Meanderings in New Jersey's Medical History

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INTRODUCTION

Just For The Fun Of It

I never enjoyed studying history while in school. As far as I was concerned, all it involved was memorizing names, dates and events which seemed irrelevant to my world. It wasn't until I was in my mid-thirties that I had a change of heart. By then I was married, the father of three and launched on a medical career as an internist-cardiologist in northern New Jersey.

One of the first established physicians to welcome me when I arrived in the Pascack Valley in 1968 was Dr. Stewart Alexander. His father, Samuel who preceded him in practice had settled in Park Ridge in 1910 taking over for the area's first physician Henry Neer who came in 1865. By the time my colleague retired, that three generation practice spanned 117 years and it seemed to me as if they'd never thrown anything away. Not only did Stewart Alexander enjoy telling stories about the old days, he sometimes showed me old medical records, equipment and photographs and when I suggested that he write about it all, he replied he was too busy—that *I* should do it!

Well that sounded absurd, but in 1976, the year of the American bicentennial, it's precisely what happened. That was a time of heightened interest in history nationwide and two years later, my small town of River Vale had its own Revolutionary moment to celebrate—an obscure skirmish which captured the imagination of everyone in the community. When a grand recreation of "The Baylor Massacre" was planned, I got caught up in the spirit and as my contribution chose to gather stories about our area's pioneer doctors. Building on Dr. Alexander's tales and memorabilia, I collected a number of entertaining anecdotes and from

these came my literary first-born *Early Physicians of Northeastern Bergen County*. With a title like that, small wonder it attracted no notice beyond northeastern Bergen County. Indeed, that very same year I jealously noted that a pathologist in Hackensack received acclaim for his newly published book about the venereal diseases of Victorian English writers; its title was *Boswell's Clap.* I never was very good at thinking up sexy titles.

That same year of 1979, a popular television series based on Alex Haley's novel *Roots* inspired many people to explore their own genealogy; I among them. My grandparents had emigrated from Eastern Europe during the 1890s and after intense research, I published a *yizkor* (memorial) book about Dubrowa Bialystoka, the small Russian town from where my father's parents came. Next, having explored both my medical and my Jewish roots, I thought it might be amusing to combine these two interests by studying my *Jewish medical roots*. This project absorbed me for more than a decade and resulted in four books about early Jewish physicians culminating in 2006 with *Jewish Medicine. What It Is and Why It Matters.*

Over the years, I'd occasionally had other opportunities to write or lecture about topics related to Bergen County's or New Jersey's medical history and one thing which I learned was that studying history doesn't have to be dull, so long as it's framed in a way that's relevant to one's own experience. Morphing from the familiar cliché that all politics is local, I came to understand that all history is *personal*—the challenge being to figure out how? For me the creative process often followed a similar pattern—encountering an unusual case, feeling inspired to read everything I could find about it and then widening my focus. Like a stamp or butterfly collector, I loved to gather stories about doctors because it was narrative more than facts which brought history alive.

That was the enjoyable part; the tedium came afterward with the process of editing, organizing, polishing and publishing. Of course it was gratifying when, at last, I could hold the finished product in my hand or if someone said that they'd enjoyed reading my work. But recognition by others wasn't the motivation; rather, it was just the sheer intellectual fun of it. Coming to closure on a project usually brought a sense of release from the compulsion which had driven me for many months—now I was free to pursue the next self-appointed task.

This book is an eclectic compendium of a few favorites which I've written over more than three decades. Some already have appeared in print, others are expanded lecture notes; all are slightly altered from the

original format and several new essays have been added to fill in gaps. The chapters are not presented in order of composition but appear roughly in chronological sequence and each stands alone. Their style and tone differ and the only unifying theme is that in some way they relate to the medical history of New Jersey—mostly Bergen County. To be sure, some of the connections to New Jersey are tenuous and many range far beyond the state's borders. However, New Jersey was a microcosm of what was happening elsewhere and, as such, these stories comprise a social history of the American experience from pre-Colonial times almost to the present. Finally, I make no claim that this collection provides a comprehensive overview of New Jersey's medical history; others have done that perfectly well.

This book is the first of two collections of my history writings. Its companion, *Meanderings in Medical History* will differ in that the essays will not feature New Jersey, but will consider general subjects including selected material concerning Jewish medical history. Scholars may be disappointed that I've eschewed specific references, but these anthologies were intended for a general audience and, after all, my "medical meanderings" were written *just for the fun of it.*

Dedicated to The Medical History Society of New Jersey whose members help keep the glorious tradition alive.

Chapter 1

"A VERY HEALTHFUL AIR"

This chapter is adapted from my first book "Early Physicians of Northeastern Bergen County" which was published in 1979.

In 1685, John Gordon of New Jersey wrote to his physician brother back home in Scotland:

> *If you design to come hither yourself, you may come as a Planter or a Merchant, but as a Doctor of Medicine I cannot advise you; for I can hear of no diseases here to cure but some Agues; and some cutted legs and fingers, and there are no want of empirics for these already; I confess you could doe more than any yet in America, being versed both in Chirurgery and Pharmacie; for here are abundance of curious Herbs, Shrubs and Trees, and no doubt Medicinall ones for making of drugs, but there is little or no Imployment this way.*

Another 17th century visitor to New Jersey reported: "It is a very healthful Air; no complaints of sickness there." Perhaps so, but no one lived long in America in those days, few reached age fifty and death usually came as a result of childbirth, accidents or infections. To be sure, every neighborhood had someone who was skilled at cupping or bleeding, dressing wounds or extracting teeth, and do-it-yourself home health books were readily available for those who could read. Among the few who could were schoolmasters or local clergymen who treated physical as well as spiritual ailments. The country was overrun with medical pretenders—as

one writer said, "quacks abound like locusts in Egypt", but in due time, trained physicians finally made an appearance in northern New Jersey.

Bergen County's first doctor, Johannes Van Emburgh was born in Kingston, NY in 1661, grew up in New Amsterdam and learned the medical trade from his father and grandfather. He moved to Hackensack in about 1685 and practiced from his home which was located on what became known as "Doctor's Creek." Nowadays that creek runs under the parking lot of the County Court House and after particularly heavy rains, if you're parked there and your feet get wet, it may be the creek rising and you can consider it "Van Emburgh's revenge." The doctor must have done fairly well because in 1698 he and a partner, David Provost, bought 250 acres of wilderness land to the north in what the Indians called Hoghakas (HoHoKus.) The deed listed the purchase price as equivalent to about $10,000 in modern currency. At some point Johannes Van Emburgh moved to what become Ridgewood and although there's no evidence that he actually practiced medicine there, it's where he died in 1729.

During the 18th century there were very few even partially trained physicians in the area. One may have been Joseph Sackett, Jr who before the Revolution had a busy practice in Newtown, Long Island, a hotbed of Whig supporters. When the British destroyed the community's church, the doctor moved to politically safer Paramus. Bergen County was politically divided with Whigs predominating in the north and loyalists to the crown in the south. It's unclear whether Sackett practiced medicine in Paramus, but reportedly he allowed Colonial troops to camp on his grounds. His family owned other property in New Jersey where in 1766 Dr. Sackett had been one of seventeen founders of a state medical society. However, when passions quieted shortly after the war's end, Dr.Sackett moved to New York City and nothing more was heard from him in these parts.

Not all of the early practitioners were high minded. In 1792 a presentment was made before the Bergen County Grand Jury against Hackensack's George Warren Chapman for quackery. It claimed that Chapman was "ignorant and inexperienced and an unskilled person in the art or business of a physician and surgeon and that he practices without any testimonial of an examination." Chapman was not indicted and several years later, resettled in Schraalenburgh (Dumont) where he built a home with beautiful gardens and entertained lavishly. However, he gained an unsavory reputation and it was rumored he'd trapped a man and held him prisoner in a closet of his house, killed and buried him in

the cellar, taking up the skeleton after the body decomposed for nefarious "medical purposes."

Especially in remote settlements clergymen often were drawn into medicine and some were accepted as professional equals of the doctors. Rev. Heinrich Muhlenberg was one who cared for the both the bodies and souls of his congregants in rural Pennsylvania:

> *I necessarily had to take a hand myself . . . We have only a very few properly educated and experienced doctors. Most of them are empirici or at least chirurgic. The real doctors are not respected as they deserve to be, and are not used. The empirici are very busy and do a great deal of harm, for they are without supervision or order.*

On a trip from Maryland to Boston in 1744, one gentleman encountered a particularly sorry assortment of doctors: a "greasy thumb'd fellow who professed physick and particularly surgery [and extracted teeth] with a great clumsy pair of blacksmith's forceps"; "a drunken military surgeon of little education who damned Boerhave for a fool and a blockhead"; a physician who "chiefly prescribed local herbs and eked a living as a barber." Another layman told our traveler that he'd learned by experience to shun all doctors as imposters and cheats: "Now no doctor for me but the great Doctor above."

Those "regular" practitioners who worked in towns and larger villages appear to have made decent livings and some died rich. Country doctors who lived on farms could supplement their income through agriculture; others invested in real estate; one practitioner in Burlington, N.J. kept a tavern and if all else failed, they could take a wealthy wife. Medical practice did not rank in prestige with the law or ministry and theoretic knowledge made less impression than practical experience about what worked. Americans preferred plain talk and simple methods of treatment.

Some doctors attended church regularly, not out of piety so much as to keep up appearances. Indeed, maintaining sobriety could be a challenge. A physician arriving after a long country ride in cold or wet weather was likely to be met at the door with a warming glass. As a result of this friendly custom in the era of house-calls, many a doctor became alcoholics. Some appeared to have great capacity, seemingly tolerating a regular toddy with no ill effect.—perhaps it focused their minds or relieved their stress.

So ubiquitous were the self-proclaimed doctors that on July 23, 1766 seventeen conscientious physicians (including Joseph Sackett) gathered in a New Brunswick tavern to organize a Medical Society of New Jersey—the first of its kind in the nation; its first president: Rev. Robert McKean, rector of St. Peter's Church in Perth Amboy. This followed a British tradition of forming professional societies whose members pledged to encourage skill and discourage uneducated pretenders. Several months later, an announcement was released to newspapers which explained that because of "the low State of Medicine in New Jersey and the many Difficulties and Discouragements, alike injurious to the People and the Physician . . . it was determined to attempt some Measure for rescuing the Art from that abject Condition."

At their first meeting a "table of fees and rates" was agreed upon and a petition sent to the legislature for a code providing for "the examination and licensing of all those who wish to practice medicine in East Jersey" and before long the Medical Society's members drew up the first stringent law to regulate the practice of medicine. Now approaching its 250th birthday, the organization continues to be a force for good. There were no medical schools in the American colonies before 1765, but as we shall see, by the end of the 18th and beginning of the 19th centuries several had emerged and it was not unreasonable that most citizens could expect to be treated by a doctor with some formal training.

Chapter 2

HACKENSACK'S FIRST HOSPITAL:

October—November,1776

Conventional wisdom holds that when Hackensack Hospital opened its doors in 1888 with a capacity of 30 patients, it was Bergen County's first hospital. But not so. More than a century earlier, the city was the site of a military hospital which cared for more than a thousand sick and wounded Colonial soldiers—albeit, for little more than a month! Therein lies an almost unknown story that's hardly mentioned in the many history books written about the Revolutionary period. No structures remain, no pictures, no narratives of patients treated there.

Naturally, Bergen County citizens then and historians later were most interested in the details of local skirmishes and the political intrigues between citizens who favored either the rebels or the crown. Of far less concern was the fate of a relatively few ragged strangers who were only briefly in their midst. Nevertheless, medical events which occurred in Hackensack during the autumn of 1776 provided a fascinating backdrop for a power struggle which was playing out on a larger stage between America's two leading doctors—a personal vendetta which would culminate in each of them being removed by Congress as the army's medical director.

On July 21, 1775, six weeks after the battle of Bunker Hill, the Continental Congress directed that a "Hospital for the Army" be established and headed by a Director-General who would be directly responsible to the

Commander-in-Chief. Expected to service an army of some 20,000 troops, at full strength it would consist of four surgeons, twenty surgeon's "mates," an apothecary and for every ten men one nurse. But as the war zone and the army expanded, more facilities were needed and general hospitals were set up at relatively stable locations with smaller regimental and mobile "flying camp" hospitals placed close to battle areas.

There were almost no hospitals in America before the Revolution and those which opened during the war were makeshift, improvised affairs lacking beds and other amenities. In March, 1776 an inventory of twenty-four Massachusetts regiments reported only six sets of amputating instruments, two cases of knives, 859 bandages and a hundred old sheets. The next year a notice placed in newspapers asked "the good people of the province of New Jersey" to send old sheets and linen for the use of the Jersey Hospital, "None will refuse complying with this request, when they consider that the lint and bandages made of this linen may be used in dressing and curing the wounds of their own fathers, husbands, brethren or sons."

During the war, infectious diseases were more deadly than cannon and there were far more sick than wounded. Typhus and typhoid were common causes of so-called hospital fever (other times referred to as putrid fever, camp fever or jail fever.) As Dr. James Tilton of Princeton wrote, "Many a fine fellow have I brought into the hospital for slight syphilitic affections and carried out dead of a hospital fever."

The leaders of regimental hospitals were vaguely charged with drawing on Congress for supplies that were to be administered by the general hospitals, but independent-minded field surgeons saw central authority as demeaning micromanaging. The schematic arrangement followed the British Army model in which patients who needed more complex care would be transferred to a general hospital—except for "putrid" cases or those with contagious diseases. Higher salaries were paid to general hospital surgeons, $33 per month, which naturally did not endear them to their regimental colleagues. Indeed, the relationship between the regional and general hospitals and their physicians was barely addressed by the original Congressional dictate.

When the first Director-General Dr. Benjamin Church was court martialed for treason after only three months in office, he was replaced by Dr. John Morgan of Philadelphia, the most erudite and influential physician in the country. John Adams wrote to his wife, "Some have

whispered that the Dr. is a little Visionary in Theory and Practice . . . But all agree that he is attentive, vigilant and laborious for the good of his Patients in a great Degree, and he is said to be a pious Man."

As a young man John Morgan had served for four years as a surgeon during the French and Indian Wars and afterward studied medicine and humanities in London and Edinburgh for five years. Morgan was only the 10th American to hold a medical degree from a European university. He also was accepted into several learned scientific societies and during his time abroad impressed Benjamin Franklin and many of Europe's leading scientists as a brilliant American talent. Upon his return to Philadelphia a colleague noted, "Morgan comes home flushed with honors and is treated with all due respect by his friends to his merit. He appears to be the same friendly man, not assuming the solem badge so accustomed to a son of Aesculapius."

Dr. Morgan immediately promoted his own plan to establish medical education according to the European model which would result in his founding America's first medical school in affiliation with the College of Philadelphia. Remarkably far-sighted, he advocated medical practice as being a distinct specialty separate from surgery or pharmacy. But while some grudgingly acknowledged his brilliance, others resented his portraying American physicians as being ignorant. After all, most of them were products of the apprenticeship system in which any farmhand could make himself a doctor by hanging around a physician's office. Instead, Dr. Morgan demanded that candidates for his school not only must be familiar with the rudiments of medicine, but also should be adept in Latin, mathematics, natural science and a modern language. After working in the Pennsylvania Hospital for one year, students would receive a Bachelor of Medicine degree and before becoming Doctors of Medicine they would have to practice for three years and write an acceptable thesis.

While John Morgan was proposing restructuring medical education and practice in America, he had an equally well trained rival in William Shippen, Jr. Himself the son of a famous physician, Shippen was a year younger but had graduated from Edinburgh a year before Morgan. Contemporaries described him as calm and cautious whereas Morgan was impulsive and dogmatic. Both were ambitious but Shippen was the more politically astute. Morgan was self-confident to a fault while Shippen was more affable. Dr.Shippen held a deep grudge because he felt that Morgan

had usurped his proper distinction as having been the prime mover in establishing the first medical school in the colonies and, as we shall see, their rivalry would boil over in 1776.

Upon taking command of the Continental army's medical department in Cambridge in 1775, Dr. Morgan attempted to bring order out of chaos insisting upon accurate record keeping and demanding written explanation of why a soldier was deemed unfit for duty and when they might return. He required that all surgeons be examined in order to weed out incompetents and quacks and, needless to say, this was not well received. Morgan limited for patients to the bare essentials: "Indian meal, oatmeal, rice, barley, molasses" and the like. Sick men who needed more food and nursing care should be sent to the general hospitals. Because every regimental surgeon regarded the general Hospital as a store house from which he could freely requisition whatever he wanted,

John Morgan pleaded with Congress for clarification of their sometimes contradictory orders and delineation of the extent of his authority. Obtaining quality medical supplies was daunting. At one point when Morgan complained that he could properly "vomit" sick troops because British-manufactured tartar emetic no longer was available, he was advised that a locally made substitute was "bound to be as good as any, although it looks so black." When asked to send more scalpels, he advised surgeons to use their own razors. Concerning Congress's insistence that "necessaries" should be provided from the General Hospital to the regimental hospitals:

> *It is a vague term, gives them a handle for caviling; & I fear till the latitude of that term is defined, & settled by Congress, they will never think they have eno' furnished to them, whilst any thing is left for them to ask for . . . The Labour of supplying them with Medicine, which is so scarce is prodigious . . . Besides it employs the Mates of the Hospital to drudge incessantly for the regimental Surgeons & Mates, whilst they have little to do. I speak from Experience. I ordered the Mates of the Hospital to make up ten thousand Bandages: Above one half have been given out to the regimental Surgeons; they loose them & want more. . .*

Besides supply problems, many of the regimental surgeons were incompetents or frauds and selling recommendations for medical discharges or permitted malingering was commonplace. Abuses were

so rampant that even General Washington complained that many of the regimental surgeons were "very great rascals . . . There is a constant bickering among them, which tends greatly to the Injury of the Sick; and will always subsist till the Regimental Surgeons are made to look upon the Director General of the Hospital as a Superior." Washington declared that any dispute between regimental and general hospital surgeons should be referred to Dr. Morgan who had "superintendency over the whole." Small wonder that the regimental surgeons resented central command and fomented a plan to destroy both the General Hospital and its Director. But before pursuing medical politics of 1776 further, let's consider certain military events of that year.

On July 3, 1776 the British navy landed some 30,000 troops on Staten Island and that summer methodically drove Washington's forces out of Brooklyn and then occupied lower Manhattan. However, General Howe was slow to press his advantage, dawdling for weeks while waiting for reinforcements, which allowed the rebel army to regroup in Harlem Heights. Their ranks were seriously depleted by desertions and dysentery and as cold weather approached there were insufficient tents, shoes and blankets. Washington called a Council of General Officers to discuss whether to stand and fight or preserve themselves by retreating to Westchester.

General Washington wrote to the Continental Congress on September 8 that "the case of our sick is also worthy of much consideration, their numbers by the returns form at least 1/4th of the army: policy and humanity require they should be made as comfortable as possible." At the time, of about 28,000 men, 4,433 were listed as "present sick," 3,433 as "absent sick." At the same time, Washington wrote to the New York Convention, "It being determined to move our sick to Orange Town (now Tappan in Rockland County), we shall want four large Albany sloops for that purpose. The fatigue of traveling that distance by land would not only be more than patients could bear." On September 9 General James Clinton was instructed—:

> *[to] dispatch a whaleboat, well manned, towards New York and impress the first four large, convenient river sloops you meet and send them (in pursuance of a request of his Excellency, General Washington) to the City of New York, to remove the sick from hospitals there to Orange Town in the County of Orange, for which purpose you will direct the captains of*

> *the said sloops respectively . . . . to apply to Dr. Morgan, the Director General of the Hospital for further orders.*

The first evacuees were bedded down in Tappan's Dutch Reformed Church with the overflow placed in the adjacent courthouse; neighborhood women volunteered to help and the dead were buried in the church's graveyard.

But when Morgan arrived to find a suitable site for a larger facility he was disappointed; his findings reported on September 12 to General Washington:

> *Agreeable to Orders I have been into the County of Orange & collected seven members of Committee, & spent the whole of Yesterday & part of this day in viewing the Country, & looking for proper Coverings for the reception of the Sick and Wounded, I am sorry to report that in a circuit of 14 miles in that County, I cannot find or hear of any suitable Accomodations, for more than about 100 Sick. No Country can be worse provided in all respects; & the places proposed are remote from any Landing.*
>
> *From the knowledge I have of New-Ark, I am perswaded it is a place infinitely superior in all respects for the establishment of a Genl Hospital. There are but 4 miles of Land Carriage required; all the rest is Water Carriage. The Houses are numerous large & Convenient. If it be objected that they are full of Inhabitants from N.York, so is every Hovel thro' Orange County; & as to the Town of Orange. I cannot find that there is a room for One sick person without incommoding Some One or other.*
>
> *After this report, which is grounded on most careful Inquiry and Inspection, I wait your Excellency's further orders, but if I may be permitted to offer my Sentiments it is, that no time be lost in applying to the Committee at New-Ark by requisition for Room for the Sick; & if your Excellency thinks proper, I will immediately repair with all dispatch to urge the Matter without delay—or proceed in any other Way your Excellency may see fit. I am, Yr Excellencys Most obedt & very humble Servt. John Morgan*

Similarly, Judge John Haring, one of the leading Patriots in Orangetown who accompanied Morgan on his brief survey, reported to General George Clinton that no place could be found "without turning a number of distressed persons out of doors. Almost every house is filled and crowded with people who fled out of the city . . . . Every hovel in Orange County is full of inhabitants from New York." Among them was the family of General John Morin Scott who described his wife's plight in a letter to his commanding officer General Heath:

> *I have accounts of Mrs. Scott, of her being at Tappan with her whole family in one room. She is overwhelmed with distress, and continually in tears, not knowing how to dispose of all that are dear to her except myself. She cannot be comforted till she sees me and receives my direction for her future disposal.*

If she found her cramped quarters in Tappan to be stressful, imagine what Mrs. Scott would have thought if she knew that some two centuries later, their rural farm which was located just a few miles north of New York City would become Times Square!

Some of the sick and wounded were shipped directly to Newark as Morgan had suggested and on September 15, a newspaper account from Powles-Hook (now Jersey City) reported, "Last night the sick were ordered to Newark, in the Jersies, but most of them could be got no further than this place and Hoebuck, and as there is but one house at each of these places many were obliged to lie in the open air till this morning."

On September 16 the British attacked Harlem Heights and were repelled with each side suffering about seventy killed. Dr. Morgan helped carry the wounded and hurried back and forth until when Redcoats arrived, he was forced to flee. Wagons and boats were in short supply and the appearance of three British Ships of War impeded further ferrying across Hudson's River. Yet by September 21, General Washington still was proposing "those too sick too fight be immediately removed to Orange Town . . . on the Jersey side."

For the next month there was a lull in the fighting and in order to prevent being encircled, on October 20 the main body of troops were moved to the White Plains area leaving small garrisons at Fort Washington and directly across the river at Fort Lee. Writing from there on November 6, Washington said, "The situation of our Affairs is critical and truly

alarming. The dissolution of our army is fast approaching." Morale was low, officers were quarreling among themselves and several of the state militias were considered "ungovernable"; their recruits returning home as soon as their contracts were up—or sooner. This was not necessarily a loss for as Washington described some were "not fit to be Shoe Blacks."

Because Morgan had rejected Orangetown (Tappan) as a suitable site for a general hospital and Newark was still too far away, his second choice was the village of Hackensack, probably because of its proximity to the Fort Lee garrison. As Washington would elaborate in a letter written a month later to Dr. William Shippen, "Under the circumstances in which we left New York, we found it impossible to remove our sick up the country on this side of the river; Dr. Morgan was therefore directed to provide and prepare hospitals for them in Jersey [not New York] to be under the Controul of him and his Assistants."

Hackensack's court house and church as well as its celebrated college-preparatory academy and several nearby sandstone buildings could be converted to accommodate from four to seven hundred men. But the prospect of suddenly absorbing so many Colonial troops must have been unsettling to the locals, even those who were sympathetic to the rebel cause. Mrs. Helen Brasher of Hackensack, the wife of a Colonial officer complained, "Our situation became very public by the troops from Long Island and York island all crossing over to the Jerseys. My husband proposed moving us farther back in the country [and] he got rooms for us at Paramus [in fact, HoHoKus.]"

John Morgan's chaotic entry into Hackensack has been rather overdramatically described by historian James T. Flexner (*Doctors on Horseback*, 1992):

> *The instant [Morgan] arrived there, three hundred sick were brought to him, although he was quite alone. In a few days there were over a thousand. The building was not ready and he had no bread, flour or fresh provisions; however, he set off dispatch-riders and labored heroically, spending day and night bent over the dying. It was a nightmare of torn limbs and wasting flesh and many anguished voices calling at once to one tired man. For a week Morgan never took off his torn clothes which were so creased and dirty now it was impossible to believe they had been among the neatest in the army . . . . this gaunt man with the tight face*

lying on the ground for a half-hour's sleep, trying not to hear cries for help because he knew he must sleep or collapse himself

Historian Flexner didn't provide exact dates for the arrival of these troops or of Morgan's harrowing experience, but reconstructing from other events, probably they occurred early in October. Within about a week, medical reinforcements arrived from the former hospital on Long Island which was headed by John Warren, a twenty-four year old surgeon from Boston. Before proceeding with this narrative, we'll pause to consider the brief appearance in Hackensack of this precocious, and eventually famous physician.

After graduating from Harvard College, John Warren (1753-1815) apprenticed for two years with his older brother Dr. Joseph Warren and then moved to Salem where he practiced with an older physician. When the British marched on Lexington and Concord in June 1775, it was Joseph Warren who sent Paul Revere on his famous ride to warn that "the Redcoats are coming." During the subsequent battle of Bunker (Breed's) Hill, Joseph was one of the first to be killed and when John sought his brother, he was bayoneted by a British sentry. His passion inflamed, young "Jack" Warren volunteered for military service. However, his family persuaded him to enlist as a physician and General Washington assigned him as senior-surgeon at the Cambridge military hospital. In May 1776 John Warren accompanied the army to Long Island where he was placed in command of the general hospital. When that hospital moved to Hackensack in October, 1776 he quickly became embroiled in the medical politics between regimental and general hospital surgeons.

At a later time (April 12, 1777), Morgan asked Dr. Warren to provide details of an event which had occurred soon after he took command in Hackensack:

Dear Sir,—I received your letter requesting the particulars of some conversation I had with Colonel Stone at Hackensack, relative to a number of soldiers belonging to Colonel Smallwood's regiment, quartered in Mr. Zabriskie's barn. If I recollect rightly, they were ordered out, in pursuance of a resolve of the Continental Congress [October 9, 1776] or a general order, forbidding any regimental sick to be quartered in the neighborhood of a General Hospital. Upon his mentioning the orders

which he considered a hardship, I told him I imagined this to be the case.

He informed me that some of them were very ill, and he knew not why they might not be removed into the Courthouse, to which they were so near. I answered him that that house was appropriated to the reception of the wounded only, as it was apprehended that if the sick should be admitted into the same house with the wounded, the health of the latter would be essentially affected, especially as the prevailing diseases were of the putrid kind. Orders having been given for building an oven, in a house contiguous to the barn, for the use of the General Hospital; it was represented to the Colonel as absolutely necessary that the barn should be immediately evacuated, in order to receive a quantity of stores which were at that time in said house, and which it was necessary to receive before the masons could begin their work. In consequence of which, they were removed in the course of a few days.

As soon as Dr. Warren arrived in Hackensack, Morgan rode off to Fort Lee to seek food and supplies, but he was in for a surprise there. Neither he nor General Washington were aware that while they were frantically attending to a multitude of problems, Morgan's old rival General William Shippen, Jr. was busily undermining his authority. Unlike John Morgan, Shippen had no prior military medical experience, but on July 15, 1776 he was appointed to head a "Flying Camp" hospital in Amboy. These mobile squadrons were composed of short term volunteers from mid-Atlantic colonies who might be used to fill in as reserves where required. Dr. Shippen wasted no time siding with disgruntled regimental surgeons and began sending false reports to his brother-in-law Richard Henry Lee. He disparaged Morgan as "a damned rogue" accusing him of speculation in supply stores and playing favorites, e.g. John Warren.

Dr.Shippen's charges sufficiently influenced Congress that on October 9, without consulting either Morgan or Washington, they ruled that henceforth, Dr. Morgan will "take care of such sick and wounded of the army of the United States, as are on the east side of the Hudson river, and that Dr.Shippen take care of such of the said sick and wounded as are on the west side." When Morgan arrived in Hackensack, apparently he didn't yet know about the Congressional order. Again, as described by historian J.T. Flexner:

> *At last some more doctors arrived [in Hackensack.] Morgan did not take even a day's holiday; driven by that abnormal energy which pulls men through impossible crises, he galloped to Fort Lee to ask General Greene about supplies for the Hackensack Hospital. There he met Dr. Shippen . . . . He seemed his old self, his clothes were meticulous as always and the same smile adorned his face. Morgan was thin, he said; he hoped he hadn't been ill. Then his smile vanished and his words seemed strange: "Why aren't you at your post on the other side of the river?" When Morgan's tired eyes looked at him in blank amazement, he explained that he was in command in New Jersey and Morgan belonged in New York. Morgan's nerves were on edge. He laughed a little hysterically and then became furious. He was the medical director of all the armies, he shouted and Shippen was his subordinate; Shippen should be careful how he spoke to his superiors. But Shippen merely smiled blandly and advised him that a wise officer follows the acts of Congress.*

Amazed, Dr. Morgan rode on to Newark only to learn that the chief medical officer there was aware of the Congressional decree. Intending to straighten matters out with the Commander, Morgan returned to Washington's headquarters in White Plains, arriving on October 28, just in time for the British attack. At the sound of firing, Morgan rushed out of the hospital accompanied by his surgeons, instructing several assistants to bring instruments and dressings in a wagon. The doctors established themselves right behind the line of battle and did not move until it was over. Terrified regimental surgeons, who until now had refused to give up their sick, dumped the newly injured on the ground. Although desperately short-handed, Morgan and his staff tended to nearly one hundred new casualties some of whom bled to death. Watching his charges die of cold because he could get no action, Morgan continued to care for the wounded as if nothing had changed concerning the command structure.

When order finally was achieved, Morgan at last could plead his case with George Washington. Although Shippen was a personal friend of the General, as Commander-in Chief Washington supported Morgan's position. In a letter to Shippen (Nov. 3) he explained that he knew nothing of the Congressional machinations: "I never . . . meant to exclude either of you from the power of establishing whichever side of the River you thought most convenient for your respective Sick." The chagrined Dr. Shippen complained to his cronies: "I have not taken charge of nearly two

thousand sick scattered up and down the country [including Hackensack] in cold barns who suffer exceedingly for want of comfortable apartments because Dr. Morgan does not understand the meaning of the honorable Congress in their late resolve."

After the Battle of White Plains, Washington divided his army again, leaving John Morgan behind with General Charles Lee in command of more than 7,000 troops in North Castle (now Armonk.) By then, lower ferry crossings were precluded by British ships so the Commander-in-chief crossed the Hudson near Stony Point and with some 5,000 men marched in a round-about route of 65 miles to arrive in Hackensack on November 13. General Washington established his new base beside the village green in the sturdy "Mansion House" owned by the patriotic Freeholder Peter Zabriskie. Morale was poor, including that of the Commander who wrote to his brother, "I am weary almost to death with the retrograde motion of things and I solemnly protest that a pecuniary reward of 20,000 pounds a year would not induce me to undergo what I do." The day after Washington arrived in Hackensack, he was mortified to learn of the surrender without a fight of Fort Washington with a loss of two thousand men and many supplies.

Although Dr. Morgan was left behind with General Charles Lee's army in Westchester, affairs in Hackensack were much on his mind, especially relative to his troubled relationship with Dr. Shippen as indicated in letters which he dispatched to Dr. Warren:

November 2:

> *Dear Sir—When I left Hackensack, I expected to have returned in a few days. The present situation of the armies, posted in full view of each other [in White Plains], forbids me to think farther of it at present; and, indeed, I find it absolutely necessary to continue with [our army] so long as the vicinity of the enemy and the prospect of an action continues . . . . I doubt not you will favor me with an account of everything relative to the hospitals at Hackensack. If any of the surgeons want medicines, please send them to Mr. Cutting, at Newark, and apply to Mr. Delameter to pay any accounts you may account for. [Morgan goes on to request that exact receipts of purchases should be sent to him every week.]*

November 3

> *Since I wrote yesterday, the General has given me to understand that a large hospital is to be established on this side.* [He goes on to ask Warren to send supplies and two "mates] *and if you do not have hands enough, write to Dr. Foster in Newark or employ such [local physicians] as offer, and you approve . . . I write in haste and have only to add, that Dr. S* [Shippen] *has nothing to do with any hospital under my care; and you are not to deliver anything to any person out of the hospital; but only to the sick under our care, etc.; but by an order from the commander-in-chief, or myself, as I have spoken to G.W.*

November 4 John Morgan writing to regimental surgeons "with the approbation of his Excellency, George Washington":

> *Gentlemen, Few of the surgeons or sick allowed to remove from camp, some time ago, being yet returned, and no reports made of them to me; his Excellency, the Commander-in-chief, conceiving that his former indulgence to the sick in permitting them to retire from the camp for the recovery of their health, has been much abused, both by the sick and by the generality of the Surgeons and Mates, under whose care they are allowed this indulgence;—It is his Excellency's orders, therefore, that each of you do forthwith wait upon Dr. Isaac Foster, Esq., at Newark, or Dr. Warren, Esq., at Hackensack, Surgeons in the General Hospital, whichever is nearest at hand,; and make a faithful and accurate report of the state of the sick and wounded under your care; and remove those who are fit subjects, immediately to the General Hospital under their care; for which you are to apply to the Quartermaster-general's Department for wagons; and accompany them yourself. All those who are absent without leave must naturally be looked upon as deserters. And the Surgeons and Mates who cannot give a regular and satisfactory account of their faithful discharge of their duty, necessarily subject themselves to an inquiry into their conduct.*

If they wished, regimental surgeons would be permitted to care for their patients but only under supervision of the general hospital doctors and if unwilling, they should rejoin their regiments. In a separate order from Morgan to Dr. Warren written that same day:

Make out ten or a dozen copies of the foregoing circular order to the regimental surgeons, to be forwarded to such as are at Orange County, Tappan, Haverstraw, Paramus, Polrey's, etc., under cover, to be communicated from one to another until all the sick are brought in. Let my name be put to the letter and each copy be certified to be a true copy, either by Dr. Foster or you.

Nov. 7

Dear Sir, As the enemy are now retiring before our army towards New York, and a detachment has filed off to harass them, I imagine the chief of the army will follow. Of course, I am more than ever of opinion that Hackensack will be the chief place, or headquarters for the General Hospital of our army. I hope, therefore, that you are going on with spirit in enlarging and accommodating suitable quarters for the patients.

You will be pleased to acquaint all the surgeons of the regiments and mates, that went from this army to the Jerseys and Orange County; in short, all you meet or hear of, that are from camp and anywhere on the west side of the North River, under a pretext of taking care of the sick or wounded (except such as you require, and who are willing to assist you in the business of the General Hospital at Hackensack), that it is his Excellency's orders, that they make a report of their sick and wounded to you, that they deliver them up to your care, and return immediately to camp . . . .

I am to desire you to examine into the state of the sick who offer to you, and have been long ill,—certifying those whom you think will be unfit for any service during the present campaign, and that have friends to take care of them, and are desirous of a discharge—that I may procure it for them. The enemy are now retreating. I suppose we shall soon follow. I hope, therefore, before it is long, to have it in my power to pay you a visit at Hackensack. Compliments to all friends. Let me have weekly returns, punctually. I remain, dear sir, your most obedient and very humble servant. JM

General William Heath wrote to Dr. John Morgan on November 19 explaining he had 5,000 men under his command in Peekskill, but no surgeon nor hospital. Although General Washington understood the dire need, he confessed to Heath that in the confusion of things it had "slipped his memory." When prompted, he suggested that Heath write directly to Dr. Morgan.whose reply, written the very next day from Hackensack, coincided with the disaster at Fort Lee. In it Morgan expressed awareness of the necessity for providing the makeshift hospitals with sufficient food, equipment, nurses, carpenters, cooks, "fatigue men," bed bunks, straw, coffins in order for the surgeons to function effectively:

> *To call for the establishment of a general hospital for surgeons to attend and take care of the sick and not to strengthen their hands, so as to enable them to do their duty, is the certain way of plunging them into insuperable difficulties which must bring reflections on them while it is not in their power to wipe off, but by showing the defect was not at their door.*

Nov. 21.

> *Dear Sir, A report prevailed here yesterday, that five thousand of the enemy were landed at, or near Hackensack. Under the influence of that report, I wrote to have my things removed to Newark, and to desire your assistance. Today, the report is contradicted, and I now write to counteract my former desires. Let matters rest, but in case of real danger I know you will be ready enough to assist. . . If unexpected danger should threaten, you will be so good as to be attentive and act for me, as I would for you, in like circumstances; or as you wish any one would do for you . . . I hope I shall get things in readiness on this side, that I can leave it in a week or ten days, and go to Hackensack*

Amidst the fog of war, reliable information was unpredictable, but in this case the news which Morgan received about a British invasion on Nov. 20th was correct and apparently he never returned to Hackensack. On the very same day that he was writing the above message from the hills of Westchester, the American army already was abandoning Hackensack.

Fort Washington's brigade of 230 officers and 2,600 troops surrendered on November 15 and five days later Lord Cornwallis's army crossed

"Hudson's River" at Closter Dock, scaled the Palisades and captured Fort Lee. General Nathanael Greene's garrison of nearly three thousand men barely escaped and as they beat a disorganized retreat across Bergen County to Hackensack, local roads were strewn with discarded canons, muskets, knapsacks and abandoned cattle. One British officer contemptuously remarked, "On the appearance of our troops, the rebels fled like scared rabbits and in a few minutes . . . . not a rascal of them could be seen. They have left some poor pork, a few greasy proclamations and some of that scoundrel Common Sense man's letters (Tom Paine) which we can read at our leisure now that we have got one of the "impregnable redoubts" of Mr. Washington's to quarter us . . . We intend to push on after the long faces in a few days."

Late on the night of November 20, nearly three thousand dispirited evacuees from Fort Lee straggled into Hackensack. Thirteen year old Robert Campbell later described the scene:

> *The night was dark, cold and rainy, but I had a fair view of Greene's troops from the light of the windows as they passed on our side of the street. They marched two abreast, looked ragged some without a shoe to their feet and most of them wrapped in their blankets. The army spent the night camped along Main Street (then the King's Road) near the Green.*

Two days later (Nov. 21) they were off again, heading south to Passaic, Newark, New Brunswick and Princeton. By early December the army was out of New Jersey altogether, until on Christmas night they famously recrossed the Delaware River at Trenton and surprised the Hessians which is all well known history.

When the Continental Army, including Dr. John Warren, left Hackensack, a few of the sickest troops were left behind. Those who could be moved were "sent to the country"—meaning to scrounge for themselves, while others were dispersed to general hospitals in Newark, Morristown, Princeton, Trenton, Fishkill, NY, Bethlehem, PA and other locations. The day after the Americans exited Hackensack, the British entered. As one resident described, "In the afternoon the church green was covered with Hessians. A horrid frightful sight with their whiskers, brass caps and kettles or bass drums."

But the Redcoats were in no hurry to push their advantage. They lingered in Bergen County for five more days "enjoying the abundant food and supplies of the prosperous inhabitants which they bought and plundered" before continuing their pursuit. A remnant of the British force remained in Hackensack until mid December, their presence bolstered by hundreds of young men who favored the Tory side, swore allegiance to the crown and were mustered into a regiment of "Greencoats" which was headed by a Teaneck physician, Dr. Abraham Van Buskirk.

In addition to the general hospital in Hackensack, John Morgan set up a regimental hospital at the Paramus church and, lacking sufficient army physicians, enlisted the services of some local doctors including the brothers James and Bleeker Van Buren. Although they practiced together, they had differing political and religious views, Bleeker supporting the colonists while James professed neutrality. But when the British arrived, James Van Buren attended sick members of their 26th regiment while continuing to care for wounded rebels left behind. Later James would complain that he "got nothing fore it."

On November 26, 1776 Congress reaffirmed its directive of October 9 about medical leadership, but a week later Morgan crossed back into New Jersey and hastened directly to Philadelphia to press his case. George Washington wrote to him, "I have every reason to think that you exerted yourself in the removal of the Hospital Stores from New York in 1776 and, I well remember the fact of your remaining in the City among the last that stayed." In January 1777 although a Congressional committee convened at Morgan's request declared themselves to be satisfied with his performance, they dismissed him "from any further service in said offices" replacing him as Director-General with Dr. Shippen. Although Morgan's honor was restored, he was not mollified and continued not only to promote his own defense but started building a case against his successor. Pressing the matter for the next two and a half years, he published a 158 page *Vindication* which included the following explanation of his actions during the last weeks before his dismissal:

> *To be ordered by the General to collect medicinal stores . . . and to be abused and calumniated for performing that duty; and after supplying chests to five battalions at Boston, near fifty at New-York, and sent twenty more to the northern department, and furnished the hospitals at Long*

Island, New-York, Newark, Hackinsack, and Kingsbridge . . . . I never met with the least acknowledgment for these services from the Congress.

Dr. Morgan proceeded to accuse Shippen of malpractice and misconduct and was supported by Dr. Benjamin Rush who writing to John Adams (October, 1777) lamented:

Our hospital affairs grow worse and worse . . . The fault is both in the establishment and in the Director General. He is both ignorant and negligent of his duty. For God's sake, do not forget to take the medical system under your consideration. It is a mass of corruption and tyranny.

Dr. Rush had argued with Shippen over steps to relieve overcrowding and promote the health of the men, but the new Director-General had rebuffed his suggestions reminding that he was the sole judge of what was best and that Rush's business was merely to look after all those sent to his care. In turn, Rush's sarcastically proposed an effective way for destroying Howe's army without firing a shot: "Lead them through any of the villages in Lancaster [Pa] county where we have a hospital, and I will ensure you that in six weeks there shall not be a man of them alive or fit for duty." As a result of Morgan's incessant counterattack, Dr.Shippen was forced to resign in 1781 because of alleged improprieties during his tenure. Thus the first three Medical Directors-General of the Continental army all were dismissed by the Congress which had appointed them. What happened after George Washington's army departed from Hackensack, is well known, but the subsequent stories of the protagonists of our local narrative is worth reviewing:

James Van Buren, the Hackensack doctor who'd helped care for both army's sick and wounded, in addition to medical work guided the British on several sorties. This resulted in his being jailed for eight days by the Americans, released only after certain "women of his acquaintance made application for him." When the British army returned to New York in September 1777, the doctor accompanied them and after war's end, like many other Tory collaborators, he emigrated to Nova Scotia. James Van Buren returned in 1792 and practiced medicine in Totowa, NJ until his death seven years later at age 70.

John Warren returned to Boston in 1777 to head a military hospital there and during the next few years organized a course of anatomical

demonstrations as well as a Boston Medical Society. From these would emerge in 1782 the Harvard Medical School. At one organizational meeting a colleague criticized Warren for suggesting that the new school have three professors, one of them expert in anatomy and surgery:

> *Warren is an artful man, and will get to windward of us all. He has made a proposition to the club, that, as there are nearly a dozen pupils in town there should be an incipient medical school instituted for their benefit . . . . He was immediately put up for the latter branches; and, after a little maiden coyness, agreed to commence a course, as he has many operations and surgical cases in the Continental Hospital, of which he is sole director in every respect; and he can always have command of subjects for dissection, without exciting alarm, or being reduced to the necessity of taking bodies from the burying ground, as most of the inmates of the hospital were foreigners, and no one would scrutinize the matter.*
>
> *Warren will be able to obtain fees from the pupils who will attend his lectures on anatomy and surgery and turn it to pecuniary advantage. But he will not stop there: he well knows that moneys have been left to the college (Harvard) for such an establishment as he is appointed to, and he is looking at the professorship. Mark what I say . . . you will probably live to see it verified.*

When John Warren was inducted as Harvard's Professor of Anatomy and Surgery, his delivered his oration in Latin, beginning:

> *A new College of Medicine, upraised on no high pinnacle, but with a broad formulation under the ample wings of the University, is now made ready for the useful art of healing . . . If with all this we might increase her renown for a learning already great, no Academy should be more worthy of praise than ours . . .*

One of his two doctor sons John Collins Warren (1778-1856) would become one of the most renowned surgeons of the 19th century, the first surgeon of Massachusetts General Hospital, famed for being involved with the first use of ether anesthesia. But for our purposes here, the other doctor brother Edward Warren was more important because he published a biography of his father (and another of his brother) which helped to fill

in some of the blanks in the Hackensack military hospital's story which have been cited here.

What became of Dr.John Morgan? His long struggle, first to clear his name and then to bring down his successor, left him exhausted and alone. During his last years Morgan was impoverished, often depressed and virtually forgotten. On October 15, 1789 Dr. Benjamin Rush, Philadelphia's best known physician, received an urgent summons to make a house call on his old colleague who'd suddenly taken ill. However, he was too late; there was not even a widow or family member to comfort. Upon returning home, Dr. Rush wrote the following:

> *This afternoon I was called to visit Dr. Morgan but found him dead in a small hovel, surrounded with books and papers, on a light dirty bed. He was attended only by a washerwoman, one of his tenants. One of his nieces, Polly Gordon, came in time enough to see him draw his last breath. His disorder was the Influenza, but he had been previously debilitated by many other disorders. What a change from his former rank and prospects in Life! The man who once filled half the world with his name, had now scarcely friends enough left to bury him.*

The next day would have been Dr. Morgan's fifty-fifth birthday. He was buried next to his wife and, according to his instructions, no headstone marked their graves. Today John Morgan, the greatest physician of his generation, is scarcely remembered; neither is Hackensack's first hospital for which he was responsible.

Chapter 3

YOU'VE GOT MAIL

Based on a lecture delivered at The Hermitage in HoHoKus in February, 2002 and again later that year to the Medical History Society of New Jersey.

At the onset of the 18th century, a pioneer physician who practiced in HoHoKus for more than three decades was Dr. Elijah Rosencrantz who preferred the surname Rosegrant. A fourth generation American, he was born in Sussex County in 1766, one of fourteen children of a prosperous landowner. His father had been a colonel in Washington's army and Elijah was the first of his family to go to college, graduating from Queens College in New Brunswick (Rutgers) in 1791. Then he studied theology for sixteen months, was granted a license to preach and, evidently, in 1894 he gave an uninspiring sermon in the Paramus Church. When Elijah couldn't find a permanent position, he began to have second thoughts about a career as an itinerant preacher. He was disturbed by "the low state of religion and the neglect paid to ministers in general [so] I prosecuted the study of physik with diligence."

After two years of apprenticeship, in 1799 Elijah was granted a license to practice as physician and surgeon. He settled in Paramus on seven acres he'd purchased from one of his brothers and in 1807 bought fifty-five acres of The Hermitage property in HoHoKus. That same year he married Cornelia Suffern, a daughter of a wealthy Rockland County landowner; he was 41, she 34. The archives at The Hermitage contain Elijah's account book for 1830, two years before he died, which provides insight into the life of a country doctor nearly two centuries ago. During his last full year

of practice he made 549 visits to members of 110 families—on average that was fewer than two encounters a day. Physicians of that era dispensed their own medicines which they carried with them on their rounds. They would purge or bleed, apply blistering plasters and delivered babies. Some of Elijah's most favored medicines were castor oil, quinine and the potent and popular cathartic calomel, a chalky mercury compound.

Fees varied according to the place and time. At its first meeting in 1766 the *Medical Society of New Jersey* agreed on a uniform Table of Fees which began with a free item: "For travel on visits in town where the physician and surgeon can readily attend without riding, to be charged for according to the duration of the ailment, or in slight cases where only a visit or two may be wanted, no charge." More than a half century later, Elijah Rosencrantz's highest fee, two dollars, was for obstetrical deliveries plus aftercare; a tooth extraction cost thirteen cents; small pox vaccination twenty-five cents. Total charges for the year 1830 were $538 (about one dollar per visit) which was less than the average income of unskilled workers of that era. Elijah Rosencrantz also was a farmer, businessman and real estate developer so whatever money he accumulated was not because of his bedside skill. Nevertheless, when he died the total value of all of his assets was only $1,048.

John Rosencrantz, the first of Elijah and Cornelia's four sons, was born in 1809. As a teenager he seems to have been more interested in squirrel hunting, sleighing and new clothes than in studying Greek and Latin. His father wanted him to have a "liberal education" but evidently financial considerations made this impossible. Plan B was for him to study "physik" and join his father's practice—a less prestigious career than what Elijah had envisioned for his oldest son. Indeed, Elijah described this necessity as his life's greatest disappointment, but one he could reconcile himself to if John applied himself and demonstrated the "cardinal virtues of honesty, justice, temperance and prudence."

The Hermitage's archives contain a number of fascinating letters from father to son, most written between 1826 and 1828 when John attended two terms of medical classes at the so-called "Rutgers Medical College" in New York City (more about this later.) Elijah sometimes signed these as, "Your best friend and affectionate father"—once he signed "Elijah Rosegrant, alias Elijah Rosenkranz" In them he provided not only local

news, but advice to avoid bad company and the temptations of the big city:

> *It is impossible to apply the mind to study when it is continually intoxicated with the idea of company and those bewitching frolics common to this country. You will not disappoint me I hope of keeping yourself and your desires of company and the pleasures of youth under due restraint.*

Like Polonius to Hamlet, the anxious father was full of paternal advice, urging his son to follow "the cardinal virtues of honesty, justice, temperance and prudence." Also, John should be respectable to his elders and improve his poor handwriting. Although he should regularly attend church. He should keep his opinions to himself and never enter into arguments on religious subjects and "You must indulge no deistical ideas or opinions." (Washington, Adams, Jefferson, Madison, Franklin, Henry and many others of the Founding Fathers were deists who believed in a creator but not one who was engaged in human affairs. Deists held that the Bible was not divine in origin which was inimical to Dutch Protestants like the Rosencrantz family.)

To his credit, Elijah was aware that too much study might make John a dull boy and grudgingly agreed to pay for dancing lessons—"so long as its respectable and not too expensive. But this you must keep this to your self, let it not be known here." In another letter the doctor reflected, "The field before you is great. Great industry and perseverance is necessary to make you respectable in your profession. This I trust you are sensible to and will not disappoint me in." He couldn't resist adding that two slightly older local boys, Garret Banta and Cornelius Zabriskie, already were "making their fortunes" practicing in Paramus.

The total cost for Johns' lectures, books, boarding etc. at Rutgers Medical College would have amounted to about $400; nearly as much as his father made from his medical practice in a good year. Elijah's business and real estate ventures also were unsuccessful and there were stressful legal problems—he borrowed money and even attempted to raise cash by buying lottery tickets. Worn down by a series of medical ailments, he was assisted in his last years by his newly licensed son, but John was frustrated that he couldn't afford to buy medical books or new clothes, or even to take time off for himself.

The summer of 1832 was a particularly challenging time. In July of that year a cholera epidemic broke out for the first time in this country, particularly in urban areas. The disease was novel and terrifying, death sometimes occurring within the first hours after the appearance of symptoms. Most Americans still regarded the United States as a land of health, virtue and rustic simplicity, but cities seemed to be unnatural places characterized by filth, misery, vice and ignorance. Many thought it was a scourge of the sinful, an inevitable and inescapable judgment, and ministers urged morality upon their congregants as a guarantor of health.

Five special cholera hospitals were set up in New York City where the Board of Health was so desperate that they proposed a reward of twenty dollars for any licensed physician who could cure a case. Everyone who could afford it fled the city, roads were crowded by horse-drawn carts and carriages; "oceans" of pedestrians trudged out of town in the mid-summer heat with packs on their backs. Amidst this chaos and fearful that the disease might spread beyond New York, John Rosencrantz ventured into the city to learn more about the pestilence at one of the new hospitals. When his brother George who was living in New York City developed mild symptoms, Dr. John advised:

> *I am now acquainted with [the] appearance of cholera and can understand more about it. The disease is increasing, Come home or go to the Rockaways. Mr. Suffern [a relative for whom George was working] has given you the choice of going or staying. If staying, I advise you to see Dr. Francis [a famous New York physician] Your diarrhea is continuing too long—and can be cured . . . . . [In August he writes again to George] I can't come to New York, I have too many very sick people to attend.*

The cholera epidemic eventually passed, but the next year John wrote, "I am almost wearied out, driving constantly from 5 or 6 in the morning until 8,9,10 and 12 o'clock at night." Worse, he was having trouble getting paid for all his travail: "The people around here are an infernal set with few exceptions. They don't care to pay bills, we must call for it [even] if it is five miles—[in effect] earning it twice."

> *If only I had time to collect and people had a disposition to pay . . . I am a man who is poor who is doing a business of 4 to 7 dollars a day and not able to collect enough to pay a tradesman's bill . . . . I give you some*

> *insight into the horrors of the country practice for although I am the son of a country physician and brought up in the country, yet I know no more of this life and the perplexities of one who practices here and lives by it, than a new born babe . . . [in a postscript] It is a Monday morning and I have just come in and have not a cent . . . Hell and dander—I wish the profession was in oblivion.*

In a letter to his brother George, John complained of "the dull monotony of life," how unrelenting routine is "one of the greatest antidotes to sentiment and the busy imagination of youth . . . There is no room for fancy in the reality of this world." Certainly there was no time for dancing. Small wonder that a few years after Elijah's death in 1832, John moved to Philadelphia where he worked for the large Ripka textile mills and the next year married the boss's daughter. But during the financial panic of 1857 and then the war, the mills went bankrupt. John and his wife moved to Alexandria, Virginia where during the Civil War he seems to have done some volunteer work as a hospital surgeon. It's not known what happened next, but he lived to age 75 and died in Virginia in 1885.

Some of John's friends seemed not to have been as frustrated by the exhausting routine of a country doctor. Garret Terhune, who was one year ahead at Rutgers, had a slower start in nearby Passaic County since he didn't inherit a father's practice. As he described in letters to John, at first there were only a few calls a day so Garret spent much of his time reading newspapers and books. He sometimes suffered from what he called "the blues" and worried that although Paterson girls were "pretty and mischievous," he was having trouble finding a suitable mate. To fill their evenings, he and a bachelor friend joined the "Hackensack Literary Association and Debating Society" and in their first debate, successfully defended the contra position of the question, "Ought the distillation of ardent spirits be prohibited by law?" A century before Prohibition, the nays had it by "an overwhelming majority" in Hackensack. Work soon picked up and Dr. Terhune went on to have a long and highly successful medical career.

Chapter 4

THE STORMY PETREL OF AMERICAN MEDICAL EDUCATION

Adapted from talks given in 2011 at the Ridgewood Public Library and to the Medical History Society of New Jersey. In a letter to his medical student son, Elijah Rosencrantz wrote, "Return my compliments to Dr. Hossack [sic], you will be very careful and respectful to all the professors, [but] particularly to Dr. Hossack." I wondered who this "Dr. Hossack" was who warranted such respect. It's still unclear to me how or even whether Elijah Rosencrantz personally knew the doctor, but when Elijah first began studying "physic", Hosack, who was about the same age, already was one of New York's best known doctors and by the time John Rosencrantz attended medical school, Dr. Hosack was a leading medical educator. But first let me set the stage:

The time: July, 1778. The scene: The Hermitage estate in HoHoKus. The owner, a Swiss-born British officer James Marcus Prevost, is away fighting in the West Indies while back home his wife Theodosia fears that their home may be confiscated by the Patriots. Theodosia is plain looking but vivacious; well read and a charming hostess. Also, she's politically astute and in an effort to save The Hermitage, offers hospitality to George Washington and his staff which includes the likes of James Madison, the Marquis de Lafayette, Benedict Arnold and two ambitious young colonels Alexander Hamilton and Aaron Burr. Washington accepts Theodosia's invitation and the brilliant assemblage stay for four hot summer days

and as a result of her new friends' influence and after two years of legal wrangling, the Hermitage remains in the Prevost family's hands.

After Theodosia's husband died of battle wounds in 1781, she married Aaron Burr with whom she'd been having an affair. They must have been an odd couple. She was 36 years old, ten years older than her lover, and had five small children in tow so she must have been a real charmer. After the wedding they moved to Albany where Burr had a small law office and began his political career. After twelve years of marriage Theodosia died of stomach cancer in 1794 and The Hermitage was sold several times before Elijah Rosencrantz purchased it in 1807. (His family retained ownership until the last descendant died in 1970.)

Now let's consider the star-crossed lives of Alexander Hamilton and Aaron Burr. The two were of about the same age—Hamilton born out of wedlock on the island of Nevis in 1755; Burr born the next year in Newark to a distinguished family; his father the second president of The College of New Jersey, what would later become Princeton. Both men were short, witty and attractive to the ladies. Both had attended the same prep school in Elizabethtown; later, Burr graduated from what became Princeton and Hamilton from Kings College (Columbia.) After the war, the two were bitter political and personal rivals. Hamilton became our first Secretary of the Treasury under George Washington and Burr was our third Vice President after he and Thomas Jefferson tied in the presidential election of 1800 and the result had to be settled by Congress, Burr losing by one vote after 35 ballots.

Fast forward now to July, 1804: This time the place is Weehawken, NJ—more precisely a secluded clearing overlooking the Hudson, roughly opposite what today is 42nd Street. At that point the sheer cliff was about two hundred feet high, there was a small beach below and a rocky ridge about twenty feet above the shoreline.Two rowboats approach with muffled oars. The occasion is the fatal confrontation between Burr and Hamilton. Dueling was illegal, but New Jersey's law was more lenient than New York's so that combatants often settled their differences in Weehawken—eighteen times between 1798 and 1845.

Alexander Hamilton publicly deplored dueling, but he'd participated in several as a second—indeed, three years earlier his son Philip was killed in a duel in this same place using the very same pistols. Hamilton shot first and it's unclear whether he deliberately aimed at Burr. From ten

paces away, our 3rd vice president was a more accurate shot than our 46th (Dick Cheney.) His bullet pierced Hamilton's ribs, passed through his liver, lodged in the spine and he dropped to the ground. Two centuries later, Burr and Hamilton loyalists still argue about who was the good guy and who the bad. In 2004 the bicentennial of the duel was celebrated in Weehawken and aired on PBS with the roles of the protagonists played by their descendants.

However, our interest here is less on the combatants, than on a man crouched in the bushes nearby with his back turned so as not to be an eye witness to an illegal event. He was Hamilton's friend and doctor (Burr's too) who'd rowed across the river with him from lower Manhattan. When the shots rang out, he'd rushed up to the ledge only to hear Hamilton gasp, "It's a mortal wound, Doctor." The victim was correct. Alexander Hamilton died in agony the next day in the home of his second and attended by this same doctor. So who was this doctor who'd carried Hamilton back to the boat, administered smelling salts and the pain killer laudanum (opium), cared for him until the end, performed an autopsy, served as one of Hamilton's pall bearers and later charged Hamilton's estate $50 for medical services rendered during the so-called "final illness"?

He was 35 year old Dr. David Hosack, the same man whom some two decades later Elijah Rosencrantz would advise his student son John to especially respect. By the time of the famous duel, Hosack was a successful society doctor whose patients included the families of both Hamilton and Burr. So with that lengthy introduction, now let's consider the controversial Dr. Hosack whose story reflects the sometimes quarrelsome state of American medicine early in the 19th century. One historian has described him as "the stormy petrel of American medical education." This curious expression has been used to describe other brilliant but irascible physicians of the past—notably the 16th century alchemist Paracelsus. Petrels are sea birds which were said to ride out storms by flying in the lee of sailing ships—if they flew nearby, it warned of oncoming bad weather. Over time, the expression took on a non-nautical connotation—meaning a rebel, a revolutionary, even an anarchist.

David Hosack was born in New York City in 1769. His father came from Scotland to fight with Lord Jeffrey Amherst during the French and Indian War and then stayed on. Like both Hamilton and Burr, David received some of his early education in New Jersey—Latin and arithmetic

in Newark and Greek in Hackensack. Later while studying at Columbia College, he decided to become a doctor and apprenticed with a well known New York surgeon, Richard Bayley.

In 1788 while studying anatomy at New York Hospital, Hosack became involved in an infamous affair known as "The Doctor's Riot." In those days, grave robbing was an illicit, but common way to obtain cadavers for anatomic study; the perpetrators were familiarly called "resurrectionists." There were various legends about how the riot started, but at one point it seems that a medical student taunted a mob which had gathered outside by waving a severed arm out of a window. The mob charged and some students tried unsuccessfully to defend the laboratory and its displays. The melee lasted for three days; faculty homes were invaded looking for body parts; some doctors fled town, others sought refuge in the city jail. At one point, young David Hosack was struck on the head by a rock and had to be carried away. Alexander Hamilton and Governor John Jay tried to quiet the mob also were struck by rocks and when Baron Von Steuben, the head of a band of eighteen militia, was knocked down, he ordered his men to open fire. After the first volley five people were killed, a half dozen others wounded.

David Hosack prudently transferred to the less rowdy College of New Jersey in Princeton and after graduating from there, attended medical school first at Columbia and then at the University of Pennsylvania where he boarded with the family of the most famous physician of the time, Benjamin Rush. He married a Princeton girl and they moved to Alexandria, Virginia which it was expected would become the nation's capital city. Although Hosack's fledgling practice there was busy, he was poorly paid so the ambitious young doctor moved back to New York City.

Dr. Hosack understood that the wealthy class he coveted was most impressed by doctors who'd trained abroad, so leaving wife and baby behind, he sailed off to England. While studying for two years in Edinburgh and London, he didn't neglect his social life. He met various celebrities and while visiting their estates and gardens came to realize that he lacked botanical knowledge which was crucial for a budding physician (pun intended.) It was a time when herbal remedies were compounded by physicians and Hosack arranged to supplement his medical education. By the time he returned to America in 1794, he was the local authority and soon was appointed Professor of Botany in Columbia College.

In 1801 David Hosack bought twenty wooded acres of so-called "common land" three and a half miles north of the city (located nowadays between West 47th and 51st Streets, Fifth and Sixth Avenues.) And in that sylvan setting he built America's first botanical garden naming it Elgin after his father's native city in Scotland. His intent was for it to be "subservient to medicine, agriculture and the arts." Friends sent seeds from around the world and more than 2000 varieties of plants and rare trees were cultivated. Paintings from that time depicted elegantly dressed couples strolling along manicured paths and Dr. Hosack would hold an annual wild strawberry festival to emphasize the fruit's medicinal properties.

The venture was too expensive for one man to manage alone so Dr. Hosack arranged for political friends and medical colleagues to petition New York State to purchase the garden because of its great value to a city which aspired to greatness in medicine. A public lottery was held to raise money and in 1811 Elgin Garden was purchased by the state at a considerable personal financial loss to Dr. Hosack. Under government ownership it was neglected for it seems that the medical students were disinclined to make the long trip north of the city limits.

After three years the state passed the property to Columbia University to settle a debt. It was said that Columbia accepted the gift "with apprehension." They failed to develop it for more than a century until, in 1929 it was leased to John D. Rockefeller, Jr. The lease between the Rockefellers and Columbia University was renegotiated several times until in 1985 the school was bought out for $400 million. Subsequently, there were several more sales of Rockefeller Center, the most recent in 2000 to a group headed by Goldman Sachs for $1.85 billion!

The only evidence that remains today of Dr. Hosack's botanic garden can be found at Rockefeller Center where a small plaque marks the spot of the greenhouse, midway along the promenade between Fifth Avenue and the skating ring. It reads in part:

> *In memory of David Hosack 1769-1835, botanist, physician, man of Science and Citizen of the World, on this site he developed the famous Elgin Botanic Garden, 1801-1811, for the advancement of medical research and the knowledge of plants.*

Returning to medical matters, in 1798 Dr. Hosack became caught up in a particularly severe epidemic of yellow fever. Decades before Pasteur's

discoveries, he appreciated that the cause of yellow fever was an infection for which he favored "sudorific" treatment—herbally induced sweating. There was no good evidence that it was effective, but it was milder than the approach of his mentor Benjamin Rush whose heroic regimen was to "bleed, blister, puke and purge." In a polite exchange of letters, the two doctors agreed to disagree about whose approach was better. In 2005 an historical novel titled *Hosack's Folly* vividly described this era. The doctor's "folly" was that during another epidemic of yellow fever in 1824, he'd promoted building a "fever hospital" on the grounds of Bellevue in order to quarantine patients. When he also advocated closing ports to discourage importing the infection from the Caribbean businessmen and corrupt politicians who'd be adversely affected were enraged. It's well told in the novel.

At the beginning of the 19th century, American medical education was chaotic and in New York City there was in-fighting between Columbia College and P&S (Physicians and Surgeons) which had been started by the newly formed Medical Society of New York. Among the band of medical rivals, Hosack seems to have been the most entrepreneurial. Undaunted by various conflicts of interest, he was on the faculty of two schools while at the same time was privately and profitably teaching his own students.

In 1966 historian Byron Stookey described Hosack as the "stormy petrel of American medical education." In this he was differing with fellow historian David Rogers who recently had used that same title for another influential and controversial figure in New York's medical politics, Hosack's teacher Dr. Nicholas Romayne Indeed, the famed 16th century alchemist known as Paracelsus also had been described as a "stormy petrel." Petrels were seabirds which were thought to ride out storms by flying in the lee of sailing ships. Over time the archaic expression took on a non-nautical connotation meaning a rebel, a revolutionary, even an anarchist.

David Hosack was an eloquent and popular medical lecturer. In a speech to incoming students at P&S in 1825, he praised the school and predicted that New York would soon surpass Philadelphia as the center of American medical education. Hosack advised the students to always carry a small notebook to jot down new ideas and to record interesting cases. He discouraged the emerging practice of blood-letting being done by non-physicians and warned against what he called "vendors of drugs"—doctors should make their own medicines, not leave such a critical job to laymen.

By the next year things had changed drastically. In those days the teaching faculty were paid directly by students and the more courses taught the better they did. At one time Dr. Hosack held three professorships at P&S, but he also wanted to be appointed professor of surgery because it attracted more students than his other courses. Thwarted in this, in 1826 he resigned, writing "I can spend my time more profitably than by teaching unproductive branches to the College of Physicians." He promptly opened his own school on Duane Street in lower Manhattan (now Tribeca) and among the 152 enrollees was John Rosencrantz from HoHoKus.

However, Dr. Hosack needed more than students; he required a chartered diploma granting institution. After being turned down by Union College, he looked across the Hudson for a willing partner. Indeed, there was precedent because in 1792-1793 and again in 1812-1816 nearly forty private students of New York physician Nicholas Romayne by special arrangement were granted medical diplomas from Queens College in New Brunswick. But Queens had financial woes and twice had to shut down until in 1825 it found a new benefactor. It reopened for a third time when Colonel Henry Rutgers, a wealthy 80 year old New York City bachelor, gifted them $5,000—and a large bronze bell worth $200. They hung in the belfry of their main building and, hoping for more, the school changed its name from Queens to Rutgers. Alas, when Henry Rutgers died five years later, his will left them nothing more.

The arrangement with Dr. Hosack's school might have brought some prestige to Rutgers College, but little money. Each student would pay a $3 matriculation fee to the college and a $25 graduation fee; but they would have to pay between $10 and $30 dollars directly to each lecturer; in all, close to $200 a year. Although Rutgers was the official sponsor, the school was better known as "Hosack's School," but the start-up venture had powerful enemies, especially at the now combined Columbia and P&S medical school. A law was passed in 1827 in order to thwart Hosack's plans which precluded diplomas from out-of-state schools being used for New York medical licensure.

Not to be outdone, the intrepid David Hosack now needing a New York State college took the advice of his friend Bishop Hobart of Trinity Church and turned to Geneva College in the Finger Lakes District where a small Episcopalian school claimed to be dedicated to "civilized and learned behavior (later, that school was renamed after Bishop Hobart and

William Smith.) The idea was for Hosack's school to be a joint venture between Geneva and Rutgers. As a result of this partnership, in 1830 when John Rosencrantz finally was awarded an honorary degree, his certificate read "on the recommendation of the Geneva Medical Faculty of Rutgers College."

But this hybrid arrangement also was short-lived. There were bitter charges and countercharges with Hosack carrying his fight to New York's Supreme Court and then to the legislature. But no classes were held after 1830 and only two more regular and five honorary medical degrees were granted until in 1835 Dr. Hosack and his colleagues threw in the towel. Hosack's days were numbered anyway. He'd already retired to his 700 acre country estate in Hyde Park in Dutchess County where he pursued the life of a gentleman farmer and entertained well-known naturalists, authors and artists. His city home where he held weekly salons once was described as "the resort of the learned and the enlightened from every part of the world."

David Hosack's enduring cultural and civic contributions included being one of the founders of the New York Historical Society, the American Academy of Fine Arts, The Humane Society and Bellevue Hospital. Dr. Hosack died after a stroke at age 66 in 1835. Decades later his Hyde Park estate was sold to the Vanderbilt family and, still later, their neighbor President Franklin Roosevelt arranged to have the estate designated a national park where a portion still is known as "Hosack's Farm." Rutgers Medical College reopened 130 years later in 1966, but after only four years, the school was severed from Rutgers University and absorbed into what is now the University of Medicine and Dentistry of New Jersey (UMDNJ.) Now, once again, there are those who are attempting to reunite Rutgers and the medical school.

Chapter 5

FROM BRANDY TO GRAHAM CRACKERS

Adapted from "Early Physicians of Northeastern Bergen County" with some later additions.

The first practicing physician in the Upper Northern Valley of Bergen County was Henry Kipp (1785-1849.) whose family history intermingled with that of New Amsterdam, one member being on the Board of the Dutch East India Company which commissioned Henry Hudson's explorations. Dr. Kipp settled in what then was called Schraalenburgh (now Dumont) where for many years he was the only physician in the area. He was replaced in 1850 by Charles Hasbrouck, but the fifteen hour days soon took their toll on the younger man so he brought in a partner John J. Haring and two years later moved to the more relaxed atmosphere of Hackensack where he built a lucrative practice—more about Charles Hasbrouck shortly. Dr. Haring continued for more than fifty years and in addition to his medical work, wrote a newspaper column which consisted of a series of "chips" (essays) written under the pseudonym "The Whittler." At age 91 Haring's collected writings were published as a book called *Floating Chips* and in one "chip" the "Whittler" recalled a typical work day:

> *Responsibilities and labors were, of course, enormous. Horsepower was the only method of travel and over roads of which no square yard had been improved. The following is a single day's experience—one of its strenuous ones: rising early, taking a hasty breakfast, starting out on a high wheel sulky drawn by a spirited horse for Hoboken; then crossing*

the Hudson River by ferry on a small low boat, driving to the drug store at Spring Street, selecting and packing needed drugs and returning home by the same route, making a few calls on the way. The evening, perhaps, was passed preparing pills, powders and tinctures for daily use.

The frustration of the early physicians in dealing with infectious diseases was poignantly expressed in Dr. Haring's description of the death of three brothers in Tenafly during a diphtheria epidemic:

In this same room I had seen these three children expand their lungs for the first time and it so happened that I was present with them all when they were expanded for the last time, sadly closing their eyes to death, having passed through a strain experienced only a few times before in my twenty-five years experience in the sickroom.

Relocated to Hackensack, Charles Hasbrouck was a faithful member of the county medical society reporting each year to the state society on contagious diseases prevalent in Bergen County. Following are several selections from his report for 1865:

As a reporter for this District, I am happy to state that the diseases of Bergen County, so far as I have been able to learn from my own observation, and from considerable association with the physicians of the county, have for the last year, presented the simple, mild and manageable characters, by which they have been marked for the past few years . . . .

In my last annual report, I stated that smallpox was at that time prevailing to an unusual extent in the county, but that I had been so fortunate as not to have met with a case. This terrible disease continued to prevail for a month or two after that report was written and then disappeared entirely . . .

Until recently, Bergen County has been almost a terra incognita. Within the last few years, however, the county has been connected with the city of New York by lines of railway, and the rich and beautiful lands of the county are beginning to be much sought after by merchants and others doing business in the city . . . .

> *The profession here get along very harmoniously together. I have no violation of medical ethics to report—a fact due in a great measure, I think, to the organizations of our District Society. This has brought the members together—not as often as should be, to be sure—and association secures confidence and a better understanding. If no other good result from our Society, this alone is worth the cost.*

Charles Hasbrouck was among the vanguard of physicians who were pushing back against the received dogma of Benjamin Rush's "heroic" treatments. Dr. Hasbrouck favored a popular 19th century theory called Brunonianism which classified disease either as being "sthenic" (excessive tension) or "asthenic" (excessive relaxation.) Each required a different therapeutic approach than bleeding and purging, e.g. liberal use of opium, quinine, ammonia—and brandy. Like his colleagues on the state medical society, Hasbrouck was disturbed, and financially threatened, by the multitude of unlicensed "irregulars" then practicing in New Jersey.

In 1869 he composed an essay, "The Apparent Uncertainties of Medicine, As Seen in the Conflicts and Discrepancies of Medical Opinions and Practices" in which he tried to reconcile what was considered to be scientifically proved with what actually seemed to work at the bedside. He noted that there were great variations in how experienced physicians treated common conditions and how often they vehemently disagreed. Scorning "recipe doctors" with their patent medicines, he remarked "their prolific saddlebags are always pregnant with a promiscuous collection of remedies, concisely labeled, "Good for Rheumatism," "Good for the Piles," "Good for the Bloody Flux" etc . . . . "a very convenient arrangement surely and admirably calculated to save time and to prevent the needless waste and wear of brains."

No doubt Charles Hasbrouck was disturbed by a report that there were 596 "regulars" practitioners and 151 "irregulars" in the State. The latter included 60 homeopaths, 36 "eclectics," six Thomsonians, five Botanics, six "electricians," five cancer doctors, five clairvoyants, three root doctors, two of the "Swedish movement," two hydropaths, one Indian doctor and one "inhalation" practitioner. Two more were listed simply as "Quacks" and 17 were not classified or practiced no particular system.Twenty-one irregulars were females, "of the class known as the progressive bloomer kind, spiritualists and infidels."

It's unlikely that clear distinctions between these systems and sects could be identified since both regulars and irregulars used a mix of regimens during this period which predated any semblance of modern medicine. They promoted their treatments with vigor, little concerned about how they worked so long as the patient felt better. Dr. John Budd (1762-1845) of Essex County had a favorite panacea he called "diabolical pills" which he dispensed liberally. As he explained, "I give [it] when I do not know what else to do for it is [an emetic], sedative, cathartic, tonic and expectorant and cannot fail to hit somewhere."

During the 18th century in Hunterdon County, George Viesselius, locally known as "the red cheek doctor" because of a birthmark, confined himself to treating conditions which might respond to external applications. These included black salves, poultices, washes and waxed "cerecloth"—the last, generally used for wrapping dead bodies. After his death in 1767, the doctor's widow and his "bound" assistant, Jacob Tidd (1742-1818) continued his practice in Hopewell. After completing his indenture, Tidd practiced herbal medicine in the area for many decades. A review written in 1893 in the *Eclectic Medical Journal* by Dr. Alexander Wilder of Newark provided this vivid description:

> *Dr. Jacob Tidd of Amwell, Hunterdon Co, New Jersey, [was] a man of excellent success in the methods of treatment as well as a great originality. Dr. Tidd was a German by birth, and never got beyond a broken English dialect. Coming to this country in boyhood, he had spent some time in captivity among the Indians. Observing their modes of procedure, and learning their remedies, he was able to set up in the use of these after his return to civilized life. His scorn for heroic medication was intense: "Dem doctors p'isens de people," was a favorite assertion of his, and an over true one.*

Jacob Tidd also seems to have learned tricks of the trade from "Old Doctor Parks" (Roger Parke) who was familiar with techniques employed by old Indian squaws and medicine men. As reported by historian Fred Rogers, "probably no other pretender [than Tidd] was more distressing to regular practitioners who frequently reported receiving his patients after their diseases had become incurable." When Jacob Tidd died in 1818, the family business was continued by his daughter (Dr. Polly Bennett) and his

son John who introduced "the lancet, the scarifier and cups and gave pills and powders of magnesia, rhubarb and salts."

However, it was Jacob Tidd's apprentice Wooster Beach (1794-1868) who would have a major impact upon American medicine. As a young man in Trumbull, Connecticut, Beach became obsessed with the idea of reforming current religious and medical practice. He was convinced that "the present practice of physic and surgery, so far from being founded on correct principles, both in theory and practice, was absolutely a curse to society." When he learned of the prowess of the renowned herb doctor in rural New Jersey, Wooster Beach sought out Dr.Tidd and begged to be accepted as his student. The old man was wary and twice refused, but as described by Beach's biographer Alexander Wilder:

> *These men (of whom the world was not worthy) suffered the spoiling of their property, outlawry as notorious offenders, deprivation of their right to just remuneration for services, prosecutions for crimes of which they had never dreamed, and wanton wrong and insult in every form. It was natural that they should receive overtures and professions of friendship with distrust.*

Dr Tidd must have realized that he was approaching the end of his half-century career and reluctantly relented to Wooster Beach's entreaties. After his mentor's death, the indefatigable Beach continued to seek herbal knowledge from "root and herb" doctors, native Americans and "female practitioners." Leaving Hopewell for New York City he enrolled in medical school where he studied with Dr. David Hosack among others (see Chapter 4.) He explained later that by studying conventional medicine, he was better able to defeat its errors which he pursued with a crusader's zeal. After receiving a diploma and becoming a member of the New York County Medical Society, any legal obstacles to continuing a medical career were removed.

Wooster Beach developed a busy practice in New York, took in his own students and in 1825 opened what he at first called a clinic, then an infirmary, then an academy until finally and grandiosely, "The Reformed Medical College of the City of New York." He claimed that his "eclectic" approach combined the best of other treatment regimens, including ancient and native American treatments as opposed to the cruel, inhuman, sometimes barbaric methods used by the followers of Benjamin

Rush. Beach's popular three volume text *The American Practice of Medicine* discussed the benefits of roots, barks, herbs, flowers, seeds, gums, balsams and other "earthy and animal substances."

Copies of the book were sent to various European sovereigns who submitted them to their grateful court physicians. This led to an outpouring of royal diplomas and honors, including a testimonial and gold medal from Pope Gregory XVI. Exuberant letters from medical colleagues hailed Wooster Beach as "being in the top rank of the most celebrated authors of our art." Another testimonial said, "The work which has just flowed from your learned pen will not fail to obtain the approbation of all enlightened connoisseurs." Not bad for the apprentice of Hopewell's root and herb doctor.

When Wooster Beach established a training school in Worthington, Ohio he proclaimed that it would make available to people of the Midwest "a scientific knowledge of Botanic Medicine." As one faculty member recalled, "The effort was not to cultivate the idea of a fixed or routine system, but to release the mind from the dogmas of creeds and systems, the philosophy of medical schools as these were then taught, and to direct it into an unlimited enquiry." Dr. Beach not only was pedagogic, he was political. Realizing the importance of legitimizing the eclectic movement, he established a national organization *The Reformed Medical Society of the United States*.which emerged as a serious competitor of the main-stream "allopaths." Along with other irregular groups, including Thomsonians and homeopaths, the desperate regulars were forced to band together to meet the competition by forming *The American Medical Association.*

No discussion of New Jersey's contribution to 19th century alternative medicine would be complete without mention of a passionate reformer Sylvester Graham (1794-1851) who served for several years as a Presbyterian minister in Bound Brook. His stern message was "if it feels good, don't do it." Graham advocated hard mattresses, loose clothing, open bedroom windows, vigorous exercise—and chastity. Proper diet was crucial and he championed high fiber and vegetarianism. However, Minister Graham's enduring contribution was a biscuit made from molasses and whole wheat flour with no chemical additives. It was introduced in 1829 while he still lived in Bound Brook and adherents claimed that regular use would cure indigestion, poor circulation and insanity among many other conditions—also it would reduce lust! It's known to this day as the Graham Cracker.

Chapter 6

A COUNTRY DOCTOR CALLS FOR HELP

In 2009 I was invited to speak to a local group about pioneer physicians of Bergen County and on considering what to discuss, I recalled an article I'd co-authored with Dr. Stewart Alexander in 1983 in The Journal of the Medical Society of New Jersey which we called *"Home Care Delivery in Bergen County in the 19th Century." The material also had been presented at a symposium of the Medical History Society of New Jersey in May, 1982, but upon revisiting that early work in the hope of finding a fresh approach, there was a surprise.*

Henry Crippen Neer, who was born in upstate New York in 1838, received a medical degree in 1860 from the Berkshire Medical Institute in Pittsfield, Mass. That Institute had five lecturers, generously called "professors," and was in business only between 1823 and 1865. It was one of dozens of proprietary diploma mills which provided two years of lectures and then, for a hefty graduation fee, granted a medical certificate—all that was needed to practice in those days. Henry Neer's formal training may have been suspect, but he'd apprenticed with his older brother Dr. David Neer of Paterson, NJ. Moreover, he was a life long learner who read medical journals and regularly participated in county and state medical conferences. After a brief stint of practice in Schoharie County, in 1865 at age twenty-seven, Dr. Neer arrived in what was then called "Pascack" (the name was changed to Park Ridge in 1894) and worked there until his death from colon cancer in 1911.

American medicine in mid-19th century was crude and unscientific. Sometimes the era was called the age of "heroic medicine" and, in truth, the heroes were the patients who had to swallow noxious medicines, emetics, cathartics and herbal remedies. As Boston's poet-physician Oliver Wendell Holmes Senior famously summed up in 1861: "If the whole *material medica* as now used could be sunk to the bottom of the sea, it would be all the better for mankind—and all the worse for the fishes." Although county health officers like Henry Neer dutifully reported statistics about local epidemics to the state medical society, they really had no understanding of the link between human disease and microorganisms.

In the early years, Dr. Neer traveled widely by horse and buggy over muddy or rutted roads, in all conditions and at all times of day or night, south as far as Paramus, north to Spring Valley and Pearl River, NY. Neer needed to be resourceful for when he began he was not only the Pascack Valley's first physician, but also the only dentist, veterinarian and pharmacist for miles around. He ordered basic medical supplies from a drug store in Manhattan: colchicine, digitalis, salicylate, calomel, quinine, opium, bismuth, camphor and all sorts of herbs and mixtures. For those who couldn't tolerate the vile taste of castor oil or other potions, he instructed his wife and daughters who served as his pharmacy assistants to lace the medicine with port wine. Dr. Neer also invented and patented a pill-coating machine in order to hold their home-made concoctions together.

During his long career, Henry Neer delivered more than two thousand babies. For most people in town, not only was he present at the beginning but he also attended them at their deaths. At his own funeral in 1911, Neer was lauded as "the ideal family physician . . . who gave more hours of the twenty-four and in so doing traversed a wider territory than any other physician in Bergen County." In addition to leading the stressful life of a country doctor, Dr. Neer was the town's first mayor, twice was elected president of the county medical society, was the Dutch Reformed church's organist and choir leader, and on the side sold pianos in order to help feed his nine children. Indeed, for more than four decades Henry Neer was Park Ridge's indispensable man.

For my speech, I wondered what more could I say about Dr. Neer that I hadn't described before? Then I remembered three huge ledgers which Dr. Stewart Alexander had shown me many years ago. Two of them

contained thousands of prescriptions which his family prepared in their home's drug room, but it was the third ledger which contained the doctor's obstetrical recrods which we'd previously written about, that especially interested me. In it Dr. Neer had recorded vital statistics of every delivery and occasionally details of the more complicated cases were written in the margin—both the good and bad results; terse comments written for himself, sometimes only a sentence or two. In 1982 Dr. Alexander and I had selected seventeen of these for our paper because we felt they provided unique insight into what "home deliveries" were like for country doctors more than a century earlier.

Being an avid reader of medical journals, Dr. Neer was familiar with new developments in obstetrics and in some of these marginal notations he described how when uterine contractions were weak he used a recently described battery operated electrical stimulator. Although he was aware of new technology, he also was susceptible to superstitions of his time. One case report described premature delivery of a severely deformed dead fetus with no anus or genitals whose vestigial legs were fused. As explanation for this "monstrosity" he wrote, "This case undoubtedly was caused by nervous impressions on the mind of the mother, a very sensitive and imaginative person, produced by seeing a man at a show who had both thighs amputated in the army." He added that she didn't know that she was pregnant. Another time after delivering a baby with a hare lip, Dr. Neer explained that the mother said that she was "frightened and very much interested at seeing a man without a nose soon after her conception, to which she attributes the child's deformity."

On rereading what Dr. Alexander and I had written nearly three decades earlier, one case report especially stood out. There was a ledger entry for February 10, 1879 which reported that a baby was born to Garret N. Ackerman, age 23 and Margaret ("Maggie") Westervelt, age 18 and the following is exactly what Stewart Alexander and I copied from the marginal note :

> *A very severe and protracted labor owing to a small pelvis and face presentation. Was called about 11 A.M. in the morning. Dr. Zabriskie [of Westwood] was called in consultation; we made attempts until 7 o'clock to effect delivery by the forceps, or by turning, but the head lay so high above the brim of the pelvis that we could not make either application. About*

being satisfied that delivery could not, in all probability, be accomplished per vias naturalis [natural childbirth]

I SENT A MESSENGER TO NEW YORK AFTER DR. L.G.THOMAS. *The patient was given a dose of morphine, and at 9 o'clock Dr. Zabriskie went home, to return on the arrival of Dr. Thomas on the 2:30 train [that would be the next afternoon]. Remaining with the patient, I found her rapidly losing in strength and at 11 her condition was very desperate, strong premonitory symptoms of eclampsia, great exhaustion, yawning, confusion of intellect, and believing she could not survive until the arrival of Dr. Thomas, and the os being well dilated, although still above the superior strait, I determined to make another effort to apply the forceps, and after some difficulty, succeeded and soon delivered her a living female child. She rallied very slowly with some incontinence of the bowels, and spasmodic pains, but finally made a good recovery.*

That certainly was a dramatic success, but what puzzled me was why this experienced family physician would go to the trouble of importing a consultant from relatively distant New York City in the midst of the winter of 1879—indeed, it was the only such instance recorded in Dr. Neer's ledger. With difficult cases, especially when high forceps delivery failed, he sometimes sent his driver to fetch colleagues from nearby towns and they'd arrive within a few hours, usually to administer chloroform anesthesia while he attempted internal version (turning the fetus by inserting the doctor's fingers or entire hand into the uterus and delivering the baby feet first) a hazardous procedure both to mother and child with babies usually delivered still born. However, in this case, Dr. Neer's consultant L.G.Thomas would have been coming by train the next afternoon. What special skills might he be bringing to the kitchen table?

My initial efforts to learn about this Dr. Thomas were unsuccessful. The archives of the *Academy of Medicine of New York* failed to turn up any licensed physician in the city by the name of L.D.Thomas. Shortly after Neer arrived in Pascack a new railroad line began operating between Hoboken and Spring Valley, New York, a few miles north of Pascack so perhaps Neer's consultant came down from Rockland County, only a few minutes away, rather than up from New York City. But historical records

from there also failed to turn up a Dr. L.G. Thomas. I was able to locate a Luther Goble Thomas who had practiced medicine briefly in Newark before volunteering in the Union Army in 1863. He'd served for nine months but then suddenly developed what was called "brain congestion" and died at age 34—two years before Henry Neer arrived in Pascack. Frustrated in my research, it appeared that I wouldn't be able to identity Dr. Neer's mystery consultant.

Then several months later an unexpected clue turned up when Robert Vietrogoski, the medical history librarian at UMDNJ/New Jersey Medical School, suggested perhaps Dr. Alexander and I may have misread Dr. Neer's handwriting. It certainly wouldn't have been the first time that a doctor's handwriting was misread. He asked whether rather than L.G.Thomas the consultant from New York might have been T.G. Thomas? I revisited the old ledger which now resides in an archive of one of the Rutgers Libraries in New Brunswick and, sure enough, we'd misread Neer's flowery 19th century script and what had appeared to be a capital L, in fact was a capital T. Armed now with the correct name, information about the consultant was abundant and readily available on the internet.

Thomas Gaillard Thomas (1832-1903), usually referred to as T. Gaillard Thomas or Gaillard Thomas, may have been the most famous obstetrician and gynecologist in the United States during the late 19th century. Born in South Carolina, he received his medical degree from the state university there in 1852 and then did two years of graduate work in Dublin and Paris. Returning to this country he settled in New York City where he worked at Bellevue Hospital and the New York City Hospital on Blackwell Island. In 1863 he'd accepted the position of chairman of obstetrics at Columbia's College of Physicians and Surgeons; later became chairman of gynecology and during his twenty-six year tenure at Columbia, earned an international reputation as a brilliant surgeon, lecturer and author.

In 1868 Professor Thomas published his magnum opus *A Practical Treatise on Diseases of Women*—802 pages long, it included 347 engravings. The textbook went through six editions, was translated into five languages and sold more than 60,000 copies. Among Dr. Thomas's innovations (1880) was the so-called "dull curette"—sometimes referred to as the "when in doubt curette" which, in addition to conventional gynecological

conditions, was employed to treat "lassitude, headache or any ache almost anywhere." Impressive.

Through the marvel of Google Books one can read his huge textbook on-line, as well as various other publications by and about Dr. Thomas. One colleague described the professor as "a man of prepossessing appearance; quite stout . . . inclined to corpulency . . . a strictly methodical man . . . . and quite fully impressed with his own professional worth." At a celebration of his 70th birthday at the Waldorf Astoria in 1901 more than 300 colleagues attended and after all of their praise, Dr. Thomas, himself famous for his eloquence, responded at length.

He began by describing the medical advances that he'd witnessed during fifty years of practice including the thermometer, anesthesia, germ theory and antisepsis. He noted how surgery had advanced in status from advanced barbering to a true science and amidst his acknowledgements, Dr. Thomas had good words not only for "prosperous professors who live in metropolises," but also for humble country doctors such as Henry Neer: "the obscure practitioner who plies his arduous calling trudging the highways with much of labor and little of profit."

Having successfully identified Dr. Neer's consultant, the question remained why would the eminent Professor Thomas board a train in the dead of winter and travel for hours in order to help deliver a baby in Park Ridge? The answer came not from Dr. Thomas's *Treatise on Women's Disorders,* but from an important paper titled "Gastro-elytrotomy: a substitute for the Caesarian Section" which he'd delivered less than a year earlier at the New York Academy of Medicine (March 21, 1878.) Later, Dr. Thomas delivered the same talk to medical audiences in such diverse locations as Yonkers and Edinburgh and various journals reproduced the speech in full.

Dr. Thomas had reported on five successful operations that either he or a colleague performed between 1870 and 1878 on desperately ill pregnant women who were unable to be delivered conventionally, usually because of a small or deformed pelvis. The mother's and the baby's lives were at stake and Caesarean section was considered too dangerous because of the risk of peritonitis and sepsis. Being a student of medical history, Dr.Thomas was aware of several so-called "miracle deliveries" done in the past using a technique which he called "laparo-elytrotomy" or "ovotomy". Of the five cases he reported, four children were delivered alive and three

mothers survived. In each instance the circumstances were dire, the mother already half dead and the goal merely was to extract a live baby.

The procedure was not for the faint of heart—neither mother or doctor, It required exquisite surgical skill to avoid complications, especially hemorrhage. An abdominal or vaginal incision was made just above the pubis and tissue carefully but bluntly dissected so as not to enter the peritoneum or puncture the bladder, the baby then extracted from the cervix or vagina through this operative wound. The procedure could be accomplished in ten minutes, required no special instruments and was technically less difficult than Caesarian section. Later, the patient "should be kept perfectly quiet, nourished by milk and animal broths and kept free from pain with opium."

Dr. Thomas wasn't ready to recommend the technique for standard practice, but suggested that at least it deserved careful consideration in an emergency. In fact, in other hands infection proved to be a problem and the Thomas approach didn't catch on, but by then antiseptic techniques, which he strongly advocated, had reduced the risk of infection from Caesarean sections and maternal mortality at the best of hospitals fell to about 15%. Dr. Thomas's talk and subsequent paper provoked much comment and skeptics suggested that only a virtuoso surgeon like Dr. Thomas could pull it off—or pull a live baby out. The procedure came to be known as "Extraperitoneal Caesarian Section" but many referred to it as "the Thomas Operation." As one British enthusiast opined,

> *Whatever the future may determine as to limit in the class of cases to which Thomas's operation is applicable . . . I am certain that the great merits of the operation will be so established in obstetrics by the profession at large throughout the entire world as to satisfy the ambition of any man to be regarded as a great contributor to the advance of the obstetric art in a limited number of cases.*

No doubt, Henry Neer, who prided himself on keeping up with new developments, was aware of Dr.Thomas's technique. Desperate to save Maggie Ackerman and her baby son, he was faced with a dying mother whose baby was still alive so the country doctor must have decided to call for help. Surely the New York professor would have been eager to add to his limited experience and perhaps this case might have seemed like a good opportunity. As it turned out, Dr. Neer couldn't wait another day for

the great man's arrival—Maggie was dying. With persistence, high forceps and good luck, Neer successfully delivered a healthy baby. Both mother and child survived without the need for "special delivery."

Dr. Gaillard Thomas was a dynamic lecturer and writer and typical of his time, his language and prose were vivid. A few selections from his classic textbook on gynecology are worth reviewing for the insight they provided into what was known about women's health during the late 19th century. Concerning neglect of exercise and physical development the doctor noted that women were far more sedentary than men, but he was gratified that in the last twenty years more outdoor amusements were being pursued such as archery, bowling and rowing. Girl's schools were particularly backward because exercise was considered "hoydenish", unbecoming and fit only for rough boys. He advised twice daily salt water sponge baths followed by vigorous rubbing with a rough towel for five to ten minutes.

Corsetting, lacing and wearing tight clothes was condemned as detrimental to health by altering pelvic anatomy and physiology. In particular, "uterine disease just after maternity even where no excesses have been committed . . . is not due to excessive indulgence in coition which injures the cervix, but [results from] distortion of natural relations of the genital organs."

"It is no exaggeration to maintain that the American woman except in our cities is at least half-starved—not from an enforced but from a voluntary starvation. Let one travel through our farming region and examine closely the women whom he meets, and he must admit that the robust, buxom, florid lass and matron is the exception; the pale, lank and emaciated the rule . . . . These women are underfed from the cradle to their graves." The worst offender: "The noxious and inevitable pie of the Eastern states in place of bread and nutritious puddings, will never answer the requests of nutrition until the laws which govern that process are altered."

Puerperal or childbed fever was a dreaded complication of childbirth during the 19th century, second only to tuberculosis as a cause of death in women of child-bearing age. By the 1840s some physicians were beginning to suspect that there might be an environmental cause. Oliver Wendell

Holmes said, "In my own family, I had rather that those I esteemed the most should be delivered unaided, in a stable, by the manger side, than that they should receive the best help, in the finest apartment, but exposed to the vapors of this pitiless disease." Outraged by this comment, the eminent Philadelphia obstetrician Charles Meigs replied, "Doctors are gentlemen and gentlemen's hands are clean." Nevertheless, at mid-century medical students still were being advised to bring oil-soaked towels and pig lard with them to deliveries.

In 1847 Ignaz Semmelweiss in Vienna made the connection between cleanliness and sepsis and ordered doctors and students at his hospital to wash their hands in chlorinated lime solution. His findings were not well known in this country, but Professor Thomas was aware of Semmelweiss's work and in a speech at the New York Academy of Medicine in 1883 remarked that after 2000 years we finally were passing out of the darkness into the light. He spoke of an unknown "poison that invades the blood of the parturient woman which sometimes may produce convulsions," as he put it, "an untoward moral influence which may cause violent mania . . . . It is an infection due to septic inoculation in the wounds [made by] the passage of the child."

Dr.Thomas suggested that the poison entered either through the atmosphere or on the fingers of the doctors or nurse, or on the towels, sponges, instruments or bedclothes. He complained that apathy to the problem by even the best doctors "borders very closely upon criminality." He advised that delivery rooms should be scrupulously cleaned, floors and walls washed with carbolic acid and clothing bathed in boric acid. Dr. Thomas also deplored the common practice of midwives who carried silver urethral catheters which they reused from case to case. Although recognizing that veteran physicians might disagree, he didn't care—he was merely repeating what already was being done in Germany where preventive antiseptic measures were mandatory.

Surely, Dr. Henry Neer was up to date with contemporary medical advances, but as it turned out, the country doctor's skill was sufficient to deliver a healthy baby. Church records indicate that baby Eva lived until age 20, mother Maggie died in 1931 at age 81 and the father Garret N. Ackerman (who later became mayor of Park Ridge) died in 1943 at age 87.

Chapter 7

ESSEX COUNTY'S DOCTORS GO TO WAR

A by-product of my futile search for "L.G.Thomas" was discovering a book about early 19th century medicine as practiced in Essex County. It was written in 1866, on the occasion of the 50th anniversary of the founding of the Essex District Medical Society by that organization's designated Historian Dr. J. Henry Clark of Newark.The author reviewed the history of physicians who'd practiced in the county from the late16th century to those who'd fought in the recently completed "great rebellion." They included a Dr. L.G.Thomas, but he was too early to have been Dr. Neer's consultant. Some of Dr. Clark's vignettes were amusing, others heart breaking, and each put a human face upon New Jersey's medical history. Included here are several anecdotes concerning some of the twenty-three Essex County physicians who fought in the Union Army, three of whom failed to return.

After the fall of Fort Sumter in April, 1861, President Lincoln called for 75,000 volunteers to provide ninety days military service and one physician who responded was Newark's Alexander Dougherty. According to Dr. Clark's enthusiastic account, during the Peninsula Campaign of 1862, Dougherty was "largely instrumental in saving the Army of the Potomac from the dreadful effects of the scurvy, he being so far as he knows, the first to call attention of the authorities to the formidable scourge of armies." Dr. Dougherty had urged provision of potatoes, dried apples, onions, fresh vegetables and substitution of malt liquor for the whiskey ration. Anyone with swollen gums was prescribed vinegar three times a day, their compliance with the regimen carefully recorded and the

results were dramatic. At the battle of Fair Oaks where each side had some 5,000 casualties, Dougherty performed thirteen amputations in three days. In the field hospitals where speed was deemed more important than cleanliness, some facile surgeons could lop off limbs in ten minutes or less. Dougherty himself suffered two serious injuries during the war and when he left the army, his achievements were recognized and he was elevated to the rank of Colonel.

Dr. Clark reported that Dr. Edward A. Pierson was "our first martyr to a preserved nationality." Pierson served in the Navy and during his first assignment was to a frigate, he narrowly escaped injury when a shell fired from the iron-clad *Merrimac* entered his room. The doctor also survived a bout of yellow fever, but his luck ran out during the blockade of Wilmington when a shell fired from land exploded near him causing a fatal skull fracture. Another navy man Dr. Edward Holden entered the regular service in 1861 and was assigned as an assistant surgeon on a frigate which engaged in prolonged conflicts with the *Merrimac*. A few months later Holden was assigned to the *U.S. S.Passaic*, one of ten iron-clad "monitors" in the Union Navy. As reported by Dr. Clark, this introduced new medical challenges:

> *The fearful experience of eight or nine months, from untried navigation, improper ventilation, iron-impregnated water—causing much illness of officers and crew—has resulted in such improvements in iron-clad architecture as has made the American Monitor a model of elegance, health and comfort. [But] a disease, very peculiar in character and symptoms which was called "iron clad fever" occurred on all the Monitors until these improvements were perfected . . . . The illnesses produced by combined impurity of air, improper ventilation and arduous duty—completed what might be termed a maximum dose of iron-clad experience.*

One of Essex County's Civil War heroes James T. Callahan had apprenticed to a Rahway doctor at age sixteen, graduated from medical school in 1859 and two years later volunteered in the army serving at Bull Run and Fredericksburg. A medical colleague recalled that at Gettysburg, "his energies and resources were taxed to the utmost but he was never found wanting." When General Daniel Sickles' leg was shattered by a cannonball, Callahan assisted in the battlefield amputation. Young Dr. Callahan had administrative as well as surgical skills. In 1864 he was

placed in charge of the hospital where victims of the tragic "Burnside Mine Explosion" were treated.

Callahan's next assignment was to set up the Ward Army Hospital in New York Harbor which for five months in 1865 housed more than three thousand Confederate prisoners. When a cholera epidemic broke out on nearby Hart's Island in July, 1866 he treated the maid servant of commanding officer General Abner Doubleday (yes, the "father of baseball") and that same evening came down with fever and dysentery. He washed down his paregoric with whiskey and took to his bed. Knowing full well what to expect, he shook Gen. Doubleday's hand saying, "I hope that I have done my duty. It is a great consolation to know that I shall die at my post."

The doctor's last words to his wife were, "Tell my mother that I died a Christian." The poor woman had no time to grieve for their baby became ill the same time as his father and died ten days later. Callahan's body couldn't be removed from the island for fear of spreading disease and it wasn't for another six months when the weather was colder, that President Grant arranged transfer with full military honors to a cemetery in Rahway. Dr. Callahan was made a Lieutenant Colonel in recognition of his services at Hart's Island during the time of cholera. The body of his infant son was placed in his 27 year old father's casket.

When Newark encountered one of its periodic cholera epidemics during the 1850s, young Dr. Gabriel Grant had been appointed to a special Health Committee which led a vigorous drive to improve sanitary conditions. Scavengers were hired to cart away garbage; privies, gutters and alleys were swept clean; pools of stagnant water covered with lime and excreta removed from stables and pens. The experiences of other locales was studied but to no avail and when the epidemic spread, fearing that their labors "though incessant and fatiguing would not be adequate to stem the scourge," the Committee was excused from reporting so as not to create panic (see Chapter 16.)

At the war's onset Dr. Grant helped organize the Second New Jersey Volunteers and saw action under General Philllip Kearny at Harper's Ferry, Bull Run, Antietam and Fredericksburg. In 1863 he was sent to Vicksburg on a large hospital ship on which both medical officers and the wounded suffered from the tropical climate, malaria and inadequate supplies. Later that year, General Burnside placed him in command of the new USA Government Hospital that was being built in Madison, Indiana. Under

Dr. Grant's direction it grew to more than 3,000 beds and treated more than 7,000 troops with a mortality rate of only 1.66% and an average length of stay of twelve weeks. He resigned his commission in 1865 after having headed the hospital in Madison for one and a half years. No doubt, there was a link between this important posting and the first name of Gabriel Grant's son Madison who was born in New York City later that year. (see Chapter 18 for more about Madison Grant.)

In 1893, long after J. Henry Clark's historical review of Essex County's medical luminaries was written, Gabriel Grant was awarded the Congressional Medal of Honor. The citation extolled his personal daring at the battle of Fair Oaks where while under fire, he'd rescued wounded soldiers exposing himself to danger far beyond the call of duty, thus furnishing "an example of most distinguished gallantry." One of those whom he saved that day was Gen. Oliver O. Howard whose right arm was amputated by Dr. Grant.

There was a striking disconnect between J. Henry Clark's flowery rhetoric in 1866 praising his heroic colleagues and the fact that those worthies had little idea about the nature of the diseases they were treating. Dr. Clark often used the metaphor "working in harness" to describe how hard physicians of his day worked. In truth, it was an apt choice of words since they needed real horsepower in order to make their exhausting rounds. Clark concluded his review of Essex County's medical history by musing on past, present and future:

> *The revelations of the stethoscope, microscope, ophthalmoscope, laryngoscope and speculum had neer been made. Veratrum, chloroform, the preparations of iodine and the alkaloids had not been discovered. Nothing had been known of the "pathies," such as homeopathy, electropathy, hydropathy and motorpathy, for each of them have produced some modification and taught us something. The art of healing gains advantage from innovations and systems, so called; for each of them is based upon some truths, often greatly magnified by the genius and industry of its advocates.*
>
> *Now pathology, physiology and chemistry have each grown into distinct sciences . . . The period of superstition, of the purely theological and of the metaphysical has passed away . . . Doubtless the next half century will advance us quite as rapidly and as far as the last. The golden age is not*

> *in the past or in the future, but is all about us. We live in it. Whether we live up to it will depend upon ourselves—upon you—it will depend principally upon the young men who are still full of hope and buoyancy. This is the period of labor. Now is the time to do our life work.*

Dr. Clark would die just three years later so his closing words were especially poignant:

> *As soon as the grave closes over us the questions of worldly accumulation will be of little importance. It will be asked were we faithful to every trust and obligation? Did we perform our whole duty to our patients, to the profession and to society? Did we perform our duties fearlessly and conscientiously? If so, we shall be pronounced by the future medical historian, "good and faithful servants;" if not, we must be written faithless to our brethren and to God.*
>
> *The limit of inquiry will never be reached in this world, however near it may sometimes appear . . . . No branch of medicine can be exhausted by any one in a single life. There are fields of inquiry not yet entered upon—golden veins not yet touched. One generation constantly crowds the next and "passing away" is written upon all earthly scenes.*
>
> *The generation which succeeded the one which inaugurated the [Essex County] society is passing its period of activity. It has done its work. It seeks repose and is quite willing to pass the labor and responsibility along to the younger generation . . . . . Your historian takes his leave with high hopes and ardent expectations.*

Whereas J. Henry Clark's book described medical progress in Essex County during the previous fifty years, he concluded with "high hopes and ardent expectations" concerning advances which he expected might occur in the coming half century. In 1912, forty-six years later and almost right on schedule, his son J. Henry Clark Jr. addressing otolaryngology colleagues at the Academy of Medicine of New Jersey and described how medical science was only now emerging from its Dark Ages. But new problems were emerging, including tension between generalists and a new breed of specialists:

> *The necessity of specialism in medicine is obvious, the legitimate result of increased knowledge . . . . . The old reliable, intelligent and faithful family physician has become a relic of the past. In those early days the physician was as much the general adviser on all matters medical as was the clergyman or priest in matters spiritual.*

The junior Dr. Clark noted that the public no longer seemed able to distinguish between the "ignorant adventurer or successful empiric . . . . and him of scientific attainment":

> *Every real physician greatly prefers the approval of his brethren to popular favor, or even popular fees . . . . Every advance in medical science during the last half century, has been made by men who have enthusiastically devoted themselves to some particular department of science.*

Acknowledging that specialists should "never lose the intimate contact with general medicine," Dr. Clark Jr. concluded:

> *The general practitioner should and will retain the management of acute diseases and should continue to be the trusted medical adviser of the household. He should not fear, in these advanced days, that he will lose the confidence of his patient by referring him to a specialist when it becomes necessary—the public is too intelligent. There is room and abundant opportunity for both the general practitioner and specialist.*

In some respects, tensions between generalists and specialists continue to this day, but the concluding message of Dr. Clark, Sr. written in 1866 still resonates:

> *Little seems important to us individually except that we faithfully perform our duties to the generation which Providence calls upon us to serve.*

Chapter 8

DOCTOR, LAWYER, INDIAN CHIEF—AND POET

The next two chapters are expanded from my article "Bergen County's Physician Poets" which was published in the Journal of the Medical Society of New Jersey, Vol. 77 (Nov) 1980.

Thomas Dunn English (1819-1902) practiced in Fort Lee before the Civil War. His Quaker family had come to America with William Penn and settled in New Jersey where he was born near Philadelphia in 1819. As a Fort Lee physician during the 1850s he scorned horsepower, preferring to walk, sometimes as much as ten miles to visit patients. Dr. English was an inveterate tobacco chewer who had a kindly and jovial disposition and a casual philosophy about money. It was alleged that "he never paid a bill nor did he send any" and because he rarely attempted collection of his fees, he was always poor. English received his medical degree from the University of Pennsylvania in 1839, then studied law and was admitted to the bar in 1842. Because he claimed that his grandmother was an Indian squaw, the expression "doctor, lawyer and Indian chief" truly applied.

At various times Dr. English worked as a journalist, editor, novelist, playwright, and historian and had more than one thousand poems published in magazines and publications. His literary claim to fame was the sentimental ballad *Ben Bolt* which was published in 1843 at the request of the editor of the *New York Mirror*. Newspapers throughout the world copied the words and it attained phenomenal popularity during the

Civil War period, a favorite of soldiers on both sides. A steamboat and a racehorse son were named in its honor and The Library of Congress had 26 different versions of the song. Typically, Dr. English never received a penny for his work and in time came to resent its great popularity, considerimg the song "one of my early indiscretions." At a meeting of the Essex County Medical Society he threatened to walk out when a quartet appeared to sing *Ben Bolt* in his honor.

Ben Bolt

Don't you remember sweet Alice, Ben Bolt—
Sweet Alice whose hair was so brown.
Who wept with delight when you gave her a smile,
And trembled with fear at your frown?
In the old churchyard in the valley, Ben Bolt,
In a corner obscure and alone,
The have fitted a slab of granite so gray,
And Alice lies under the stone.

There is change in the things I loved, Ben Bolt,
They have changed from the old to the new,
But I feel in the deeps of my spirit the truth,
There never was change in you.
Twevlve months twenty have past, Ben Bolt,
Since first we were friends—yet I hail
Your presence a blessing, your friendship a truth,
Ben Bolt of the Salt-sea gale.

In 1845, the doctor became editor of a short-lived poetry magazine which numbered Edgar Allen Poe and Walt Whitman among its contributors. Poe and English developed a bitter prolonged feud which in 1845 erupted into a fist fight. English knocked Poe down in the street and in retaliation Poe wrote an article ridiculing the doctor-poet unmercifully. When English charged him with forgery and plagiarism, Poe sued and was awarded $225 in libel damages.

Although Dr. English did not practice law, he held the position of Justice of the Peace in Fort Lee and was politically active. He was a prominent Copperhead representing his district in the New Jersey Assembly from

1863 to 1864 and was elected to Congress in 1891. Although totally blind at the end of his life, he could sit in Congress and call out the name of every representative by the sound of his voice. English Street in Fort Lee is named after this multi-talented physician.

Chapter 9

LE MEDECIN MALGRE LUI

Oh I suppose I should
Wash the walls of my office
Polish the rust from my instruments and keep them
Definitely in order
Build shelves in the laboratory
Empty out the old stains
Clean the bottles
And refill them, buy
Another lens, put
My journals on edge instead of
Letting them lie flat
In heaps—then begin
Ten years back and
Gradually
Read them to date
Cataloguing important articles for ready reference
. . . . . .

What doctor writes like this? Compare these gritty, straight-forward words with Thomas Dunn English's sentimental ballad *Ben Bolt*. As William Carlos Williams once explained, "I'm a doctor all day and into the night; I write on the run, or when it's plenty dark, before going to bed." As he described, "possessed by words", WCW certainly was the most famous

New Jersey physician, acclaimed as one of the giants of modern American poetry.

Born in then-rural Rutherford In 1883, Williams enrolled in medical school at the University of Pennsylvania directly from Horace Mann School without attending college. He began writing poetry as a medical student realizing that medicine would make it possible for him to live and write as he wanted: "As a writer, I have been a physician and as a physician a writer, and as both writer and physician I have served 68 years of a more or less uneventful existence not more than half a mile from where I happened to have been born."

Building a general practice was a struggle and many of the older physicians considered him to be a "young whippersnapper." In 1910 WCW's first office was the kitchen pantry of his parents' house; the front hall serving as a waiting room. His entire life centered around Rutherford where he grew up and married a local girl. He practiced medicine and wrote his poems all within that single community. Before beginning his medical career, he had a local printer publish his first book of verse—four copies sold at 25 cents each. During the early years he progressed from a bicycle to a mare and then in 1911, to a Model T Ford.

WCW considered himself to be "a man in the front line . . . in the trenches." His practice gradually evolved predominantly into pediatrics and he joined the staffs of St. Mary's and Passaic General Hospitals. Distrusting academicians and the medical establishment, he rejected the temptation to build "a money practice." Like all physicians of his time he was overworked, describing his long evening office hours as "that hellish drag." Yet, throughout his career Dr. Williams always was able to steal time between patients to type a few lines or stop his car by the roadside to scribble verse on blank prescription pads. Feisty but humble, he admired the stoicism and simplicity of his "down and outers" and when he made house calls, those "folks" called him "Doc" or "Doc Bill" or "Doc W."

Williams' inexhaustible energy allowed him to lead this double life. His literary output was prodigious with more than 3000 poems, essays and stories written during the same forty-two year span in which he delivered some 3000 babies. Thirteen of the "doctor stories" drew directly from his medical experience. He wrote of the epic five volume poem *Paterson,* which took fifteen years to complete; "I took the city as my 'case' to work up." Dr. Williams won many major awards and his friends included the leading intellectuals of his era, including Ezra Pound, Archibald MacLeish, Ben

Shahn, Alfred Stieglitz, Georgia O'Keefe, John Marin and Raphael Soyer. In 1978 the Whitney Museum mounted a major exhibition concerning his impact as a pivotal figure in the visual arts in the 1920s and 1930s.

For WCW medicine and literature were compatible disciplines, "nearly the same thing . . . two parts of one whole":

> *As a writer I have never felt that medicine interfered with me, but rather it was my very food and drink, the very thing which made it possible for me to write.*

Chapter 10

THE OLD DOCTOR'S GARDEN

In 2002 I curated an exhibition at The Hermitage in HoHoKus about Bergen County's early medical history and on opening night described some of the old docs, including one of my favorites, Ridgewood's Dr. William L. Vroom. The event was reported in a town newspaper, especially the part about the local hero. Several days later I received a phone call from a woman who had read the newspaper and identified herself as Dr. Vroom's last patient—some 35 years earlier. Before relating what she told me, here's some background extracted from "Early Physicians of Northeastern Bergen County."

In March, 1888 22 year old William Loveridge Vroom arrived on the railroad (built in1848) from New York City. He'd just completed his studies at NYU and while awaiting notice of his final grades and had come to visit his father, Rev. William Vroom, who a year before had been appointed as pastor of the Paramus Reformed Church. The next day it began to snow and blow. The storm continued for three days; there was 21 inches on the ground with 40 to 50 inch drifts. It was the famous "Blizzard of '88" and young Dr. Vroom was stranded.

According to legend, about this same time Doctor William Francis asked the young man to cover while he took a well earned rest. The old doc hadn't had a day off since he came to Ridgewood in 1872 and Vroom agreed. Apparently Dr. Francis couldn't tolerate the leisure and died shortly afterward. An obituary in the *Ridgewood Republican* noted that for nearly two decades he'd had a large practice "the close attention to which was largely the cause of his sudden death. Everyone who knew Dr. Francis

found beneath a brusque exterior a genial and warm-hearted friend." In effect, the old gentleman had worked himself to death.

It makes a good story, but the actual sequence of events suggests that the final hand-off didn't occur during the snowstorm. The blizzard came in March, Vroom hung up his shingle in April and Dr. Francis died on June 21, 1888 at age 59. Those details notwithstanding, Dr. Vroom did take over the senior man's practice and then continued—for 76 years! In fact, he continued to see patients into his mid 90s when he was hailed as the nation's oldest active physician. He died on August 1, 1966, four months after his 100th birthday party.

Dr. Vroom's first patient was a maternity case "up country" which took two days and as he later described, after the delivery it was as if nature was celebrating the opening of a new era, the horse had a colt, the cow calved and the cat had kittens. In all, Dr. Vroom delivered well over 2000 babies during his career. In 1893 he bought an old stone house on Ridgewood Avenue and two years later married a local girl whose late father had been a Philadelphia railroad magnate. It was the social event of the season. The young doctor's father officiated and the ceremony was held in the same old Dutch church in Paramus where Aaron Burr had married Theodosia Prevost. (see Chapter 4.) Here's how the *New York Times* reported the wedding:

> *The inhabitants of the quaint little village of Paramus were awakened last evening from a sleep almost exceeding in duration that of Rip Van Winkle. Not since the marriage of Aaron Burr and the Widow Provost has there been a wedding in the pretty ivy-covered church of the little hamlet until last evening when Dr. William Loveridge Vroom and Miss Blanche Harriet Miller were united in marriage. A pretty wedding it was! The quaint stone church—a mass of flowers and blooming foliage—was covered with guests from New York, Philadelphia and surrounding counties. Without, smiling green fields, peace and plenty everywhere. A contrast indeed to the Revolutionary days when, within the same little edifice, a dashing soldier, snatching a brief respite from his checkered military duties, led his English sweetheart to the altar. (June 5, 1895)*

Historian Henry Bischoff of The Hermitage questions whether the newspaper reporter, writing more than a century after the Prevost—Burr wedding, got the location of the earlier ceremony correct. Tradition has

it that Burr and Theodosia participated in a double wedding with her cousin "at The Hermitage" but archival records there don't provide further specifics.

After a two month honeymoon trip to Europe, it was time for Dr. Vroom to get back to work. He installed electric lights in his office and built a telephone from cigar boxes and odds and ends. He also rigged up the first telephone wire in the area which he operated for about two years. In those days, travel to outlying houses could be hazardous, especially in winter. In February 1894 an item in the *Bergen County Democrat* reported that Dr. Vroom's "conveyance" was run into by a bobsleigh which smashed the front wheels and completely overturned the horse and buggy. Doctor and driver were thrown out but escaped injury. Vroom used to rotate four horses and after wearing out 28 of them, in 1899 he got permission to drive a horseless carriage. It was the first car in Bergen County and before he could use it, he had to pass a steam-boiler engineer's exam. On January 12, 1900 *The Ridgewood News* breathlessly reported, "Dr. Vroom's automobile has been seen on the avenue." *The Hackensack Republic* was more circumspect:

> *The Doctor is progressive. He doesn't have to stop and tie his new horseless vehicle while attending a patient, doesn't have to do lots of things that are demanded of a live animal. But some day when the machine gives out five miles from nowhere the Doctor will wish it was somewhere else.*

Six months later *The Bergen County Democrat* reported that Dr. Vroom may have been the first in town to drive an automobile, but also was the first to be sued because of it. "A horse driven by Mrs.John Guire . . . took fright at the appearance of the machine and threw her out of the wagon. She has never fully recovered from her injuries and the doctor is sued for $5,000 damages on the grounds that he was "careless and incompetent to manage his automobile." In 1911 there was another indignity: while vigorously cranking his new "runabout", the doctor broke his wrist, and for the next month had to wear a cast, seemingly as a mark of shame. Perhaps he should have kept the horse and buggy.

In 1910, together with his young associate William Craig, Dr. Vroom organized Ridgewood's first hospital as a wing added to his residence. The two doctors bought their own surgical instruments, did the electrical wiring and made their own cauteries. "In those days we were allowed to

do a great many things. I could go to New York and have the run of the hospital. I could see any of the big doctors." In 1917 when the two doctors enlisted in the army, they turned the facility over to the town. *The Ridgewood Herald* reported:

> *There will undoubtedly be urgent and early need for hospitals along the Atlantic Coast to care for war sufferers and this is an opportune time to render patriotic service by making this thoroughly-equipped hospital a Ridgewood institution and operated as a public service for the benefit of the whole people.*

Dr. Vroom was one of the first to successfully use diphtheria antitoxin and to prescribe the new wonder drug aspirin. Although only a country doctor, he was chosen by The Rockefeller Institute to pioneer the use of insulin which he injected into a rabbit at a meeting of the county medical society in 1923. Eight years later, Vroom was invited to give a speech to his colleagues about Bergen County's medical history. He recalled many amusing anecdotes including how in 1916 President Wilson had sent him to Mexico to deliver a personal message to the bandit Pancho Villa. After much delay, the Vroom-Villa meeting finally took place, but the outlaw was distracted by severe pain from kidney stones. Vroom made some medical suggestions but Villa didn't agree to stop raiding Texas. Shortly afterward, General Pershing was sent down to deliver a more forceful, but equally unsuccessful message.

For many years Dr. Vroom enjoyed riding in Ridgewood's annual Memorial Day parade bedecked in his World War I Colonel's uniform. In later years he enjoyed reading the classics and with his third wife Alma moved into a nursing home. As his 100th birthday approached in 1966, he agreed to be interviewed by three much younger Ridgewood physicians and in summing up, he recalled:

> *In my day, medicine was a great adventure. We had to make a living but our practice was the big thing. The profession of medicine must always be an adventure. A good doctor must always be a pioneer with spiritual fire and dedication.*

At the end of that interview, Dr. Vroom mentioned a young woman who'd been his last patient: "She'd suffered from "a nervous condition" but was not insane. She'd been treated without benefit first at Bergen Pines, then at Morris Plains (Greystone) and now was home "on vacation." Here's how Dr. Vroom recalled the case:

> *So they sent her home and she came to see me and told me all about it. Well, I said, "Go out in my garden with me. Plant seeds and do my transplanting with me and do something. You've never done a stroke of work in your life before." Yes, she came down the next day. She had a pair of overalls on, all fixed for it. I put her to work that day. We worked in the garden . . . . It did her some good. She acted better. Did it again the next day. I gave her work for three or four days. I telephoned Morris Plains, telephoned the doctor, told her what I had done and how she was acting. He said, "Keep her right there and go ahead."*

Naturally when Dr. Vroom's "last patient" called me in 2002, I was delighted to learn more. For the sake of anonymity, I'll call her Mary. She suffered from what today we probably would call a "panic disorder" which was so disabling that she rarely ventured out of her home. Not only was her treatment at the mental hospitals unsuccessful, it was insensitive and her desperate mother phoned the old doctor for advice. He told them to come right over and when they did, they found Dr. Vroom to be up a tree—literally! Apparently, the old man was perched on a ladder pruning a tree in his garden. He descended and listened to Mary's story and then invited her to lend him a hand in his garden—and as we've heard from his own account, she did so regularly. As it were, they reversed roles so that now she would be helping him.

From their weekly work in the garden, a bond of trust developed and Mary gradually gained self-confidence. Dr. Vroom found her a job working for a local veterinarian and eventually, she emerged as a poised health professional who in later years counseled others who were afflicted with anxiety disorders.The young woman and the old doctor became friends and when Vroom attended her wedding, he said, "I'm not going to leave until I get a snoot full." When she brought her baby to his 100th birthday party, he pointed to them and said, "That's the best thing I ever did" and the appreciation was reciprocal.

In this story Dr. Vroom displayed traits which in today's impersonal, high tech medical system no longer are as evident. In those less sophisticated times, empathy, persistence and dedication to the patient as an individual sometimes was all that the overworked doctors could provide. Nevertheless, self sufficiency and common sense could accomplish a lot.

Chapter 11

TREATING THE SUN STARVED

In 1970 Stewart Alexander, the long-time Medical Director at Bergen Pines County Hospital, arranged for my partner and me to serve as co-directors of medical education. After thirteen years there, we left to pursue other things but when the hospital was privatized in 1998, I returned as vice president of medical affairs. The new managers had renamed the venerable institution Bergen Regional Medical Center and I was dismayed to find that historical artifacts from the hospital's early days which I had studied during my first stint, now either were decaying or altogether lost. I retrieved what I could and in an effort to preserve some of the past, published a monograph which served as a nostalgia trip for many old-timers. Then in 2010 when a presentation was made at a meeting of the Medical History Society of New Jersey concerning a once popular method of preventing tuberculosis, I recalled that I'd once written about a similar program at Bergen Pines.

Early in the 20th century there was growing realization in Bergen County of a need for a hospital for communicable diseases. Plans were debated for decades until in 1910 county physicians petitioned the Freeholders for action, public support was solicited and several sites explored. Finally the Freeholders selected twenty acres from a 102 acre site which had been purchased in 1851 to establish a poorhouse farm. The first building, begun in 1914 was designed to care for thirty patients. However, it wasn't finished until a polio epidemic in the summer of 1916 overwhelmed the closest isolation hospital in Paterson and the wood-frame building was rushed to completion. During the early 1920s several more "pavilions" were built in

Spanish Mission style to house patients with small pox, scarlet fever and tuberculosis. In 1924 the Bergen County Isolation Hospital was renamed Bergen Pines to acknowledge a donation of more than one thousand young pine trees made by a Masonic Club in Hackensack. The trees not only enhanced the campus's appearance, but were believed to benefit the health of the patients.

In 1906 the New Jersey Association for the Relief and Prevention of Tuberculosis initiated legislation which permitted counties to establish their own sanatoria for underprivileged people. The first, Glen Gardiner, opened in 1907 at Mt. Kipp and two years later another facility for malnourished tenement children who had positive tuberculin skin tests opened in Lakewood, NJ financed by philanthropist Nathan Strauss. The sanitorium movement began in Europe in late 19th century and was based on the principle that tuberculosis could be treated by rest, fresh air and plenty of sunshine. Health resorts flourished in the mountains of Switzerland and the pine forests of Finland and in this country were modeled on the famous facility founded in 1884 by Edward Trudeau in Saranac Lake, New York.

Dr. Trudeau cured his own tuberculosis by living outdoors in the Adirondacks and soon patients from far and wide would arrive in Saranac Lake where they lived in "cure cottages" and sat for hours every day and in all seasons on specially designed lounge chairs. In later years, many thousands of patients flocked to Arizona to bask in the hot desert air and in 1923 *Time Magazine* reported that "the sun cure for tuberculosis and undernourished children is becoming a recognized part of modern treatment." Robert Koch had identified the tubercle bacillus in 1882 as the "seed" that caused infection, but it was felt that an exposed patient would not develop clinical disease unless the "soil" was receptive. There were both moral and social dimensions of treatment which it was believed effected susceptibility to disease and integral to the regimen was the notion that the patient had to take responsibility for their own behavior, be it by curtailing spitting or by being frugal, temperate and disciplined.

Building 3 at Bergen Pines could accommodate only 48 TB patients, not nearly enough to meet the need, so Building 4 was opened in 1926 with another 100 beds and five years later Building 5 was added 100 more beds both for infected patients as well as 20 to 30 "kiddies" who were housed in a "Preventorium" for underprivileged children who had positive tuberculin tests but no clinical symptoms.The Preventorium contained a

school and physical therapy facilities and in 1933 the "Improved Order of Red Men and Degree of Pocahontas" in Hackensack donated a sun shelter built of bamboo and rattan with a palm leaf thatched roof next to the playground. In 1939 a solarium and therapeutic pool (mainly for polio patients) were built adjacent to Building 5.

The high water mark came in 1937 when the TB pavilions were entirely filled with advanced cases. Sun parlors were converted into wards to accommodate the overflow and the dietary department and elevators were overtaxed trying to deal with as many as 335 patients. By the time Building 6 opened in 1938 about 80% of the hospital's in-patients had tuberculosis with an average length of stay of about 200 days. Some textbooks maintained that the best results were those obtained after three or four years, but few patients could tolerate the enforced program and many signed out before they were considered "cured."

The annual report for 1943 prepared by Superintendent Andrew Morrow noted 742 total admissions: 235 to the TB service, 507 to the Contagious Disease Service. There was an average census of 217 patients of whom 185 had tuberculosis. During the war it was difficult to retain or hire staff and the total staff was depleted by 20%. The average length of stay of 233 in 1943 of 223 was down from 333 the previous year. By then Dr. Morrow was approaching the end of his thirty year tenure as medical director and had to make do with only four "medical assistants."

Dr. Morrow attributed these trends to the availability of lucrative jobs so that patients released themselves prematurely and the Superintendant warned of an "ominous" likely increase in recurrences. The hospital relied on community volunteers to work the telephone switchboard, serve meals and scrub floors. More than 16,000 active cases were followed that year in the outpatient clinic and total operating expenses were $338,795. Because Bergen Pines patients included many advanced cases of TB, hospital mortality in 1943 was high, 40%. Some received radical surgery in the hope that pulmonary infections could be contracted or "walled off." That year 84 patients had primary pneumothorax procedures (air injected to collapse the lung) with 2,372 repetitions. 35 thoracoplasties were performed in which the ribs were surgically broken and the rib cage collapsed to permanently achieve the same effect.

The healing properties of sunlight had been celebrated for thousands of years, especially for various skin disorders and during the early 20th century many medical authorities claimed that the tubercle bacillus couldn't live in

sunshine. So in addition to rest, fresh air and a healthy diet, phototherapy (called "heliotherapy" at Bergen Pines) was an integral part of the regimen. Natural sunlight contains many wavelengths of light, some visible, some not. Of invisible rays ultraviolet was deemed to be the most beneficial and now could be delivered more efficiently by electricity, in minutes rather than hours in the sun. Bergen Pines offered three modalities: in 1943 2,303 patients received "Alpine" treatments, 1,677 had Kromayer lamp phototherapy; 1,677 received infrared treatment. Alpine rays were prescribed as a "general tonic" while Kromayer rays were thought to be more suitable for "intense focal application." Rival manufacturers argued the merits of their products, but all agreed that a course of ultraviolet radiation would "set in motion the physiologic process of recovery."

Batteries of Alpine sun-lamps were shined on the bared bodies not only of TB patients (especially those with non-pulmonary disease) but for the Preventorium "kiddies." They lay on parallel litters, eyes protected by goggles, and photos of the scene appeared like a science fiction movie. Not only was heliotherapy claimed to "fortify" susceptible people, build resistance against a variety of ailments and provide a general feeling of well-being, it was touted as a boon to safeguard the whole family. Advertisements for the Hanovia Alpine sunlamp used at Bergen Pines proclaimed that "sun-starved" bodies cannot be healthy and offered a home model which could be purchased for $65:

> *When you miss your needed ultraviolet, the pep goes out of life, bodily resistance is lowered, and you become more susceptible to disease. A Hanovia Home Model Alpine Sun Lamp brings the vital part of sunlight into your home—gives you the right kind and amount of ultraviolet rays. A few minutes daily with this instrument of science is enough to afford every member of the family the benefit of ultraviolet. The soft, mellow, energy-carrying radiance plays a big part in keeping health up to normal.*

With the discovery of streptomycin at Rutgers in November 1944, there was a precipitous decline in TB mortality; from 70 per 100,000 in 1930 to10 per 100,000 in 1954. Other antibiotics soon were discovered, combined treatment was devised to combat resistance and few cases required hospitalization any more. Sanatoria throughout the country closed or were converted and when Building 8 opened in 1952, Bergen

Pines was transformed into a general hospital of 363 beds. Today Building 5 still stands, but now is a long term care unit for Korean residents. Yet, it recalls a time when tuberculosis was a universal scourge for which rest, diet and light, both natural and electricity generated, were the only defense.

Chapter 12

"SPECTROCHROME THERAPY"

Invisible solar therapy may have been mainstream for awhile; but visible "spectrotherapy" distinctly was not. A bizarre proponent of the latter was Hillsdale's Dinshah P. Ghadiali. Not all of New Jersey's early physicians were praiseworthy; we also had our share of rogues and charlatans and among them Dinshah stood out. The following is adapted from my book "Early Physicians of Northeastern Bergen County."

Born in Bombay, India in 1873 of a family of Parsee-Zoroastrians, Dinshah was a child prodigy. According to his own account he began school at age two and a half and was a professor of mathematics at a Bombay college at age eleven. He was skilled in electronics and claimed to have achieved a reputation as an inventor, mystic, hypnotist, yogi, musician, composer, actor and linguist who spoke sixteen languages. Dinshah came to this country in 1896 and, again according to his own account, in that year was the first in America to lecture on the newly discovered roentgen rays. He soon returned to India where he studied orthodox medicine and claimed to have been awarded an "honorary" medical degree in 1899. Over the years he studied engineering, obtained a doctorate in philosophy and allegedly held degrees in such diverse fields as electro-hydrotherapy, naturopathy, chiropractic and food science.

Soon after the self-proclaimed genius returned to America in 1911, he settled in Hillsdale in Bergen County where he remained until 1924. Although he never was in formal medical practice during this phase of his career, in addition to developing his own unique brand of healing

he became a pioneer aviator. While staging an air show over Hillsdale in 1919, he nearly crashed during an attempt to drop toys, candy and peanuts to the children below when a parachute became entangled in the plane's elevator.

Dinshah Ghadiali espoused a philosophy of reverence for life, championed the right of freedom of choice of health methods and ran for Governor of New Jersey in 1937. Dissatisfied with what he considered the public school system's emphasis on sports and learning by rote rather than on ethics and morality, he educated his own children. He warned against the evils of tobacco and alcohol and was an outspoken vegetarian. He was friendly with such celebrities as Mohatma Ghandi and Thomas Edison and his more than thirty inventions included a talking flickerless motion picture projector, an electric shaver, an electric "Peace Gun" that would stun but not kill, automatically dimming auto lights and an engine tester that could measure engine performance which he said was used by the United States Air Force in World War I. Among various honors he claimed were: "Doctor of Legal Law," Vice-President of the National Association of Drugless Practitioners," "President, All Cults Association" and "President, American Anti-Vivisection Society."

Despite all of the above, Dinshah was most controversial because of his methods of treatment for various diseases. He adapted another physician's technique based on the therapeutic properties of visible light and color which he called "spectrochrome therapy." It was based on a combination of physics principles, yoga and vegetarianism. The method involved putting pure water into glass bottles of various colors, exposing these to light with the charged water presumably having therapeutic properties. He argued that good health requires balance between four color "potencies" (blue, green, red and yellow) similar to ancient Greek theory of balance between four humors. Any disorder could be corrected by shining appropriate colored lights on involved portions of the body while a more "systemic" regimen involved bathing the entire nude body with "colored waves."

Dinshah sold more than 11,000 of his "visible spectrum color projectors" and by 1940 allegedly had earned over one million dollars which he used in developing his Spectro-Chrome Institute. For forty years he battled with the AMA, the FDA and the Post Office Department for fraudulent use of the mails. After a sensational case in 1925, he was convicted and spent a year and a half in the Federal Penitentiary in Atlanta, Georgia before the sentence was commuted by President Coolidge. He also

was convicted of violating the Mann Act for transporting an under-age woman across state lines.

In 1924 Dinshah moved to Malaga, NJ where he continued to have widely publicized conflicts with various agencies. At his Institute he advised diabetics not to listen to orthodox physicians: "Stop insulin at once and irradiate yourself with Yellow Systemic alternated with Magenta on Areas 4 or 18 and eat plenty of raw or brown sugar and all the starches." In 1958 the government obtained a permanent injunction against shipping his machines across state lines, but he continued to sell them in New Jersey. After his death in 1966 at age 92, his family continued to sell his contraptions. Whether Dinshah was a wizard or a charlatan, he certainly was the most bizarre member of New Jersey's extended medical community.

Chapter 13

THE PERILS OF PUS

The following is extracted from my book "A Tale of Two 'Villages': Vineland and Skillman, NJ."

A century ago, many psychiatrists resented psychologists and social workers whom they perceived to be challengers to their authority. Recent medical advances seemed to offer an opportunity for psychiatrists to assume a more influential place in the professional hierarchy. The dawn of bacteriology, based on the work of Pasteur and Koch, suggested that germs might be the cause of many unexplained disorders including mental illness. Neurosyphillis was known to be due to a spirochete infecting the brain; the Wasserman blood test enabled diagnosis, and Paul Ehrlich's "magic bullet" Salvarsan, promised a cure. Why not take a similar approach with other forms of mental illness? Could psychosis, like syphilitic paresis, be due to a foreign agent?

Dr. Adolf Meyer of Johns Hopkins, the most prominent American psychiatrist during the first decades of the twentieth century, believed that all mental activity was based on physiology and its "anatomical substratum." Consistent with this theoretical framework which Meyer called "psychobiology," occult infections might be a correctable cause of mental illness and if cure could be achieved, there wouldn't be a need for overcrowded, expensive mental institutions. What was needed was a champion willing to lead the way in finding a muscular alternative to the effete psychoanalytic talking approach or the fatalistic heredity theorists.

Now entered an optimistic new voice from the New Jersey State Hospital in Trenton. One of Adolf Meyer's former students, Dr. Henry Cotton had been appointed as Superintendent of Trenton State in 1907 after his predecessor was fired because of patient abuse. Having completed postgraduate studies in Munich, Dr. Cotton had come to reject both psychoanalysis and eugenics theory. About the latter he said, "We are now in a position to say, with reasonable confidence, if not absolute finality, that mental disease per se cannot be transmitted from one generation to another." As for Freud, his work was dismissed with the curious remark, "psychoanalysis, in time, will be superceded by gastric analysis." Gastric analysis!

In those days, asylum superintendents were autocrats in white coats who exerted strong control over their institutions' policies. But Henry Cotton was more interested in clinical than administrative matters and, to his credit, drastically reduced the use of restraints at Trenton and increased the number and quality of physicians and nurses. However, he was unable to make any significant inroads in treatment outcomes and gradually came to accept the idea that psychosis was not a disease entity, but a symptom of focal low-grade infection lurking in the body, as a result of which accumulated toxins acted directly upon brain cells. These unsuspected pockets of pus needed to be found and extirpated. Although Dr. Cotton was not the first to propose "surgical bacteriology," beginning in 1916 he began pursuing his theory in earnest and quickly became the world's most outspoken proponent of eradicating focal sepsis in order to prevent or cure mental illness. Some hailed him as "the new Lister."

The most obvious locus of occult infection was the mouth and Dr. Cotton attacked the problem by removing teeth and tonsils, even if there were no evident abnormal signs. Next bridges and crowns were extracted and if that didn't do the job, the doctor probed deeper and removed internal organs—gallbladders, spleens, reproductive organs, thyroids. And if abdominal X-rays revealed excess retention of fecal matter or if the patient suffered from constipation, Dr. Cotton would order colectomies. Operative mortality was astonishingly high, between 30 and 40 percent. In one twelve-month period (1919-1920) 6,472 dental extractions were done, an average of ten per patient, as well as 542 tonsillectomies and 79 colon resections. Between 1918 and 1925, 2,186 major operations were performed at Trenton State, often against the expressed wishes of patients or their families—and not only for psychosis. They also were done on

children to correct "sexual abnormalities" like masturbation or in order to "prevent" insanity.

Indicative of Henry Cotton's misguided sincerity was that he had his wife's and two sons' teeth extracted, even some of his own, and he caused one son to have a partial colectomy. Dr. Cotton claimed impressive clinical results as well as doubling discharge rates and reducing hospital costs. After one lecture at Princeton University, a *New York Times* reporter gushed: "At the State Hospital in Trenton, under the brilliant leadership of the medical director, Dr. Henry A. Cotton, there is on foot the most searching, aggressive and profound scientific investigation that has as yet been made of the whole field of mental and nervous disorders . . . . There is hope, high hope . . . for the future."

In 1921 Dr. Hubert Work, president of the *American Medical Association*, declared Trenton State to be one of the country's "great institutions [a tribute] to the public mind of the people of New Jersey, a composite of their social morals, their charity and Christianity in its broadest sense, and it is as well a monument to the most advanced civilization of her people." The president of the *New Jersey Medical Society*, Dr. Henry Costill proclaimed, "Dr. Cotton has built a foundation for the benefit of the health of the people of which each succeeding generation will reap the benefit and generations to come will rise up and call him blessed."

Small wonder that wealthy madmen and women from all over flocked to Trenton ready to sacrifice teeth, tonsils, and colons in a desperate search for sanity and when their numbers exceeded the hospital's capacity, Dr. Cotton opened a small private facility nearby (The Charles Hospital) to accommodate well-paying customers.

Henry Cotton was a superb self-promoter, but by 1922 some within the profession began criticizing his approach. The results reported from Trenton seemed too good to be true—an 85 percent cure rate of psychosis, fourteen hundred inmates discharged "cured" over a four-year period, average length of hospital stay reduced from ten to three months. It was one thing to bring psychiatry into the medical mainstream, but if Dr. Cotton was correct, some feared the specialty might be demoted to a subdivision of dentistry or surgery. The director self-righteously defended his work from critics. Unabashed when asked to explain forty-nine deaths in a sequence of 148 total colectomies, he rationalized that because many

of these patients had "end-stage" psychosis, radical surgery was done as a last desperate chance to save them.

Faced with a rising tide of criticism, in 1925 Henry Cotton finally agreed to permit an independent investigation and the results were devastating. Not only was record keeping at Trenton sloppy, but the benefits of surgery had been vastly exaggerated. His influential supporter Adolf Meyer suppressed the findings of the report which he'd commissioned and, if anything, Dr. Cotton became even more radical in his crusade against pus. Now it was insufficient to remove only infected teeth; *all* teeth had to be extracted before he proceeded to "detoxication" or "defocalization" surgery—an elevated white blood cell count was sufficient proof of infection.

After his early death Dr.Cotton's findings were discredited, but prophylactic dental extractions and tonsillectomies continued unabated for decades. Resecting focal infection was merely one approach to treating madness that was being employed at Trenton and elsewhere. Other futile fads included colonic irrigations, fever therapy with malaria or typhoid vaccines, hydrotherapy, diathermy, inducing convulsions with insulin, metrazol, or camphor and, worst of all, lobotomies. All of these were endorsed by sober scientists who were engaged in a Quixotic quest for a biologic cure.

Fortunately, Henry Cotton's theory of focal infection as the cause of mental illness would not have lasting effects. Indeed, the reaction of most of his colleagues was negative, but in retrospect, most disturbing is that no one saw fit to challenge Cotton's right to prescribe aggressive, unproven surgery; nor was there any discussion about ethical considerations of forcing radical treatments upon unwilling patients. Dr. Cotton's general approach was not entirely an aberration, but reflected organized medicine's paternalism. Physicians presumed that they knew better than others and had no qualms experimenting on patients without permission or even despite objections, all for the sake of science.

The debacle in Trenton can be understood as an example of the parable of the emperor's new clothes—few dared to criticize the medical mighty. Even the imperious Dr. Adolf Meyer was timid when confronted with his self-assured former student and when the surgical carnage ceased with Cotton's unexpected death from a heart attack in 1933 at age 54, Dr. Meyer held back public criticism. Seemingly, he was as much concerned with protecting his own as his protégé's reputation. Meyer eulogized Dr.

Cotton as "one of the most stimulating figures of our generation . . . a remarkable example of energy, purpose and whole heartedness."

Long after the fact, the saga of Dr. Henry Cotton's delusions seems ludicrous, but it exemplifies how primitive medical science was less than a century ago. Of far greater importance than the germ theory of insanity was the parallel emergence of eugenics during the early years of the twentieth century, for if the source of madness could not be directly cut out, there seemed to be a possibility that it could be cut off. (More about this in Chapter 18.)

Chapter 14

A "CARING" PHYSICIAN

This chapter is adapted from a talk which I gave to the Medical History Society of New Jersey in May, 2008. Although Dr. Francis Peabody headed a military hospital in Lakewood, New Jersey during World War I for only a very brief time, he left an indelible mark on American medicine. Because his passion for putting the patient first has never been more important than today, his story deserves repetition.

In 1926 Francis W. Peabody, at age 45 already a full Professor of Medicine at Harvard and Director of the new Thorndike Memorial Laboratory at Boston City Hospital, had exploratory surgery which disclosed an inoperable sarcoma of the stomach. While convalescing in Maine, Dr. Peabody began writing a speech which he delivered several months later (October 21, 1926) to Harvard medical students. It may have been the most memorable speech of its kind in medical history, its final sentence burned into the minds of generations of students:

> *ONE OF THE ESSENTIAL QUALITIES OF THE CLINICIAN IS INTEREST IN HUMANITY FOR THE SECRET OF THE CARE OF THE PATIENT IS IN CARING FOR THE PATIENT.*

That sublime description is often cited when attempting to describe the ideal doctor-patient relationship. Many years later, a colleague who attended the Harvard lecture recalled that although Peabody's words seemed to have made an impression on the students, there were no signs

of unusual approval, no applause and the hall had emptied quickly. However, Dr. Peabody remarked to his wife, who also was present, that he was certain his speech would be remembered long after he was gone and in this he was correct.

Who was Francis Weld Peabody? He was a Boston Brahmin, the son of the famous Unitarian preacher Francis Greenwood Peabody (1847-1936) who for many years headed Harvard's Divinity School. Peabody Jr. received a superb medical education both in this country and abroad. His colorful career included a teaching stint at Peking Union Medical School in China as well as a harrowing time in 1917 when as a Red Cross medical consultant, he crisscrossed Siberia and Europe and was pinned down in Moscow for two weeks, literally in the crossfire of shooting during the bloody onset of the Russian Revolution.

From a New Jersey perspective, Dr. Peabody spent a brief, but productive time in Lakewood, N.J. between June and October, 1918 when as an army major he was assigned to head the cardiovascular service of what was called U.S. General Hospital #9. Before the war the site had been occupied by the Lakewood Hotel, a five-story, 500 room building, which on January 1, 1918 the army leased for $50,000 a year. They built on some adjacent property so that the new hospital potentially could accommodate 1000 patients. As one young doctor wrote, "This is quite a luxurious spot after the usual camp . . . . No excitement is offered outside the hospital and the wildest dissipation is a moving picture show. Consequently it requires no great effort to keep your mind at work."

In June, 1918, 200 beds were reserved for a cardiovascular service and within a month there were one hundred cases. Most patients had rheumatic fever, but there also were a sizable number of men who complained of palpitations, breathlessness, vague chest pain, dizziness, etc., yet showed no evidence of organic disease. Many of these troops with "functional" disease had been shipped to Lakewood for examination for symptomatic and disabled, they represented a substantial problem. The Army rejected some 50,000 young men during World War I because of suspected heart disease, many of them falling into this obscure category. Moreover, there was the problem of what to do with them after military service? For example, there were concerns about lingering disability and pensions.

On May 22, 1918 Frances Peabody was brought in as a consultant to the cardiac unit which soon was designated as a Center for Cardiovascular Diseases—the first such facility in the United States. Almost immediately he was assigned to permanent duty in Lakewood to head the new service and expressly charged with studying the men with functional disorders, a subject about which he'd already done some research.

Fifty years earlier, and some fifty miles to the south, Dr.Jacob DaCosta during the Civil War had studied similar cases at the Turner's Lane Army Hospital in Philadelphia. During the ensuing five decades some 250 papers had been published about what variously was called Irritable Heart, Soldier's Heart, Effort Syndrome, neurocirculatory asthenia and DaCosta's Syndrome. In England the condition was described among troops as far back as the Crimean War in mid-19th century and in 1915, Thomas Lewis began doing large scale physiologic studies. Now at the army hospital in Lakewood, NJ, Francis Peabody planned to extend Dr. Lewis's research, but with a slightly different emphasis.

Suffice it to say that Peabody's unit did extensive physiologic studies, including using the new fangled electrocardiogram machine. He gathered a highly skilled team of research scientists and studied hundreds of American soldiers who, unlike Thomas Lewis's patients, had not yet had any combat experience. The Lakewood group published four papers which documented, among other things, an abnormal rise in blood pressure and pulse in response to a small dose of injected adrenaline and some associated minor non-specific EKG changes. There were no other physiologic alterations, but compared to normal soldiers, these men tired easier during exercise testing and when restudied during battle training exercises developed the same symptoms and physiologic changes when they heard gunfire. (Cardiologists today are aware that many patients with such presentations are diagnosed with mitral valve prolapse, but of some 500 soldier's studied at Lakewood only 13% had what now are considered to be characteristic physical findings.)

Major Peabody arranged for these troops to be examined by a psychiatrist who found a mixed bag of neuroses. What's noteworthy is that Peabody was more interested in the patient than the disease per se. As he saw it, the terms Irritable or Soldier's Heart were being used indiscriminately to lump together a wide spectrum of patients. He suggested that the condition might be associated with various factors but that common to all of these stressed young men was what he called an

"inherited neuropathic constitution" due to a "hypersympathetic state" and "unbalanced cardiac nerves." Peabody noted that this emotional instability or "cardiac neurosis" was difficult to correct, but recommended graded exercise as part of a therapeutic regimen.

Then on October 3, 1918, with the cardiac unit just beginning to get up to speed, Major Peabody was abruptly transferred out and sent to France as a medical consultant. This ended his brief stay in New Jersey. Although reluctant to leave his team, he welcomed the opportunity to see more active duty, but within a month the Armistice was signed and he soon was enjoying himself in Paris, which he described as an enlarged version of New York's Harvard Club. Shortly after the war's end, Lakewood's army hospital disbanded and Dr. Peabody, was deactivated and returned to Boston. The legacy of the army hospital was that it opened a new era of cardiac research since many of Peabody's young colleagues spread out across the country from New Jersey and made their marks as leaders of the emerging subspecialty of cardiology.

Back in Boston, Dr. Peabody dedicated himself both to embedding clinical research within a city hospital and in 1921 accepted an invitation to head the Harvard Unit at Boston City Hospital. Two years later the Thorndike Memorial Laboratory opened with Dr. Peabody as Director and, like in Lakewood, he gathered an extraordinary group of young physicians who shared his belief that excellence in patient care can provide insight into mechanisms of disease. Although within three years the charismatic chief was dead, Peabody's followers continued his work and made the Thorndike world famous. There was an *esprit-de-corps* at the Thorndike. Dr. Peabody was respected by all; morale was high—floor-sweepers, technicians, clerks, nurses and administrators all felt that they were integral members of the team.

Now let me return to Dr. Peabody's famous talk to the Harvard students in 1927. The lecture was the third of six given by faculty members in a course called "The Care of the Patient." Earlier in that same speech Peabody had much more to say which remains of interest today:

> *The practice of medicine in its broadest sense includes the whole relationship of the physician with his patient. It is an art, based to an increasing extent on the medical sciences, but comprising much that still remains outside the realm of any science. The art of medicine and*

> *the science of medicine are not antagonistic but supplementary to each other . . . The treatment of a disease may be entirely impersonal;[but] the care of a patient must be completely personal.*

At another point he discussed the many patients who after thorough work-up, seemingly had nothing the matter with them—patients like the ones whom he'd studied in New Jersey:

> *Now my experience as a hospital physician has been rather long and varied, and I have always found that from my point of view, hospitals are particularly interesting and cheerful places; but I am fairly certain that except for a few low grade morons and some poor wretches who want to get in out of the cold, there are not many people who who become hospital patients unless there is something the matter with them . . . . many physicians whom I have questioned agree in saying that excluding cases of acute infection, approximately half of their patients complained of symptoms for which an adequate organic cause could not be discovered. These patients constitute a large group and their fees go a long way toward spreading butter on the physician's bread. Medically speaking, they are not serious cases as regards prospective death, but they are often extremely serious as regards prospective life. Their symptoms will rarely prove fatal, but their lives will be long and miserable, and they may end by nearly exhausting their families and friends. Death is not the worst thing in the world, and to help a man to a happy and useful career may be more of a service than the saving of life.*

Five years earlier, in a speech at the *New York Academy of Medicine*, Dr. Peabody declared that "the art of medicine is that which carries us beyond the patient to the man." To the modern ear those words may sound quaint but they speak eloquently about the very essence of medicine—the doctor-patient relationship, our great legacy from the past. On still another occasion Peabody remarked

> *It would be a dull student indeed who could question a patient for five minutes regarding his financial status, the character of his dwelling [or] the social group with which he associated without becoming profoundly impressed with the various ways in which all of these factors may bear on the cause, course and cure of the disease*.

Francis W. Peabody was no lone voice in the wilderness nor was he the first to express such ideas. Perhaps his idealism derived from his strict religious upbringing and the moral influence of his forward-looking, socially-conscious father, Reverend Francis G. Peabody. Several years after Dr. Peabody's premature death, Reverend Peabody wrote a poignant memoir about his son whom had been cut down in the "full midsummer of [his] maturing powers."

Chapter 15

ABRAHAM FLEXNER: THE PRINCETON YEARS

As already mentioned, in addition to New Jersey's medical history, I had a parallel interest in the stories of Jewish physicians at various times and places in history and one name which frequently turned up in my research was Abraham Flexner. In fact, he wasn't a physician at all, but was an influential educational reformer best known for a Report he wrote in 1910 for the Carnegie Foundation which bears his name. The Flexner Report helped transform American medical education from crude to world class and for the next fifteen years he was able to implement many of his ideas while working at the Rockefeller Foundation as director of its Graduate Education Board. In this role he raised and channeled more than half a billion dollars to favored institutions and in the process forever altered the medical landscape. However, Flexner's autocratic style and aggressive personality contributed to his falling out of favor and in 1928 he was forced to resign from his influential position at Rockefeller. The following extract from my book "Abraham Flexner: A Flawed American Icon" describes how in his darkest days, Flexner reinvented himself to become the founding director of The Institute for Advanced Study at Princeton.

Having completed a two month stint at Oxford, for the remainder of 1928 and much of the next year Flexner retraced his earlier steps across Europe, visited universities, renewed friendships and considered new options. The old curmudgeon was in relatively good health and still was ambitious. Then opportunity came knocking in an unusual way—this time rather than seeking out money, it sought him.

Louis Bamberger (1855-1944) was a shy man who seldom spoke in public and never married. A high school drop-out at age fourteen, he'd moved from Baltimore to Newark in 1892 where he bought a bankrupt dry goods shop with his close friend (and soon to be brother-in-law) Felix H. Fuld. They turned it into the nation's fourth largest retail store doing $35 million of business a year.Felix married Louis's sister Caroline and the three were virtually inseparable living together on a thirty-three acre estate which straddled the border of Newark and South Orange. When Felix died in January 1929, Louis felt unable to carry on alone and so the Bamberger siblings decided to sell the business and devote their remaining time to philanthropy.

R.H.Macy purchased Bambergers for $25 million just six weeks before the stock-market crashed in October 1929. $1 million in cash or annuities was distributed to long-time employees and because they had no heirs, the siblings wished to return the rest of their fortune to the city and state which had benefited them in many ways. They'd supported various civic projects, particularly Jewish institutions like Newark's Beth Israel Hospital and the YMHA and now considered earmarking $5 million to build a medical school on their estate. Perceiving that there was anti-Semitic prejudice in the medical establishment, they wished to favor Jewish applicants in their school. However, two trusted business advisors, Herbert Maass and Samuel Leidesdorf had concerns about the project's feasibility and decided to consult with the most influential figure in American medical education, Abraham Flexner. His advice was not what they expected.

As Flexner later described in his memoirs, "I was working quietly one day when the telephone rang and I was asked to see two gentlemen who wished to discuss with me the possible uses to which a considerable sum of money might be placed." After they elaborated on the Bamberger plan, Flexner scoffed at the concern about anti-Semitic prejudice in enlightened American medical schools. He said that the wrong way to counter anti-Semitism would be to set up institutions favoring Jews—genius should be the only appointment criterion. Moreover, in his opinion there already were too many medical schools and too many physicians, especially in the northeast.

Then Flexner challenged the emissaries by asking, "Have you ever dreamed a dream?" Scarcely waiting for an answer, he proceeded to describe his own vision of a purely graduate university, an American community of "men and women of genius, of unusual talent and of high devotion." Their

research would be driven by their own curiosity and they would not be burdened by teaching, writing or administrative responsibilities. Although Flexner admired European scholarship, the Institute he envisioned would have a distinctly American character. It would be "a paradise for scholars" where everyone endeavored to advance the frontiers of knowledge—no students, no classes and no degrees.

Abraham Flexner gave proofs of his unfinished book *University Education, American, English and German* for Maass and Leidesdorf to read; they were impressed and the Bamberger siblings soon were persuaded. However, it was not until long after the donors were fully committed that Flexner dissuaded them from their intention to place the enterprise on their South Orange estate. A first-rate graduate school should be associated with a leading university and library, neither of which existed in Newark, but Princeton would be an ideal location in New Jersey.

In his autobiography Flexner recalled how at age 63 he was reluctant to accept the Bamberger's request that he head the project, but was persuaded by his wife who said, "You will have to do it. You have spent your life criticizing other people. You can't refuse to give them a chance to criticize you." Although he agreed, he was determined to move carefully: "I haven't a conviction that I am not willing to sacrifice because I want to do the thing right."

The Institute was officially incorporated on May 30, 1930 with Louis Bamberger and Mrs. Fuld heading the Board of Trustees. From Flexner's viewpoint, "It is our prime and essential function to develop an American culture and civilization . . . comparable in value to those of the Western European countries." It would be the first in America where "young men and women could continue independent training beyond the Ph.D. degree without pressure of numbers or routine:

> *I shall seek a few first-rate men and give them ample salaries on condition they hold up their end of the job . . . I am not unaware of the fact that I have sketched an educational Utopia. I have deliberately hitched the Institute to a star; it would be wrong to begin with any other ambition or aspiration.*

At the first Trustees meeting in September, 1931 Flexner expanded on the grand design for this "fortress of learning":

> *The Institute for Advanced Study will be neither a current university struggling with diverse tasks and many students, nor a research institute, devoted solely to the solution of problems. It may be pictured as a wedge inserted between the two . . . I should think of a circle . . . within this, I should, one by one, as men and funds are available—and only then—create a series of schools or groups—a school of mathematics, a school of economics, a school of history, a school of philosophy, etc. The "schools" may change from time to time; in any event, the designations are so broad that they may readily cover one group of activities today, quite another group as time goes on . . . Each school should conduct its affairs in its own way for neither the subjects nor the scholars will all fit into one mould.*

Abraham Flexner charged the celebrated Princeton mathematician Oswald Veblan with recruiting the best and brightest to this scientific Camelot. They'd be provided a place for study where there would be "no duties, only opportunities." Mathematics was a favored discipline partially because all that was needed was a blackboard and chalk, paper and pencils (when Einstein arrived, he also requested a large waste basket: "so I can throw away all my mistakes.") More important, there already were a number of brilliant mathematicians at Princeton and a new building was being planned to accommodate them. The Institute didn't officially open its doors until October 2, 1933 on land donated by the university. Among the brilliant cadre assembled was the charismatic Hungarian John von Neuman, later described as "the father of the computer." He found Princeton's setting a bit too serene for his cosmopolitan taste, lacking the intellectual stimulation afforded in European coffee houses. However, von Neuman acknowledged that if civilization was to survive it would have to be in America.

During the 1930s, because of harsh new American immigration policies, Jewish refugees desperately sought other ports of call. Albert Einstein had been a deeply committed pacifist, but by 1933 he was forced to change his mind: "Until recently we in Europe could assume that personal war resistance constituted an effective attack on militarism. Today we face an altogether different situation. In the heart of Europe lies a power in Germany that is obviously pushing to war with all available means."

Einstein who had been leading an itinerant academic life once described himself as "a bird in passage." But now that the situation in Germany was becoming untenable, he considered invitations from Madrid, Leiden, Paris, Oxford and Turkey, among others. Robert Milliken of Caltech had been trying for years to lure the scientist to Pasadena, but seeing an opportunity to seize the crown jewel for his new Institute, Flexner began a quiet but persistent courtship. Starting in California, he pursued his prey to Oxford and Europe where they negotiated terms. Thanks to the Bamberger largesse, Flexner was able to make a better offer than Caltech.

Although they came to a tentative agreement in 1932, Einstein continued to have reservations, including whether his coming to Princeton where the university was known to have a *numerus clausus* (quota system) might be misconstrued as acquiescing with such a policy. Einstein must have been sufficiently reassured, but once their agreement was sealed, Flexner worried that too bold or public a stance by his superstar in favor of Jewish refugees would stir up anti-Semitism. The Institute should be a haven where scholars and scientists could regard the world as their laboratory "without being carried off in the maelstrom of the immediate." He wrote to Herbert Maas, "Einstein . . . has done a number of foolish things since going to Europe. Of course, I do not allow them to disturb me in the least, for I know that when he reaches Princeton, I shall contrive to manage him and his wife."

Trouble flared up as soon as the Einsteins arrived in America on October 17, 1933. New York's mayor had prepared a gala welcome at the Battery, but Flexner arranged for the Einsteins to be taken off the ship at Quarantine Island in New York Harbor and directly hustled off to Princeton. The mayor, cheerleaders and a brass band were left waiting in the rain at the dock for the hero who never arrived. Flexner had sent a note which was delivered to the Einsteins when they debarked cautioning that their safety in America depended upon silence and refraining from attendance at public functions:

Later Flexner contended that it was the Einsteins who wished to land secretly and that he only had gone along out of concern for their physical safety. Whether or not the Einsteins were complicit in the ruse, Flexner's concern about their safety was genuine. Before coming to America, Einstein had been warned that the Nazis had put a price upon his head and that his life was not safe even outside Germany. Perhaps Flexner may

have been misguided in his fears, but what happened next, revealed the Director at his manipulative worst.

Two weeks after the Einsteins settled in, Rabbi Stephen Wise of New York arranged with President Roosevelt's social secretary for them to be invited to visit the White House. Rabbi Wise felt that FDR hadn't raised a finger to help the Jews of Germany and hoped that this visit would help focus the President's attention on their plight. In turn the President needed a public symbol of his sympathy. Roosevelt's secretary called to arrange the details, but when Flexner found out he was furious. He called the White House directly, advising them that all invitations must go through him, and then he refused the invitation. Flexner explained to FDR, "with his [Einstein's] consent and at his desire I have declined in his behalf invitations from high officials and from scientific societies in whose work he is really interested."

Einstein knew nothing about these machinations and when he did find out, contacted Eleanor Roosevelt. This time the invitation was personally extended and the Einsteins visited on January 24, 1934, had dinner and spent the night. Einstein later complained about the incident to Rabbi Wise in a letter in which he wrote as his return address "Concentration Camp, Princeton." In addition, he sent a five page letter to the Institute's trustees complaining of "constant interference of the type that no self-respecting person would tolerate." If Flexner continued this behavior, Einstein proposed "severing my relationship with your institute in a dignified manner."

The Director backed off and, to give Flexner his due, justified his behavior on an informal discussion he claimed to have had with the Einsteins early in their negotiations when he felt they had been grateful for his solicitude in protecting them from unwanted publicity. He took this as blanket authorization to act in their behalf—including intercepting and reading their mail. If an assassination attempt was a real possibility, the safest course would be to keep the naïve professor in seclusion where he could smoke his pipe, play his violin—and think. Flexner believed that the Einsteins had a penchant for publicity; they occasionally appeared at events designed to raise money for Jewish refugees and he continued to council against it. Perturbed when they rejected his advice, in a revealing letter to Elsa Einstein he warned that if Jews got too much attention, it would stoke anti-Semitism:

> *It is perfectly possible to create anti-Semitic feeling in the United States. There is no danger that any such feeling would be created except by the Jews themselves. (my italics) There are already signs which are unmistakable that anti-Semitism has increased in America. It is because I am myself a Jew and because I wish to help oppressed Jews in Germany that my efforts, though continuous and in a measure successful, are absolutely quiet and anonymous . . . The questions involved are the dignity of your husband and the Institute according to the highest American standards and the most effective way of helping the Jewish race in America and in Europe."*

Flexner's opinion was that Jews had brought misfortune upon themselves. In a separate letter to Albert Einstein that same day, again he argued that Jews should keep a low-profile: "I have felt this from the moment that Hitler began his anti-Jewish policy, and I have acted accordingly . . . . There have been indications in American universities that Jewish students and Jewish professors will suffer unless the utmost caution is used." For his part, Einstein told Flexner, "In these times of danger to Jewish and liberal interests one is morally forced to take on many things that in normal times could be avoided." Less than one month after the Einsteins arrived in Princeton, Flexner wrote the following to Institute trustee Herbert Maass:

> *I am beginning to weary a little of this daily necessity of 'sitting down' upon Einstein and his wife. They do not know America. They are the merest children, and they are extremely difficult to advise and control. You have no idea of the barrage of publicity which I have intercepted. I should suppose that half my time is devoted to protecting Einstein. It will be worthwhile if I succeed in doing it permanently within this year. Otherwise, a very serious problem regarding Professor Einstein may arise.*

By December, 1933 AF wrote "the E's have broken their promise in almost every possible way and have brought down upon themselves very serious criticism, not only in Princeton but elsewhere." Einstein would later dismiss the White House incident as "the little war in the beer glass." In turn, Flexner reported to Louis Bamberger that "all the little misunderstandings" had been removed and tranquility reigned, However,

a rift remained which soon would deepen and years later in a moment of candor, Einstein would refer to Flexner as one of his "few enemies" in Princeton.

A postscript to this lamentable story concerns the attitude of many Princetonians toward Jews during the 1930s. In 1937 when the negro contralto Marian Anderson came to town for a concert, she was refused a room at the Nassau Inn. Einstein invited her to stay at his little house at 112 Mercer Street and in later years whenever she returned, she'd stay with him. In 1938, the *New York Times* reported the result of a survey of incoming Princeton freshmen and for the second year in a row Adolf Hitler polled highest as the "greatest living person." The local hero, Albert Einstein was second.

Abraham Flexner's decade at The Institute for Advanced Study ended similarly to his tenure at Rockefeller—a faculty revolt which led to his forced retirement. But he did not go gently into his twilight years. He continued to be an intellectual gadfly in matters concerning education and settled old scores in his published memoirs. When Flexner died in 1959 at age 92, a *New York Times* obituary declared, "No other American of his time contributed more to the welfare of his country and of humanity in general." That's a remarkable epitaph. Many of his contemporaries might have disagreed, but he outlived them all.

Chapter 16

NEWARK'S POLIO PANICS

My mother Belle Cohen was born in Newark in 1907, grew up there and taught briefly in the public school system. She lived to age 96 and until the end of her days often reminded me that she was distantly related to the famous novelist Philip Roth. Although a family genealogist has disputed the connection, I still have the feeling that she may have been right—but if so, it was a tenuous link. Nevertheless, it's true that Roth grew up in the same Weequahic section of Newark and sometimes based his stories on his native city. My mother insisted that he got some of his material from our family's dark secrets that only a relative could know.

So when I read reviews of Philip Roth's novel Nemesis, I was intrigued by the similarity of its protagonist Bucky Cantor to my Uncle Lou—both were Newark gym teachers in 1944, the year the novel describes, and both were camp counselors that summer during a devastating polio epidemic. When I had a chance to read the book, that's where the similarity ended. However, Roth's novel is marvelously evocative of Newark of that era where we'd often visit relatives after tedious Sunday drives from the Bronx. With this as introduction, in the following lines from the very beginning of Nemesis. Roth elegantly sets the scene. Although the story is based on certain historical facts, the characters are fictionalized and the author takes some liberties with actual events.

> *The first case of polio that summer came early in June, right after Memorial Day, in a poor Italian neighborhood crosstown from where*

> *we lived. Over in the city's southwestern corner, in the Jewish Weequahic section, we heard nothing about it, nor did we hear anything about the next dozen cases scattered singly throughout Newark in nearly every neighborhood but ours. Only by the Fourth of July, when there were already forty cases reported in the city, did an article appear on the front page of the evening paper, titled "Health Chief Puts Parents on Polio Alert," in which Dr. William Kittel, superintendent of the Board of Health, was quoted as cautioning parents to monitor their children closely and to contact a physician if a child exhibited symptoms such as headache, sore throat, nausea, stiff neck, joint pain or fever.*

That same summer of '44, I attended my Uncle's camp in the Catskills and four years later, when I was at another boy's camp in Vermont, several cases of polio broke out, one camper died, we were quarantined and my terrified parents drove up to take me home. In fact, I was happy to leave, and not just because of the polio, but that's another story. Here Roth continues:

> *What people did know was that the disease was highly contagious and might be passed to the healthy by the mere proximity to those already infected. For this reason, as the number of cases steadily mounted in the city—and communal fear with it—many children in our neighborhood found themselves prohibited by their parents from using the big public pool at Olympic Park in nearby Irvington, forbidden to go to the local "air cooled" movie theaters and forbidden to take the bus downtown or to travel Down Neck to Wilson Avenue to see our minor league team, the Newark Bears, play baseball at Rupert Stadium . . . . .*

What could be done?

> *Escaping the city's heat entirely and being sent off to a summer camp in the mountains or the countryside was considered a child's best protection against catching polio. So too was spending the summer some sixty miles away at the Jersey Shore. A family who could afford it rented a bedroom with kitchen privileges in a rooming house in Bradley Beach, a strip of sand, boardwalk and cottages a mile long that had already been popular for several decades among North Jersey Jews. There the mother and the children would go to the beach to breathe in the fresh, fortifying ocean*

> *air all week long and be joined on weekend and vacations by the father. Of course, cases of polio were known to crop up in summer camps as they did in the shore's seaside towns, but because they were nothing like as numerous as those reported back in Newark, it was widely believed that, whereas city surroundings with their unclean pavements and stagnant air, facilitated contagion, settling within sight or sound of the sea or off in the country or up in the mountains afforded as good a guarantee as there was of evading the disease.*

Philip Roth certainly had done his homework in preparing to write his novel and his lucid prose vividly described the inexorable spread of the polio virus and the accompanying hysteria which far surpassed fears of the war simultaneously raging overseas. In effect, Newark was at war against an unseen, unknown and terrifying enemy. Surrounded by wetlands, The city was famously infested with mosquitoes and had a long history of epidemics. Colonial scourges of smallpox and yellow fever were followed during the early 19th century by recurrent cycles of cholera and malaria. Indeed a cholera epidemic in 1832 was viewed by some as "divine judgment. Newark's physicians gave sanitary advise, a Board of Health was established and citizen's committees appointed to keep the streets and highways clean. Days of fast and prayer, notwithstanding, 127 persons contracted cholera and 65 died that year.

When another cholera epidemic occurred in 1849, a local newspaper observed that victims mainly were "foreigners in a low condition of live, who lived without due prudence." However, others noted that that the disease was reaching even to the better classes. Annual summer cholera epidemics during the 1850s were hidden from public view in order to avoid exciting the public. A special health committee advised establishing a centrally located hospital but no neighborhood was willing to run the risk of having the disease in their midst. When at last it was determined that the disease occurred principally in sections where well-water was being used, the *Newark Daily Advertiser* suggested that these wells might be infected by "the percolations of the water into them through the filth of streets, cesspools, etc." But the 19th century cholera epidemics never approached the severity of what followed during the next century. I

Although for millennia the polio virus had been an endemic pathogen, it wasn't until the 1880s that major epidemics began in Europe, mostly in crowded cities during summer months. It struck without warning, killed

some of its victims and marred others for life. No doubt prior sporadic cases of polio were called something else and surely there were other causes of withered limbs and lameness. The first epidemic recognized in the United States came in Rutland, Vermont in 1894 with132 total cases, 50 paralyzed and 18 dead. A local doctor who meticulously catalogued the afflicted advised parents to have their children avoid chills when overheated and not to play too hard on hot days (instructions still heard in Roth's narrative of Newark in 1944.) In 1908 Karl Landsteiner in Vienna discovered that the infectious agent was a so-called "filterable virus."

1916 marked the first major outbreak of "infantile paralysis"—a misnomer because it was not limited to infants and even adults could be effected. During the hot summer of 1921when 39 year old Franklin Roosevelt got sick, there were 27,000 deaths nationwide; New York City alone had some 8,900 cases with 2,400 deaths. Large scale panic led to enforced isolation and quarantine. Fantastic theories were advanced as to the cause including sharks infected by germs they breathed from the floating bodies of dead soldiers gassed in the war; infected bananas shipped to New York from the Carribean which had been inoculated by tarantulas; electrical vibrations from radio waves; intestinal maggots; subluxed vertebrae; tickling of children; sexual transmission by non-circumcised males.

As the 1916 epidemic worsened in July, all children under age sixteen leaving New York City were required by the Health Department to get a "travel certificate" proving that they were "polio-free." Nevertheless, many surrounding areas closed their doors to outsiders. The New York Times reported that in Hoboken heavily armed policemen were stationed at every entrance to the city—tube, train, ferry, road and cow path—with instructions to turn back vans, cars, carts and persons laden with furniture. All comers were instructed that they would not be permitted under any circumstances to take up residency in the city. When health centers in the north of the state were overwhelmed, Bergen County rushed its long delayed new isolation hospital to completion. (See Chapter 11.)

An early technical breakthrough of sorts came in 1928 when Phillip Drinker, a medical engineer at Harvard, developed seven foot long, eight hundred pound behemoths, popularly called "iron lungs" and within three years there were 150 in hospitals all over the country. These were air-tight cylinders with only the patient's head sticking out. A motor-powered "bellows" pumped air in and out of the chamber;

negative pressure expanding the lungs; increased pressure contracting them. Usually iron lungs were used only temporarily, but sometimes they were permanent—one woman who was encased for more than 60 years dictated her memoirs. Sometimes the machines were placed side by side in hospital wards Some people considered them to be "metal prisons" or "death traps" and because only the sickest cases needed them, mortality was high; greater than 60%. Many patients found the cylinders to be claustrophobic—moreover, the rhythmic rise and fall occurred every four seconds, more than 20,000 times a day. During the 1930s the cost of an iron lung was about $1,500, the average price of a home at that time. During the war years the price rose to nearly $3,000.

Throughout the first half of the 20th century medical scientists worked feverishly to develop a vaccine. In 1935 Maurice Brodie and William Park at NYU reported their results with killed virus while at the same time in Philadelphia, John A. Kolmer was injecting an attenuated virus to more than 10,000 children. Results were equally poor and a dozen of Kolmer's patients developed paralytic polio; nine died. Dr. Victor Parsonnet who grew up in the Weequahic section of Newark recalls how in 1938 his surgeon father administered a single shot of one of these experimental vaccines in his upper arm. His sister and four cousins also were injected and within a week they all ran high fevers and developed huge abscesses which had to be drained. One cousin developed temporary paralysis of the injected limb. (Dr. Parsonnet reports that his arm still is tender.)

1944, the year of Philip Roth's novel, began a terrible decade marked by tens of thousands of cases of polio nationwide. The incidence peaked in 1952 when there were 58,000 sick, 21,000 paralyzed and 3,000 dead. Franklin Roosevelt founded National Foundation for Infantile Paralysis (NFIP) in 1937 to support research and deliver treatment services, including iron lungs. It was administered by financier Basil O'Connor and better known as the *March of Dimes*. Eddie Cantor urged radio listeners to send their spare change to the White House to fund medical research and Hollywood stars like Myrna Loy, Veronica Lake, Linda Darnell and Alan Ladd celebrated FDR's birthday with fund-raising "Birthday Balls." Children were encouraged to drop their dimes into collection cans passed around by ushers in movie theaters and posters of cute children in leg braces were ubiquitous and frightening. After President Roosevelt died, theater directors no longer felt obliged to participate in the drives, the

March of Dimes lost income and eventually merged with the United Way.

But by then, public fear was curtailed due to the effectiveness of preventive vaccinations which were less toxic than earlier formulations. Jonas Salk's injectable killed vaccine first began to be used in 1952 and two years later massive field trials involving two million elementary school children followed. On April 15, 1955 church bells rang all across America and signs went up in store windows saying "Thank you Dr. Salk." By 1957 the "summer plague" was down to a little over 5000 cases nationwide. Field trials of Albert Sabin's oral live virus vaccine replaced the attenuated Salk vaccine in 1962 and by 1992 only five cases were reported in the United States. Afterwards there was only an occasional sporadic case, usually related to the live virus vaccine.

Because this review of polio epidemics past was inspired by Philip Roth's new novel, it seems appropriate to conclude with another literary reference. One of the prominent early investigators was Dr. Simon Flexner who was the medical director of the Rockefeller Institute for Medical Research from 1901 to 1935. My interest in the 1944 Newark epidemic happened to correspond with publication of my book about Simon Flexner's equally famous brother, the educator Abraham Flexner (see Chapter 15.) Both Flexner brothers had intimidating personalities and at the Rockefeller Institute, Simon Flexner's word was law. Some of Simon's early work involved developing a polio vaccine and in 1911 when the *New York Times* interviewed "the foremost expert on polio," he over optimistically predicted that cure was near—a matter of months. This was wildly premature; indeed, Flexner's approach was faulty and some have suggested that it may have impeded progress for four decades.

In 1920 Simon Flexner hired a young microbiologist Paul De Kruif, then two years later, summarily fired him. De Kruif's sin was that he'd anonymously published a critique of American medicine which he described as "a mélange of religious ritual, more or less accurate folk-lore and commercial cunning." When Flexner learned of this, he felt that the author's characterization was unseemly and cast the Institute in a bad light. Paul De Kruif got his revenge in an unusual manner. He was a boisterous, hard drinking man and one of his buddies was the novelist Sinclair Lewis. During an extended binge in Chicago, which involved several other famous persons (e.g. Morris Fishbein and Carl Sandburg), Lewis decided

to write his next novel about the medical research establishment rather than about organized labor, his original idea.

The result was Sinclair Lewis's masterpiece *Arrowsmith*.for which he was awarded the Pulitzer Prize—Lewis declined to accept it for personal reasons but later didn't refuse the Nobel Prize for Literature. Although De Kruif was a major collaborator and by contract received 25% of the royalties, he was acknowledged by Lewis only for his "technical support." Nevertheless, the major characters in *Arrowsmith* were drawn from De Kruif's personal experience and there was much speculation about their true identities. Clearly, the book's idealistic protagonist, young Dr. Martin Arrowsmith was a flattering self-portrait of Paul De Kruif and there was little doubt about the identity of Dr. A. Dewitt Tubbs, the smug, publicity seeking medical director of the McGuirk Institute: none other than Simon Flexner. The connection was obvious enough to brother Abraham Flexner who described the novel as "a travesty." A final irony was that both Jonas Salk and Albert Sabin seemed to have been inspired to pursue careers in biologic research by reading Sinclair Lewis's *Arrowsmith* (1925) and Paul De Kruif's own classic *Microbe Hunters* (1926.)

Chapter 17

DISASTER AT BARI

In the introduction to this collection of essays, I described how stories told to me by Dr. Stewart Alexander inspired me to take an interest in medical history. We would often meet each other while making rounds at Pascack Valley Hospital and during those chats Stewart sometimes told fascinating tales not only about his father's and Dr.Henry Neer's medical careers, but also about his own experiences during World War II. It seems fitting to pay tribute to my late medical mentor although the events described here took place far distant from his New Jersey home.

Stewart Alexander grew up in Park Ridge, graduated from Dartmouth College and received his medical degree in 1937 from Columbia University's College of Physicians and Surgeons. While interning at Bellevue he joined the Medical Corps Reserve and then worked briefly in his father's suburban medical practice. In November, 1940 he was called to active duty and the next year was sent to the Edgewood Arsenal in Maryland where he worked in the Medical Research Division. His focus was on studying the effects of mustard agents which had been employed with such devastating effect in the trenches during World War I.

During the summer of 1942, General Eisenhower wired chief of staff George C. Marshall that he needed an expert in medical aspects of chemical warfare and young Dr. Alexander was chosen. However, his orders were temporarily cancelled and he was assigned instead to serve with Generals George Patton and Mark Clark and attended the famed Casablanca Conference. In 1943 now Lt. Colonel Alexander was moved

to Eisenhower's headquarters at Algiers. Where he met and married the army's chief of nurses in North Africa, Col. Bernice Wilbur—she outranked him; General Eisenhower officiated.

On the night of December 2, 1943 the German Luftwaffe launched a surprise attack on the Italian port city Bari where some thirty-odd Allied cargo ships were moored prior to unloading vital supplies. In little more than one hour, some 2000 bombs sunk seventeen ships—among them five U.S. merchantmen. The first concern centered on the loss of military materials but within a few days it became evident that not only had been there hundreds killed during the attack, but several days later many survivors were developing unusual skin lesions, temporary blindness, swollen genitals and irritated lungs. When casualties initially were received in hospitals, doctors unaware of what they were dealing with let many of them remain in their oil and gas soaked clothes for hours. But as it began to be suspected that the German aircraft may have dropped chemical bombs, headquarters was alerted, Dr. Alexander was summoned and told, "You better get over there immediately and see what you can learn. There is a possibility that a toxic agent is involved."

As soon as he arrived in the hospital wards in Bari, Alexander recognized the characteristic odor of burnt garlic with which he was familiar from his work at the Edgewater Arsenal. He quickly deduced that most deaths were not due to blast injuries and noted that serious systemic symptoms lagged by several days to a week or more. Among other findings, white blood cell counts began to fall and the victims developed anemia. Dr. Alexander arranged to have autopsies performed on the dead which confirmed that in addition to superficial skin lesions there were marked abnormalities in lungs and other internal organs. Mustard toxicity certainly could have been involved but if so, did the Luftwaffe drop chemical bombs or was one of the sunken ships carrying the poison? Col. Alexander was aware that the American military had been stockpiling mustard to use in retaliation lest the Axis powers used chemicals. Moreover, some of the mustard could be contained in bombs that could be used in aerial attacks.

Dr. Alexander arranged to explore the harbor's floor and not only were bomb casings found which contained mustard but they had American markings. A sketch of the locations of fourteen ships showed that the greatest number of mustard induced deaths occurred among personnel closest to the Liberty ship *John Harvey* and only then, after the evidence was clear-cut, did British officials admit that the fully-loaded boat which

suffered a direct hit and exploded had been carrying two thousand 100 lb. mustard bombs. Much remained on the harbor bottom but a substantial amount dissolved in oil had contaminated the water and soaked hundreds of survivors. In effect, the Allies had bombed themselves.

Having fulfilled his mission, Dr. Alexander returned to North Africa and within the month, his preliminary report about the medical aspects of the tragedy was distributed to a small number of authorities. In it he noted, "the systemic effects were far more severe than II had ever anticipated as being possible." In a separate report back to the Edgewood Arsenal, Alexander acknowledged that although some of the deaths could be attributed to blast effects, while the cause of others "left plenty of room for mental gymnastics."

As a courtesy, a copy of Col. Alexander's report was sent to the British leaders and eventually reached the eyes of Prime Minister Churchill. But the PM asserted not only that there were no mustard gas casualties at Bari, but he threatened Col. Alexander with court martial if he persisted in his claim. Abashed, the doctor insisted "But I have proof." Churchill replied, "The symptoms do not sound like mustard gas" and ordered Alexander to reexamine his data. Alexander wired back: "If the prime minister does not approve of my diagnosis, the prime minister is free to make his own." In fact, he did; Churchill ordered that the cause of "dermatitis" should be coded as "NYD"—not yet determined.

Some of the American high command agreed that the Germans might use the revelation as propaganda which might turn world opinion against the Allies. For the British, it would be embarrassing to admit that any seaport controlled by them had been responsible for the poison gas tragedy and the war's second worst shipping disaster (second only to Pearl Harbor.) Churchill directed that all British records refer to the burns merely as "due to enemy action." No doubt, the cover up contributed to delayed treatment, perhaps even to deaths. The subsequent course of the war after Bari was altered by the loss of vitally-needed supplies; the military strategy shifted away from the Mediterranean in favor of the cross-channel invasion which was made a half year later at Normandy.

Of 617 men rescued, 83 died within the first week. Nearly a thousand more military personnel died of complications over the next months. The number of civilian casualties was never determined, probably more than 1000. Of the known mustard-related military casualties at Bari, the mortality rate was 13.6 percent. During World War I of about 70,000

American soldiers hospitalized for gas only about two percent had died. (counting all nationalities, 1,296,853 were gassed; 91,198 died.)

Col. Alexander's final report remarked that fatalities mostly were due to prolonged exposure to the mustard in oil solution in sailors some of whom were immersed for hours in the harbor's toxic waters. Systemic effects were especially evident in the hematopoetic system and were of greater significance than had been associated with mustard exposure in the past. Dr. Alexander noted that this would have to be studied further in a research setting but most likely prolonged absorption was more important than brief exposure. Also, he reported that these late developing cases did not respond to conventional methods of treating shock and blast burns.

Stewart Alexander's preliminary report came to the attention of Colonel Cornelius "Dusty" Rhoads, then commander of the army's Chemical Warfare Service. Writing to him, Alexander noted that the use of the term "N.Y.D" had been a "command decision" and concerning specific pathological observations, "the systemic effects continue to be the most interesting aspect of the picture and the most provocative of thought . . . . Any advice, help, or suggestions would be most welcome so that the best possible use may be made of the information gained in the episode." On January 15, 1944 Rhoads replied, "I would like to let you know of the high praise that has been given your report on the Bari Disaster. It provides us with such complete information as to represent almost a landmark in the history of mustard poisoning." We plan to use this report as a model in the plants where industrial accidents can occur. I am sure it will be most useful."

Col. Rhoads requested more clinical details and samples of tissue blocks from the autopsies and in April, 1944 in another letter to Alexander noted, "It is felt that the report and slides make a distinct contribution to the medical aspects of the agent concerned" and the two men agreed that if the chemical's effects could be harnessed they might be useful in treating certain forms of cancer. The Bari "incident" set off a frantic effort to investigate war gases and their effects on soldiers. Spurred on by Dusty Rhoads, contracts for research were issued around the nation and one for studying nitrogen mustard was issued to two scientists at Yale University, Louis Goodman and Alfred Gilman.

A year before the Bari disaster, Goodman and Gilman had been studying the gas's capacity to target malignant white cells, first in animals, and then on seven human patients. Both in mice and men nitrogen mustard

dramatically caused remissions in lymphomas, but bound by secrecy, they couldn't publish their findings until 1946 when their landmark paper published in collaboration with famed hematologists William Dameshek and Maxwell Wintrobe reported on 67 pooled cases. (*JAMA* 1946: 132: 126-132) It was the dawn of cancer chemotherapy and later historians have described Col. Alexander's report as a classic. Dr. Ezra Greenspan, medical director of the Chemotherapy Foundation said that the Bari incident "was the most beneficial accident that ever happened. It advanced the field of chemotherapy by many years and really got it going."

In 1948 the charismatic and controversial Dusty Rhoads was made head of New York's Memorial Hospital and invited several of his war-time colleagues to join in his crusade against cancer. Among them was Stewart Alexander but a research career was less appealing than joining his father's Park Ridge medical practice. He went on to have a long and distinguished career not only as a well-respected clinician, but as an educator and a leader in medical and community affairs.

Stewart Alexander's singular contribution during World War II would still be unrecognized were it not for a high school student in Arizona who wrote an award-winning history paper about the Bari incident. Nicholas Spark won first place in that state essay contest and also a special award from the Naval Historical Foundation but in reviewing the story he was disturbed that Dr. Alexander had never received any sort of recognition. Spark felt that the doctor's struggle to get out the truth despite the threat of court martial had been a profile in courage. At an awards ceremony the high school senior met his state senator Dennis DeConcini and asked him to check out the story. The senator's staff took the matter up with the Army and on May 20, 1988, forty-five years after the Bari disaster, at a small ceremony held in the Washington office of New Jersey's Senator Bill Bradley, the 73 years old physician belatedly received well-deserved recognition.

Chapter 18

"DR. EVIL"

For more than a decade I'd gathered every scrap of information I could find about the lives of Jewish physicians and all of this research resulted in four published collections of narrative history. Afterward, as described in this next chapter, I encountered a bizarre story about a Jewish doctor which had an obscure New Jersey connection. What follows are notes from a speech given in May, 2009 to Essex County's "Practitioner's Club" which was based on my recently published book "A Tale of Two 'Villages': Vineland and Skillman, NJ."

I'd first learned about Edwin Katzen-Ellenbogen, whom I dubbed "Dr. Evil", in 2003 when I read a 600 page book, "War Against the Weak" written by investigative reporter Edwin Black. His book described how the eugenics movement was an important social, scientific and political phenomenon during the early 20th century. Eugenicists believed that better humans could—and should—be bred, just like race horses. Some zealots argued that the human race was menaced by rapidly proliferating genetic defectives and that this trend had to be stopped, even if by draconian measures. This ideology had enormous traction among influential people and the tragic results were felt not only in Nazi Germany—but also in this country, even in New Jersey.

Edwin Katzen-Ellenbogen (K-E) was a psychiatrist who worked briefly in New Jersey before World War I. It's well known that after the end of World War II came the famous Nuremberg Trials, but few people are aware of other war crimes trials of minor figures which were run by the U.S. Army

at Dachau, the infamous former concentration camp. At one of these which began in August, 1947, thirty-one individuals were prosecuted and accused of having done atrocious things at Buchenwald. The most notorious was the so-called "Bitch of Buchenwald"—Ilse Koch—the sadistic commandant's wife who allegedly commissioned lampshades to be made from human skin. The others on trial sometimes were referred to as the "Bastards of Buchenwald" and among them was a man whose story was quite different from the others—the man whom I call "Dr. Evil."

In fact, Dr. Katzen-Ellenbogen was not a Nazi at all, but had been a prisoner at Buchenwald. So why was he on trial for his life? According to his testimony, he was born in the Austro-Hungarian Empire in 1882 and although his parents were non observant Jews, he was descended from a long line of famous rabbis whose genealogy could be traced back to King David. K-E testified that he'd received a medical degree in Leipzig in 1905 and while there had met an American girl by the name of Mary Pierce. They fell in love, he followed her to Boston, converted to her religion and they married. His wife's family roots stretched back to before the Revolution and shortly after the wedding, her father was appointed a justice of the Supreme Court of Massachusetts on which he served for many years.

Edwin Katzen-Ellenbogen held several jobs at various mental hospitals and while working at one in Danvers, Massachusetts, sometimes lectured on abnormal psychology at Harvard Medical School. He published a few articles in scholarly journals and was listed in the prestigious *American Men of Science.* All things considered, he seemed to have been a promising scholar on the rise. So what was he doing on trial at Dachau and why do I call him "Dr. Evil"? I won't keep you in suspense so let me tell you now that he was accused of having collaborated with his captors at Buchenwald and, despite his denials, was sentenced to life imprisonment. After three years in prison, in 1950 he died of heart disease at age 68.

Dr. Katzen-Ellenbogen had been a zealous eugenicist which is why Edwin Black devoted much attention to him in his book so now let me flesh out the narrative a little more. It seems that in 1914 the doctor left wife and child behind and returned to Europe for good. As described by him at the trial, for the next three decades he lived and worked variously in Germany, France and Czechoslovakia. In 1941, because of his Jewish background he was arrested in Paris and for the next few years he collaborated with the SS. Then in 1943 he was sent to Buchenwald, which

I'll discuss later, but first let me explain what this story has to do with New Jersey and why I became inspired to write a book about it. While reading Edwin Black's account, several sentences caught my attention:

> *In 1911 Woodrow Wilson became governor of New Jersey . . . . Katzen-Ellenbogen was asked to become scientific director of the State Village for Epileptics at Skillman, New Jersey . . . . As the state's leading expert on epilepsy, [he] was asked by Wilson to draft New Jersey's law to sterilize epileptics and defectives.*

I wondered what that was all about? I'd never heard either of this man or about a New Jersey law which would force epileptics and other "defectives" to be sexually sterilized? Could that be true? It seemed implausible, but I didn't find the time to follow-up until May (2008) when I decided to visit Skillman Village, just a few miles north of Princeton.

Nowadays, Skillman Village is off-limits, but I obtained permission from the township and arranged for an official to drive me around so I could take pictures. In effect, the place is a ghost town, a ghost town in a bucolic setting. It appears like an abandoned college campus, large trees, red brick buildings scattered about—all boarded-up and decaying, like Brigadoon, a village that's gone to sleep. But not necessarily a restful sleep, because my overwrought imagination sensed something sinister in the air—a specter of an evil doctor who'd once worked there. That visit sparked my curiosity so for the next few months, I delved further into the story of this mad scientist and this dilapidated place.

I read whatever I could find on the subject, searched archives in Trenton, Philadelphia and New York and arranged for several German scholars to check documents in Leipzig where K-E supposedly went to medical school. I say "supposedly" because in the end, I learned that much of what he had testified at the Dachau trial was bogus, including his claim to having a medical degree. His post-war narrative consisted of self-serving distortions probably intended to impress the military tribunal and concerning his work in New Jersey, his story was only partially true. When I finally checked the details, I learned that although Dr. Evil had worked at Skillman for nearly a year and a half, he vastly exaggerated his importance there He certainly was not the "Scientific Director" as he later claimed, but had the ambiguous title of psychopathologist—his name wasn't even included among the medical staff records.

Notwithstanding K-E's brief length of service, his very presence at Skillman seemed to cast a dark shadow on events which transpired in New Jersey not so very long ago. For as I learned more about Dr Evil, I came to appreciate that while he may have been an aberrant, even insignificant figure, many prominent New Jerseyans shared some of his core beliefs. So my focus began to shift away from this single man in order to take a broader look at events both in New Jersey and beyond early in the last century. In so doing, I came to appreciate that the more important story concerned the social and intellectual culture which prevailed not only at Skillman Village for Epileptics and its sister institution in Vineland which its leaders liked to call "The Village of Happiness" but throughout the country.

The word "ugenics" which was coined in 1883 by Francis Galton, a cousin of Charles Darwin, had Greek roots meaning "well born." At the dawn of the 20th century eugenics blended aspects of Darwin's natural selection theory and Mendel's earlier work in plant genetics. Science which was emerging from its dark ages was being used to explain various social and cultural phenomena and it seemed that abstract theories now could be proved using scientific methods and language. Eugenicists believed that behaviors such as prostitution, alcoholism and criminality were genetically transmitted. You weren't born into poverty—poverty was born into you—and one could never rise above their inbred flaws. As it turned out, the proof was flawed; eugenics was pseudo or junk science.

Nevertheless, many progressive reformers uncritically accepted these ideas and true believers advocated sexual sterilization as an effective way of reducing what seemed to be growing numbers of "defectives." That was a generic term which included not only the criminally insane, but people who suffered from epilepsy, congenital blindness, immorality, promiscuousness, even chronic masturbators. Such conditions could be bred-out by discouraging procreation by those deemed to be "unfit" which was referred to as "negative" genetics—as opposed to "positive" eugenics which encouraged fitter stock to be fruitful and multiply.

Among supporters of at least some of these ideas was young Winston Churchill who approved of legislation which would segregate many thousands of England's mentally challenged people so that "their curse died with them and wasn't passed to future generations." In this country, Teddy Roosevelt said "we have no business to permit the perpetuation

of citizens of the wrong type." Dr. John Harvey Kellogg—who along with his brother invented Corn Flakes—was an avid eugenicist who linked religious discipline with a healthy lifestyle. Celebrities and wealthy people flocked to his spa-like "Good Health University" where they were extensively examined, ate vegetarian food and exercised in whatever sun there was in Battle Creek, Michigan.

Margaret Sanger, who later founded Planned Parenthood and coined the term "birth control," meant to control the births of certain kinds of people whom she considered to threaten the genetic integrity of humanity. If such people didn't agree, they should be forcibly sterilized. Her slogan was "more children for the fit; less for the unfit." And just who were the unfit? Jews, Slavs, Catholics and Negroes as well as the usual suspects—alcoholics, epileptics, the poor and disabled, the congenitally deaf.

Perhaps the most outspoken of all was Madison Grant (see chapter 16) who often has been described as our greatest conservationist. With his friend TR, he helped establish the national park system and was instrumental in preserving California's redwood trees and many varieties of endangered animal species. More than anyone else, he was responsible for building the Bronx Zoo and he was a Board member of the Museum of Natural History. But Madison Grant wanted to preserve more than big game and big trees. He wanted to save what he called "the Great Race"—those builders of America who had lived here before the waves of immigration of the late 19th century. He was a white supremacist and a rabid anti-Semite who believed in the superiority of blue-eyed, blond-haired Nordics.

Madison Grant's book *The Passing of the Great Race* when published in 1916 was hugely influential and since he and his followers often used the language of animal breeding or agricultural studies, they dehumanized those they considered to be unfit, sometimes referring to them as "human weeds" or "insects." Madison Grant proposed that it was government's role to preserve the superior Nordic race by whatever means. His program of negative eugenics not only included segregating and sterilizing inferior races, but excluding Jews, Italians and other undesirables from immigrating lest they poison the American gene pool.

The epicenter of the eugenics movement was Cold Spring Harbor on the north shore of Long Island where in 1904 an experimental laboratory was set up on the former estates of John Foster and Allen Dulles (also

both active eugenicists.) In 1901 Charles Davenport was made head of the lab and hired a former chicken breeder from Iowa, Harry Laughlin, to serve as his right hand man. Laughlin headed a so-called Eugenics Record Office (ERO) which served as a clearing house for epidemiologic data on inherited disorders. Conferences were held frequently and field workers trained at Cold Spring spread out and collected genealogical files of more than 700,000 families in order to prove that selective breeding could be applied equally to humans as to peas, fruit flies or race horses.

Charles Davenport argued that the menace of feeblemindedness could be averted by using the newly introduced technique of vasectomy which was being performed in Indiana as punishment for criminals. Now the technique could be used for race improvement, but how many people might need to be neutered? Harry Laughlin and others estimated about 10% of the population—perhaps ten or eleven million—and that was only a start. Eugenicists often spoke of "the submerged tenth" or simply "the tenth" which was code for those whose genetic potential needed to be cut off in order to preserve what Madison Grant referred to as "the great race"—what Hitler soon would call "the master race."

In addition to Cold Spring Harbor, there were various interlocking organizations with many of America's social and scientific elite serving as active members or, at least, sympathetic to their ideas—people like Alexander Graham Bell, George Bernard Shaw, Charles Lindbergh, Luther Burbank, Henry Ford, Thomas Edison and many others like them. Between 1910 and 1940 the work done at Cold Spring Harbor was funded mainly by contributions from Carnegies, Harrimans and Rockefellers.

But now let's consider New Jersey's special contributions. During the late 19th century the Vineland School for Feeble-minded Girls and Boys opened and continued in operation for 100 years. For decades this so-called "Village of Happiness" was headed by a genial superintendent Edward R. Johnstone whose idea was for inmates to be segregated from society but treated humanely and taught to perform simple tasks such as farming or sewing. Because epileptic patients often were disruptive of routine when they convulsed, a second institution exclusively for them was opened in Skillman, NJ in 1898. When Skillman' Village's first superintendent Dr. Henry Weeks left in 1907, he was replaced by his son Dr. David Weeks who ran the facility for the next two decades. Like at Vineland, Skillman's

mission included research to study the cause and cure of mental illness, especially as it related to epilepsy.

Research at Vineland was directed by Dr. Henry Goddard who shortly after his appointment in 1908 visited Europe to learn what was being done there. Generally he was unimpressed, but in Paris Goddard met Alfred Binet who'd just developed a quantitative test which he suggested could be used to measure human intelligence. Goddard brought a copy home, had it translated and adapted to distinguish between three categories of feeblemindedness—respectively idiots, imbeciles and a new term which he coined—"morons."

The revised Binet tests became known as IQ tests; various modifications were made eventuating with the now familiar Stanford-Binet test. At first Goddard studied his patients at Vineland then for controls, local schoolchildren and soon was asked to screen immigrants at Ellis Island. But even if these people just off the boat were literate, they couldn't possibly answer questions which required familiarity with American culture and, as a result, the field workers reported that more than 70% of Italians, Irish, Blacks and Jews failed the intelligence tests, feeding into prejudicial stereotypes against them.

Henry Goddard's other major contribution was a book based on the pedigree of a single Vineland inmate for whom he devised the pseudonym "Dorothy Kallikak." The progenitor of her line was a man who during Colonial times slept with a tavern wench and from that union came six generations with many ne'er do wells, epileptics, criminals and the like. The Kallikak genealogy seemed to prove that most feeblemindedness was hereditary, that the cost to society was great, and that the best way to deal with the problem was to prevent such bad seeds from germinating.

In January, 1911 a committee from Skillman and Vineland drafted a law that would permit involuntary sterilization of several categories of feeblemindedness, including epileptics. Drs Weeks and Goddard and several others from Vineland composed the language and the bill was introduced to the state legislature in February. When Governor Wilson signed it into law on April 21, New Jersey became the sixth state to pass a forced sterilization law; in time thirty more states passed their own versions.

During that same year of 1911, Dr. Weeks was collaborating with Charles Davenport on a joint research project which involved studying the pedigrees of epileptics. I was able to obtain copies of some 80 letters

between the two men but two were of particular interest concerning Edwin Katzen-Ellenbogen, our Dr. Evil. From their exchange it was evident that neither knew anything about K-E when he applied for a job at Skillman. Certainly he was not the state's leading expert on epilepsy nor had the governor brought him to New Jersey in order to compose a sterilization law. In fact, he didn't arrive at Skillman until some three months *after* the sterilization law was signed by Woodrow Wilson.

Thirty-six years later while on trial at Dachau, Dr. Evil misrepresented his role, attributing to himself the work that actually was done by his boss Dr. Weeks. Nevertheless, Dr. Weeks did hire K-E as a clinical psychologist in order to supervise IQ testing at Skillman and he did work there for more than a year. However, the two men had a stormy relationship and at the end of 1912 when K-E's job was terminated, Dr. Weeks wrote on his final work record, "shirked and neglected duties, disorganizing spirit, lacked application." After leaving Skillman, Katzen-Ellenbogen took a position at Trenton State where he worked for about two years before returning to Europe.

Soon after New Jersey's sterilization law passed, Dr. Weeks selected Alice Smith as the first candidate for "asexualization." She was a long-term epileptic patient at Skillman and although she'd not had a seizure in five years, salpingectomy was the preferred method of choice. A state-appointed lawyer objected and after two lower court reviews, the case was referred to New Jersey's Supreme Court. While awaiting the Court's decision, leaders of Vineland and Skillman tirelessly promoted their ideas. Dr. Weeks was elected President of the International League Against Epilepsy and he and Vineland's superintendent Edward Johnstone and trustee Bleeker Van Wagenen attended international eugenics meetings in Europe. In London Van Wagenen delivered a report from the Cold Spring Harbor committee which he'd chaired proclaiming that sterilization provided "the best practical means of cutting off defective germ-plasm in the human population."

On November 18, 1913 New Jersey's Supreme Court unexpectedly declared the sterilization law to be cruel and unusual violation of equal protection. Although we had been the sixth state to pass such a law, to our credit, we were the first to rule it unconstitutional. One reason given was that it was prejudicial against institutionalized patients because it did not apply to an equal number who were not in facilities like Skillman.

However, Chief Justice Charles Garrison had another concern and in this he was prescient:

> *If the enforced sterility of this class be a legitimate exercise of government power, a wide field of legislative activity and duty is thrown open to which it would be difficult to assign a legal limit . . . Racial differences, for instance, might afford a basis for such an opinion in communities where that question is unfortunately a permanent and paramount issue.*

To my mind, Garrison's position was a "profile in courage" and although he was not alone in resisting the eugenics agenda, his was a relatively early voice of dissent. Before Garrison went to law school he had practiced medicine in New Jersey for several years which perhaps gave him some real world experience. So Alice Smith was *not* sterilized—nor were there ever any cases of coerced sterilization performed in New Jersey.

Justice Garrison's caveats notwithstanding, Dr. Weeks never changed his opinion. He maintained that epileptics were dangerous and their uncontrollable, impulsive behavior accounted for between 8 and 10% of juvenile crime. Their antisocial behavior was the result of feeblemindedness but by preventing reproduction of "neurotic strains" an endless progeny of defectives would be cut off within a few decades. In a speech delivered in Hoboken in 1916, Skillman's outspoken superintendent declared:

> *As a simple business proposition, the State can make no better investment then to provide against reproduction by these defective women of child-bearing age who are responsible for so much of the unspeakable debauchery and licentiousness that pollutes the lives of the youth of the community.*

Undeterred by their setback in the Supreme Court, New Jersey eugenicists merely changed their tactics. Beginning in 1914, Vineland's publicist Alexander Johnson delivered thousands of lectures throughout the United States warning anyone who would listen about the great menace and what could be done to avert it. In 1917 when the United States entered World War I, seven scientists headed by Robert Yerkes met at Vineland. They adapted Goddard's IQ test to simpler so-called alpha and beta intelligence tests which soon were administered to more than one million soldiers. Among this gang of seven was a young Princeton

Professor of Psychology Carl Brigham who in 1923 published a book called "A Study of Human Intelligence." It was based on the army tests and it concluded that Jews and Negroes were intellectually inferior—that 47% of whites generally, 70% of Jews and 89% of negroes met the standard for eugenic elimination.

Back at Princeton Brigham developed the SAT tests that we've all taken and it wasn't until 1930 that he belatedly admitted that his earlier work had been invalid.

However, by then the damage was done. Carl Brigham's book may have been long forgotten, but he shouldn't be forgiven for his work was cited by Harry Laughlin and Madison Grant to impress legislators with the result that in 1924 restrictive immigration laws were passed. They would have devastating effect by restricting future immigration to 2% of those from each country who had lived in the United States back in 1890. Why then? As one Congressman explained, before 1890 "the low grade stuff hadn't begun to come to us in volume." By this he meant Jewish tailors and Greek banana vendors and Italian gangsters. Others were even cruder: one legislator referred to late comers after 1890 as "the scum, the offal and the excrescence of the earth."

Some pragmatists worried, "who would work in our fields . . . or clean our houses?" A *New York Times* headline reported "Melting Pot Theory False." The accompanying article explained that many people feared that adding too many ingredients and then stirring the pot would reduce the quality of the stock. President Warren Harding declared that concerning immigration, he was more interested in quality than quantity. That same year of 1924, Adolf Hitler, just out of jail, published *Mein Kampf*. He was familiar with developments in America and after reading Madison Grant's book wrote a fan letter to the author saying that *The Passing of the Great Race* was his own personal Bible, that if he could accept a divine commandment, it would be "Thou shall preserve the species."

When the National Socialists took over in 1933 and Hitler became Chancellor, "racial hygiene", their preferred term for eugenics, went into high gear. Over the next six years 400,000 German citizens were sterilized, usually without their knowledge. That represented about 1% of the population, but soon much worse would come. In 1940, the code-named "T4" program began. Sometimes it was euphemistically called "euthanasia" or "mercy killing" and during the war years, some 200,000 people, people deemed by the government to be undeserving to live, too

costly to feed, were killed. And when the official T4 program created some public resistance, it went underground; deliberate starvations and gassings of helpless victims, always supervised by physicians, continued unabated. The technique of carbon monoxide gas showers was perfected, gold extracted from teeth, body remains cremated or used for experimentation. The methodology was perfected, experienced personnel were exported to the East where industrialized murder would accelerate.

Every step of the way, prominent Americans abetted Nazi policy. Until at least 1936, The Rockefeller Foundation funded eugenics research at The Kaiser Wilhelm Institute and business leaders at General Motors (Thomas Watson) and IBM (Alfred Sloan) provided technology which supported the Nazi war machine. For some, the motive was nothing more than profit—as one industrialist put it, "the business of business is business"—no qualms about morality or public interest. For others, the motive was frankly racist. Moreover, the 1920s and 30s was a time when European immigrants to this country were feared to include political radicals, communists and anarchists.

After New Jersey's Supreme Court rejected its sterilization law in 1913, Harry Laughlin refined the legal language and devised a model template that would withstand judicial review in other states. Then in 1927, the United States Supreme Court weighed in with its landmark *Buck v. Bell* decision which sanctioned a Virginia law which permitted sterilization of so-called "degenerates." Once again, the presumed health of the state trumped the rights of individuals. As 83 year old Supreme Court Justice Oliver Wendall Holmes famously declared: "three generations of imbeciles is enough." After *Buck v. Bell* new state laws proliferated and the pace of sterilizations quickened. Estimates vary but in time between 60 and 65,000 Americans had what one victim described as "sexual murder." About one third were performed in California—mostly on poor Mexican and African-American women, but Virginia and North Carolina also had particularly sorry records until their laws finally were rescinded during the 1970s.

I suppose that we can take pride that no coerced sterilizations were performed in our state, Nevertheless, New Jersey played a central role in legitimating and promoting eugenic ideas and research done here employed scientific language which was used to frame social and political issues. I focus on New Jersey not because people here were worse than

elsewhere, but because by telling this nearly forgotten story from a local perspective, it may have special resonance for us—right here in our home state, "good people" were advocating some very bad things.

Another of New Jersey's eugenics zealots during the interwar years was Princeton's Marion Olden (Norton.) She was the feminist founder of the League of Women Voters—intelligent, opinionated and tenacious and one of her booklets began with a picture of a mentally handicapped patient and the caption:

See the happy moron;
He doesn't have a care,
His children and his problems
Are all for us to bear.

Marion Olden was virulently anti-Catholic because of the church's opposition to birth control. In 1935 she gathered signatures from physicians and eugenicists and The League of Women Voters sponsored another sterilization bill. Although it was defeated in the state senate, undaunted, she pursued her crusade, broke with the League of Women Voters and founded what she called "The Sterilization League of New Jersey." In 1938 Olden visited Germany where Nazi eugenicists were pleased to hear her declare that the United States had become the "dumping ground" for subnormal people from southern and eastern Europe.

In 1942 the League introduced still another bill to the New Jersey legislature; this time a 24 page document called "An Act to Aid the Afflicted by Providing for the Sexual Sterilization of Persons Unfit for Parenthood." It called for a state eugenicist to search all state prisons, hospitals, homes and asylums in order to find people suffering from mental deficiency or familial epilepsy who were "unable to discharge the responsibilities of parenthood."

No legislators dared defy the Catholic Church and the bill was buried in committee. Marian Olden dismissed the church's position as "an obstacle to progress in every form." Although her blunt rhetoric antagonized many people, she remained unrepentant and even in her late eighties Olden proudly recalled her support for Nazi race policies. No doubt most eugenicists were well intentioned, respectable people who thought that they knew what was best for others—and all of them worked according to the standards of their day in order to make the world a better place. They

may have been elitists, but like everyone else, they were capable of being deceived and deluded and, therefore, they were dangerous.

Now let me complete the saga of "Dr. Evil." As I've already said, he didn't arrive in New Jersey until several months after the state's sterilization law was written and passed. True, he did some minor research as a psychopathologist at Skillman but he was considered to be unreliable by Dr. Weeks who fired him after a little more than a year on the job. My contacts in Germany were unable to find any evidence that he'd ever completed medical studies at Leipzig although he did earn a PhD degree there. It seems that when K-E returned to Europe in 1914, he developed an unsavory reputation as a bigamist, extortionist and forger and was briefly imprisoned. Indeed, his behavior during the 1920s was so heinous that his doctoral degree from Leipzig University was rescinded.

Concerning Edwin Katzen-Ellenbogen's behavior at Buchenwald, testimony of fellow-prisoners at the Dachau trial was damning. Apparently his captors gave him favored treatment—his own quarters, extra food, civilian clothing. He was indifferent to the fate of the other prisoners but accepted bribes from them. Hated and feared, he sometimes physically abused prisoners—especially the French and Italians whom he considered to be of mixed racial purity. He controlled which sick patients could be sent to the hospital and which not so that he literally had the power of life and death over many. It's possible that he participated in human experimentation and even was accused of killing some prisoners by injecting phenol in their veins. However, these charges couldn't be proved because there were no surviving direct witnesses. As a result, he was not given a death sentence but was sentenced to life imprisonment.

In retrospect, Dr. Evil's activities in intra-war Europe, then at Buchenwald and later at the Dachau trial was an enigma. Here was this erudite American citizen, a Harvard lecturer of Jewish background—highly intelligent but amoral. On the stand he appeared aloof, unrepentant, manipulative, contemptuous of those he considered to be inferior and he had a talent for dissembling. It all followed a classic pattern: in effect, the psychopathologist was a psychopath. Even after his conviction he connived to have his life sentence reduced to twelve years, but three years after beginning his prison term he died of heart disease.

I chose to tell this cautionary tale from a local perspective in the hope that it would provide special immediacy for a New Jersey audience—even

here we were part of the problem. To be sure, the Nazis carried things to a far, far different level, but that does not absolve Americans, or New Jerseyans, from sharing at least some of the blame. If we hope to learn from history, we shouldn't be too kind to ourselves and if this "tale of two villages" teaches nothing else, it should be that good intentions sometimes lead to unanticipated consequences. When social policy is based upon science, it's crucial that it be good science. Ironically, perhaps Katzen-Ellenbogen said this best in a paper which he published in 1911, the same year he came to Skillman. He was writing then about the new field of experimental psychology, but the ideas which he expressed could serve equally well as an epitaph for the eugenics movement itself, so I'll let Dr. Evil have the last words:

> *It is a dangerous enterprise to prematurely apply theoretical findings of any science to practical use, as the frequent failures which result there from, not only discourage the workers, but also cast discredit upon the work itself.*

Chapter 19

"DR. *X*"

I had coined the name "Dr. Evil" to describe an obscure doctor who worked in New Jersey for only a short time and whose dastardly behavior was revealed only many years later in Europe. However, the name "Dr. X" was widely known throughout the country during the late 1970s to describe a Bergen County surgeon who may or may not have committed murders. As it turned out, I had a personal connection of which I was not then aware.

In 1966, my wife's fourteen year old cousin Janet took two aspirin containing tablets and a few hours later began vomiting large amounts of blood and her family's osteopathic doctor admitted her to Riverdell Hospital in Oradell. At the time I was a resident at Mount Sinai Hospital and rushed to the 80 bed hospital only to find Janet being wheeled out of the operating room having just had a subtotal gastrectomy. However, bright red blood still was draining from her gastric tube and clearly something was very wrong. Within short order, Janet was transferred to Mount Sinai where she underwent an emergency second operation. This time the bleeding site was correctly identified and after a harrowing post-operative period, Janet made a full recovery. The good news was that a large financial settlement was made with the pharmaceutical company which at that time did not list GI bleeding as a potential complication of using their product. The settlement was enough to pay for Janet's college education, but what we didn't appreciate at the time was that transferring her to Mount Sinai may have saved Janet from a far more lethal and unexpected menace than aspirin—a homicidal doctor!

When Riverdell Hospital opened in 1959, it was intended to accommodate osteopathic physicians who then were not permitted to join the staffs of the County's community hospitals. "Regular" medical doctors tended to shun osteopaths as being under-trained cultists although they were granted the same rights and responsibilities by the state's licensing board. At the time, less than 10 percent of physicians in New Jersey and the nation were osteopaths.

In 1962 Dr. Mario Jascalevich, a thirty-five year old with a medical degree from his native Argentina joined Riverdell's staff. He'd come to this country in 1955, completed a surgical residency and was practicing in Hudson County. Within a year he was made chief of surgery at Riverdell and presumably was doing well until in 1965 two physician surgeons Stanley Harris and Robert Briski obtained privileges at the hospital and represented competition. Dr. Harris's first case in March,1966 was Nancy Savino, a four year olf who presented with acute appendicitis. The operation and immediate post-operative period were uneventful, but on the second morning the little girl was found dead in bed. An autopsy established no cause. Dr. Harris was devastated but unexplained deaths do happen rarely.

About a month later, the same thing happened again—this time to a twenty-six year old previously healthy woman who had an uneventful exploratory pelvic laparotomy. Again, no abnormalities were detected on post mortem examination. During the following months both Drs. Harris and Briski had several more elderly patients die unexpectedly after routine procedures. In all, thirteen post-operative deaths in 1965-1966 were considered to have been suspicious. Common to all was that they occurred without warning and seemed to be due to sudden respiratory arrest. Also, Dr. Jascalevich had been seen near the patient in every case or had responded to an emergency call.

Dr. Harris gradually began connecting the dots and suspected foul play, but he had no evidence. On October 21, 1966 he gained entry to Dr. Jascelevich's locker and inside found eighteen vials of curare, most almost empty, and a large syringe containing fluid. Curare is a powerful muscle relaxant that's hardly ever employed for hospital anesthesia and is best known for its use by South American Indians on the tips of poison arrows.

Riverdell's hospital board was informed and notified the Bergen County prosecutor who began an investigation, When confronted, Dr.

Jascelevich insisted he was innocent and stated that he'd been using the curare in dog experiments performed at Seton Hall Medical School. Otherwise he had a good past record, no motive could be ascertained for homicide and because there was only circumstantial evidence, the matter was dropped to the chagrin of Harris and others. Dr. Jascelevich resigned from Riverdell in January 1967, but continued to practice in Jersey City.

That's the way things remained for nearly a decade until in June 1975 an editor at *The New York Times* received an anonymous three page letter which charged that a decade earlier the chief surgeon of an unnamed hospital had murdered thirty to forty patients. A young investigative reporter Myron Farber was assigned to pursue the story and what followed was three years of diligent research which led to the longest criminal trial for a single defendant in American history. Farber relentlessly followed up every obscure lead and interviewed family members of the victims most of whom were unaware that their loved one's deaths may not have been natural; Dr. Jascelevich refused to talk with him. *The Times* broke the story in January 1976 with the first two of a six month series of articles. Not wishing to disclose the name of the as yet unindicted suspect, they referred to him as "Dr. X." The story was picked up by newspapers all over the country; *The Bergen Record* assigned as many as thirteen reporters to cover the case.

Myron Farber had consulted with Dr. Michael Baden, the deputy chief medical examiner of New York City who suggested that since the original inquest, advances had been made in radioimmunoassay and related technology which might be able to detect curare in tissue even many years after death. Prompted by the newspaper series, Bergen County officials reopened the long forgotten case and as part of their investigation, five bodies which were considered to have been highly suspicious were exhumed. Material tested at several laboratories confirmed the presence of curare in three of the cadavers.

In May, 1976 a Grand Jury indicted Dr. Jascalevitch on five counts of willful murder, he was arrested and immediately freed on bail. The criminal trial before a Superior Court did not begin until February 27, 1978 and was conducted in a circus-like atmosphere. Presiding was an aging judge who was unable to control the hostile bickering between the prosecution's young lawyer Sybil Moses, just four years out of law school, and the seasoned defense attorney Raymond Brown.

Brown once described himself as being "naughty, nasty and competent" and all of these qualities were on display during the long trial. He seized every opportunity to mock his opponent, among other things accusing her of "vicious" methods, legal "lynching," fraud, chicanery and being "a profound liar." Those medical witnesses who disagreed with Raymond Brown he characterized as "quacks." He delayed, distracted, bullied witnesses and brought in his own team of experts who disputed the findings of the prosecution's toxicologists who'd documented the presence of curare in exhumed tissues.

In March, 1978 the case took a new twist. Myron Farber was subpoenaed by Raymond Brown to turn over all 4,000 pages of his notes insisting that they contained unspecified information which was vital to the defense. The focus now changed from the facts of the case to an abstract conflict between First Amendment rights of the press to protect confidential information versus Sixth Amendment rights of a defendant for a fair and impartial trial. New Jersey had a long-standing "shield law" which recognized a privilege for reporters to refuse to disclose their sources, but Brown and the presiding judge refused to recognize this as an unlimited privilege.

Raymond Brown claimed that Farber and *The Times* were engaged in a "groundless, blatant attempt to mislead the Court and the country" and that County officials, doctors and expert witnesses all were complicit in "concocting charges of murder against an innocent citizen for pecuniary gain." The court ruled that Farber's refusal represented contempt and sentenced him to the Bergen County jail until he complied. For their part, the newspaper was fined $100,000 plus $5,000 a day and both the New Jersey and United States Supreme Courts declined to hear their appeal.

In the meantime the state's Board of Medical Examiners suspended Dr. Jascalevich's medical license and in 1976 launched its own investigation of five counts of "malpractice" relating to the Riverdell cases as well as "fraud and neglect" associated to two separate cases in Jersey City. In fact, Jascalevich had surrendered his New Jersey license four years earlier and at this time was practicing in the Bronx with a valid New York license.

On October 24, 1978, after thirty-four weeks of testimony by fifty-eight witnesses (Dr. Jascalevich never testified) twelve jurors deliberated for only two hours before rendering a verdict of not guilty. Later, some said they believed the deaths were due to natural causes and that the state had not proven that curare could be present in embalmed bodies after ten years.

Raymond Brown exulted in his triumph over the "arrogance of power of the big press" who were defeated by those whom they thought were "just New Jersey jerks." Grandiose to the end, he said "The only way you can get a fair trial against the press is to have an extraordinary lawyer who is tough enough and mean enough to meet them up every alley." After the acquittal, Myron Farber was released from prison; all told, he'd spent 40 days in Bergen County's jail which a study commission recently had declared "unfit for human habitation."

Dr.Jascalevich asked New Jersey's Board of Medical Examiners to restore his medical license, Their investigation had dragged on for four years and included thirty-three sessions but they refused, concluding that he was guilty of "gross malpractice or gross negligence and failure of good moral character." A short time later, Jascalevich returned to Argentina where in 1984 at age 57 he died, after a stroke. That same year, Riverdell Hospital was demolished. Beset with financial problems exacerbated by the bad publicity, it had closed in 1981.

In 1982 Governor Brendan Byrne fully pardoned Myron Farber and returned $101,000 of $286,000 in fines to *The New York Times;* the maximum he was empowered to give back. Byrne concluded that their purpose had not been to "insult or frustrate the judicial process, but to stand on a noble, if sometimes imperfect, principle." Three months after the official pardon, Myron Farber completed his book *Somebody Is Lying." The Story of Dr. X* which recounted the story in dramatic detail and included extensive trial transcripts.

Did Mario Jascalevich literally get away with murders? Perhaps, but as far as the jury was concerned after listening to more than eight months of histrionics, there was not sufficient evidence to convict without a shadow of doubt.

Chapter 20

THE SAD STORY OF KAREN ANN QUINLAN

In 1975 a twenty-one year old New Jersey woman Karen Ann Quinlan attended a party where she took an unknown amount of alcohol and a prescription sedative,. felt ill, was taken home by friends and fell asleep—a sleep from which she never awoke. In time she was diagnosed as having a recently described syndrome—persistent vegetative state (PVS.) In a sense, Karen was neither dead nor alive and her plight became world news. When New Jersey's Supreme Court decided her case in 1976; it was the nation's first so-called "Right-to-Die" ruling

As a member of New Jersey's Bioethics Commission during the 1980s, I became involved in considering similar bioethical scenarios which sometimes occur at the end-of-life from a policy perspective. The Commission considered such abstract issues as autonomy, beneficence, futility, and from these discussions emerged statutory and regulatory guidelines. Decades later many of these same issues continue to perturb—no doubt, the debates will continue for years to come. After that experience on the state's Bioethics Commission, I published various commentaries and sometimes lectured about end-of-life decision making. What follows here is a portion of an essay written in 2004 at a time when the world's spotlight was focusing on another young woman in a vegetative state, Florida's Terri Schiavo. Little had changed in the intervening years.

During the 1970s and 1980s, several decisions rendered by New Jersey's Supreme Court's were crucial to the evolution of the field of bioethics.

The first, which involved a young woman named Karen Ann Quinlan, illustrated that death in our time is not necessarily private and peaceful and sometimes can be public and contentious. Similar decisions in other states later achieved equal notoriety so that by now the names of Missouri's Nancy Cruzan and Florida's Terri Schiavo are equally as well-known as Karen's.

Each of these women were in their twenties when they were stricken by the same medical condition—what generally is called "PVS" for persistent vegetative state. The usual cause of PVS is sudden deprivation of oxygen to the brain either as a result of a head injury or heart stoppage. If more than 4 to 6 minutes passes before the oxygen supply is restored, severe and possibly permanent brain damage results. Of the three women whom we'll discuss, one was involved in an auto accident, one arrested after swallowing a mixture of prescription drugs and alcohol and the third had a cardiac arrhythmia possibly due to potassium deficiency. Although the causes of their brain damage may have differed, the end result was the same—PVS.

PVS was first described in 1972 by neurologists Fred Plum and Bryan Jennett both of whom were world experts on coma. (The title of their first article published in *The Lancet* was "a syndrome in search of a name.") PVS is a particular form of coma in which the eyes sometimes are open and there may be reflexive (non-purposeful) movements. It's disconcerting to view patients in PVS because although their eyes may open and move, they can't see. They may appear to be awake, but they're not aware of their surroundings nor can they be because the cerebral cortex or connecting neurons have been irreparably damaged. They are not "brain dead" because their brain stem, which controls vital functions, remains intact. Although biologically alive, they can't think or feel. They are in limbo.

Sometimes people in PVS recover after several weeks or months. Whether they do or don't depends upon how long their brain was oxygen deprived, but the longer they remain in coma the less likely that they'll improve. Few of those who improve after long periods return to a semblance of their previous status and if they haven't improved at all after one year, the chance of any late improvement is almost impossible; the condition no longer is called "persistent" but "permanent." Of course, everyone prays for a miracle, but if the diagnosis was made correctly—not always an easy thing—late improvement is virtually nil.

It's been estimated that at any one time there are between ten and thirty thousand people in PVS in this country. With feeding tubes and good medical and nursing care, they can be kept alive for years, especially those who were young and healthy before they became brain-damaged. The longest survivals on record are over thirty years. In recent years a condition similar to PVS has been described which is called minimum cognitive state (MCS.) These severely brain-damaged people may appear to be in PVS but retain a very slight degree of higher brain function. There may be even more of cases of MCS then PVS cases and it can be very difficult to distinguish between the two. Some of these people progressed from PVS to MCS, but function only at a very low level.

In 2005 an article published in a neurology journal was reported on the first page of the *New York Times* which described several patients being followed at New York Hospital who had sophisticated new brain scanning techniques ("functional" MRIs.) Physiologic brain responses to verbal stimuli could be demonstrated in these seemingly vegetative patients and on a radio interview a neurologist at Cornell described a patient who'd been in PVS for some twenty-five years, yet on rare occasions uttered a few intelligible words. The words made no contextual sense but it was startling nonetheless. The doctor postulated there may be a few residual "islands" of functioning brain cells but in his opinion this did not constitute integrated consciousness as we generally understand it. So it appears that there may be a continuum of comas or vegetative states.

Of between three and six million severely brain damaged Americans, perhaps 100,000-300,000 have minimal cognition or, put another way, as many as 30% of those currently thought to be in PVS may be in MCS. It's difficult to make reliable estimates. Of course, that tells us nothing about prognosis nor, more important, whether or not these people are suffering in some respect, or would wish to be kept alive under these conditions. Would you? If the medical, legal and ethical issues concerning PVS aren't difficult enough, those associated with MCS can be even more daunting. Some families caught in this situation have an enormous capacity to delude themselves that everything will turn out well in the end and many grasp for straws out of unwillingness to abandon a loved one and there are a few reputable head trauma centers who report good success. Unfortunately, there also are disreputable people who take advantage of family despair.

During the 1960s and 70s there was an explosion of new potentially life saving medical technology—pacemakers, respirators, defibrillators,

dialysis machines, all of which allowed severely brain damaged individuals to survive for long periods. Although death couldn't be prevented altogether, it could be delayed and that possibility created new kinds of challenges which had never been faced before. It no longer was so clear what medical treatment provides real benefit or when it causes harm? For the first time there were public debates about who should live and who should die? Whose life is it anyway?

Then in 1975 the abstract question of whether everything that can be done medically always should be done became symbolized by the story of Karen Ann Quinlan. The media portrayed her as a sleeping beauty being kept in suspended animation by a mindless machine. Millions of people personalized her story and declared, "I never want to be like Karen Quinlan." To them, it seemed that indefinite existence in a vegetative state was a fate worse than death; that the technical ability to prolong biologic life was more a curse than a blessing.

Karen Quinlan was 21 years old when she attended a party to celebrate a friend's birthday. She drank a few gin and tonics and also took some tranquilizers, how much of what was never made clear. Friends took her home, put her to bed and when they looked in on her shortly later, she wasn't breathing. The police were called, she was resuscitated and brought to Newton Memorial Hospital where she was put on a respirator and a feeding tube was inserted. Nine days later she was transferred to St. Claire's Hospital where her condition stabilized and after a few weeks, she opened her eyes and her family believed that their prayers had been answered.

But Karen did not progress further and as time passed, to some people it seemed as if she was unnaturally being kept alive against her or God's will. Her parents Joe and Julie Quinlan who were pious Catholics received religious counseling and gradually came to understand that their daughter wasn't going to get better. It seemed to them that in a spiritual sense, she already had died. Karen's father asked her doctors if they would disconnect the respirator, but although they were sympathetic, they were fearful of liability. Hospital attorneys had warned them that this might be construed as manslaughter. The case became a *cause celebre* and was reviewed twice in lower courts before being taken up by New Jersey's Supreme Court. Karen's high school graduation photo appeared on the cover of news magazines all over the world and as her fate was publicly debated, new terms and catchphrases were used for the first time which have become part of our vernacular: "death with dignity", "right to die", "pull the plug."

The Supreme Court's unanimous decision in 1976 was delivered by chief justice Richard Hughes, New Jersey's former Governor. They ruled for the first time anywhere that life-sustaining machinery could be removed in cases like this if there was "no reasonable likelihood of recovery." They felt that if Karen were "miraculously lucid for an interval" and was made aware of her "irreversible condition" she had the right to ask that the life-supporting equipment be stopped, even if it meant that she would die. She didn't lose that right because she no longer could speak for herself. Moreover, it was permissible for others to speak for her in what lawyer's call "substituted judgment." In this instance the Court felt that Karen's family had her best interests in mind and understood her fundamental values better than anyone else.

In recognizing this, the Court radically changed the way medical decisions would be made henceforth. Since Hippocratic times, doctors always had decided when to withhold or withdraw medical treatment for patients who were near death. Using their own judgment, doctors acted in what they thought were the best interests of the patient—so called "paternalism." But after the Quinlan decision, the bedside dynamic shifted. Now, the patient or their proxy would have the final authority to balance the pros and cons of any treatment decision—patient autonomy trumped medical paternalism.

New Jersey's Supreme Court ruled that if Karen were to die there would be no liability for the doctors or hospital since death should be construed as due to the brain damage *per se* and not to the act of turning off the breathing machine. This would be understood as allowing death to happen, letting nature take its course, rather than actively causing death. Justice Hughes wanted to ensure that similar future cases not be decided in courts of law which had no special expertise in these matters. He suggested that when difficult life or death decisions must be made, a multi-disciplinary ethics committee (he called it a "prognosis committee") should be consulted in order both to clarify the facts and to diffuse the burden of responsibility. Time doesn't permit discussion of the implications of this innovation other than to say that today every hospital and most nursing homes have and sometimes use bioethics committees.

From a legal perspective, the Quinlan decision applied a common law right to privacy which had first been enunciated by the United States Supreme Court in 1891. In effect, it says that everyone has the right to be left alone, free from government intrusion in certain very personal areas of

our lives. People have the right to do what others might consider to be the "wrong" thing—so long as no one else is harmed. That same constitutional right had been discussed only three years earlier by the United States Supreme Court in its famous *Roe v. Wade* decision which concerned abortion rights and a woman's right to choose for herself and, as we know, the issue continues to perturb. Ironically, when Karen's respirator finally was turned off, she did not die as expected but lived on in PVS for nearly nine more years before she died of pneumonia in 1985.

The Quinlan case was followed in 1985 and 1987 by two more landmark decisions by New Jersey's Supreme Court which expanded upon when and how life-sustaining treatment could be stopped or not started. One case involved an emaciated, non-verbal and terminally ill 84 year old woman, Claire Conroy who already had died by the time her case reached the Supreme Court. A difference from Karen Quinlan was that Ms. Conroy was not in PVS but remained barely responsive to stimuli and this time the technology in question was not a relatively complex respirator, but a simple tube through which food and fluids were pumped into her stomach. (The Quinlan family had never asked for Karen's feeding tube to be removed.) Claire Conroy had outlived her friends and family except for a nephew who asked that the feeding tube be removed so that she could die peacefully. Nay sayers argued that feeding a patient was equivalent to ordinary nursing care (as opposed to medical care) so that different moral rules should apply then for medical procedures.

Some people felt that this would be akin to deliberately starving a person to death and used grossly inaccurate descriptions of what it would be like for a patient like Claire Conroy—"chapped, bleeding lips, sunken eyes, convulsions." New Jersey's Supreme Court was not impressed by such inflammatory rhetoric or distinctions between so-called ordinary and extraordinary treatment. They ruled that the same reasoning should apply for tube-feeding as for any other form of medical treatment. A feeding tube is morally neutral; the issue in question is not the tube itself, but when and why it is being used.

In time, as legal principles were articulated, the basis of what popularly was becoming called "the right to die" was understood to be more a right of privacy or what legal scholars refer to as "individual autonomy." In these cases New Jersey's Supreme Court avoided the question of whether life support should be withdrawn, focusing instead upon the process. Who decides? What questions should be asked? What procedures

followed? Never, should treatment be withdrawn, but could it? Many legal and medical organizations and think-tanks declared that it was ethical to withdraw or withhold artificial life-support in certain situations, but everyone didn't agree and some still don't. In time, New Jersey's legislature passed statutes which clarified how difficult end-of-life decisions should be addressed in other cases and, over time, most other state high courts and legislatures saw things essentially the same way as New Jersey, but not all.

(For the sake of brevity I omit discussion here of the Cruzan and Schiavo cases.)

Karen Quinlan lived for ten years in PVS; Nancy Cruzan lived for ten years after her head injury; Terri Schiavo now has gone more than fifteen years with no end yet in sight. Is this life or is it slow death? Even if there are still a few viable islands of functioning brain cells, if Terri could speak, is this what she would choose for herself? Is it what you would want for yourself, or for a loved one? Should strangers make these decisions? Which loving family member should prevail when there is disagreement? The Schiavo case is the ultimate nightmare scenario in which there can be no winners—only losers. It's likely that both sides are well-meaning, decent people who are convinced that they are doing the right thing. But in cases like this is there any such thing as *absolute* truth?

Death in America is not always dignified and private; fortunately, only very rarely, does it become a public issue. But we seem to keep reliving the same stories every few years and not learning from history. Decades after the seminal Quinlan and Cruzan cases, many of the same moral and legal issues still are being argued just as they still are over abortion. Some people are determined to impose their own values upon others, but all people of good will should be troubled about the existential implications of end-of-life decision-making. These are matters which do not lend themselves to simple solutions—nor should they.

Chapter 21

WHEN IS ENOUGH ENOUGH?

The preceding chapter and this one concern bioethics and legal matters, but since their context relates to New Jersey's medical history, I feel they warrant inclusion in this collection. For many years I've been engaged in case reviews as chairman of hospital ethics committees and also have been a frequent lecturer and writer about various matters related to end-of-life care. As a member of New Jersey's Bioethics Commission during the 1980s, I also was involved with formulating state policy. The matters described in these chapters continue to have currency and are likely to perturb for many years to come.

Between 1976 and 1987 New Jersey's Supreme Court was a trailblazer in creating a medical-legal framework for end-of-life decision making. The landmark Karen Quinlan case established that life-sustaining medical treatment could be discontinued by doctors if there was no reasonable likelihood of a patient in a vegetative state ever returning to "a cognitive, sapient state." This could be done without liability and would be considered as allowing death to happen from natural cause rather than deliberately causing death, distinguishable from euthanasia which has never been approved in any form in New Jersey (unlike in Oregon and Washington state.)

The enlightened judicial decision was grounded on constitutional privacy rights first recognized in 1965 by the United States Supreme Court in *Griswold v. Connecticut*. An innovation of Chief Justice Richard Hughes in the Quinlan decision which gained universal traction was to establish ethics committees in hospitals in order to clarify prognosis and diffuse

responsibility—but not to actually make decisions. On the occasion of the 10th anniversary of the Quinlan decision, Justice Hughes recalled that the Court had endorsed the proposition that individuals have the legal right to do what others might consider to be the "wrong" thing, so long as no one else was harmed as a result of that choice.

In the ensuing decade our state's Supreme Court expanded these principles first in its Conroy decision (1985) and then in the Jobes, Peter and Farrell trilogy of cases (1987.) In Conroy New Jersey was the first state to recognize that artificial feeding should be considered to be a form of medical treatment rather than a basic need that always must be provided. As such, the same decision-making principles should be applied as say for removing a respirator or stopping dialysis.

In the Quinlan, Peter and Jobes decisions, the Court noted that for patients in persistent vegetative states, as opposed to terminal illness, absent clear and convincing evidence that they would want to be sustained artificially and indefinitely, almost everyone would consider this to be fate worse than death, a presumption that quality of life does matter. Implied, but left unsaid was that a default position in such cases would favor terminating life sustaining treatment. In its Jobes ruling, the Supreme Court suggested that medical decision making should be "deregulated" and that, except in unusual circumstances, medical decisions should be made privately among patient or proxy and physician.

New Jersey's medical profession was not silent during this legal evolution. Indeed, many physicians were troubled that, in effect, the court had altered the historic dynamic between patient and doctor. Since the time of Hippocrates it was assumed that doctors were trusted to judge what was in the patient's best interest. While supporting the principles of a patient-centered approach, there were concerns about its practical implementation. In 1996 at a conference in Princeton (*Quinlan: A Twenty Year Retrospective*) I participated on a panel about "Family Decision Making" along with the parents of Karen Quinlan and on that occasion said the following:

> Our high court sometimes seems to have been right-hearted but wrong-headed in introducing procedural innovations that have impacted adversely on decision making . . . Sometimes families are given leeway and other times not. What we have today is an inconsistent patch-work system which permits different approaches

> depending upon time, place and condition. Too many cases still fall between the cracks . . . . If there must be a burden of proof, let it fall upon those who would deny the family's choice. It should not be presumed that families are mean-spirited, or ignorant, or overly emotional. What they need is understanding and guidance. What Norman Cantor calls "the three C's"—common sense, compassion and conscience?

All of the so-called "right-to-die" cases decided by our courts concerned respecting patient's or their family's decisions to refuse or discontinue unwanted life-sustaining medical treatment, but not the converse. Not considered was the occasional situation when proxies request, or even demand treatments that are contrary to accepted medical standards. This issue usually is considered under the heading of "medical futility" which itself is an elusive and subjective concept. Dr. Ralph Crenshaw once suggested defining futility as "action that takes the form of caring, but lacks any kind of positive outcome for the patient."

Others have argued that in judging futility physicians must distinguish between limited physiologic effect and a benefit which appreciably improves the person as a whole. Treatment that fails to provide the latter, whether or not it achieves the former, is futile. Such decision making usually is limited to writing do not resuscitate (DNR) orders but some contend that it gives physicians unilateral authority which subverts the spirit of patient autonomy. In 1993 geriatrician Donald Murphy introduced a new concern, "We are deluding ourselves that we're going to come anywhere close to healthcare reform until we start talking about limits—appropriate limits." Some characterized his approach as "checkbook euthanasia"—nevertheless, Dr. Murphy's words of nearly two decades ago now seem to have been prescient.

Perhaps the first time that the principle of futility was formally acknowledged in New Jersey was in October, 1986 when New Jersey's Chapter of the American College of Physicians (of which I then was Governor) approved a policy statement about the care of irreversibly ill patients. In turn, this served as the basis of the Chapter's *amicus curiae* brief to the Supreme Court in the Nancy Jobes Case and was commented upon favorably in the Court's ruling. The statement began with the following:

> There is no obligation to provide medical care where intervention is determined by a physician to be non-beneficial in that it would be virtually futile in improving the patient's prognosis and the burdens to the patient that would result from treatment would substantially outweigh its potential benefits.

Ten years later the Medical Society of New Jersey approved a Medically Futile Therapy Policy which had been developed by its Biomedical Ethics Committee. Although the group was unable to satisfactorily define futility, they could agree on certain procedures to facilitate decisions in individual cases that were respectful of both patient autonomy and professional opinion. For example, conversations between physician and family could be framed to explore what a family wants when they say, "Do everything" and what limits, if any, they might set. "Everything" is a nebulous statement and should be made in reference to some goal. Is that goal comfort? Longevity? Restoration of health?

In 1996 I published an article called "It's Time To Get Serious About Defining Futility." It was prompted by the case of "Baby K" in which a Virginia appeals court supported a mother's demand to keep her anencephalic baby alive at any cost. Physicians had argued that if clear lines couldn't be drawn in such cases, how can we ever set limits on rampant medical technology and runaway costs? Indeed, if doctors can't follow their judgment, made in good faith, how can they practice medicine? The debate was framed by two polar positions:

> The idea that a right exists to futile treatments is absurd, especially when there is not enough money for basic care for millions. Physicians and health care institutions need to make a stand for traditional medical rights and professional standards.

> A society that forces people to die against their will produces more offense than one that forces healthcare professionals to provide services that violate their consciences. If a society must offend, the lesser offense is preferred.

In Philadelphia that same year a set of Siamese twins were surgically separated at an estimated cost of about $1 million although the anticipated success was estimated to be at best 100 to one with zero percent likelihood

of survival for more than three years. George Lundberg, the editor of the *Journal of the American Medical Association* estimated that "tens and probably scores of billions of dollars" would be saved annually if guidelines were established and implemented to identify and eliminate futile care.

That was in 1993! Little has happened since then. When the United States Supreme Court belatedly addressed the so-called "right-to-die" controversy in the case of Nancy Cruzan (1990) the futility issue was not raised. The Court endorsed legal principles first articulated in New Jersey but deferred to "the laboratory of the states" rather than establishing over-arching national standards.

In 1999 the American Medical Association's Council on Ethical and Judicial Affairs recommended a process-based approach in which either party, family or physician, could invite review by an ethics committee to determine futility: all sides would have an opportunity to be heard but the committee's finding would not be legally binding. Texas has been the only state which has taken the procedural approach to the statutory level mandating a ten day waiting period between the agreement of an ethics committee to endorse a futility determination and the actual withdrawal of treatment. The process has rarely been used and an outcomes study of the first 47 cases found no instances where the committee's recommendation was challenged in court.

It wasn't until March, 2009 that a New Jersey Superior Court finally addressed the matter of futility in Betancourt v. Trinitas Regional Medical Hospital. The case involved a 73 year old man in PVS and renal failure with a history of malignant thymoma. The patient's coma was the result of a post-operative lapse in oxygenation of the brain for which his family had initiated a malpractice suit.

The physicians wanted to discontinue dialysis and life support which they believed were medically and morally inappropriate and inhumane. The family disputed the neurologic diagnosis and insisted that this "strong-willed" man would want everything possible to be done in order to maintain life—there was no advance directive. The Court ruled in favor of the family's right to decide and although by then the patient had died and the wissue was moot, it was appealed because the hospital and medical organizations understood the matter to be of sufficient public interest that it deserved full judicial review.

The Betancourt decision recalled the much earlier Helen Wanglie case in Minnesota (1991) when the focus also was on who decides more than

what is decided. Physicians at Hennepin County Medical Center wished to terminate a respirator from an elderly woman in PVS, consistent with the hospital's policy on futility. Although she could not recover and the respirator was deemed to be non-beneficial, her husband in "substituted judgment" valued biologic life without limit based on religious and personal grounds. He declared that doctors should not "play God." Minnesota's high court held that autonomy worked both ways—if patients or their proxies can refuse unwanted life sustaining medical care, they also can insist upon it. As years later in New Jersey, the husband prevailed but the court never indicated whether there ever were any limits to patient/proxy choice.

Most conflicts usually can be resolved through negotiation and very few cases ever go to committee or court. To be sure, several cases concerning the futility issue have been heard in other state courts which have supported the notion that physicians need not be passive bystanders. Physicians at the Massachusetts General Hospital in 1998 wrote a DNR order on Catherine Gilgunn, an elderly patient in prolonged coma. Although some of her family agreed to the order, one daughter did not and brought suit. The court ruled that the doctors were not liable because they weren't obliged to provide futile care. Similarly, in 1998 a Louisiana lower court ruled in the case of Sonya Causey that physicians were not required to provide treatment which in their view would be without effect and medically inappropriate.

Whereas until now courts have paid scant attention to the futility issue, it has generated much discussion in the medical and bioethical literature. In 1993 a distinguished group of scholars noted that futility is one problem that will not go away. They remarked upon differences in how futility is understood in this country and abroad, noting that a tradition of American individualism and ethnic diversity makes embrace of common and shared values difficult, if not impossible. Public discussions of that time were focused not on goals of treatment so much as on the details of medical delivery and payment. Nevertheless, it was suggested that the market place would provide only temporary refuge from value-laden challenges and that once the systems inefficiencies were corrected, the more fundamental question of establishing reasonable limits would need to be addressed: "Then we will need to begin a more searching exploration of the care we provide." That was in 1993. We are still waiting.

Ethics and economics may be uncomfortable bedfellows, but they need not be mutually exclusive. Because courts focus on single cases, cost concerns are rarely addressed; macro issues are the province of legislators. However, current political debate about the prohibitive cost of health care, especially at the end of life, makes it imperative that all parties confront the subject. When it comes to the lives of those closest to us, we all want the latest and the best care, usually high tech at high price—and we want it now. But can society afford it? At a recent public forum when challenged by a neurologist the audience about who will say "No" in various proposed reform packages, President Obama agreed that this was "the right question"—but then didn't attempt an answer.

A useful starting point would be to affirm that there have to be reasonable limits to what patients or their proxies can demand. For example, it would be helpful if courts or legislatures affirmed that physicians can write DNR orders when there is no reasonable likelihood of successful resuscitation. This does not mean discontinuing treatment, but not starting it in unsalvageable cases—all that accomplishes is to convert tragedy into indignity. Choosing whether or not to continue basic life sustaining medical treatment should be the prerogative of health care representatives, preferably guided by advance directives or like documents, but the same authority need not extend to extraordinary, prolonged and, yes, costly critical care requested by families in the hope of achieving a miracle cure—and provided by doctors out of fear of a potential law suit. Medical care providers must include patients and surrogates in the decision-making process by soliciting through dialogue what is known of the patient's own values and goals and then providing guidance regarding which treatments can assist in achieving those goals.

In their zeal to protect the rights of patients to choose for themselves, courts should not lose sight of the morale and integrity of health care providers as well as what constitutes fair allocation of limited resources which effects the community itself. Every individual is entitled to a "fair share" but who decides what that fair share is? The preamble of the United States Constitution speaks of promoting "general welfare" and a tradition more than two millennia older than the Bill of Rights, the Hippocratic tradition, which asserted that physicians can be trusted to do what in their judgment would benefit their patients, has stood the test of time. Although the principles of autonomy are splendid and to be cherished, on rare occasions personal choice can be carried too far.The challenge to the

Appellate Court in *Betancourt v. Trinitas*, is how to affirm that there are times when enough is enough.

As It turned out, the Appellate Court chose not to address the futility issue and in August, 2010 they declared the Betancourt case to be moot since the patient already had died and the legal waters were muddied by a pending malpractice suit. The Court did acknowledge that the issues raised were of great importance, but deferred to New Jersey's legislature for a more comprehensive review. In June, 2011 both chambers of the legislature requested the Governor to appoint an advisory committee to make recommendations pertaining to end-of-life care, but not specifically to address the futility conundrum.

Chapter 21

SHOOTING THE MESSENGER—12 YEARS AFTER HE'S DEAD

When I first began working at Bergen Pines County Hospital in 1970, one of the most popular guest speakers at our weekly Medical Grand Rounds was Dr. Irving Selikoff who lived in nearby Ridgewood but then was working at Mount Sinai Hospital in New York. Dr.Selikoff had a charming personality and was a compelling speaker—more than forty years later, I still can remember some of his slides and anecdotes. By then he was world famous as the individual who more than anyone else called attention to the health hazards of asbestos.

In 2003 an English medical historian Dr. Peter Bartrip published a thirty page paper titled "Irving John Selikoff and the Strange Case of the Missing Medical Degrees." Since Dr. Selikoff had died twelve years earlier at age 77, it might have seemed unusual for such an extensive investigation of his medical education to be of any interest so long afterward—but the article's appearance at this late date was no accident.

Peter Bartrip was a professional apologist for the asbestos industry who already had published two books which defended their good faith efforts as caring employers. In this new article Bartrip wrote, "in view of Selikoff's importance to the asbestos question over a period of over thirty years, it's pertinent to inquire about his medical education and qualifications." Pertinent? Why? When Bartrip remarked upon what he characterized as Selikoff's "patchy and in some respects substandard" medical education, it was an obvious attempt

to undermine the credibility of the man who "played as large a part as anyone in destroying the American asbestos industry." Significantly, Bartrip's article appeared when the terrorist attack on the World Trade Center in September, 2001 was still fresh in everyone's memories. In effect, Bartrip's expose was a perverse misuse of history in order to score points as the asbestos industry geared up for a new round of law suits.

Irving Selikoff, born in Brooklyn in 1915, had an uneventful growing up. When he received his bachelor's degree from Columbia University in 1935, it was a time when it was difficult for Jewish students to gain entrance to American medical schools so like many others of similar background he went abroad. But when he enrolled at the University of Glasgow in Scotland, World War II was breaking out and Americans were strongly advised to return home. Australia seemed to be a safe alternative and he sailed there in hope of accumulating more credits toward a medical degree. However, because of bureaucratic difficulties encountered there and being unable to return to Scotland because of the war, he returned home and enrolled in what turned out to be a corrupt medical school called Middlesex University in Massachusetts. According to Peter Bartrip, Selikoff was never able to display a proper medical certificate which suggested that a man capable of misrepresenting the facts of his education, might equally misrepresent other things—such as the hazards of asbestos.

Diploma or not, in 1943 Irving Selikoff did an internship at Newark's Beth Israel Hospital and then spent two years as a resident at Sea View Hospital on Staten Island, a huge TB hospital. Three years of chest fellowship followed and after receiving a license to practice in New Jersey in 1946, he continued to work part-time at Sea View and in the chest clinic at Mount Sinai Hospital. In 1951 he and two colleagues (Robitzek and Ornstein) began treating 175 tubercular patients at Sea View with two related hydrazides—isoniazide and iproniazide. Their published results (*JAMA*, 11/8/52) later would be considered a medical landmark.

In 1955 Dr. Selikoff and his colleagues shared the Lasker Award, sometimes called the "American Nobel Prize." Interestingly, they found that iproniazide (later withdrawn because of hepatotoxicity) worked better than isoniazide, but both were far more effective than previous treatments, including streptomycin for which Selman Waksman of Rutgers was awarded the Nobel Prize in 1952. An incidental finding noted without further comment by the Sea View investigators was that those patients

who received iproniazide had "increased energy and a sense of well-being." A few years later, Nathan Kline working at Rockland State and Bergen Pines, was the first to report on the antidepressant effects of iproniazide and imipramine.

Even before the TB paper appeared, Irving Selikoff had opened a general medicine practice in Paterson and by 1951 was so busy that he invited a younger man, David Roth, to join what they called "The Paterson Clinic. Dr. Selikoff remained with the group for some twenty years, but increasingly became involved as a chest specialist at Mount Sinai Hospital in New York. Then in 1953 something happened which not only would change Irving Selikoff's life, but would lead to his creation of an entire new specialty field.

Dr. Selikoff was contacted by a local lawyer who represented workers at the Union Asbestos & Rubber Company in Paterson. During the 1940s the company, later known by the acronym UNARCO, was producing insulating materials for the Navy using amosite, a form of asbestos mined in South Africa. Of the first seventeen men examined by Dr.Selikoff, fifteen had objective pulmonary abnormalities although all still were working and seemingly well. Eight years later, four of these men were dead—one of lung cancer, one of stomach cancer, one of mesothelioma and one of asbestosis.

When Selikoff approached UNARCO executives, he was refused permission to study the Paterson workers. He also was unsuccessful in obtaining cooperation from the Johns-Manville Corporation in Manville, New Jersey or from the Public Health Service. So instead of studying workers in factories, he decided to examine those who were working with the material on the outside—installing asbestos tiles, insulation and the like. Their unions in Newark and New York were happy to cooperate and of more than one thousand asymptomatic workers, he found that about half had chest X-ray abnormalities. The extent was directly proportional to duration of exposure: 0-10 years exposure (it didn't matter how much exposure) had 10% abnormalities; 10-20 years 50%; more than 20 years, an amazing 87% and about half of these had progressed to symptomatic disease.

Irving Selikoff's findings were reported in the *Journal of the American Medical Association* in 1964 and noted that men who'd been exposed between 1943 and 1962 had overall increased mortality of about 25%; seven times greater than the predicted incidence of lung cancer; three times

more than predicted GI cancer. In 1968, again in *JAMA*, he reported that asbestos workers who smoked cigarettes had 92 times the risk of dying of lung cancer than age-matched controls. Still later, 30% of wives and children of asbestos workers had abnormal chest X-rays.

During the 1970s and 80s at hundreds of meetings and trials, Selikoff testified that more than 20 million Americans had been occupationally exposed to asbestos and predicted that over the next 20 years there would be 8 to 10 thousand deaths from it every year just in workers. But you didn't have to be a worker. If you were a worker's family member, or if you lived in a town where there was an asbestos plant, or if you were a child playing with asbestos-coated toys, the risk also was great.

In fact, the mineral's danger had been well known to industry as early as the 1930s, perhaps even earlier, but they had deliberately covered-up the evidence—schools and buildings continued to be built without regulation. In 1986 retired lawyer Charles Roemer, by then in his eighties, testified that as early as 1941, several months before Pearl Harbor, he'd learned from a physician cousin that there were many cases of asbestos-related diseases among workers at the Paterson plant—that was a dozen years before Dr. Selikoff began seeing cases. Roemer went to the Paterson plant manager and together they set up a meeting in New York City with top executives of Johns Manville. The executives freely admitted that their records showed that workers were suffering from lung problems, but they told Roemer that they'd be fools to share this information with the workers: "If our workers are told, they would stop working and file claims against J-M." It was their policy to let workers continue on the job until they quit because of asbestosis or died of some related disease. Roemer was incredulous and asked, "Do you mean to tell me that you would let them work until they dropped dead?" Johns-Manville's president replied, "Yes, we save a lot of money that way."

In response to Irving Selikoff's constant criticisms, industry lawyers and hired-gun consultants tried to discredit him. Acknowledging that he was an effective and self-confident opponent, they variously described him as being ambitious, malicious, unscrupulous, biased, "a dangerous man . . . out to make a name for himself at the expense of the asbestos industry." If such "nonsense" continued, industry leaders feared they'd be regulated out of existence by "sensationalism." So Johns-Manville mounted an orchestrated smear campaign, picturing Selikoff as an advocate for the victims and intent on ruining the industry. His public

recommendations to remove asbestos from buildings were characterized as "hysteria", his testimony that even one fiber could kill was mocked as being "fiberphobia."

However, thanks to Dr.Selikoff's persistence, the message was getting out. The environmental movement took off, industry lost its exclusive control of the agenda and their every action was subject to much closer scrutiny by watch dog agencies and the media. There was a huge backlash with increased public awareness about what had been marketed as "the miracle mineral." OSHA established workplace safety protocols for asbestos and in 1989 continued use of asbestos was banned. However, two years later the ban was revoked except for any new uses that might be introduced later. For many years Congress debated the so-called FAIR Act (Fairness in Asbetos Injury Resolution) but there was no action and in 2009 the matter was dropped altogether. Nevertheless, hundreds of thousands of lawsuits were started, billions of dollars awarded and more than half of asbestos producers went bankrupt.

During the mid-1980s, of 17,000 law suits filed about half of the plaintiffs had been involved in the defense industry but the federal government refused to admit responsibility. During World War II more than 70,000 workers were spraying asbestos on the hulls of warships at the Brooklyn Navy Yard where the air usually was thick with dust. Asbestos was used in pipes, boilers, insulation, moving gears and the military was in no mood to hear about health hazards. There was a war to be won; for the Navy it was full speed ahead. In 1978 HEW secretary Joseph Califano belatedly admitted that during World War II between 8 and 11 million people were significantly exposed, about half of them in shipyards. What did Califano do about it? He urged workers to stop smoking.

By the time Irving Selikoff died at Valley Hospital in 1992, he'd long been recognized not only as the nation's leading expert on asbestos, but as the father of the specialty of environmental and occupational medicine. He had won numerous awards, founded a major research institute at Mount Sinai and for thirty years was the leading light in the field. You might think that would have been the end of the story, but not so. Nearly a decade after Selikoff's death came the World Trade Center disaster.

More than three decades earlier, in 1969, in testimony to executives of Tishman, the WTC's principal contractor, Dr. Selikoff estimated that 100 tons of asbestos fiber "snow" would be released in the air over the city if spraying of the steel supports continued. He described the work

practice being used as the worst he could imagine and predicted that not one man spraying fiber today would be alive in twenty years. His authoritative comments so alarmed the builders that not only did they cease spraying, but asbestos was removed from some, but not all of the north tower already in construction. It never has been made entirely clear how many floors did or did not have asbestos removed, but evidently many tons remained intact.

No wonder that after the WTC attack some three decades later when toxic "snow" filled the air, government and industry officials were eager to reassure the public. Some even argued that the very fact that asbestos was not used throughout contributed to the buildings' collapse, a theory which was not supported by subsequent investigators. Initial statements from the EPA and other sources proclaimed that the air in lower Manhattan was safe, but this was challenged by independent experts and in later years as the number of defendant companies skyrocketed so too did asbestos lawsuits. In the first months after the WTC disaster, the EPA denied that its authority extended to protect people from indoor exposure to toxic substances, but in 2003 the agency reversed itself and agreed to support cleanup of contaminated apartments in the vicinity.

Today the asbestos controversy continues and the twenty-year latency clock from exposure to symptomatic disease ticks on. So is it any surprise that industry representatives might have realized that it would be convenient to revive the old rumors that there was something fishy about Irving Selikoff's credentials. When Peter Bartrip's article appeared in the *Journal of the History of Medicine,* it was unusual for a scholarly publication because of its inuendos and subjective opinions. Bartrip claimed that Selikoff had spent his career hiding the fact that he didn't have a bone fide medical degree and had taken the secret to his grave. If his education had been fraudulent and "substandard," so too might have been his subsequent research.

That same year of 2003, a $100 billion trust fund was proposed by industry and their insurers to settle all present claims with the proviso that no new cases would be heard. That would have been a bargain because they anticipated more than $300 billion in claims with no end in sight. Two decades earlier, a similar trust fund which had been set up by Johns-Manville had proved to be terribly underfunded. There were more than a million law suits and dozens of factories went bankrupt, including Johns-Manville. However, in 2001 J-M was purchased by

Berkshire Hatheway and continues to make insulation and hundreds of other asbestos containing products; its new public face being that of a model citizen dedicated to public safety.

The WTC disaster notwithstanding, the asbestos industry has had set-backs in court, including in New Jersey. In a 1986 decision, New Jersey's Supreme Court ruled unanimously that manufacturers could not be excused for liability on the basis that they didn't know about ita potential danger. The ruling noted, "It is appalling to us that Johns-Manville had so much information on the hazards to asbestos workers as early as the 1930s, and that it not only failed to use that information to protect these workers but, more egregiously, that it also attempted to withhold information from the public."

In 2006 the state's Supreme Court established a precedent in a case of so-called "take home" or second hand asbestos exposure when it ruled against an employer. The victim was the wife of a man who was exposed at work, her exposure came from washing his work clothes and she died of mesothelioma about a year later. In 2009 a Bergen County jury ruled in favor of another man whose wife died of mesothelioma. He'd worked in an Englewood warehouse during the early 1970s and she also had laundered his clothes. An appeals court ruled in favor of the family awarding them a record $30 million.

If questioning the qualifications, integrity or motives of critics is insufficient, nearly always there will be some element of scientific doubt which can take years or decades to resolve. Without certainty about the danger of a product, there is no obligation for an industry to remove it from the market or to lower exposure to toxic materials. One can always say that more studies are indicated. Science is a slow, cumulative process and until unequivocal "proof" exists and there is no "controversy," industry has a legal reason to delay or disseminate disinformation.

The asbestos industry's vilification of Irving Selikoff which culminated with Bartrip's article was convincingly rebutted in 2007 in an article by historians Jock McCulloch and Geoffrey Tweedale. Irving Selikoff was not the first whistle-blower nor will he be the last to have his credibility attacked by industry interests.

Tarnishing the reputation of the messenger is standard procedure among industry lawyers and there have been many other examples of malicious criticism of scientists including those who called attention to the dangers of radiation, silica, lead and vinyl chloride as potential health hazards.

PREVIOUS MEDICAL HISTORY PUBLICATIONS BY MICHAEL NEVINS

BOOKS

Early Physicians of Northeastern Bergen County. 1979.
The Jewish Doctor, 1996
Case Reports: Short Stories About Jewish Doctors, 1997
Jewish Medical Roots, 2003
Jewish Medicine. What It Is and Why It Matters, 2006
A Tale of Two "Villages": Vineland and Skillman, NJ, 2009
Abraham Flexner: A Flawed American Icon, 2010

ARTICLES

Bergen County Poet-Physicians. *The Journal of the Medical History Society of New Jersey* 77: 83-87, 1980.
Home Care Delivery in 19th Century Bergen County, *The Journal of the Medical History Society of New Jersey* 80: 283-287, 1983.
Did Chairman Mao Have A Jewish Doctor? *Korot* 17: 131-156, 2003-4.
Jewish Medical Historiography. *Korot* 18: 191-204, 2006.

MONOGRAPHS

Bergen Pines. A Remembrance of Things Past, 1998
Israel Through A Doctor's Eyes, 2006
Two Doctors of Terezin, 2009
Death Panels, 2009
Ridgewood's Marvelous Medical Heritage, 2011
All Fall Down: "The Great London Plague" of 1665, 2011