Joseph Marshall Flint
and the Whole-Time System at Yale

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In a talk presented in 1922 to the Society of Clinical Surgery, Dr. Harvey Cushing, the eminent neurological surgeon, said that, "Someone has divided mankind into those who deserve a biography and those who do not, the former being subdivided into one- and two-volume people; those entitled to three can scarcely enter into any calculation. Yet individuals or their agglomerations, when too near at hand, are difficult to draw in proper perspective" [1]. Little is known about Joseph Marshall Flint, and little has been written. The records are sparse, his correspondence was not extensive, and other than a memorial account of Flint and his career written by Samuel Clark Harvey in 1944 [2], no biographer has yet come forward to set down his course. This presentation will consider Flint's career in general, but focus primarily on his important contribution to the establishment of the "full-time" system at Yale.

Flint was the seventh professor of surgery at Yale, preceded by Nathan Smith, Thomas Hubbard, Jonathan Knight, Francis Bacon, David Paige Smith, and William Carmalt. Flint, a Hopkins graduate and chairman of surgery from 1907 to 1921, brought Samuel Harvey back to New Haven from the Peter Bent Brigham Hospital where Harvey had been a resident under Cushing from 1914 to 1917, and the Cabot fellow in surgical research at the Harvard Medical School. These three institutions in Boston, New Haven, and Baltimore were inextricably related in those days, and perhaps in these days as well. Three men had come from training at the Brigham to Yale: Samuel Harvey, John Fulton, and William German.
We will begin the story in 1906. Joseph Marshall Flint, chairman of the department of anatomy at the University of California, was in Vienna. George Blumer was professor of medicine at Yale. Harvey Cushing, surgical resident, and William Welch, dean at Hopkins, were in Baltimore. William Osler, Regius Professor at Oxford, was in the West Country. Lewellys Barker, Osler's successor at Hopkins, was in Baltimore. Milton Winternitz was a third-year medical student at Hopkins. David Edsall, professor of medicine at Penn, was in Philadelphia. Abraham Flexner, a former school teacher, was in Berlin. Henry Pritchett, president of the Carnegie Foundation, was in New York. Henry Christian, Hersey professor of the theory and practice of physic at Harvard, was in Boston.

These are the major dramatis personae in a drama about to unfold: the revolution in American medicine. The drama is one of intrigue, cold calculation, destiny, power struggles, old school ties, new wealth vs. old traditions, and, finally, a quantum advance in medical education. The stage is set at the Hopkins, Yale, Harvard, the University of Pennsylvania, and at Washington University in St. Louis. The setting is one of medical education in disarray. Many medical schools were proprietary organizations; standards were lacking. They were poorly equipped, they exploited students. The dean of a certain medical school, when asked to show a visitor his physiology laboratory, said, "If you wait a moment, I'll bring it down," and appeared a few minutes later carrying a sphygmomanometer [3]. Reform was needed and would come about. Natural forces would play roles. The Chicago fire in 1871 and the earthquake and fire in San Francisco in 1906 had significant impacts on the medical institution of Yale College.

The Council on Medical Education of the AMA, under the chairmanship of Arthur Bevan, was hard at work documenting problems of medical education and trying to bring about change. The General Education Board had been established in 1902 with money from John D. Rockefeller. Board members included Daniel Coit Gilman, first president of Johns Hopkins University, Frederick T. Gates, a Baptist minister and friend of Rockefeller's, George Peabody, and the Reverend Anson Phelps Stokes, secretary of Yale University. The Carnegie Foundation for the Advancement of Teaching was established in 1906. Its first president was Henry Pritchett, a native of Missouri who had been professor of astronomy at Washington University for many years and then president of M.I.T. The intricate web being spun—of people, relationships, and institutions—was becoming evident even then. The Johns Hopkins School of Medicine was begun by William Welch, initially the hospital pathologist and then dean, by William Stewart Halsted and Harvey Cushing, all Yale College graduates. From Hopkins to Yale were to come Flint, Blumer, Winternitz, and others.

Joseph Marshall Flint was born in Chicago on July 8, 1872. His father, Francis, and mother, Sara Elizabeth, had come from Flint, Wales. Francis Flint was a mason and contractor with offices in the middle of the present Chicago Loop. The family lived on West Division Street not far from the old Water Tower, the only structure standing after the fire of 1871. Needless to say, a contractor in Chicago at that time must have prospered during the rebuilding of the city. This allowed Joseph Flint to prepare for college at the rather elegant Lake Forest Academy. Many of the academy records were destroyed in a fire in 1946, so all that is known of Flint's early years was that he was president of the literary club.

In 1891 he enrolled at Princeton where he managed the freshman baseball team, was a leader and prominent member of the football team, and editor of the daily
Princetonian. He was also elected to membership in the Tiger Inn. He left Princeton after two years to attend the University of Chicago and received the bachelor of science degree in 1895. Flint stayed on at Chicago for a year of postgraduate study, from which came his first contribution to the medical literature, a paper in the Journal of the American Medical Association, entitled, "Notes on the Distribution of Bacillus Coli Communis." He then matriculated at the Johns Hopkins Medical School in 1896. Although the Johns Hopkins University was incorporated as early as 1867, the medical school was not opened until 1893, some years after the hospital. The president, Daniel Coit Gilman, and his board of trustees, after consultation with President Eliot of Harvard, President White of Cornell, and President Angell of Michigan, decided that rather than merely a college, they wanted a university, an institution in which graduate studies would be emphasized. The establishment in Baltimore of graduate level teaching, as exemplified in the laboratories in Europe of men such as Huxley, His, Ludwig, and Cohnheim, is well known.

One of the prime movers in this inductive type of learning was Franklin Mall who, as we shall see later, can be considered the father of the whole-time system in the United States. Mall stressed the complete devotion of the teacher to the functions of teaching, which he had learned in Germany, and Flint very early on came in contact with Mall.

The Spanish-American war led to interest in tropical disease, and in 1899 President Gilman sent Simon Flexner and Lewellys Barker to the Philippine Islands to study tropical diseases. They were accompanied by two medical students, J.M. Flint and F.P. Gay, who traveled at their own expense. In Manila Flexner discovered the type of bacillus producing dysentery that now bears his name. Flint and Barker also traveled through India, seeing large numbers of people with bubonic plague which they described in several publications. During the trip Flint and Gay had extensive discussions with Flexner and Barker, both of whom had been students of Mall. Flint received his M.D. degree from Hopkins in 1900 and promptly went abroad to Leipzig on Mall’s recommendation. Ludwig had died, but His was still there, as were Spalteholz and Trendelenberg. Concurrently, Lewellys Barker was offered the professorship in anatomy at Chicago. He planned ultimately to work in internal medicine, but Mall strongly recommended he take this chair initially to be better prepared for entering clinical medicine. Flint, having already decided to pursue a career in surgery, was also advised to begin in anatomy and went to Chicago with Barker in 1901. The stay was short, however, for Flint was offered the chair in anatomy at the University of California, which he accepted. In 1902 he served on a commission to study the establishment of a university hospital in San Francisco, having had considerable experience and background from his relationships with Welch, Barker, and others at the Hopkins. Also on the commission was Moffitt, for whom the hospital was named. He reorganized the anatomy laboratories and course of study, reporting this in the Bulletin of the Johns Hopkins Hospital in 1905.

The department of anatomy at California had been endowed by Mrs. George Hearst, widow of Senator George Hearst who had made a fortune in mining in the West (the Anaconda and other mines). Following the senator’s death in 1891, Phoebe Apperson Hearst, a native of Franklin County, Missouri, engaged in numerous philanthropic activities including formation of the PTA, was a well-known patron of the arts, a feminist, and a regent of the University of California. Flint met Mrs. Hearst’s niece, Anne Apperson, who had been reared by Mrs. Hearst at the Hacienda del Pozo de Verona, her estate near Pleasanton across the Bay from San Francisco.
Anne's parents managed the Hearst ranch at San Simeon. In 1903, Flint and Anne Apperson were married. Flint took a leave of absence from the University of California in 1905 to prepare for his transition from anatomy to surgery and studied in Bonn, Munich, and Vienna until 1907.

After the turn of the century, the fortunes of the school of medicine at Yale were at low ebb. As recounted by Dr. Vernon Lippard, "Yale was lagging behind; poorly supported by the university morally and financially, a school which had stood among the best was losing ground rapidly. The Corporation was faced squarely with the decision whether to continue operating a good liberal arts college with loosely appended graduate and professional schools, or to become a university in practice as well as in name" [4]. The endowment of the medical department was a meager $100,000. The University provided only a few thousand dollars from its endowment per year, and the best paid professor earned $2,000.

On April 18, 1906, the earthquake struck San Francisco and was followed by fire and destruction of much of the city. The minutes of faculty meetings of the University of California during that period mention Flint's correspondence from Europe expressing concern for the school and regrets about the hospital, which had been destroyed. George Blumer was at that time an assistant in medicine there. Born in England, Blumer attended Cooper Medical College and then went to Hopkins, joining Welch in pathology, later taking the post in medicine at California. Harvey Cushing may have played a role in suggesting that Blumer come to Yale. He wrote President Arthur Hadley, "There is no one who could do more for the School than Dr. Blumer, and all Yale men must feel that they are to be congratulated upon acquiring such a man. It is a bad earthquake that does not shake down golden fruit for someone" [5]. Since there was no longer a hospital in San Francisco following the
quake, Blumer accepted the position at Yale and came to New Haven, having worked with Osler and Halsted, Welch, Flexner, and Barker. He became the John Slade Ely professor of the theory and practice of medicine in August 1907, and dean in 1910.

William Carmalt, then professor of surgery, was hoping to step aside from his post. President Hadley, dean of the medical school Herbert Smith, and Blumer made a concerted effort to recruit Harvey Cushing from Hopkins to New Haven by appealing to his loyalty as a Yale graduate. Cushing at that time was being recruited to Boston and the Peter Bent Brigham hospital, then under construction. Washington University in St. Louis also sought him. His perceptive review of the situation in New Haven is found in his letters: "Dear Professor Smith, In the first place, let me congratulate you on having acquired Blumer. In regard to the matter of the surgical appointment, I gather from your letter that there are good prospects of a continuous service to the holders of the medical and surgical chairs in the New Haven Hospital, but that this cannot be assured until the Directors' meeting in January. I do not quite see, therefore, until the assurance of such a service is a certain one how I can make any promise about the position. . . ." [5].

Cushing wrote later in March 1907 to J. Sanford Barnes, "I have had a pleasant visit from Anson Stokes [Secretary of the University] and have endeavors to make clear to him what the needs of the School really are if they wish to put it on a proper modern basis. It is possible they may be able to bring about these changes at an earlier date if I hold off than if I accept the position now, while their plans in regard to the School are somewhat visionary."

Also he wrote to Mr. Stokes, "It not only was a great pleasure to have seen you but what you told me about New Haven matters has done much to strengthen my belief that in time they will do the right thing by the Medical Department there. . . . Sincerely, Harvey Cushing" [5].

The hospital did not see fit to provide a continuous service and such was not forthcoming for a prolonged period. Therefore the university moved on in its search for a surgeon. We find then a letter from Joseph Marshall Flint from Vienna on May 14, 1907, to President Hadley: "My Dear Sir: I wish to acknowledge your letter of April 15, with its cordial concurrence in the action of the Medical faculty in offering me the chair of surgery in the University. The invitation to join your circle has been deeply appreciated and I am considering the matter very seriously. Naturally at this distance a decision is difficult to reach, specially as I have no means of consulting President Wheeler [President of the University of California], so much so in fact that I am bending every effort to sail for America at the earliest possible date in order to have an opportunity of conferring with you and the members of the medical faculty in person. Very sincerely yours, Joseph Marshall Flint" [6].

Little did President Hadley realize then that he and Dr. Flint would have considerable correspondence over the coming years, back and forth from Europe, and related usually to how quickly, if at all, Flint could get back from his European excursions. Flint proceeded quite directly to Baltimore to consult with his mentors, including Halsted. We find on June 20 a cryptic message from Flint to Hadley, accepting the position:

Baltimore, Maryland

June 20, 1907

President Arthur Hadley, Yale University, New Haven, Conn

"Will accept call"

Joseph Marshall Flint

[6]
There is no evidence to indicate Flint visited New Haven before accepting appointment.

Four days after receipt of Flint’s telegram, the Corporation voted to appoint him at a salary of $4,000. At such time as Professor Flint would take office, Professor Blumer’s salary was to be increased to the rate of $4,000 per year as well. They also voted to pay $4,000 for the director of the gymnasium. On November 7, 1907, appropriations were made from university income not to exceed $8,500 for alterations, additions, furniture, and equipment for new laboratories at 321 Cedar Street across from the New Haven Hospital, to be used by the professors of surgery and medicine [7]. This was the first clinical experimental laboratory established in the medical school. The school at that time was on York Street, so the establishment of laboratories and an address on Cedar Street brought it close to the hospital.

Flint began work in New Haven in January 1908, having been appointed attending surgeon at the New Haven Hospital, and chief of surgery at the New Haven Dispensary on York Street. It is of note that he was not made chief of surgery at the New Haven Hospital—that didn’t come until later. In 1907 the beds and patients available for teaching medical students in surgery were only 18 in number, representing one-fourth of the total service beds, the remainder jealously guarded by nonteaching members of the hospital staff. Students were allowed on wards only during the quarters when the professor was actually attending on service. Flint’s coming was anything but a welcome or peaceful one. He represented innovation, a professor of surgery who had a rigorous background in basic science and anatomy. Little is known of his struggles in those early years.

In 1913 Dr. Flint became surgeon to the Arsakelon military hospital during the Greco-Bulgarian war. The possibility that he was drawn off to Europe and wars by an interest in wounds is not supported by his experimental and anatomic interests. Relationships with the hospital, however, were strained at best and one can only assume that going off to Europe to military hospitals gave Flint the surgical involvement so necessary for a surgeon, and denied by the hospital relationship. In 1915 we find him back in Europe again as chief at Hospital No. 32, the Hôpital de Français in Passy par Veron. The exchange of telegrams depicts the situation fairly well.

WESTERN UNION CABLEGRAM

PRESIDENT HADLEY

YALE UNIVERSITY NEW HAVEN SEPTEMBER 14, 1915

“JUST REC'D TRAINLOAD SERIOUSLY WOUNDED CANNOT LOCATE SUCCESSOR IN FRANCE MAY PRINCE AND I SAIL TWENTY-SIXTH ARRIVING FEW DAYS LATE NO ONE IN HOSPITAL COMPETENT TO TAKE DIRECTION IN SUCH A SERIOUS PREDICAMENT NECESSARY TO HAVE ANSWER IN TWENTY-FOUR HOURS TO CATCH STEAMER”

FLINT

VERON, FRANCE

HADLEY SEPTEMBER 16, 1915

YALE UNIVERSITY NEW HAVEN CONNECTICUT

YOUR LETTER RECEIVED GRACE CRISIS RENDERS URGENT OUR REMAINING TWO MONTHS URGE YOU TO CONSENT IF ARRANGEMENT IMPOSSIBLE NOTIFY US IMMEDIATELY SO THAT WE CAN SAIL 25TH ABOVE BY ORDER OF MY CHIEF

FLINT 10 PM
Finally, by November of 1915, Hadley was worn down. He stated in a letter, "My Dear Flint: We shall be very glad to see you when you do come home. We are rather short handed this year with the absence of several of our men." From Veron on November 21, 1915, Flint cabled again to Hadley: "SUCCESSEUR JUST ARRIVED SAILING TWENTYSEVENTH" [6].

Flint was back in New Haven in 1916 and corresponding with President Hadley about salaries. In 1917 he submitted an outline of a plan to organize a Yale mobile hospital unit for the war effort [8]. There was a general desire on the part of the medical school to render the maximum service to the country at the time.

In 1918, therefore, Flint returned to France with Mobile Hospital No. 39, American Expeditionary Forces, France, the Yale Unit. He wrote President Hadley, "I feel very chagrined that so long a time has passed without my being able to acknowledge your commencement cablegram with your felicitations and good wishes for the unit. Permit me to express my appreciation . . . and allow me to congratulate you on the great success of the entire Medical School program which is a matter of genuine gratification to me. I believe the opportunity before Yale and medicine is now unequaled in the country. With cordial greetings to Mrs. Hadley. Believe me. Very sincerely yours" [6].

To understand the significance of his words, we must go back to the revolution in American medicine. The origin of a whole-time concept for clinicians goes back to the winter of 1885, when Franklin Mall was working with Carl Ludwig in Leipzig. The old man confided to Mall that he had one final dream, that of placing clinical medicine on a university basis with clinical professors as well as preclinical faculty devoting their full time to research rather than engaging in private practice on the side. Mall remembered this and discussed it with his students in Baltimore. Then in 1902 Barker, a former student, delivered an address at the meeting of the Western Alumni of Johns Hopkins University in Chicago. "If so much can be accomplished under adverse circumstances, what might not be done by such men if the subjects of the last two years were placed upon a real university basis. I should like to see what the result would be if men with these capacities were bred to university careers, or placed in charge of hospitals especially constructed and endowed for university purposes, and were sufficiently paid to permit them to devote their whole time and strength to teaching and investigation in such hospitals."

Of critical importance is the recognition that all of the ingredients which Barker described must be present for such a system to prosper. So many of the troubles which occurred in coming years resulted from trying to institute such systems without all these criteria present or available. Barker went on to say, "In the first place a very large sum of money would be required, for the university would have to build and equip hospitals of its own, arranged on an entirely different plan from that adopted in ordinary charity hospitals" [9].

Thus the rallying cry for a whole-time system had been sounded. In 1905 Barker left Chicago to become Osler's successor at the Hopkins. Meanwhile, Pritchett and the Carnegie Foundation became interested in the quality of medical education after being contacted by Bevan and the AMA. Flexner in 1907 had gone to Heidelberg where he was writing a book on his experiences, The American College, a sweeping indictment of college education in the United States which fell flat following publication. Flexner had attended Johns Hopkins University and after graduation opened Mr. Flexner's School in Louisville, Kentucky. He prided himself on his stern approach and seemed to enjoy the statement of some students who said, "You are a Tsar." Flexner sought a job from Pritchett and was assigned the task he began in
1908, a survey of medical education in the United States which led to publication in 1910 of *Bulletin No. 4* of the Carnegie Foundation, "Medical Education in the United States and Canada." This report, later known as "The Flexner Report," began the well-known revolution of medical education, forcing the closing of many proprietary schools and an overall revamping of others.

The success of *Bulletin No. 4* led to Flexner's commission from the Carnegie Foundation to study medical education in Europe. In Munich he met Professor Mall, on sabbatical from Hopkins. Together they visited laboratories, clinics, and lectures. Flexner reports, "The chapters dealing with medical education in Germany were profoundly influenced by Mall's apparently unconscious comments, criticisms and suggestions" [3].

In 1911, Frederick Gates of the General Education Board asked Flexner to lunch. He indicated he had read *Bulletin No. 4* from beginning to end and felt it was not only a criticism, but a program. Mr. Gates asked Flexner what he would do if he had a million dollars with which to make a start in the work of reorganizing medical education. Flexner, a loyal Hopkins graduate, friend of Welch and Mall, replied that he would give it to Dr. Welch at Hopkins. Flexner then went to Baltimore seeking Welch. During dinner at the Maryland Club he asked Welch, Mall, and Halsted about the uses to which the income from a million dollars could be put. Mall immediately spoke, "If the School could get a sum of one million dollars, use every penny of its income for the purpose of placing upon a salary basis the heads and assistants in the leading clinical departments, doing for them what the School did for the underlying medical sciences when it was started. That is the great reform which needs now to be carried through" [3]. At that time Halsted, Kelly, and Barker received nominal salaries of a few thousand dollars annually from the University, and made their living by practice.

Flexner points out in his autobiography, *I Remember*, "I have often been credited with the authorship of what is called the full-time scheme, but I am entitled to no credit whatsoever. It did not originate with me and is not mentioned in either *Bulletin No. 4* nor *No. 6*." Flexner urged that $1,500,000 be given to Johns Hopkins for the purpose of reorganizing upon the full-time basis or, as Dr. Welch preferred to call it, "the University basis," the medical, surgical, obstetrical, and pediatric clinics. Gates accepted, and word was sent to Welch that if a formal request were drawn up from Hopkins the money would be forthcoming. The trustees of the university endorsed the plan along with Welch, subject to ratification by the medical faculty. Within the medical faculty the scheme was unanimously endorsed by the laboratory men, but there was a rift among clinicians. Dr. Welch made no overt endeavor to push the idea. Every member of the medical faculty had a copy of the report, and Welch bided his time. The situation was complicated by the fact that a copy of the report was also sent to Dr. Osler, then Sir William Osler, at Oxford, and his opinion was adverse. Flexner became perturbed about the inactivity over the decision and wrote Mall asking why Welch "doesn't either shoot or give up the gun." Other references to the letter, which can no longer be located, were that it was a much more biting document.

There was skullduggery going on at Hopkins. On April 21, 1910, on Maryland Club stationery, Welch wrote: "Dear Winternitz: I am much disturbed to find that a pile of confidential printed documents was unpacked by Joe and left on my desk in the laboratory and at least four of them have been taken, and possibly several persons may have been reading them. It is a most unfortunate occurrence as the matter to which the documents are related is at present of an entirely private and confidential nature. Very sincerely yours, William H. Welch" [5].
Part of the conflict at Hopkins was because of Mall. Many felt his inductive method of teaching anatomy left the student ignorant of regional anatomy and forced surgeons to offer instructions of their own. The statement, "Mall failed the men," was common in Baltimore. But this kind of failure Mall took pride in, because he felt he was setting anatomy free from its old subservience to medicine. He wanted to be a man of science and a teacher of scientists who would have to make their own accommodation to practical medicine. At that time Gertrude Stein was a medical student at Hopkins. She was good at science but had no vocation for medicine and Mall, of course, was her favorite instructor. Mall did not meet with total hostility from the clinical men because, for some reason, William Stewart Halsted became his best friend and supporter. Osler never attempted to conceal his concern for the inductive method of teaching anatomy and always deplored in private the remoteness of Mall and Halsted from the students, their elevation of research above teaching and science above medicine. Thus the lines of battle had been drawn at Hopkins long before.

Osler described "the whole proposal as utopian" and resented the implication that the clinical professors had made themselves rich. He deplored the effort to shrink the clinical men to the dimensions of the laboratory. "What would the School have been if the clinical men had not been active in the local and national societies? Would whole-time men have the same influence in the profession at large? I doubt it" [5]. Within several years, however, the faculty was converted. Barker quit and agreed to accept a clinical professorship. Halsted, who was independently wealthy, was enthusiastic. The appropriation was made in 1913.

Following the initial success in Baltimore, the General Education Board decided to devote its total resources to development of full-time clinical programs throughout the United States. Therefore, Flexner set out for other fields to conquer and the next two were Washington University and Yale. Robert Brookings, a prominent St. Louis industrialist, had taken a hand in reorganizing the Washington University school of medicine along with Barnes Hospital. Pritchett, a former professor at Washington University, had a particular interest in this school. David Edsall, professor of medicine at the University of Pennsylvania, was slated to go to Washington University to help institute the new full-time system. There would be a $750,000 endowment from the GEB and Harvey Cushing was considered to go there in surgery. The whole scheme broke down because of some treachery at the University of Pennsylvania where Edsall was offered a position to stay. The chairman of surgery at Washington University, Fred Murphy, recently arrived from the Massachusetts General Hospital, felt incapable of conducting his department on purely academic lines and resigned.

Meanwhile in New Haven, Blumer and Flint were hard at work. Anson Phelps Stokes, secretary of the university, as a member of the General Education Board made an attempt to get an oar in for Yale early on. The GEB offered Yale $500,000 if they would develop a satisfactory relationship with the New Haven Hospital, would raise an additional endowment of $1,500,000, and would institute a full-time system. A committee to study the future relationship of the hospital and the medical school reported back in 1912 proposing an agreement whereby the Yale medical school would nominate the New Haven Hospital's attending physicians and surgeons and organize the hospital wards for teaching medical students. In return for these privileges, Yale University would agree to build, equip, and staff a modern pathologic laboratory and endow it for a total of $600,000. This interesting sequence occurred in a period of one year: Johns Hopkins received $1,500,000. Washington University
received $750,000. Yale received $500,000. The Yale Corporation voted that the departments of anatomy, physiology, pharmacology, pathology, medicine, surgery, and pediatrics be organized on the full-time basis and that complete teaching and medical control of the New Haven Hospital be procured by the Yale Corporation. Thus Yale was to receive one-third the money that Hopkins received, but put twice as many departments on full time. The Yale Corporation then realized, however, there would be an increased expenditure of about $42,000 a year and the offer from the General Education Board would not cover it. Friends of Yale were urging them on.

Sir William Osler wrote in 1913, after a visit to Yale, “You could do at Yale what is done at Heidelberg and other German universities to have a medical school as good as there is” [5]. William Welch wrote that he thought there was room for a second important medical school in New England. Harvey Cushing wrote in 1914, “The continuance of the school on the old basis is impossible and this status has been a humiliation to all loyal Yale men who have been aware of the progress in medical education elsewhere” [5]. Osler also remained in the fray about the whole-time question, and wrote in 1915, “The burning question to be settled by this generation relates to the whole-time clinical teacher who has been forced on the profession by men who know nothing of clinical medicine and there has been a 'mess of potage' side to the business, in the shape of big Rockefeller checks, at which my gorge rises. To have a group of cloistered clinicians away completely from the broad current of professional life would be bad for teacher and worse for student” [5].

Relationships with the hospital in New Haven were not helped by Francis Bacon. Bacon had resigned from the chair in surgery at Yale many years before, believing there was no future for the medical school, going then to work at the New Haven Hospital where he largely dominated its policies for years. He left an estate valued at $713,000 in 1912, a legacy originally intended to be split between the New Haven Hospital and Yale University. When Flint came to Yale in 1907, however, Bacon put a third codicil to his will which practically cut off the New Haven Hospital. The Evening Post in New York reported, “The tenor of Dr. Bacon's long will and several codicils indicate that he was opposed to the close union of the New Haven Hospital and the Yale Medical School, feeling that the School would make the Hospital an institution of medical education rather than one of charity.” Many wealthy alumni, particularly in Boston and New York, had serious concern about continuing the medical school in New Haven and had the general impression that the Yale medical school was a lame duck, rather a hindrance than anything to the university.

A formal fund-raising drive began in 1914. The Bradys gave $600,000. Gifts came from Charles and Edward Harkness, and two million dollars was obtained to begin the whole-time experiment instituted in 1919. For a very brief period the new system seemed to work well; however, by 1920, the New Haven Hospital ran out of money. It became apparent also that the hospital was the target of an informal boycott by local New Haven physicians who resented their exclusion from the public wards and were diverting their patients to other hospitals. The GEB could not allow the new full-time scheme to collapse because they knew it would be fuel to the fire of opponents to the plan. They therefore gave the income on one million dollars each year to the Yale medical school which the school would turn over to its teaching hospital.

During this period Harvard made at least three separate applications to the GEB for support for development of its medical school. All were turned down because Harvard was not willing to institute the strict full-time system. Harvard president Charles W. Eliot wrote in 1917, “The authorities of the Harvard Medical School
regard the full-time policy as a great improvement in clinical teaching, but they believe that in its most intelligent application it will permit the continued employment as teachers of men who accept private practice as well as hospital practice" [3].

In Dr. Cushing’s papers we find the following verses written by a patient who had had a surgical operation at the Hopkins: “Dr. Halsted doesn’t care. Dr. Finney isn’t there. Dr. Follis doesn’t dare.” Cushing was not enamored of the complete full-time plan. Upon retirement as surgeon-in-chief he wrote in the 18th Annual Report at the Peter Bent Brigham Hospital in 1931,

Someday an impartial and unabridged history will be written of the important movement that has come to be known as the full-time plan for clinical departments. Meanwhile in 1912, Dr. Christian and I in full accord with the general principles of a whole-time service were in the process of coming to a working arrangement with the Board of Incorporators of the Brigham Hospital. So it came about that we were the first clinical teachers so far as I know who desired and were permitted to give their undivided attention to the work of a teaching hospital and to confine their professional activities within its walls. In so doing, we were to have the privilege of accepting fees from patients who might consult us during such hours as we felt justified in setting aside for this purpose.

Our self-imposed program, however, was not permitted to stand unchallenged. In October 1913, after some overtures, the General Education Board offered to give the Harvard Medical School $1.5 million, provided the chiefs at the Brigham Hospital would agree to serve as full-time officers. The medical school was then in debt and the promise of financial relief would have been a veritable windfall, but I never could convince myself that those here who have pressed us to accept the restrictions imposed by the gift were interested as much in the principle involved as in securing the gift.

I think some awfully bad mistakes have been made and so far as I know, Henry Christian and I are the only reasonably happy people in the country who are on a full-time arrangement. If you want some really illuminating information, someday go and talk to Mrs. Halsted. Happy full-time people on the Flexner basis are either bachelors or people of independent means.

Cushing then tried to get things organized. He called a meeting of the American Surgical Association. “It seems to me the wisest thing to do would be for us to have a meeting uninfluenced in any way by the Rockefeller Foundation. It is true enough that many of these men can ill afford to go away to meetings owing to their small salaries, but that is one of the penalties of adherence to Mr. Flexner’s program” [5].

Coming full circle, we find James Rowland Angell writing in 1933 from the office of the president of Yale, “Dear Dr. Cushing: Believe it or not, I have just read with huge delight your unorthodox but inspiring swan song. I particularly enjoyed your mordant analysis of full-time—Cushing’s vs. Flexner’s—and I wondered how many readers will get the full flavor of the references to Barker. You convey wittingly or not an erroneous impression, I think, as to Abe’s position in the GEB. When the Board created sections, Abe was made director of medical interests, but I think your statement would lead the casual reader to suppose he became head of the Board which he never did, despite his eager desire” [5].

All was not quite so idyllic at the Peter Bent Brigham. Henry Christian, chief of medicine, wrote Cushing in September of 1922, “Dear Harvey: As far as medicine is
concerned, there is now a pretty even division both of work and money between the three hospitals. The MGH has some excess, perhaps, owing to Edsall's much larger salary. Edsall's excess salary over mine is I think quite unfair." He then sent out a formal announcement, "Dr. Henry A. Christian begs leave to announce that having arranged to curtail the time devoted by him to teaching work in the Harvard Medical School, he will resume consultation work in internal medicine on October 1, 1922" [3].

In 1919, the various changes brought about in New Haven were beginning to take their toll. Dean Blumer wrote the Board of Permanent Officers indicating he was not willing to come up for reelection as dean, saying, "It is clearly apparent that we are not pulling together and the School will not prosper until we do pull together. There is all the difference in the world between a team of stars and a star team.... The enormous waste of time and energy involved in the mere administration of education sapping the strength of the men who should be devoting their time to teaching and research seems to be little less than criminal." Blumer resigned announcing his intention to reenter private practice in New Haven. He stated, "I am resigning not because I disapprove of the full-time plan, but because I am anxious to see it given a fair trial under the best possible conditions." At that time Joseph Marshall Flint had returned from Europe but, due to fatigue from the battles, went on to McCloud, California. Flint had a residual pulmonary infection and never seemed afterward to regain his strength fully. He received the Distinguished Service Award in 1919 for his outstanding efforts during the war. In that same year, Anne Apperson Flint received from the estate of her Aunt Phoebe $250,000 along with her summer home, Wyntoon, on the McCloud River in California. Later in the term, Flint was back in New Haven, exchanging terse letters with Blumer. Flint wrote, "Dear Blumer: I suppose our conversation last night will do in lieu of a reply or opinion about the meetings of the Board of Permanent Officers. It is practically impossible for me at this time to reply to your request about the part of the budget next year which relates to salaries, owing to the fact that I do not know what shifts will be necessary on account of the uncertainty of Harvey's position." Blumer responded, "Dear Flint: I think it is highly improbable that the University will have any change of heart with regard to the amount of money that we are to be allowed" [10].

On February 2, 1921, at the age of 50, Flint submitted his resignation to President Hadley. "Dear Mr. Hadley: As you know, I have felt ever since my return from France, physically unfit to bear the responsibility for the conduct of my department and I desired in consequence to resign. In response to the wishes of my colleagues and Dr. Murphy, I have twice allowed myself to be dissuaded from this step on account of the critical condition of the Medical School. Its affairs have reached a stage in the reorganization, however, where I feel free to consult my own wishes. I beg you, therefore, to transmit my resignation to the Corporation to take effect at the end of the present academic year. May I take this occasion to express to you my deep appreciation of your unfailing courtesy during my fourteen years of service to the University. Very sincerely yours. . ." [11].

It was voted that the following resolution be spread upon the minutes of the Board of Permanent Officers in 1921: "The faculty of Medicine have learned with deep regret of the resignation of Dr. Joseph Marshall Flint from the Chair of Surgery which he has so ably and faithfully filled since 1907. Coming to this University with a broad and thorough scientific training and with high ideals Dr. Flint became the original full-time professor and has done great service, both by precept and by
example in upholding high standards of teaching, research and practice. He has always shown great tenacity of purpose and devotion to principle. Whatever the success the Yale School of Medicine may have in the future will have been made possible by the loyalty and steadfastness of Dr. Flint and Dr. Blumer whose joint service at a time of great stress succeeded in tiding over the crisis that economic conditions and new developments in medical education have brought on. The faculty desire to place on record their high appreciation of Dr. Flint's service to the University, to the nation, and to science, and express their keen sense of loss at his leaving."

Harvey Cushing was asked to organize a retirement dinner for Flint. To James Rowland Angell, president of the Carnegie Foundation and then recently named next president of Yale, he wrote, "My Dear Mr. Angell: May I introduce myself to you as a Yale man of ancient vintage who has been called upon to preside at a dinner to be given in New Haven for Dr. Joseph M. Flint on his retirement, but also to give the Yale Medical School a real boost which they need very much just at this time. If the two young men, Dr. Blake and Dr. Harvey, who are to take charge of the medical and surgical departments, can be made to feel that the Yale alumni in medicine are really behind them and the same thing is even most true of the hard working and enthusiastic dean, Dr. Winternitz, the occasion will be more than worthwhile. I have asked a few men to come and speak, among them Dr. Welch, Secretary Stokes, B. Harrison, Simon Flexner. If you could by any possibility be present it would insure the success of the occasion" [5].

Angell responded, "Dear Dr. Cushing: I wish I might send an unequivocal response. Unfortunately, I am setting out for an extended trip on the following day. . . . I may say that the Medical School is one of the great divisions of Yale in which I feel the most vital interest. I am sure that it contains possibilities to the greatest usefulness and I am very eager that it should be given every opportunity to demonstrate its possibilities" [5].

To this Cushing responded, "Dear Mr. Angell: I am glad to have your note and greatly hope that you will be able to come. I only venture to suggest your presence because it would be an indication to everyone that you are likely to have a more lively interest in the Medical Department than it has received in the past" [12].

Dr. and Mrs. Flint stayed on at Wyntoon until 1923, when they left for Switzerland, remaining there until the beginning of the war. In October 1922, Flint had written Yale's ticket office for two tickets to the Harvard-Yale game in Boston. While in Switzerland he studied and wrote, documenting his own illness carefully. At Yale's request he represented the university in 1937 at the 400th anniversary of the University of Lausanne. In the mid-thirties he wrote a paper entitled, "John Quincy Adams of Vienna," published in the American Magazine of Art. Adams, who painted the portraits of Mrs. Flint and Dr. Flint which are here at Yale, was well recognized at the time.

Flint's last paper was "The Effect of the Macallum-Laughton Extract on Marked Hyperglycemia in Hypophyseal Diabetes." In 1940 he wrote to Dr. Morris Slemmons in Los Angeles, "I know really nothing about the Yale situation except occasional comments that have come to me from time to time. I gather that the increase of endowments for cancer and the Institute of Human Relations leaves the central structure of the medical faculty comparatively impoverished. The situation appears to be what it was in our days" [8].

In 1942 Flint gave his medical library to the Yale medical school. It is an impressive
collection containing many wonderful original anatomy studies including that of Cloquet's six-volume *Anatomy of the Human Body*, Duclaux's treatise on microbiology, Bartholin's *Anatomy*, Eustacchio, Hister, Kusmall, Larrey, Malpighi, Morgagni, Paracelsus, Scarpa, Valsalva, Velpo, Virchow, and the wonderful volume of Vesalius.

Joseph Marshall Flint lived until 1944, twenty-two more years, during which time he and Mrs. Flint traveled extensively throughout Europe, carrying on a full and active life. Although his health was not perfect—he suffered from an unusual form of diabetes—he was able to live fairly normally. One wonders what influences the institution of the whole-time system, the university budget, and his and his wife's inheritances may have had upon his early retirement.

Earlier he had written Earl Trimmingham in Pleasanton, California, saying that he and Mrs. Flint had been thinking of the beautiful California redwoods and decided they would like, when they died, to have their ashes buried there, if Mr. Trimmingham would take care of it. Flint died at Seal Harbor, Maine, in 1944 at the age of 72. Some time later his ashes were delivered in an urn by parcel post to the Trimingham's where they remained in a closet until, as Mrs. Trimmingham recounts, "I kept them until the next time Mrs. Flint came, which was at least a year." Then Mrs. Flint, her companion, Alice Maurer, and Mr. Trimmingham took the remains up into the California redwoods where Dr. Flint's ashes were deposited near the Smith River.

Mrs. Flint was in her nineties when she died in 1972, leaving her estate of approximately two million dollars to Yale, Princeton, and the University of California. A number of art objects and personal possessions were given to the Yale art museum. Funds from her estate established the Joseph Marshall Flint Foundation and provide visiting professorships in medicine or science.

Joseph Marshall Flint was the original whole-time professor at Yale. He initiated the residency system at the New Haven Hospital. He first brought a background of basic science to the clinical area. He was first to institute a laboratory, do research, and include this in the curriculum for students and residents. He truly set the stage for development of the medical school in its present form. In a letter to a colleague, he said, "My own feeling is that the really difficult part of the job has been done. The ground is plowed and all that it needs is the proper kind of planning and cultivation to bring about the fruition of the years of labor that you have invested in the School" [8]. The erection of the Sterling Hall of Medicine and accommodations for anatomy, physiology, physiological chemistry, and pharmacology came about shortly after this. An incidental effect of this exciting development was the tearing down of the surgical laboratory which had survived since 1907.

As for the whole-time system, we turn now to Samuel Clark Harvey's report to the dean, Milton C. Winternitz, on the department of surgery for the years 1920 through 1935: "Dear Winter: This cursory summary may carry two impressions. One is that of a complicated organization which brings the responsibility for administration to a peak in the office of the chief surgeon and head of the Department of Surgery. Such a setup has many advantages which are apparent and indeed cannot, I believe, be dispensed with. It is an unexpected result of the introduction of the full-time system, which has served to replace the expenditure of time previously employed in private practice, by an equivalent or greater detachment of time from professional pursuits for the purposes of administration. As a result, the person holding this position becomes in large part an administrator and far removed from the clinics, teaching and research. The defect is obvious, but the correction of it to my mind not at all apparent" [13].
Nor, to my thinking, and that of Dr. Harvey and Dr. Flint; but we will struggle on with it.

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