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Sins of the Fathers



Like his friends, Banting and Best, Dr. John Gerald FitzGerald was a Canadian hero. He founded the Connaught Labs, saved untold lives with his vaccines and transformed Canada's public health system. What so darkened his reputation that his memory has been all but erased?

BY JAMES FITZGERALD

As a small boy, I believed our house was haunted. In my bones, I felt that 186 Balmoral Avenue - the gloomy, stuccoed-brick three-storey where I lived until age seven -- was inhospitable to children. Sometimes, when I wandered alone through the dark rooms, I felt sure that some daunting, suppressed secret was about to burst out of the cast-iron radiators, flooding the hardwood floors.

The house was built in 1914 by my grandfather, John Gerald FitzGerald, an ambitious doctor of Irish Protestant blood who died ten years before I was born. While I was growing up, my father, Jack, an immunologist who inherited the place soon after his marriage, never spoke of his father. Given what I now know - that during the '20s and '30s my grandfather achieved fame as the visionary founder of the internationally renowned Connaught Laboratories and the University of Toronto School of Hygiene, institutions responsible for the saving of countless lives - my father's silence seemed all the more baffling.

The citadel of repression that ringed the ghost of my grandfather connected me to him in uncanny ways. At age six, I startled my mother by solemnly announcing that I wanted to change my name from James to Gerry. Some time later, as we drove past the expansive Connaught Labs property at Dufferin and Steeles on a Sunday outing, my young ear caught my parents whispering references to my grandfather - a taboo subject, not unlike sex.

"Where does he live?" I piped up from the back seat. "Oh, he's dead now," my mother explained. Brow knitted, the budding journalist in me retorted: "Who shot him?"

Even then, my parents' nervous laughter seemed a kind of clue, a tenuous lead to something hidden. Our family moved out of the house in 1957, and over the next decade my father gradually descended into a protracted mid-life depression, culminating in severe drug addiction, a series of psychotic episodes and, in 1970, two failed suicide attempts by morphine injection. As I watched one electro-shock and pill-pushing psychiatrist after another botch my father's treatment, I wondered whether everyone wasn't dodging an obvious fact, the elephant in the bathtub: the unspoken influence of my extraordinary grandfather on my father's life.

After studying psychology at Queen's, I sought to de-code the secrets of my paternal bloodlines, burrowing through the stone wall of my father's denial to reach back to my grandfather and beyond. I delved into archives, letters and photo albums, and interviewed medical historians and aging former colleagues of my grandfather. Tantalizing fragments began to come together bit by bit, like a jigsaw puzzle. I was amazed to learn that my family story was inextricably bound up in an epic national drama, one that had been entirely withheld from my brother, my sister and me.

Why? What could my father have hoped to gain? What was he trying to protect us from? His father had been a medical pioneer, a Canadian hero. In a single generation, I discovered, Gerry had boldly conceived and built the modern institutional infrastructure of Canada's public health system. It became a model to the world and led to the effective control or eradication of a litany of killer diseases, including syphilis, diphtheria, rabies, tetanus, meningitis, typhoid, scarlet fever, tuberculosis, smallpox, influenza, diabetes and polio. Yet we were told virtually nothing about him. It felt as if his memory, like the ravages of diphtheria or polio, had been virtually erased.

In 1995, after my own father's death, I discovered in a psychiatric archive 60 intense, confessional letters written by my grandfather in the last year of his life. He was in a private sanatorium in Hartford, Connecticut, being treated for depression. The letters were to his close friend Dr. Clarence B. Farrar, director of the Toronto Psychiatric Hospital, forerunner of the Clarke Institute of Psychiatry. Fascinated by my grandfather's inner world, I devoured them in one sitting.

Here, at last, I found a compelling but cryptic clue to my father's determination to stand between the generations like darkened glass— my grandfather's eerie repetition of this haunting sentence: "I have committed the unpardonable sin -- and the penalty is death."

My great-grandfather William FitzGerald was an austere man with sad eyes and a bushy, handlebar moustache. He had four children, Hazel, Bill, Sidney and Gerry, the eldest, who was born in 1882, the same year as James Joyce and Franklin Roosevelt. John A. Macdonald was prime minister. Nietzsche had shocked the world with his declaration that "God is dead."

My great-grandfather owned a small apothecary shop on a muddy street in Drayton, Ontario, a gaslit village of 800 people northwest of Toronto. The grandson of Irish immigrants who had sailed to Canada in 1824, he passed on to his children the sharp tools of self-discipline and a fierce work ethic that led so many pioneer families out of the unforgiving Upper Canadian wilderness.

Gerry grew into a lean, six-foot-tall, red-headed lad endowed with a keen, hungry mind. In his father's busy drugstore, he watched the villagers routinely spend their hard-earned incomes on hand-made pills and potions to ease their afflictions. Tending to his invalid mother, a Victorian shut-in who rarely rose from her bed, Gerry soon realized the limits of his father's alchemical powers. As a teenager, he immersed himself in medical history books, drawn to heroic figures like Louis Pasteur, who attracted world attention in 1881 when he successfully vaccinated a herd of sheep against anthrax. Four years later, he risked administering an unproven, rudimentary rabies vaccine to nine-year-old Joseph Meister, bitten 14 times by a mad dog. In saving the boy's life, Pasteur, a pioneer of the germ theory of disease, laid the foundation of modern preventive medicine.

In September 1899, my grandfather, a precocious 16-year-old country boy in wire-rimmed spectacles, bowtie and stiff white collar, set off for the University of Toronto Medical School on the cusp of a hopeful new century. Gerry had an obsessive ambition – to stamp out the terror of contagious diseases *before* they spread their murderous ways. Prevention was the key. He completed the four-year course and then headed to Baltimore for a two-year internship in neurology and psychiatry at John Hopkins and Sheppard Pratt psychiatric hospitals. At 24, he was appointed the first pathologist and clinical director of Toronto Asylum for the Insane at 999 Queen Street West.

Working under Dr. C.K. Clarke, Gerry was swept up in the revolutionary bacteriological discoveries of the time, founding the asylum's first laboratory while teaching courses in psychiatry at U of T. After centuries of ignorance, medical science promised, at last, to fathom

the complexities of human disease. The bacterium *Treponema pallidum*, a spirochete, had recently been shown to cause syphilis; shortly thereafter, Gerry wrote one of the first scientific papers in Canada on the "ravages of 'syphilization.'" When the spirochete was found in the brains of patients suffering general paresis of the insane, accounting for roughly 10% of all asylum populations, the theoretical question arose: did other forms of madness derive from some nasty, mercurial, infectious bug?

Gerry's case files of the period open a fascinating window onto the sexual and religious angst permeating puritanical, Edwardian Toronto. I found my grandfather performing an autopsy, cutting open the brain of a depressive Irish immigrant woman who had slashed her throat with a razor. In his diagnosis of another Irish woman, I was drawn to a particular passage: "She tells me she is possessed of the devil, that something came out of her mouth and blighted the flowers on her father's grave. She has had very many somatopsychic ideas recently, complaining that she has lost various organs and she has committed the unpardonable sin." For doctors of my grandfather's generation, perhaps the genesis of sin itself could be revealed by the blade of a scalpel or the lens of a microscope – the secular miracles of the scientific method. In 1908, my grandfather abandoned neurology and psychiatry in favour of a career in the related but separate fields of public health and preventive medicine.

Succeeding him as clinical director of 999 Queen Street was Dr. Ernest Jones, a Welsh colleague and the eventual biographer of Sigmund Freud. Jones remained in Toronto for the next five years, living "in sin" at 407 Brunswick Avenue with his sister and his morphine-addicted mistress (later analyzed by Freud), provoking widespread alarm in the city's medical establishment for what was seen as his unsavoury pre-occupation with psychosexual issues. Gerry admired Jones' intellectual dynamism and they exchanged letters and papers. Eventually Jones, the dedicated yet tactless Freudian proselytizer (he was once called "Freud's Rottweiler") was virtually run out of town in the wake of an alleged sexual harassment scandal that horrified starched, ultra-repressed Toronto.

Early in his career, then, Gerry had been exposed to the two seminal, conflicting factions raging in psychiatric circles across North America -- the biomedical model, championed by C.K. Clarke et al., which viewed all mental illness as organic, genetic or biochemical in origin, and the emerging, revolutionary challenge of psychoanalysis and cathartic talk therapy, the approach forged by Freud and such acolytes as Jones.

Over time, my grandfather lost contact with Jones while deepening his connection with C.B. Farrar, whom he had first befriended at Johns Hopkins. Farrar was traditional psychiatrist who became a prominent member of the American Psychiatric Association and founding director of the Toronto Psychiatric Hospital (forerunner of the Clarke Institute); he once condemned communism, Catholicism, unionism and psychoanalysis as "the Four Horsemen of the Apocalypse." With the departure of the radical Jones, the new psychoanalytical ideas about dreams, sex and repression did not take root in Toronto for another 40 years – such was the city's aversion to the subversive power of Freudian and post-Freudian thought.

Why did my grandfather abandon psychiatry? Perhaps he was disturbed by what he had witnessed at 999 Queen Street – a snakepit in desperate need of reform – and realized that his therapeutic impact on psychotics would be limited. Perhaps he realized he could accomplish more in his lifetime in the emerging field of public health – easier to rub out diphtheria, for example, than schizophrenia.

Or perhaps there's another factor: the death of his invalid mother of heart failure in 1907 precipitated a breakdown in his father, the Drayton pharmacist. Devastated by the loss of his wife, my great-grandfather, then 51, sold his home and drug store and moved to Toronto, where he seems to have become emotionally and financially dependent on his four adult children. It was at this time that Gerry began an intense period of international travel, education and training – perhaps, paradoxically, escaping his troubled father in order to save him.

At the turn of the last century, Canada's public health system was in crisis, overwhelmed by the rapid industrialization and immigration of the Laurier boom years. High rents and low wages led to the emergence of over-crowded immigrant worker slums. An estimated 5 to 15 per cent of the population was infected with venereal diseases. More than 3,200 Montrealers, mainly poor, had died in a smallpox epidemic in the 1880s. Toronto suffered typhoid epidemics caused by polluted water and unpasteurized milk; by 1910, infant mortality rates spiked as high as 20%. From 1880 to 1929, more than 36,000 Ontario children perished from diphtheria. Municipal and provincial boards of health, understaffed and under-trained, were reactive and unco-ordinated; a federal Department of Health bureaucracy was not formed until after World War I.

Public health reformers struggled against popular and political resistance to the implementation of stricter sanitation laws, including compulsory smallpox vaccination. A 1906 article in *Saturday Night* protested against the unequal application of vaccination laws between rich and poor. Anti-vaccinationists charged that, in addition to infringing civil rights, compulsory immunization was being used as a class weapon by elite public health doctors against common working men who often lost many days wages suffering from severely ulcerated arms, the vicious side-effect of the crude vaccine.

Dr. C.K. Clarke, superintendent of 999 Queen Street, reflected the medical opinion of the embryonic "mental hygiene" movement, contending that "feeble-minded" immigrants were infecting the psychic health of native-born Canadians--as if madness, like syphilis or TB, were due to foreign bacteria. My grandfather did not share the extreme eugenicist views of many of his colleagues (who advocated the deportation and/or sexual sterilization of those deemed mentally unfit). His ambition was to clean up Canada's degenerating health conditions.

After a year on a research fellowship in bacteriology at Harvard, Gerry married Edna Leonard of London, Ontario, a graduate of Havergal College and heiress to a family foundry fortune. As a wedding present, Gerry received the complete works of Sigmund Freud (in German) from his friend Ernest Jones. In a letter that would grow more ironic with time, Jones wrote: "Dear FitzGerald: As marriage is at times an adventurous enterprise, no one contemplating it will be harmed by an addition to his knowledge of the human soul." (The Freud books have been lost; it is not clear whether Gerry, a pragmatist not given to introspection, ever took psychoanalytical ideas seriously.)

As part of a working honeymoon, my grandparents traveled to Europe. Gerry studied at the Pasteur Institute in Paris and Brussels, learning how to make rabies, diphtheria and smallpox vaccines and antitoxins under the guidance of Emile Roux, Louis Pasteur's right hand man and co-creator of the world's first diphtheria antitoxin. During Gerry's first week in France, the German bacteriologist Paul Ehrlich announced the momentous discovery of a "magic bullet," Salvarsan, for the treatment of syphilis – the kind of breakthrough that stoked scientists' dreams.

For three years, Gerry kept up a blistering pace, establishing a network of international contacts while working with leading experts in pathology and bacteriology at the University of Freiburg in Germany, the Lister Institute in London, the New York City Department of Health, and the University of California at Berkeley. In the fall of 1913, armed with this international training, he returned to Toronto ready to execute the first step of his master plan.

Now an associate professor of hygiene at U of T, my grandfather prepared the first Pasteur anti-rabies vaccine in Canada at a small provincial Board of Health lab at 5 Queen's Park Crescent. Encouraged by this success, he proposed to the University of Toronto that he manufacture a Canadian-made diphtheria anti-toxin and distribute it free or at cost to doctors, pharmacists and boards of health across Canada.

Diphtheria meted out a gruesome death – a thick membrane clogged the throat, slowly asphyxiating its victims over weeks or months. A single dose of imported American anti-toxin was prohibitively expensive — \$25 — the equivalent of two weeks' wages for most families. Only the wealthy could afford it. One Toronto doctor recorded the story of a family who could only pay for one dose of anti-toxin for their two children, presenting the parents with a kind of Sophie's choice. Tragically, only the one child lived.

The university's board of governors deferred Gerry's proposal — the idea of uniting an academic institution with commercial production of bio-medical products was unprecedented and radical. Impatient with their inertia, Gerry plunged ahead on his own. In December 1913, using \$3,000 borrowed from his wife's inheritance, he built a rudimentary stable at 145 Barton Avenue, near Bloor and Bathurst, and stocked it with lab equipment. He bought five horses for \$3 each – saving them from the glue factory -- and hired a technician.

The dangerous, painstaking process of making diphtheria antitoxin entailed injecting a horse with small, incremental amounts of poisonous diphtheria toxin – lethal enough to kill several men but not a horse -- which mixed with the animal's blood and built up immunity over time. The human anti-toxin was obtained from the pseudo-globulin by bleeding the horse.

Seeing my grandfather's success, the U of T board of governors ultimately came round, endorsing his idea. On May 1, 1914, the University of Toronto Anti-Toxin Laboratories were formed. The notion was that a full range of preventive medicines be available free to all Canadians – “within reach of everyone,” in Gerry's phrase -- regardless of class or income. Understandably, general practitioners, druggists and commercial drug manufacturers resisted the idea; they depended on paying patients for their livelihoods.

World War I broke out three months later. The fledgling lab, in a cramped basement space in the U of T medical building, was soon overwhelmed by the demand for preventive medicines to inoculate thousands of Canadian soldiers fighting on the Western Front (at the time, as many soldiers were dying of disease in the trenches as from war wounds). Fortunately, the philanthropist Albert Gooderham, chairman of the Ontario Red Cross and a scion of the Gooderham & Worts distillery empire, came to the rescue. He donated 58 acres of farmland at Dufferin and Steeles and money for more extensive lab buildings. They grew into a dynamic wartime factory, pumping out enormous quantities of tetanus antitoxin, anti-typhoid vaccine, smallpox vaccine, diphtheria anti-toxin, and anti-meningitis serum. In the latter stages of the war, my grandfather served in France as a major commanding a mobile pathology lab.

In October 1917, at Albert Gooderham's request, the Anti-Toxin Labs were re-named the Connaught Laboratories, after the out-going Governor-General of Canada, Prince Arthur, Duke of Connaught. Two months later, Gerry's father died of a stroke, having lived long enough to witness his son's first major professional achievement, as well as the birth of my father, Jack FitzGerald, born the same day as the future U.S. President, John Fitzgerald Kennedy.

A post-war influenza pandemic killed more than 20 million people worldwide. In its wake, the Canadian government established our first national Department of Health. To ensure a national presence for Connaught, Gerry astutely set up a scientific advisory committee that soon became the Ottawa-based Dominion Council of Health, comprising himself and all the federal and provincial deputy ministers of health. Despite early opposition from commercial drug manufacturers and druggists, every Canadian province was freely distributing Connaught's products by 1920.

Within a decade of the building of a primitive horse stable on Barton Avenue, two historical events -- the Great War, and the discovery of insulin in 1922 by Frederick Banting and Charles Best in a U of T lab -- had vaulted Canadian medicine into a world leadership position. In the early 1920s, before cutting a deal with American pharmaceutical house Eli Lilly, Connaught was manufacturing Canada's entire supply of insulin, used to keep countless diabetics alive. In its production

capacity for preventive medicines, Connaught was now comparable to the Pasteur and Lister Institutes.

Connaught's work with insulin and other products caught the attention of the New York-based Rockefeller Foundation. Impressed with my grandfather's dedication to medical research and education, John D. Rockefeller Jr. donated \$1.25 million for the establishment of a School of Hygiene -- only the third in North America, after Johns Hopkins and Harvard -- to be erected at 150 College Street. This generous endowment, likely worth \$30 million today, brought enormous international prestige to the university, the city and the country.

My grandfather, by now a full professor of hygiene at U of T, had restructured and staffed the department of hygiene within the faculty of medicine. He wrote a textbook on preventive medicine and overhauled undergraduate medical education, introducing mandatory field courses in public health. (It proved a tough sell -- most med students preferred studying curative, clinical medicine to tramping through noxious sewage treatment plants.) As director of both the Connaught and the new four-storey School of Hygiene, opened in 1927, he saw his dream of transforming Canada's health conditions become a viable reality.

For the school's faculty, he assembled a remarkable, multi-disciplinary team of men and women, experts in the emerging medical sciences of immunology, microbiology, biometrics, parasitology, virology, epidemiology, environmental health, nutritional science, and sanitary engineering. Each year, the school trained dozens of post-medical graduates, who went on to direct public health services in municipal, provincial and federal departments of health. All the while, my grandfather was lobbying the federal government to develop a national health insurance policy.

The Connaught motto -- "Mens sana in corpore sano" (a healthy mind in a healthy body) -- proved more than mere words. Practising what he preached, my grandfather required the Connaught doctors to partake of nutritionally balanced cafeteria meals and exercise regimens, and to compete in deck tennis tournaments on the roof of the School of Hygiene to promote team spirit.

For decades, the Connaught Labs Farm in Downsview and its academic arm, the School of Hygiene, formed an independent, self-sustaining division of the University of Toronto. Laying the foundation of provincial and federal health programs across Canada, its triad of research, teaching and manufacturing of biomedical products in the name of public service was unique, the first in the world. Within a generation, the Canadian public health system had evolved from a colonial backwater to a world leader, setting an international standard of excellence.

Former colleagues of my grandfather remember Connaught as a seamlessly efficient organization that demanded selfless service to a collective ideal; at its zenith, some say, the place emanated a mystical, quasi-religious vibration. Gerry himself was as a study of contrasts. At first glance, he seemed calm and courteous, even mild-mannered, a master of his emotions who gave executive direction by means of subtle suggestion. Hyper-sensitive to sound, he hated thunderstorms and loud singing, insisting the Connaught employees wear rubber-soled shoes to minimize noise levels.

Under this controlled, genteel demeanour, however, burned a fireball of frenetic energy. One of his favourite sayings was: "Play to win or do not play at all." As his wife, Edna, confessed to June Callwood in a 1955 *Maclean's* article on the Connaught: "I'm married to an idea, not a man."

In the 1930s, my grandfather hurled himself into an even more exhausting round of work. Delegating day-to-day running of the Connaught to a colleague, my grandfather in 1931 became a Scientific Director of the Rockefeller Foundation, the first Canadian appointed to the position. He served a four-year term as Dean of Medicine at U of T and in 1936-37, now a world authority in his field, he spent a hectic year travelling to some 40 countries in Europe and North America, assessing dozens of medical schools and hospitals on behalf of the Geneva-based League of Nations. He was a world authority in his field, a heroic figure.

My father, the immunology specialist, must have known all this. It's the kind of story you might have expected a son to take pride in telling to his children. What could have so stained my grandfather's reputation, so darkened his extraordinary achievements, that my family preferred to act as if he had never existed?

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"Show me a hero," wrote F. Scott Fitzgerald "and I'll write you a tragedy." In my grandfather's case, the tragedy was not long in unfolding. By 1938, following his world tour, he appears in photographs to be a gaunt, white-haired fellow 20 years older than his 55 years. Suffering from chronic insomnia, migraine headaches, a bleeding ulcer and decades of overwork, the doctor obsessed with attacking disease had effectively ruined his own health.

In February 1939, my grandfather swallowed a fistful of Nembutal tablets at his home and was rushed to Toronto General Hospital. Emerging from a coma, he told his attending physician, "I'm sorry to be such a burden to you all. I'll do it right the next time." Within weeks, his old friend and colleague from Johns Hopkins days, C.B. Farrar, now director of the Toronto Psychiatric Hospital, arranged for Gerry's admission to the Hartford Retreat, a private sanatorium in Connecticut.

During a harrowing year, my grandfather was subjected to no fewer than 57 insulin shock treatments, falling into a cycle of profuse sweating, painful convulsions and deep coma. Devastated by this blunt, recently invented procedure (later discredited), my grandfather, swinging between rage and despair, found himself not so far removed from the caged rabbits, monkeys and guinea-pigs sacrificed in vaccine experiments at the Connaught Labs. Indeed, in an irony that even a novelist would hesitate to invent, the asylum superintendent used my grandfather's authority to request free doses of insulin from Connaught.

Gerry's letters to Farrar are rife with self-laceration: "I am a disgrace to my family, the university, the Connaught. I should be taken out and shot." He calls himself a coward and a deserter. He is not a religious man, yet he asks to see a Catholic priest. Repeatedly, he accuses himself of having committed the "unpardonable sin" – for which "the penalty is death."

Although he does not refer to it in his confessional letters, my grandfather had a brief affair at some point in the 1930s, a fact known to his psychiatrists. At first, I felt sure that this lapse in his stringent moral code must explain the unpardonable sin. Now I'm not so sure.

As it happened, neither Farrar, the virulent anti-Freudian, nor the Hartford psychiatrists ever gave Gerry the opportunity to talk about his problems. Mental illness was organic, like polio or diphtheria; Freud's talk of fathers, of repression, of the murky ways of the unconscious was so much bafflegab. On my grandfather's release from the asylum, he received a breezy letter from the psychiatrist-in-chief that ended: "I am glad that your troubles are now permanently behind you."

Gerry returned to Toronto and tried to resume his work. But on the afternoon of Sunday, June 16, 1940 -- Father's Day -- he looked out the curtains of his living room and, in an agitated state,

told my grandmother that the University of Toronto was out to get him. Again he took an overdose of Nembutal; again he was rushed to Toronto General.

My grandfather's death certificate states that he died four days later of a duodenal ulcer. Only while interviewing a former U of T Dean of Medicine did I learn the true details of his death, details suppressed for over half a century, withheld even, I believe, from my own father.

On the afternoon of Thursday, June 20, 1940, the longest day of the year, scattered thundershowers washed clean the streets of Toronto the Good. My grandfather lay in a brass bed at Toronto General, recovering from the toxic drug overdose, lost in dark reverie. The French windows of his room in the brown-brick, ivy-covered Private Patients' Pavilion overlook University Avenue; only 200 yards north, on College Street, stood the School of Hygiene.

A nurse placed a tray of food on Gerry's lap. When she withdrew, he grasped the knife, pulled his white hospital gown up to his waist and felt for the femoral artery in his right thigh. With the stoic willpower of his Irish Protestant forefathers, he stabbed his flesh again and again, soon falling into hypo-volemic shock. Within five minutes, a life of self-sacrifice was over. He was 57.

I wonder whether, two days before his suicide, he had glanced at the headlines declaring that the Nazi army had captured Paris, where he had trained 30 years earlier and where the 64-year-old Joseph Meister -- the same Joseph Meister made famous at age nine when Louis Pasteur saved his life with the world's first rabies vaccine -- was serving as caretaker of the Pasteur Institute. When Meister was unable to prevent the Nazis from entering Pasteur's crypt, he went home, took out his World War I service revolver and shot himself.

Gerry's close friends, Sir Frederick Banting and Charles Best, numbered among his pallbearers at his funeral at Convocation Hall at U of T. Eight months later, Banting, the first Canadian Nobel Prize laureate, perished in a plane crash in Newfoundland at age 49. Less than two years later, in September 1942, Gerry's younger brother, my great-uncle Sidney, a Toronto lawyer, flung himself off a bridge. The youngest brother, my great-uncle Bill, a banker, was treated with electro-shock at 999 Queen Street. His psychiatric file reports that he was depressed by the suicides of his two brothers. These multiple horrors remained buried for decades until, spurred by my father's monolithic, suicidal denial, I dragged them, piecemeal, into the light of day. Among the things I seem to have inherited from my grandfather is a passion for research.

Not long before I began to plumb my grandfather's life, I dreamt that a doctor in a white lab coat took a scalpel and made a deep, vertical incision down the middle of my face, releasing a violent torrent of water. Was it an uncanny, pre-cognitive allusion to my grandfather's lethal, self-inflicted wound? A symbol of the accumulated generations of untapped grief of which I was the contemporary carrier?

Nietzsche, who died mad in 1900, once said that the advancement of civilization depended on cruelty. Despite the exorbitant cost in private suffering, my grandfather left behind a civilizing, public legacy. The Connaught's major global achievements have included, besides insulin: the control of diphtheria (by 1940, the year of my grandfather's death, Toronto and Hamilton became the first cities in the world to be diphtheria-free); the mass production and world-wide distribution of penicillin in the 1940s and the Jonas Salk polio vaccine in the 1950s; and a leading role in the 1970s, together with the World Health Organization, in the conquest of smallpox.

In 1972, the University of Toronto sold Connaught Labs and it was later privatized; the multiple disciplines within the School of Hygiene were broken off and integrated into the various departments of the faculty of medicine. Without a forceful personality to sustain it, my grandfather's unique institutional vision had run its course -- 58 years -- almost exactly the length of his own life. Following take-overs and mergers in the 1980s and '90s, the labs now serve as a division of the Franco-German-owned, multi-billion dollar Aventis Pasteur

pharmaceutical empire. The Connaught name has been reduced to a footnote and the global forces of privatization now threaten the very concept of "public" in the phrase "public health."

Yet in the age of AIDS, public health scandals and bioterrorism, the thrust of my grandfather's life's work seems timeless. The re-emergence of virulent, drug-resistant infectious diseases threatens humanity in new and unforeseen ways. Contemporary public health workers face what seems like a Sisyphean task, analogous, perhaps to the Freudian "Return of the Repressed." Today, that rueful Darwinian maxim – "Mother Nature bats last" – stands heroically confronted by Louis Pasteur's famous dictum: "My strength lies solely in my tenacity."

Whenever I walk past the School of Hygiene on College Street, or find myself on Barton, or drive past the old Connaught farm, I think of my grandfather. When I study the old black-and-white photographs of him, I see a troubled man, a truth-seeker, ruthless, fallible, passionate, repressed, sane, insane, visionary yet blind. From this stranger I never knew, I've learned that the truth itself, like an invisible microbe passed from one person to another, is perpetually elusive, no more or less meaningful than a dream.

I sometimes imagine my grandfather enjoying a peaceful retirement, picnicking with his grandchildren in the natural beauty of the Connaught farm, not "playing to win," just playing. I wonder how he would have viewed the cultural revolution of my own privileged '60s generation, which flagrantly rejected his values of duty and self-denial in favour of sex, drugs, and rock and roll. I like to imagine that a conversation might have been possible between us, as it never was between my father and me.

As for his "unpardonable sin," it remains an enigma. Was it simply guilt over an adulterous affair? Self-contempt for the unmanly stigma of emotional collapse? Failure to attain some impossible standard of moral perfection? A germ of shame that blossomed into a suicide attempt, the shame merely redoubled when the attempt failed?

What animated him when he plunged a knife again and again into his thigh? Did the same thing rise up in my great uncle, when he leapt to his death? Did it take root in my father, the immunologist, when he became addicted to anti-depressants, regularly consuming enough, as one doctor put it, to kill a horse? And when he came home one day, walked past his children, put a sign on his bedroom door that said "Daddy Ded"? What unspoken virulence, what unfathomable darkness, what Irish madness lived in him?

Does it live in me?