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"Can You Handle the Truth?"

Acres of Skin: The Lost Chapter

Editor's note: In 1998, Allen M. Hornblum published the book "Acres of Skin," a fascinating account of clinical research at Holmesburg prison. We are honored to make this unpublished chapter available to the public for the first time. The book is still in print... - NMG

A Conspiracy of Silence

By Allen M. Hornblum

I

According to many of its proud graduates, the Dermatology Department of the Medical School of the University of Pennsylvania has had nothing short of a profound influence on the "rise of dermatology" in America. Considered a "static, superficial medical sub-division" throughout most of the 19th century and the early part of the 20th, many Penn dermatology grads believe it would still be an undesired, backwater specialty for those who couldn't quite cut it in more rigorous fields, if it was not for the considerable talents and contributions of several extraordinary Penn physicians.¹

Though many of his disciples accord Dr. Albert M. Kligman the honor of this singular achievement, the more historically minded see the true beginnings of Penn's unique dermatological success story originating with Dr. Louis A. Duhring, a Philadelphian of affluent, German parentage who single-handedly labored to upgrade dermatology from a "superficial specialty" to a bonafide medical department in post-Civil War America. Duhring opened the Philadelphia Dispensary for Skin Diseases in 1871, and its clinic became the training ground for some of the nation's most accomplished dermatologists.

The growth and respect for Penn's dermatology program continued over the decades and was periodically enhanced by such distinguished physicians as John H. Stokes, Frederick D. Weidman, and Donald M. Pillsbury. The latter, in particular, played a significant part in developing prominent dermatologists in the post-war period and a critical role in the career of Albert Kligman. Born in Nebraska in 1902, Pillsbury came to the University of Pennsylvania in 1928 after obtaining his undergraduate and medical degrees at the University of Nebraska. Pillsbury distinguished himself at Penn, becoming associate professor of dermatology within ten years of his arrival and shortly thereafter chairman of the department. Considered by many of his peers to be "born for success," Pillsbury achieved distinction in many facets of medical activity, including clinical research, medical training and government service. He also built a solid teaching department that included such respected dermatologists as Joseph Klauder, Herman Berman, Morris Samitz, and George Hambrick. In addition, over a dozen of his students went onto successful dermatological careers and the chairmanships of numerous university dermatology departments. Examples include John Strauss at the University of Iowa, Harvey Blank at the University of Miami, William Epstein at the University of California (San Francisco), and Walter Shelley at the University of Pennsylvania.

By mid-century, the University of Pennsylvania's Duhring Labs was poised to become one of the most famous and prolific training grounds for dermatology students in the country. Highly respected physicians such as Clarence Livingood, Howard Maiback, Bernard Ackerman, Herbert Mescon and Martin Carter all passed through Penn's honored

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dermatological program. Not surprisingly, it also generated an international reputation that attracted numerous foreign students who would make their own distinguished mark in the field. Some of those were Gerd Plewig, Richard Marples, Alfredo Rebora, Peter Frosch, Machiro Tagami and Bertil Magnusson.³

Penn's "incredibly strong line-up of stars"⁴ during the 1950s and 60s would eventually be dwarfed by the bright, shining meteoric career of Albert M. Kligman, one of their own whose "brilliance," "cleverness," and entrepreneurship catapulted the field of dermatology to new levels of public recognition, self-respect and financial achievement. But who better to extol the virtues of the Penn dermatology program, its famous professor and the Holmesburg years than the master's medical colleagues and "Kligman's boys,"⁵ his students, whose lives and professional careers were so greatly influenced by "his enthusiasm, inquisitiveness and boundless energy..."⁶

II

"When I first met [Kligman] at the American Academy of Allergy in 1965, he invited me up to his hotel room to discuss the Penn program and its opportunities. Kligman extolled the virtues of Penn's program in dermatology and his own research program at Holmesburg Prison: "Come to Penn," he said. "We have acres of skin."⁷

Dr. A. Bernard Ackerman's account of his initial encounter with the famed Penn dermatologist is pure Kligman: the medical maestro as academic salesman – few others in the mid-sixties could be so bold, brash and blunt. And cavalier; since the "acres of skin" he referred to were not attached to huge rolls like factory-loomed carpet, but to the bodies of human beings – albeit incarcerated ones. Dr. Kligman's renowned ability to inspire and shock, probe and alarm those he comes in contact with is the stuff of legend, and is probably best known by his peers and the scores of medical school students he trained and for whom he acted as a role model over the decades. Their recollections are critical to gaining a deeper understanding of the man and his impact on the culture of medical research in post-war America.

Many of his former students have become successful dermatologists in their own right, but practically all agree Albert M. Kligman is unique and played a critical role in their educational and moral development. Not always, however, for the better. Though a legion of acolytes are quick to praise his accomplishments, probing personality, and unique aura, critics are occasionally willing to speak out as did one former student who said; "He should not be up on a pedestal. He should not be looked at as a God."⁸ An even stronger critic is Dr. Ackerman. Tall, bespectacled, with a receding hairline, Bernie Ackerman has achieved a few medical landmarks in his own career and is accorded the respect that goes with being one of the nation's leading dermatopathologists. For him, however, Kligman is an entertaining medical showman; a dilettante, and a huckster hawking health care for fun and profit. Regrettably, Ackerman believes, the pied-piper of style over substance, has almost single-handedly transformed the field of dermatology from a serious discipline devoted to care of patients with skin diseases into a bonanza for practitioners who seek to profit from cosmetic procedures on emotionally vulnerable patients so that dermatology "is gone forever as a serious subspecialty of medicine." As he laments: "It is now mostly cosmetic."

Ackerman is critical of dermatology as a profession because it "turned [Kligman] into a hero." He "pandered to the worst instincts in medicine" so that now the "emphasis is on taking advantage of human inadequacies in regard to appearance and aging. And turning that into financial profit." Though disappointed and disillusioned by the shift in emphasis, Ackerman can understand how so many people were captivated by Al Kligman's salesmanship. For a short time, he too, was one of Dr. Kligman's devotees or "clones," as some critics have disparagingly referred to them.

"I was a big Kligman fan at the outset," admitted Ackerman in one of several interviews.⁹ "He was exciting, and had a lot of style and pizzazz" which separated him from most of the dull, colorless men in the field. "I was dazzled by the man and was prepared to follow his lead because he seemed to have academic pursuits. Kligman was entertaining, fun and smart. And there were ideas. But another student warned me early on that the fascination would wear off. He said, 'It's not going to last. Kligman uses people and then discards them.'"

The warning proved correct. In August, 1966, after one month at Penn, "I looked at Penn and said it was not for me." Ackerman recalls that he considered the department a "sham because it was motivated by money making and personal fame rather than education and the advance of knowledge." In the 1960s," Ackerman said, "Kligman was the most interesting man in dermatology. Nobody was as dashing and as exciting. He was the dominant figure; he had the pizzazz. All the students modeled themselves after Kligman."

But a closer look, Ackerman argues, would have revealed disturbing fault lines in the infant terrible of dermatology. For example, Kligman's "lectures were ridiculous, just opportunities to show off. He never prepared them. It was all made up. All the numbers were phony." More importantly, said Ackerman, "Kligman was utterly unconcerned about the prisoners at Holmesburg and the ethical issues of his experiments on them." Dr. Ackerman recounts a story in which he once brought his brother, Jim, who was then chairman of the Department of Orthodontics at the Dental School of the University of Pennsylvania, to visit the "research" unit at Holmesburg Prison. His brother took a look around and then asked, "Have you ever heard of the Nuremberg Code?"

Evidently, Dr. Kligman's students and peers in the medical community were either too humbled or had bought into the same utilitarian philosophy; no one, it appears, raised a similar question to their distinguished instructor. Today, Dr. Ackerman labels this phenomenon a "conspiracy of silence," a deep-rooted inability by anyone in the medical community to criticize "Kligman's indiscretions."

Chief among those "indiscretions" was his 20-year reign over the medical research program at Holmesburg Prison, which Ackerman calls "the model for all to follow. Kligman orchestrated the program, the rationalization and the subterfuge. He played to their worst instincts and self-interest. All are culpable."

The highly respected dermatopathologist is not timid in his criticism – for him the Holmesburg experiments are "analogous to those in Nazi Germany in the sense that if a person is not a volunteer – really a volunteer – it is impossible to get informed consent in a prison. The whole thing is wrong."

Ackerman spent a year working under Kligman at Holmesburg in addition to his usual duties as a second year resident at Penn. "I was new to the set-up" and assigned "dandruff" as "my subject" of study. During the first three months he "rarely saw Dr. Kligman" because the architect of the Holmesburg testing program was "depressed" and in seclusion at his summer home at the Jersey shore. The FDA was investigating Kligman's prison experiments and he feared its impact on his career. Beginning in the Fall, Kligman returned to Penn and Holmesburg with renewed vigor. Though Ackerman left for Harvard after one year at Penn, the memories of his days at Holmesburg Prison remain with him; a strong reminder of the unethical liberties science can take with vulnerable populations.

"The Penn experience was searing for me," he claims. "It had a tremendous impact on me. I believe there are others who feel the same way and are now embarrassed by their actions."

One example of Ackerman's sensitivity to questions of medical ethics was his devoting portions of four issues of the journal *Dermatopathology*, of which he is editor-in-chief, to the

subject of Nazi medicine and its destructive impact on German society and the German medical establishment.

Entitled "Dermatology and Dermatopathology under the Swastika" by Wolfgang Weyers, M.D., the four-part series examines the question: "How was it possible that an overwhelming majority of German physicians, many of whom were celebrated scientists with a worldwide reputation, accepted wholesale the ridiculous ideas of the Nazis about medical matters without raising their voices?"¹⁰ Additionally, "How was it possible that so many other cruelties of the Nazis could be perpetrated in public without vigorous opposition from the German people in general and German physicians in particular?"

In an editorial to the concluding segment, Ackerman asks, could such a barbaric phenomenon "happen again? Of course it could...and it will continue to happen until a profound change occurs in how nations throughout the world educate their children about the worth of individual human beings..."¹¹ Ackerman goes on to discuss "the co-opting of medicine," and how "the venality of all too many doctors...led to corrupted behavior."

It is obvious that he is keenly curious "how persons who seemed to be well educated and schooled in the Hippocratic Oath could become accomplices to evil...?"

Unfortunately, too few were as moved by the Holmesburg experience as Dr. Ackerman; the vast majority had the opposite reaction; they tried to replicate the master's formula for financial and academic success. Two of his students, in fact, Drs. William Epstein and Howard Maiback traveled west in the early sixties and established a prison testing business of their own in California that ultimately gave them substantial financial rewards and a prominent role in Jessica Mitford's controversial 1973 account of prisoners as medical guinea pigs.¹² Many others developed lucrative practices with Dr. Kligman constantly in mind as their entrepreneurial role model.

A portion of this misguided course can be attributed to the fact that there was very little, if any, ethical training in medical schools in the fifties and sixties. "There was no training on medical ethics at the time," declared Ackerman, an educational product of the 1960s.¹³ Maybe if there had been, he suggests, he and others would have been far quicker to perceive the injustices and abuses taking place at Holmesburg. "It didn't strike me at the outset," recalls Dr. Ackerman of his Holmesburg experience, but after a period of time "it had a definite impact on me. I have a different view of the cosmos now."

Today, Dr. Ackerman is a strong critic of medicine's preoccupation with the superficial and the pecuniary, and much of this is blamed on the economic self-interest of those in charge. Regarding the Holmesburg experiments, he believes, economic profit was the true goal. "Kligman, Ivy, the prisons, Hendrick and the U. of P. all profited. Everybody profited. Any resemblance to real research was purely accidental. All the research was commercial; it had very little validity." Ackerman said Kligman was fond of paraphrasing the French physician Claude Bernard, "The only reason I do the experiments is to please the critics. I know the answers already."

III

Though Dr. Ackerman is not alone as a critic of Dr. Kligman in the dermatological community, few others are as bold or forthright in their criticism. Most admit to Kligman's eccentric personality and baggage-laden career, but temper their reproach of their famous and affluent colleague. Dr. Rudolph Baer, for example, the former chairman of New York University's Dermatology Department and one of the distinguished names in the field, admits to little knowledge "regarding Kligman's human experimentation at Holmesburg Prison," but parts company with him over pure dermatological issues. "I'm not particularly interested in cosmetic problems," Baer said. "I'm a dermatologist, but I'm not interested in

cosmetic problems. Dermatology is part of the healing arts and that's why I don't bother with the cosmetic things."¹⁴

Baer's criticism is similar to Ackerman's: although Kligman had made a fortune from discovering Retin-A, the issue of "wrinkling" in aging adults should not be the predominant thrust of dermatology. Though he admitted the popular anti-wrinkle cream had "strong believers on both sides," he had "not been able to convince himself in a definitive way that retinoic acids really work."

Though they had never worked together, Baer, 86, said Kligman's reputation was widespread and ran the gamut from "scoundrel to genius." When informed that some critics bring up the Nazi analogy and compared Kligman to the Nazi physicians at Auschwitz and Dachau, he said; "Being a German refugee, I find the accusations of Dr. Mengele claims against Dr. Kligman quite interesting." However, Baer, who was born in Strasbourg, Alsace-Lorraine, and received his early medical training in Switzerland, believes Dr. Mengele [was] "a category by himself" and didn't think it applied to the famous Penn physician. Baer believes "attitudes about working on human beings vary with the mores and attitudes of the times and in times of war it may be understandable to perform some experiments that would not be countenanced during times of peace."

Another European refugee who fled Nazi tyranny and finds it difficult to view Al Kligman harshly is Dr. Frederick Urbach. A dermatologist as was his father before him, Urbach started his residency training at Penn the same day in 1949 as Kligman and went onto head Temple University's dermatology program for over three decades. "I'm fond of Albert," says Urbach. "He's a fascinating person, but he has two speeds – bloody genius or he's wrong."¹⁵

On the issue of "using prisoners as experimental subjects," he argues, "as time goes by people's views change. The philosophy changes, but to blame the people of 30 years ago or 40 years ago is not right." Urbach, who was born in Vienna, Austria, but received his medical training in America, believes "it was not immoral 30 or 40 years ago" to have used prisoners as experimental subjects. "You have to consider the social aspects of the time. There was no such thing as medical ethics. No one taught it. The events at Nuremberg weren't that impressive in the United States. It doesn't make it right, but a little more understandable. Retrospective studies are problematic."

"All the permission business is a fairly recent thing," Urbach said of the rigid regulations surrounding contemporary clinical studies. "You've got to tell everybody what you're doing – your children, colleagues, and patients." But in years past, he says, "even prisoners were delighted to be part of experiments and didn't complain. It was a perfectly acceptable way of doing things and you hoped you wouldn't hurt anybody. The doctor's first code is to do no harm. I don't think Kligman ever did anything deliberately to hurt anybody. Al is an enthusiast."

"It was different back then. We were doing basic research. Nothing for pharmaceutical companies. When we started out they wanted us to have a strictly academic, research-oriented practice," said Dr. Walter Shelley of his dermatological training in the late 1940s and early 1950s. "Today you have to go through 16 different groups to get the okay for something. When I started out, you didn't have to inform anybody what you were doing. You were on your own and no one cared. There's been an enormous change in viewpoints on experimental testing. It's totally different today."¹⁶

One of the nation's leading dermatologists and one of Albert Kligman's oldest colleagues, Walter Shelley, 79, began his association with the University of Pennsylvania's dermatology program in 1946 as a professor, after earning his medical degree at the University of Minnesota, and serving as a Captain in the Army's Medical Research Unit during the war. His Penn tenure concluded in 1980 after serving 15 years as Chairman of the Medical School's

Dermatology Department. The holder of MBA, M.D., and Ph.D. degrees, Dr. Shelley believes he and another Penn colleague, Dr. Harry J. Hurley, may have even preceded Dr. Kligman into Holmesburg Prison "by a matter of a few months," but assured me that the experiments were harmless: "We never did any experiment that we wouldn't do on ourselves."

Shelley praises Kligman, calling him a "genius," "a great teacher...and a stellar lecturer. I marveled at his ability to energize an audience. He's an absolutely unique individual." Dr. Shelley is fond of telling the story of the first time his son heard Kligman lecture. Afterward his son said; "Dad, if Dr. Kligman charged a dollar for everyone to attend a Sunday service, he'd still have a packed house."

Shelley said he enjoyed "dealing with a single patient," but others found it "too restrictive" and Kligman was one of them. "He liked the testing and the money that could be brought in." After opposing it initially, the University realized, "There's money in them thar hills." He said Kligman "brought in all this money – millions and millions of dollars for Retin-A. In the beginning it was not the right thing to do. The University considered work with pharmaceutical companies as unsuitable. It was not part of the university thing to do. But the pendulum was starting to swing. Kligman was on the cutting edge. Now they worship him."

Although he was the dermatology department chairman during some of Kligman's most controversial human experiments at Holmesburg, he claims to have had very little knowledge of them. "I know nothing of what he was doing and he didn't know what I was doing," said Shelley. "I wasn't privy to his non-University activity, there's no doubt about that." He blames this lax organizational oversight to a department tradition and Penn's short-sighted financial priorities. "The University did not want to pay us in the old days and many of us were part-timers," Shelley said. "I was a part-time chair. There was no money for us." Hence, Shelley felt no obligation to have his finger on the department's pulse and be "privy" to everyone's business. In a 1990 interview dealing with Dr. Kligman's legal battle with Penn over the patent rights to Retin-A, however, Dr. Shelley had a considerably different recollection. Brought in as a defense witness, Shelley said, "he was fully aware of Kligman's outside work and never considered it improper."¹⁷ Although his recollection of certain past events may be somewhat selective, he distinctly recalls the campus uproar at the time of the newspaper revelations. "Penn students boycotted and protested when they found out about Kligman's experiments at Holmesburg."

Another highly respected physician with over a half-century of service to the field of dermatology who vouches for Kligman's independence is Clarence Livingood. Trained at Penn in the thirties and subsequently the head of dermatology programs at medical schools in Philadelphia, Detroit, and Galveston, Livingood agrees that "Shelley had little knowledge of [Kligman's] research. Kligman operated independently," he assured me.¹⁸ It isn't clear how Livingood, who was several thousand miles away during this period could be knowledgeable about this point, unless he is under the belief that he and most other department chairman functioned similarly and, like Shelley, were unaware of what their associates were doing. Though departmental freedom may have been greater and oversight less in the fifties and sixties, it is unlikely that Kligman's Holmesburg research was totally unknown to Dr. Shelley and his fellow colleagues at Penn. Too many students and faculty members were traveling from the University in West Philadelphia to the prisons in Northeast Philadelphia for there not to be some inkling as to what was taking place.

Dr. Livingood, now 85, agrees with Shelley on two additional points concerning Kligman's intellectual prowess and the invisible role of the Nuremberg Code in postwar America. Of the former, Livingood believes Kligman is a true "genius," who should be recognized for the

"tremendous accomplishments in his career." Retin-A alone, has been a "great contribution" to the field of dermatology. "I admire what he's done," says Livingood.

As to the impact of the Nuremberg Code, Livingood said he "wasn't really aware of it" as a student or young physician during the postwar years. Though he had served in the "China-Burma theater of operations in World War II" and written a manual on dermatology for the Surgeon General's Office just after the war that was given out by "the tens of thousands to doctors in the service," he said; "I don't remember the Nuremberg Code having any role or importance at the time" or being told to include such material in his own publication. Livingood said he just didn't have "any recollection of the Code being given to me or anybody else. There weren't any guidelines as I can recall.

IV

Probably even more revealing than the portraits of his peers are the powerful recollections of Kligman's students; the young doctors who revered him and would follow him into the dermatological profession. Many have now acquired over 30 years in the field, and some, have had their feelings about Kligman altered by time, distance, and reflection. Dr. Paul R. Gross, for example, has known Kligman since the late 1950s and spent several years working under him at Holmesburg Prison. As a young, impressionable medical student, Paul Gross could not have been more taken by his exciting, hard-charging professor. "I admit he is brilliant and tremendously creative. He's one of the few that is really creative and original," said Gross. "I believed everything he said as a student. He was wonderful. He took me all over and introduced me to everyone. He told me; 'By the time you graduate from medical school at Penn you'll have 10 to 15 papers published.'"¹⁹

In later years, however, Gross began to realize a lot of the master's admonitions were "self-serving and ridiculous." For example, Gross recalls; "He always told students that rules don't apply to genius. They just get in the way of creative minds." Many students over the decades could have accepted such nonsense as fact given Kligman's eccentric personality, rising status in the field and assembly line-like publication schedule. Few, if any of his peers, could match him for excitement and productivity. Kligman, apparently, was equally impressed. "He thought he could do and say anything and get away with it. He was superior to the average fellow and deserved greater freedom." Few challenged the professor on such an elitest message. According to Gross, "no students questioned his tactics or methods. They were all in awe of him."

With Kligman trumpeting the medical version of the divine right of kings and the absence of any countervailing ethical guidelines, it is not difficult to understand the receptive minds of eager, young med students adopting their professor's goals, value system, and methodology. Evidently, unless the students came into the medical school's department of dermatology with a humane code of ethics, they were unlikely to acquire it while there. Kligman and his Holmesburg laboratory were teaching another course and a different ethic and with such assurance of its rightness that, at first, it seemed to be right because Kligman made it sound as if it were beneficent and socially conscionable. Time would prove it to be otherwise.

The Holmesburg operation personified that ethic. The experiments, their diversity and volume, would never be contemplated today, much less allowed. The sheer size of the program – where occasionally 90% of the prison population was participating in one experiment or another – staggered inmates, guards and doctors alike. "There must have been a payoff to the warden to allow all the testing," said Dr. Gross. "It certainly disrupted the prison routine."

It also endangered the inmate-volunteers, who were ever-willing to subject themselves to strange procedures and mysterious substances in order to gain an extra few dollars. Though Dr. Gross had graduated from the medical school at Penn by the time Holmesburg embarked on its more dangerous and controversial experiments in the mid-sixties, he is now aware that some earlier ones – ones on which he worked – may have been hazardous to the test subjects. As detailed in a 1961 Kligman publication concerning the “Pathologic Dynamics of Human Hair Loss,” Dr. Gross is described to have used Paritol C, a heparinoid, to induce hair loss in prisoners.²⁰ In what Kligman called a “matchless experimental opportunity,” inmates were intravenously administered 300 mg. of Paritol daily for a week resulting in the desired “shedding of club hairs.”

According to one close observer; Paritol “was an experimental drug similar to heparin” (an anti-coagulant) that was found to “cause renal toxicity.”²¹ Gross, who was just a medical student in the late fifties “hadn’t even had pharmacology yet” and Al [Kligman] told him to “use this drug for the experiment.” Later, Gross discovered “how dangerous this drug was and the fact that it was never marketed because of its dangerous qualities.” As a student, Gross didn’t “know any better at the time.”

Contacted nearly four decades after Paritol had been given to Holmesburg inmates, Wyeth Ayerst Laboratories, who supplied the drug for the experiments, claimed no knowledge of it. “That was an experimental product that never made it through clinical trials,” said a spokesperson for the pharmaceutical company. “It was never put on the market.”²²

Today, Dr. Gross regrets his involvement in such questionable human experimentation at Holmesburg, and tries to explain the tremendous practical and philosophical changes that have transpired between then and now. “It was a different era then and a different ethic,” Gross said soberly. “Views of such things changed as time passed.”²³ What was acceptable then is repugnant now.

V

“Times really have changed,” said Gerd Plewig. “There were no ethical concerns in the old days.”²⁴ Dr. Plewig, Chairman of the Department of Dermatology at the University of Munich, perhaps the most prestigious chair in Europe, received his dermatological training under Dr. Kligman at Penn from 1967 through 1970 and spent several years in the late sixties learning his craft at Holmesburg Prison, said the penal facility represented an “unrestrained scientific environment” that encouraged intellectual curiosity and clinical exploration. “I was so deeply engaged in the activities, I was not aware of the growing concerns about experiments. There were no restrictions at any time,” recalled Plewig. “We could do whatever we wanted in scientific testing,” there were no limitations.

Plewig said it was a “very stimulating period and experience” working at the prison and that it had left a “deep impression” on him. “I learned so much at Holmesburg about people and medicine. I’m very fond of my days at Penn and Holmesburg.” Although he described occasions when the prison environment was quite “threatening” – especially during “riots” or when “fights broke out” – Plewig speaks with genuine affection of the institution and the people he met there.

“We worked intimately with the inmates,” Plewig said, rattling off a series of first names – inmates who had assisted him in the research program years ago. He spoke of eating with the inmates on several occasions, although he said “the food was terrible” and the general atmosphere less than appealing. “Money was the main reason” the inmates participated, he said. They needed “money for their families and other human needs.” It was the “overwhelming reason” men entered the program.

He also told of the work he performed there, in particular, his role in the discovery of Retin-A – the highly successful anti-acne, anti-wrinkle skin cream. “I specialized in acne treatment and did major work on the retinoid family” of drug therapy. Plewig called Holmesburg the “birthplace” of Retin-A, since “pre-testing...for safety and tolerance” was done at the prison. The “first clinical testing at Penn Labs” came shortly thereafter. In his estimation, development of a “systemic treatment of Retin A for acne...was the greatest success” of Kligman’s tenure there, but certainly not his only one.

Curiously, Plewig claimed to be “unaware” of the more controversial experiments being orchestrated at the prison while he was training there in the late sixties. Regarding the extensive Army testing, he said; “I was never aware of it. It never took place on H block where I was. I know the Israelis, Japanese, or German doctors never participated in them. I never heard of any chemical warfare drugs being tested until years later.” Plewig repeatedly claimed he “was not aware” of such experiments during his tenure as a researcher at Holmesburg Prison.

Plewig’s declaration of ignorance, however, causes one to wonder how a physician who is coming into an institution on a regular basis and forming friendships with test subjects and inmate-research assistants could not have learned about the most feared and talked about experiments in the jail. The high-pay, added-risk U.S. Army experiments occurred in metal trailers adjoining H block, Plewig’s (as well as other Penn physicians’) work site. Is it possible, as he claims, that he was “so deeply engaged” in his own research studies he was not aware of more controversial experiments taking place around him?

On the question of the prisoners’ level of understanding regarding the experiments they participated in, he frankly admits: “There was “no informed consent at that time.” Plewig attempted to explain that “during those days...uninformed patients...were the rule. We told them about the tests, but nothing like we do today.” He said during that era there were very few constraints placed on physicians or their research endeavors, and the gradual development of experimental restrictions came years later. Informed consent, he argued, was a “quite recent development” with little relevance to scientific work undertaken in the 1960s.

Another physician who believes it was impossible to be aware of all the experiments occurring within the walls of Holmesburg Prison is Isaac Willis. A Penn resident in dermatology from 1967 to 1970, Dr. Willis claimed the “military experiments,” for example, “were done in such secrecy that [he] didn’t know they were taking place.”²⁵

Dr. Willis was so sure that he was not alone in this belief that he was willing to wager that former colleagues felt similarly. “I’d be willing to bet that most of the people who worked with me – the postdocs – didn’t know that such experiments were taking place. I didn’t have the foggiest idea that people were being exposed to warfare chemicals,” Willis implored me to believe. Other residents, however, admit that Army experiments were taking place, but argue they never knew the exact nature of the tests.

He also denied knowledge of other dangerous medical experiments orchestrated under Dr. Kligman’s direction at Holmesburg. As a department resident, said Dr. Willis, he focused on “basic research and clinical research,” and never had involvement with some of Professor Kligman’s more controversial experiments, which he did not learn of until years later. The dioxin experiments for Dow Chemical, for example, had taken place under his nose, but he claimed to have not learned of it until many years had passed. The magnitude of that research, he said, did not hit him until he “began to see problems with soldiers who had been exposed to Agent Orange” after the war in Vietnam. “Agent Orange exposure was a serious problem,” said Willis. Forced to reflect on those formative years at Penn, Dr. Willis admitted that some procedures and practices had been taken “casually” at the time, and in “20/20 hindsight” they should “have done things differently.”

Some of those requiring greater caution were the experiments that incorporated the use of radioactive isotopes. Thymidine and other potent radioactive substances were injected into the inmate-volunteers "at the very end" of certain experiments, Willis claimed, and now admits if they "got into a person's bloodstream it would be very bad."

The former Chairman of the Department of Dermatology at Morehouse Medical College confessed that, "It would have been better to use animals" than prisoners for some of these research studies, but "we took things a lot less serious in those days. I know better now" he told me.

Dr. Willis said the "cavalier" attitude of researchers during that era was compounded by the competitive and captivating atmosphere that engulfed him and his fellow students under Kligman's tutelage. He admits to becoming "completely obsessed" with succeeding at Penn, impressing his professors and holding his own "in the great debates and discussions on research projects" that were held between faculty and students.

Without question, the most dynamic member of the faculty was Albert Kligman. Willis said "to know the man was to love him and hate him at the same time." He drew for me this character portrait of his controversial mentor. "Kligman had the genius to assist with the missing part of your puzzle" and he was "invariably right." He also had "the gift to encourage you to achieve" and would "go to the nth degree to ensure you were successful if he liked you." That "personal or professional" assistance, led Willis and others to view their "challenging" teacher as a "very genuine person." Kligman's generosity could appear boundless; students could be made to feel like peers and social equals with ski trips, folkdancing, and trips to the "schvitz" (steam baths) at the Y. In short, Kligman exuded a personal charm and charismatic seductiveness that was difficult to resist.

On the other hand, Kligman had some "negative" personality traits that could not be overlooked. "He was crude," said Willis. "He'd blast you" on occasion and become "very demanding." Kligman also had a strong elitist streak in him and "wanted to be seen as the last word" on all matters, not just those of a dermatological nature.

Like many high-ranking academicians, Willis said Kligman "got a lot of credit for things he didn't do." As an example of this claim, Willis told the story of a project he worked on "night after night" during his last year at Penn. He wanted this "final paper" to be his medical piece de resistance, a scholarly work he and the Penn faculty could be proud of. "This is a brilliant paper," said Dr. Kligman on perusing it. "Can I hold on to it?" "The next thing I knew," Willis said, "it was submitted to publishers with Kligman as the lead author." Dr. Willis chuckled as he recounted the story. "He performed no work on it. He never knew it was going on." When published in the mid-seventies, the article on "depigmenting human skin" – in which "more than 100 healthy, young, adult, black, male prisoner-volunteers" had portions of their skin turned "an ivory hue" – had Dr. Kligman as the lead author. Willis had to settle for the second spot.²⁶

Curiously, the student was not outraged at his mentor's conduct. "Strangely enough," Willis admits, "I was never angry at him. If it had not been for him I would never have had the idea" for the project.²⁷ The episode taught the young medical student another lesson, which his accomplished mentor underscored by stating: "Remember, it's not the person who discovers it, but the person who markets it that is important." Willis believes such Darwinian admonitions were "meant to make you tougher and more aggressive. They were not meant to injure you...but to bring out the best in you." However, he admitted, "I don't know a person he hasn't burned."

His examples of the latter included the "Papa incident" (the short-lived testosterone ointment designed to regrow scalp hair) and the ground breaking work done on Retinoid

Acid. "Without a doubt," said Dr. Willis, "Retin-A was work by others. Kligman did little hands-on work. That work was done by his students."

Despite such occasions, Willis speaks with appreciation and reverence for his Penn training, his collegial associations, and his teacher – Albert Kligman. "It was an honor to be in that group, even though you may have spent every day in misery." And on his famed professor: "Either you didn't get along or you got along wonderfully. He's an adventuresome, bright, active person who took advantage of a situation to improve science and medicine, but then branched out into other things. He broadened the base from pure research in the early years to a great many other things. In retrospect," said Dr. Willis, reflecting on the numerous human experiments at the prison, maybe it would have been "better to have done it on animals."

VI

"Kligman was considered the King of Dermatology. No one did more to develop the profession's reputation. People broke their ass to work under Kligman," said Dr. Tact (a fictitious name for one clinical research director who requested to remain anonymous)²⁸ "There hasn't been a guy like him in dermatology. He's unique. Kligman is just a brilliant guy," albeit one who "may have become more interested in his research than the subjects he worked on."

Post-war "medical research was in its cocoon," said Dr. Tact, and those physicians with prison practices or connections to prisons could call their tune with the burgeoning pharmaceutical industry. "Prisoners were bored, anti-social, and nobody cared what happened to them." Dr. Tact tried to take advantage of the Holmesburg situation as well, but was rebuffed by the prison overseers. "I don't think you could get in there as a competing research program. I tried to get in and was told; 'No. We have enough.'" Dr. Tact believes Kligman's ability to get in early and corner the market on prison testing in Philadelphia underscores his "entrepreneurial brilliance. Originally, he was interested in investigational research for journal publications and scholarship, but he was entrepreneurial and saw he could do commercial studies and make money."

Many tried to duplicate Kligman's winning formula, but without success at Holmesburg. Dr. Tact's rejection led him to believe Kligman and Milt Cahn, another Penn dermatologist, with a smaller research program in Holmesburg, "paid Hendricks to perform studies" at the prison. Dr. Tact said he then went to Bucks County Prison, just north of Philadelphia to run experiments, "but left after a short time. I didn't feel comfortable working in there. Prisoners turned toothbrushes into weapons..." and the need for constant vigilance led Tact to abandon the notion of conducting clinical trials in prisons.

As to Kligman's more controversial experiments and the unflattering comparisons to Dr. Mengele and the recurring Nazi analogy, Tact says "it's not even close. I don't believe he has a bad bone in his body." He too agrees with the far-more-favorable analogy that the Penn dermatologist is an "enthusiast" who may lose himself in his theoretical and practical experiments, but never with the intention of hurting anybody. For him, Kligman is an agent provocateur of ideas, not an evil practitioner of destructive experiments. "Kligman stimulates thoughts and questions. He wants people to figure out problems and move the profession forward. The guy was Mr. Dermatology and stimulated more high-ranking scholars than anyone else. He can really stimulate people. I sat in back of a lecture room and listened to him. It was very enjoyable to see young kids react positively to him. His students said he was a little crazy, but brilliant. In the overall picture, he did much more good than bad."

"Prisons were a very good place to get human subjects. It was a win-win situation for us and the inmates," said William L. Epstein, one of Penn's dermatological residents during the golden years in the 1950s. Beginning as an intern in 1952, Epstein spent four years under the tutelage of Drs. Pillsbury, Klauder, Beerman, and Kligman – the Dermatology Department's finest. And he learned his lessons well. So well, in fact, that he duplicated Kligman's prison research model in California a few years later. "Ours was a little bit better," Epstein said of his own program with a chuckle. "We had a proper laboratory. I know they did not have it at Holmesburg. They were little closets and cubby holes," he said of the tiny H block cells that had been converted to small lab units at the old prison.²⁹

The Penn-Holmesburg years were fruitful ones for Epstein. Not only did he learn how to establish and operate a prison research unit, he learned the medical arts, thereby enabling him to ascend to the chairmanship of the dermatology department at the University of California at San Francisco. Kligman had an enormous impact on Epstein and co-authored several scholarly articles with him during and shortly after his departure for the West Coast. The topics of these early papers ran the gamut from tumors³⁰, cysts³¹, and warts³² to the problems of pneumonitis³³ and hydrocortisone's impact on allergic reactions.³⁴

Dr. Epstein, now 71, said his mentor was a driven researcher who "was always working in the lab looking for new methods of treatment. He used to do funny things in the lab" in search of new techniques to combat the medical problems of the day.³⁵ "In the beginning," recalled Epstein, "there were no guidelines or directions. You were on your own." But he pointed out that it was "our responsibility not to hurt anybody." He said, "I started for convenience at the prison. In one hour you could get 50 people and be "done" with your clinical experiment. "On the street you had to work at the subject's convenience, a much longer and more problematic experience."

By the early sixties, Dr. Epstein knew where to go to recruit young dermatologists for his university, as well as his prison programs. "I recruited him," said Dr. Epstein proudly, of Howard Maiback who came to Penn as a resident in 1958 and has subsequently emerged as one of the foremost dermatologists in the country with a substantial practice, hundreds of scholarly publications, and the Vice-Chairmanship of Dermatology at the University of California at San Francisco. Together, Epstein and Maiback directed research clinics at San Quentin and Vacaville State Prisons and were happily ensconced at those sites until the 1970s when their research projects fell victim to changing attitudes and the bad publicity fostered by Jessica Mitford's expose of their prison projects.³⁶ According to a fellow medical colleague who has closely followed the careers of Epstein and Maiback over the years, they "still believe Kligman walks on water."³⁷

Many others were equally impressed, although not all were permanently blinded by their mentor's shining example. "Kligman was a giant," recalled Dr. Chalmers E. Cornelius III, a Penn resident in the early 1960s, and an early admirer of that special Kligman mystique that few others in the profession at that time possessed. "He had verve, wore custom shirts and gold cufflinks, and took up flying and ballooning," said Chalmers. "Kligman had a brilliant, acute mind and was able to cut through the malarky and get through to the heart of the matter. He had a brilliant command of the English language and his lectures were uplifting, exciting, and entertaining. People were humbled by him. The young investigators were totally mesmerized by his style and aura. The kids would worship the guy. He'd say 'come with me' and people did. It was exciting."³⁸

Though he wasn't assigned by Kligman to work at Holmesburg, Dr. Chalmers would occasionally escort the Penn professor to the prison for inspections. These trips allowed for a good vantage point of both the famous physician/researcher and his many experiments. Chalmers said he witnessed a fair number of studies, running the gamut from poison ivy and early Retin-A work to radioactive isotope studies and less controversial pursuits such as

the impact of chocolate on acne. Much of this work, Chalmers believes, has had little lasting value. "The poison ivy work was high profile, but the vaccine didn't do anything...and his chocolate studies" were tarnished by the fact that the "test subjects weren't the appropriate age for such a test." When questioned about more sensitive experiments dealing with dioxin and mind-altering drugs, Dr. Chalmers claimed ignorance, but offered that "dioxin was a compound that was not well-known at the time. It was considered much more benign. The studies back then were not perceived as dangerous," he said. "How do you advance medical knowledge if you preclude procedures, subjects," and factors that help to attain your goal? Regardless of the more controversial initiatives, Chalmers defends Kligman's experimental work, arguing, "harming experimental subjects was not his thrust. His goal was to find things out." He does admit, however, that Kligman could be "a little bit calloused...and overzealous in the experimentation" process. Moreover, few, if any, experimental ventures were rejected; "any protocol was accepted, unless it was too dull." Dr. Chalmers said some of the more risky work may have been due to the "different flavor of the times. There was great paranoia about the Russians and the possibility of a nuclear war."

On a personal basis, he admitted, Kligman could be a tyrant as easily as a concerned teacher and benefactor. "Al Kligman is the type of guy who would have you over for dinner and inflate your ego, and the next day belittle you in front of strangers. He could make you feel elated, excited, and the next day totally avoid you." Chalmers said Kligman would say "bad things about you behind your back after making you feel like a prince." Though he "had great wit" and was "a comic at times," Kligman "made a lot of enemies with his mouth. He had a disregard for people's feelings...and could be extremely degrading.... If Kligman had maintained himself and friendships he'd have it all right now."

The various views of Kligman by his medical peers and former students further illuminate a complex personality with tremendous potential for both good and evil. Gifted intellectually, and possessing an abundance of energy and curiosity, Albert Kligman had the ingredients for a stellar career in whatever fields he chose. However, he could also be brash, ruthless, and devious, characteristics that don't necessarily negate the many positive qualities, but can lead to some troubling results as they did in the use of prisoners, retarded children, and institutionalized senior citizens as human guinea pigs. Unable to see the inherent dangers of such a cold and heartless practice, Kligman's cavalier philosophy was passed on to a whole new generation of dermatological practitioners and researchers who believed their exciting mentor's approach to medicine and science must be correct. Though some in the medical community may have recognized the excesses, the transgressions, the human rights violations being committed, few, if any, spoke out. By remaining silent, they collaborated in the exploitation of various vulnerable populations. Albert Kligman was the prime architect of the Holmesburg experiments, but he could not have accomplished it alone.

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