

## **Obstetrics and Gynecology at the University of Iowa: Three leaders and 51 years**

Roy M. Pitkin, MD<sup>1</sup>

In his history of the Department of Obstetrics and Gynecology of the University of Iowa College of Medicine,<sup>1</sup> William C. Keettel traced the evolution of the department from its origin in 1870 until 1980. This article will focus on a particular segment of the department's history, that from 1926 to 1977, in which the department grew and developed to a position of national stature. During this 51-year period, departmental leadership was provided by three individuals, E. D. Plass (1926-1951), John H. Randall (1952-1959), and William C. Keettel (1959-1977) and this paper will consider these three men and their contributions to the department's growth and development. The 1980 department history provided most of the basis of the article, although a small amount of the Randall section and a substantial amount of the Keettel section reflect my personal perspective and recollections.

### **E. D. PLASS**

Everett Dudley Plass was born in 1886 in Poughkeepsie, New York. He disliked his first name and avoided it assiduously. For official usage, he

avored the initials and friends and family called him "Dudley" or sometimes "Ed" (apparently a contraction of his initials). He chose Colgate University for his education, graduating in 1907, and then went on to medical school at the Johns Hopkins University. Hopkins was arguably the nation's premier medical school and his acceptance there must have reflected an outstanding academic record in college. His performance in medical school must have also been strong, for upon graduation in 1911 he obtained a much-coveted internship at the Johns Hopkins Hospital.

Hopkins at the time had separate programs in obstetrics and gynecology. Obstetrics was headed by J. Whitridge Williams, a powerful personality who dominated the field nationally by virtue of his research, his influential textbook, and most importantly the number of academicians he trained. Williams obviously saw indication of something special in Plass. The modern concept of residency training in a specialty actually originated at Hopkins and the young man, upon completion of his

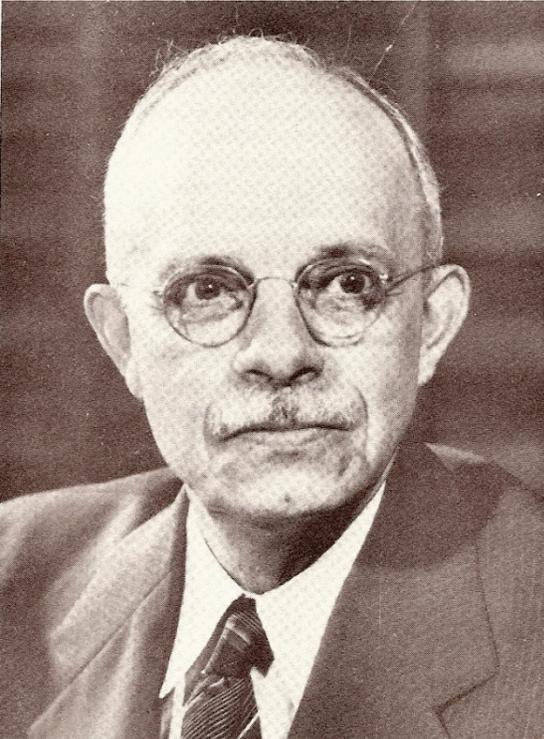
<sup>1</sup>Professor Emeritus, David Geffen School of Medicine at UCLA, Los Angeles, CA

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**Corresponding author:** Roy M. Pitkin, 78900 Rancho La Quinta Drive, La Quinta, CA 92253, Telephone 760-564-6373, e-mail [r.pitkin@earthlink.net](mailto:r.pitkin@earthlink.net).

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internship, was accepted as Assistant Resident of Obstetrics. His training included a year of gynecology, which he served at the Sloane Hospital for Women in New York.



**E. D. Plass**

### **World War I and the Aftermath**

As Plass neared the end of his residency program, the likelihood of U.S. involvement in World War I was building and, ever the patriot, he volunteered for military service. Commissioned in April, 1917, he left immediately for Europe in a group representing the vanguard of the American Army that would cross the Atlantic over the next 18 months. Once in France, he was assigned on loan to a combat medical unit of the British Army and served near the front. After a few

months, he was posted to an American Red Cross unit working mainly with civilians and then, in the summer of 1918, he was ordered to a mobile field hospital of the U. S. Army, where he served until the war's end in November.

He was discharged from the Army in France on March 1, 1919. Williams had offered him a faculty appointment at Hopkins, but Plass decided to delay his return to the United States to join an American Red Cross Mission to the Balkans to aid in reconstruction of that area where World War I had its roots. He served as medical director of the mission, mainly in Albania, and was involved in constructing and opening a hospital. Two events during his time in Albania would have influences on the remainder of his life. First, he met a nurse, Lillian Genrich of Rochester, New York, who he would later marry. Secondly, it was almost certainly during this time that he contracted pulmonary tuberculosis, a disease endemic in Albania, although the diagnosis would not be made until after his return to the United States. Parenthetically, he would participate in a similar mission to Eastern Europe following World War II, as described later.

### **Return to Hopkins and then a Sojourn to Detroit**

Plass joined the Hopkins faculty in October 1919. He and Miss Genrich planned to be married shortly thereafter but a chest x-ray indicated a "slight lesion at the right apex." His sputum was negative and would remain so until the disease broke down many years later. There must have been

considerable consternation, but the couple went ahead with their wedding plans. They were married on November 26 and the newlyweds immediately entrained for the sanatorium at Saranac Lake, New York for a combination honeymoon and “treatment” of tuberculosis, the latter consisting mainly of bed rest, open air, and healthful diet.

He returned to Williams’ Department of Obstetrics in May 1920. His academic career began to blossom and promotions and salary increases followed regularly. A daughter was born, the birth attended by J. Whitridge Williams. In 1922, Plass was being recruited by the Henry Ford Hospital in Detroit and about the same time an overture came from the University of Rochester, which was planning to open a medical school. Both involved leadership positions, but the former was more a private, non-teaching position whereas the latter was purely academic. Plass eventually accepted the Detroit position, mainly because it offered considerably more money, a matter of no small consequence since he had one child and another on the way. Additionally, Rochester’s University Hospital was two years from opening and it was unclear what Plass would do in the interim. Whatever the reason, the decision caused a breach with Williams who felt strongly that Plass should remain in academic medicine. Possessed of family wealth, Williams had little understanding of a decision based on money, feeling that his prize protégé, like Esau, had sold his birthright. Fortunately, the breach was healed several years later and eventually Williams and his wife visited

the Plasses in Iowa City.

The evidence suggests that the Detroit experience was far from satisfactory, at least professionally. There was little or no opportunity for teaching and research was difficult if not impossible. Moreover, the Henry Ford Hospital in 1922 was run autocratically, with all orders and requisitions having to be approved by the Ford Motor Company. Plass did publish 12 scientific papers during his time at Henry Ford but most if not all came from work done earlier at Hopkins. He must have realized quite early that Williams had been right after all. About the only good thing that seems to have happened involved family growth; a child was born shortly after their move, followed by another several years later.

### **To Iowa**

No information exists as to why and how Plass came to the University of Iowa, but Iowa certainly offered many appealing features. It was a state institution with reasonable support and it was building a new university hospital. Moreover, it had had a combined department of obstetrics and gynecology since its very beginnings in 1870 and, even though Plass was trained unilaterally, he strongly favored a unified specialty. However his candidacy was identified and evaluated, he was appointed Professor and Head of the Department of Obstetrics and Gynecology in June 1926.

Plass immediately set himself to the task of developing an academic department, using John Hopkins as a model. He established a four year

residency, initially pyramidal with two residents appointed in the first year and then one to continue, and instituted the practice of an annual photograph of faculty and house staff. Norman F. Miller was recruited from the University of Michigan to lead gynecology, since Plass did not do surgery. There was a very small private service and most of the patients were indigent, but Plass insisted on a uniform standard of care. Once a prominent Iowan whose wife was Plass' private patient insisted that she receive the "very best care possible;" according to Mengert, Plass replied by assuring that she would have care every bit as good "as any of our indigent patients." Research was encouraged and extramural activities fostered.

cultivating referrals, and along with the growth of the Iowa Indigent Care Program and the introduction of the statewide ambulance program in 1932, it all resulted in an increase to 1800 births over the next 12-15 years.



### **UIHC ambulances 1935**

Because of Iowa City's population, the clinical volume was small (1927 recorded only 248 deliveries) and growing it required attention. This was approached by providing educational programs around the state and



### **UIHC ambulance 1948. Gerhard Hartman, Hospital Director, at right Contributions**

As the patient load increased, the residency was expanded. There were occasional bumps in the road. The medical school experienced some unrest involving governance issues shortly after Plass' arrival and faculty turnover became problematic. However, the Department of Obstetrics and Gynecology was little affected, probably because of its strong and effective leadership. In a later period of unrest in the medical school, the dean resigned and Plass served on a three-person executive committee to administrate the school. He was probably a candidate for the deanship, but he was not chosen. In the 1940s, concerns about compensation

developed and he played a key role in developing the landmark Iowa Medical Service Plan. Plass experienced two personal disappointments when J. Whitridge Williams died in the early 1930s. He hoped to succeed his mentor as Professor at Hopkins and also as author of Williams’ textbook, but in both cases Nicholson Eastman was chosen. Plass’ major goal when he came to Iowa was to establish an academic, nationally recognized department, and in this he unquestionably succeeded. Before 1926 the Iowa department of obstetrics and gynecology, as indeed the Iowa medical school, was hardly known outside the state.

**Table 1 Iowa Residents who became Department Chairs**

<b><i>Plass era (1926-1948)</i></b>
Tiffany J. Williams (University of Virginia)
William F. Mengert (Southwestern Medical School, University of Illinois)
John H. Randall (University of Iowa)
William C. Keettel (University of Iowa)
<b><i>Randall era (1952-1959)</i></b>
William G. Slate (Loma Linda University)
<b><i>Keettel era (1959-1977)</i></b>
Charles A. White (West Virginia University and Louisiana State University)
Roy M. Pitkin (University of Iowa and University of California, Los Angeles)
John McDonald (Ohio State University-Anesthesia)
James R. Scott (University of Utah)
Dwight P. Cruikshank (Medical College of Wisconsin)
Douglas W. Laube (University of Wisconsin)

Twenty years later the Iowa department would probably be in most authorities’ “top ten” and certainly in the “top

twenty.” One index of this prominence lies in the number of people who served under Plass and went on to become leaders in academia: four of his residents became chairs of medical school departments (Table 1) and four faculty colleagues went on to chair positions elsewhere (Table 2). Plass placed consistent emphasis on teaching and it involved the medical student curriculum, residency, and the practicing community. During his era, most Iowa graduates went into general practice and obstetrics was an important part of their professional activity. Therefore, medical student education at Iowa was aimed at providing a firm foundation in obstetrics and women’s diseases. The residency turned out graduates, some of whom went on to academic careers, but all of whom were highly trained specialists who became leaders in their practice sites.

**Table 2: Iowa faculty who became Department Chairs**

<b><i>Plass era (1926-1948)</i></b>
Norman F. Miller (University of Michigan)
Lester O’Dell (University of Nebraska)
Willis C. Brown (University of Arkansas)
J. George Moore (Columbia University, University of California, Los Angeles)
<b><i>Keettel era (1959-1977)</i></b>
Leo J. Dunn (Medical College of Virginia)
Robert M. Kretzschmar (University of Missouri Kansas City)
Herbert J. Buchsbaum (Medical College of Wisconsin)
Michael E. Yannone (University of North Dakota)

Part of the department’s reputation also derived from Plass’ national visibility and

recognition. In 1929, a scant three years after coming to Iowa, he participated in the founding of the Central Association of Obstetricians and Gynecologists and became its first Secretary-Treasurer. The next year he was one of eight founding directors of the American Board of Obstetrics and Gynecology.



**Directors of the American Board of Obstetrics and Gynecology, 1930**

He participated actively on the American Committee on Maternal Welfare, which would eventually form the basis of the American College of Obstetricians and Gynecologists. In 1946, in the wake of World War II and its devastation of Europe, a group of 14 prominent medical academicians was chosen for a two-month mission to medical schools in Czechoslovakia. Paul Dudley White, an eminent cardiologist, was chairman and Plass was vice-chairman. The mission received much in the way of recognition and honors for its contributions to medical education.

Plass continued his personal role in research, turning out several substantial and creditable investigations. One of his more important findings—and one

that literally abolished a disease—was identification of the cause and prevention of polyneuritis of pregnancy,<sup>2</sup> a complication of hyperemesis gravidarum carrying a mortality rate over 50 per cent. Recognizing the similarity of the condition to beri-beri, Plass showed that the outcome could be prevented by giving parenteral thiamine to women with excessive vomiting. He first described the association between monilial vaginitis in the pregnant woman and oral thrush in the newborn.<sup>3</sup> At the time the pathogenicity of *Trichomonas vaginalis* was controversial, but he and Ray Trussell grew the organism in culture for the first time and then fulfilled Koch's postulates.<sup>4</sup> Plass strongly encouraged the people in his department to do research and publish, but he refused to add his name to anything on which he had not played a substantial role.

There were two important research projects of an inter-departmental nature in which Plass was important. One was the development of blood banking. A young faculty member in the Department of Internal Medicine, Elmer L. DeGowin, became interested in establishing a blood bank, but was stymied by a lack of interest in his department. Because of the obvious importance in relation to obstetric hemorrhage, Plass became very interested in the project and provided financial and laboratory support that identified the basis of blood preservation and storage, work that won the Hektoen Gold Medal of the American Medical Association in 1939.<sup>5,6</sup> With the outbreak of World War II, this work assumed monumental significance and

Plass was appointed a charter member of the Committee on Blood Transfusion of the National Research Council.

The second project with extra-departmental aspects was the establishment of a program in cervical cytologic screening. A faculty member, Willis E. Brown, stimulated by the work reported in 1943 by Papanicolaou and Traut,<sup>7</sup> wanted to set up a cytology laboratory. The Department of Pathology was skeptical of the concept, but Plass supported and encouraged the project, providing space and convincing the Iowa Cancer Society to lend financial support. The first report of results appeared in 1947.<sup>8</sup> After 5 years as a function within the Department of Obstetrics and Gynecology, when everyone was finally convinced of its value, cervical cytologic screening was transferred to the Department of Pathology.

### **Personal glimpses**

I never met Plass so any observations of a personal nature must be secondary. William Mengert wrote a detailed biography that in abridged form was incorporated into the departmental history. I served on Mengert's faculty for three years as he was writing the biography, so I had a great deal of second-hand exposure to its subject. Additionally, William Keettel, who was also a resident under Plass, provided an additional perspective, published as a separate chapter in the departmental history.

Mengert described Plass as a "complex man with keen intelligence and a finely

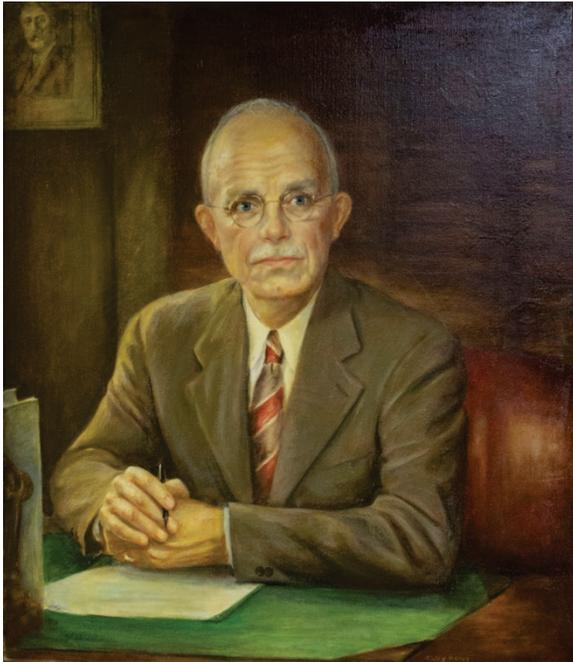
developed sense of humor," an incisive thinker with an unfailing ability to cut to the heart of a matter. He was rigorous and scientific in his approach to clinical medicine and skeptical about fashionable trends. But it must be remembered that Mengert idolized the man and, while he attempted to be objective, his biography needs to be interpreted in that light. Keettel, while not disputing any of Mengert's laudatory assessments, was more balanced in pointing out some aspects of administrative style that were, in Keettel's words, "difficult to understand." Perhaps the most important of these was his promotion, or at least acceptance, of a rather bitter rivalry between the two main members of his faculty, John Randall and William Mengert. Each man spent much of his effort trying to undercut the other and curry favor with their chief, and residents found themselves forced to choose sides in the rivalry. It was unpleasant and sometimes destructive and Plass, perhaps believing that competition was healthy, did little to defuse it.

### **An unhappy ending**

As Plass passed the 20 year anniversary of coming to Iowa, health problems began to surface. In 1947 he experienced back pain and x-rays revealed a destructive lesion of the fourth and fifth lumbar vertebrae, presumably representing tuberculous involvement. Treatment consisted of immobilization in a body cast for six months, which resolved the situation by promoting spinal fusion. This illness made former residents and associates around the country realize that their

chief was aging, prompting a campaign to raise funds for a portrait. The portrait was painted by a local artist, Cloy Kent, and upon its completion plans were made for a presentation at a meeting and scientific program on Plass' birthday, May 6, 1949. Unhappily, the plans had to be cancelled because of Mrs. Plass' sudden death from a heart attack shortly before the scheduled affair.

Later in 1949, Plass lost some weight and chest x-rays revealed some progression of pulmonary disease.



**E. D. Plass, oil portrait by Cloy Kent, 1949. Photo by Zach Sanderson**

More significantly, for the first time, his sputum tested positive. On August 8, 1949 he was admitted to the Oakdale Sanitarium, where he remained for some months. During this time, he went to his office in the University Hospital

two or three times to attend to correspondence and in early 1950 he was shocked to receive a letter from the College of Medicine Executive Committee admonishing him to stay away from the hospital as long as his sputum was positive. The letter, sent by long-time friends and colleagues, was brief and cold and Plass was deeply wounded by it. Over the course of several months, his University status remained unclear. He received full salary until June 30, 1950 and half salary for six months thereafter. This was before the time of disability coverage or retirement programs and there was no further compensation from the University. He submitted a formal letter of resignation, effective July 1, 1951, and in response received a warm letter noting its acceptance "with deep regret" and acknowledging the "great loss in your retirement." One year later he was notified of his appointment as Professor Emeritus.

In the fall of 1950 Plass left Iowa City for Saranac Lake, where he would spend the rest of his life. In retirement, he took up manual hobbies such as leather and metal working and needle-pointing. He wrote the section on "Obstetrics" for the Encyclopedia Britannica, a version that continued in the annual editions from 1953 to 1964. He died at Saranac Lake on August 17, 1956, of a ruptured aortic aneurysm, and was buried in Oakland Cemetery in Iowa City.

### **JOHN H. RANDALL**

John Hammond Randall was born February 26, 1898 in West Melton, Ohio. He early expressed an interest in

medicine but his parents were of limited financial means so he went to a teachers' college in Defiance, Ohio. Here he met a woman who would later become his wife, adding marriage as a financial goal to be met. After considerable searching, the two identified What Cheer, Iowa, as a place where both could find job, he as a science teacher and athletic coach and she as an elementary teacher. Subsequently, they taught in Danby, Minnesota and Forest City, Iowa, finally accumulating enough money to marry and to permit John to enter medical school at the University of Iowa in 1924. Despite the need to work part time, he established a strong academic record and was elected to Alpha Omega Alpha.



**John H. Randall**

Upon graduation in 1928, Randall began the residency program in obstetrics and gynecology. Somewhere during his training, probably during the first or second year, Plass arranged for him to spend a year studying in Europe, supported by a grant from the Cancer Society. Most of his time abroad was spent in Vienna where he was exposed to radical surgery and other forms of cancer treatment, sparking a lifelong interest in gynecologic oncology. Following this year, Randall returned to Iowa, completing his residency in 1934, and then joined the faculty.

#### **Academic career**

Although Randall practiced and taught the full range of the specialty, his specific interest was in gynecologic cancer. He established a tumor registry to follow patients after treatment, something that was quite innovative then. His reputation and teaching activities in the state led to many referrals. At the time, Iowa was one of only four institutions with accredited systems of follow-up of gynecologic cancer patients; the others were Michigan, Stanford, and Memorial in New York City. Undoubtedly related to his cancer interests, he was a first-rate pathologist. In fact, when a patient was referred and brought her microscopic slides with her, he would often examine them and dictate a report himself, without the slides ever being sent to the Department of Pathology.

As summarized earlier, there was a protracted period of uncertainty during the time of Plass' illness from 1949 until his resignation of July 1, 1951. As the

next most senior faculty member, Randall presumably functioned in an acting capacity during this time but it was difficult for both him and Plass, as well as for the rest of the department. Compounding the problem was an administrative vacuum in the medical school, with the deanship vacant from 1949 to 1953. The school was administered by a five-person Executive Committee and this group acted as a search committee for replacing Plass. One outside candidate, Allen Barnes of Ohio State, was interviewed, but the support for Randall among some (though not all) of the medical school faculty and especially among physicians in the state was strong, and his appointment as Head of the Department of Obstetrics and Gynecology was formalized in April 1952. The clinical faculty had fallen to two, Randall and Keettel, and the physical facilities remained in serious need of attention, but Randall had accepted the position with little in the way of conditions or requests.

Gradually, the situation improved. A third and later a fourth physician were recruited. After some delay, the hospital constructed an outpatient clinic and made some improvement to the maternity facilities. The teaching program remained strong and the residency, now enlarged to two or three per year, continued to attract highly qualified applicants, although now nearly all were Iowa graduates. One or two postgraduate courses each year were well attended and appreciated, especially by general practitioners in the state. Randall seemed to have little or no interest outside activities and the

department's visibility began to suffer accordingly. Apparently anticipating this problem, near the end of his tenure Plass had established a lectureship to bring national authorities to the department.

Randall's personal publications mostly represented retrospective reviews of various gynecologic cancers. However, he supported research in at least one other significant way: recruiting James Bradbury back to the department, to establish an endocrinology laboratory and a research program that would prove highly productive over the next 20 years. Additionally, it was during Randall's administration that the department instituted an innovative computerized system permitting retrieval of clinical records that formed the basis of many clinical research reports over succeeding decades.

### **Personal glimpses**

Randall, while not a particularly effective lecturer, related well in individual and small group situations. His style was slow and deliberate, with frequent repetitions, and little in the way of humor. He spoke in a monotone. If there is a single word that described his manner, it would probably be "phlegmatic." Yet it was of undoubted effectiveness in communicating basic clinical concepts, especially to students, but also to residents and practitioners. He was chosen by medical students as "teacher of the year" four different times, one of them involving selection by both the junior and senior classes. Physicians in the state, both generalists and specialists, regarded him very

highly and he was probably the most respected of all clinical faculty members in the medical school. One of the residents who served under him, William G. Slate, later chaired a medical school department (Table 1). At some point toward the end of his headship, a large oil painting of him, with the hospital's imposing Gothic tower in the background, was completed.

His personal commitment to teaching was incredible. I had occasion to observe this in a very dramatic way. During my senior clerkship on obstetrics, in the spring of 1959, Randall was hospitalized with cardiac failure, a condition that would soon prove fatal. Every day a resident would go to the private floor (one floor below the obstetric ward) and bring Dr. Randall in a wheel chair to meet with the eight or ten medical students. A case would be presented and he would discuss it. The man was clearly very ill—his ankles were swollen and his speaking was even more hesitant than usual because of cardiac failure—but here he was, doing what he believed his job to be.

Sharply in contrast to his deliberate and stolid style was his deportment in the operating room, according to Keetel. Apparently because of tension, he would sometimes lose his temper and heap verbal abuse, and sometimes instruments, on scrub nurses and residents who were assisting him.

### **An untimely end**

In 1956 Randall was found to have hypertensive heart disease and he had to cut back on some of his activities.

He discontinued private obstetrics, but continued with gynecology and teaching. Two years later, following an automobile accident, his cardiac status worsened, but he still came to the hospital every day for his teaching obligations. Eventually he needed to be hospitalized, and he died on April 19, 1959.



**John H. Randall, oil portrait, Richard A. Chase. Photo by Zach Sanderson**

The Randall era was brief and for an appreciable part of that time he was compromised by illness. Nevertheless, it was marked by certain lasting legacies to the department's history. He took over at a difficult time because of the protracted and unpleasant circumstances surrounding Plass' retirement, and the stability he brought

to the department was perhaps his most meaningful contribution. His emphasis on gynecologic pathology was incorporated into residency education, something that would continue long after him. He continued the department's emphasis on high quality clinical education, and he reinforced this by personally demonstrating a remarkable commitment to teaching. The department may have suffered a little with respect to national visibility under his leadership, but the residency remained strong. Finally, he initiated basic research by recruiting James Bradbury to the faculty.

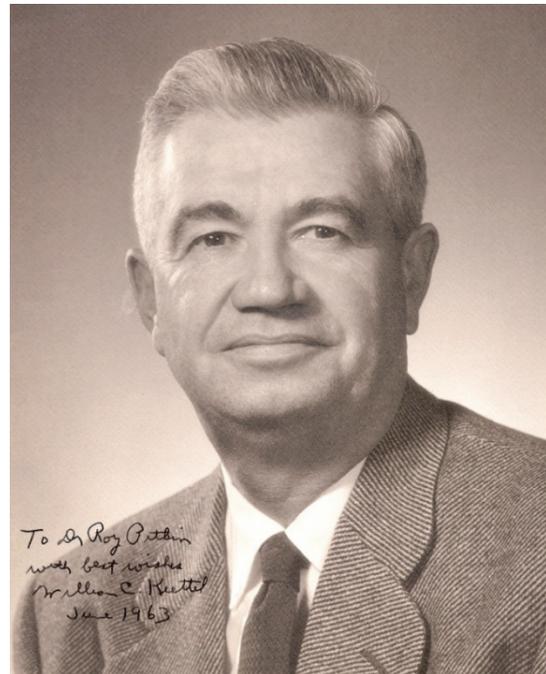
### **WILLIAM C. KEETTEL**

William Charles Keettel was born in Lyons, Nebraska, where his father practiced general medicine, on April 30, 1911. Following graduation from the local public high school, he enrolled in the University of Nebraska, completing the premedical curriculum in three years and graduating with honors. He was in the marching band and one of band's trips was to Iowa City for a football game, at which time he toured the new University of Iowa Hospital. He went on to medical school at the University of Nebraska, graduating in 1936. During his internship at the University of Indiana Hospital he found his interests centering on obstetrics and gynecology. However, Indiana at that time had separate programs in obstetrics and gynecology and, recalling his earlier visit to the University of Iowa's new hospital, he applied to that institution. His progress through the residency was excellent, although there were some concerns that he spent a great deal of

time playing poker with other residents, at which he was apparently quite successful. His history of the department characterized the residents of that era as "rugged individualists" and recounted a number of their antics.

### **World War II**

Completing his residency in 1940, Keettel looked into several private practice situations but, with World War II looming on the horizon, he decided to take a less permanent position as obstetric consultant to the Wisconsin Health Department. His duties involved visiting every maternity unit in the state and giving educational programs to county medical societies. He also had an affiliation with the University of Wisconsin medical school where he formed relationships that would prove beneficial to his career later.



**William C. Keettel, about 1960**

While waiting to be called into military service, Keettel received an invitation to serve as part of a very secret program. He was told only that he would be commissioned in the Army and would practice obstetrics and gynecology, at least eventually. He went to a remote area of eastern Tennessee for an interview, where he saw a large construction site, including (he was told) a hospital. In spite of the lack of information, he took the position, thus becoming part of what is known to history as the Manhattan Project, the race to produce the atomic bomb. His role was to develop the obstetric-gynecologic service for a community that soon reached 85,000 population. It entailed planning and equipping the hospital, recruiting several other obstetrician-gynecologists, and supervising the clinical service. He regarded his time at Oak Ridge as one of the most exciting and satisfying periods of his life.

### **Return to Iowa**

Upon release from active duty in 1946, he was offered the option of remaining in Oak Ridge as a civilian physician caring for the people working there, at an income substantially greater than that he was offered to return to Iowa. Nevertheless, he accepted Plass' invitation and began his academic career in Iowa City where he would remain for the rest of his life. The workload at Iowa was considerable and he sometimes chafed at being in a subordinate position, but his progress up the academic ladder was steady and he turned out several major pieces of clinical research. Perhaps the most

notable of his early studies was a double-masked study that demonstrated the efficacy of penicillin (then a new drug in civilian practice) in preventing puerperal morbidity.<sup>9</sup> He was active in the medical school and came to chair most of the important committees. He also developed national recognition, was invited to join prestigious societies, and he interviewed for a number of chairmanships.

With Randall's death in 1959, a small ad hoc committee was appointed to recommend a replacement. The committee contacted several department chairs from other institutions and received a unanimous response that Keettel should be chosen. His appointment was confirmed by the Board of Regents in November 1959. In negotiations with the dean, he asked for two new faculty positions and construction of a new labor-delivery suite. The department promptly began to "take off." New faculty members were recruited, from both Iowa and the outside, from such places as Indiana University, the University of Michigan, and Columbia University. The residency was expanded from three to four per year, and in a short time the department became a modern academic clinical operation. It was not exactly a democratic model, for Keettel's hand was always very much on the tiller, but there was general satisfaction with his eminent fairness. The unrest and turmoil in society that characterized the 1960s was felt in the University of Iowa College of Medicine, but very little involved the Department of Obstetrics and Gynecology, undoubtedly a reflection of his steady and gentle

leadership.

The emphasis on teaching that had marked the department previously was, if anything, enhanced under Keettel's leadership. The residency, which grew eventually to six per year in a four year program, attracted a national sample of high quality applicants, providing experience in research, pathology, and anesthesiology, in addition to the full range of obstetrics and gynecology. Medical students voted a departmental faculty member as "teacher of the year" with almost embarrassing frequency. Two popular postgraduate courses were presented each year, one on general obstetrics and gynecology and the second on a more focused topic. The faculty grew progressively and diversified; with the advent of subspecialization in the late 1960s and the early 1970s, subspecialty programs were established. Former residents and fellows were organized into an active and productive Alumni Society that would, near the end of his tenure, form the basis of a successful campaign to endow a professorship in his name.

Coincident with these developments, research productivity soared and no fewer than 305 publications emanated from the department during the 18 years of Keettel's tenure as Head. He himself continued to make important contributions in clinical research. He pioneered peritoneal cytology and the use of intraperitoneal radioactive gold in treating early ovarian cancer.<sup>10</sup> Working with James Bradbury and using assay techniques crude by comparison with modern methodology, he was first to identify the high, tonic LH levels

characteristic of polycystic ovary syndrome.<sup>11</sup> He served as a director of the American Board of Obstetrics and Gynecology and chaired the specialty's Residency Review Committee. He was elected to national leadership positions, and he declined many others because he feared they might distract from what he regarded as his primary responsibility.

There is perhaps no better indicator of the environment Keettel provided than the fact that six of the residents who served under him and five other members of his faculty subsequently became chairs of medical school departments (Tables 1 and 2). Additionally, two of his residents (Thomas J. Purdon and Douglas W. Laube) were later elected Presidents of the American College of Obstetricians and Gynecologists.

### **Personal glimpses**

Keettel was unfailingly kind, gentle, and thoughtful in all his dealings, promoting a feeling of trustworthiness in those he came in contact with. Patients adored him, residents idolized him, and colleagues trusted him. Thus it was that his advice and counsel were sought, even among those not in close relationships with him. National leaders respected his opinions, knowing that they would receive objective, accurate, and thoughtful assessments and that confidences would be respected. Beneath a kindly, benevolent, and somewhat folksy manner, however, lay a superior intellect and a high degree of insight, something that was only appreciated by those few who came to

know him well—or as well as anyone came to know him.

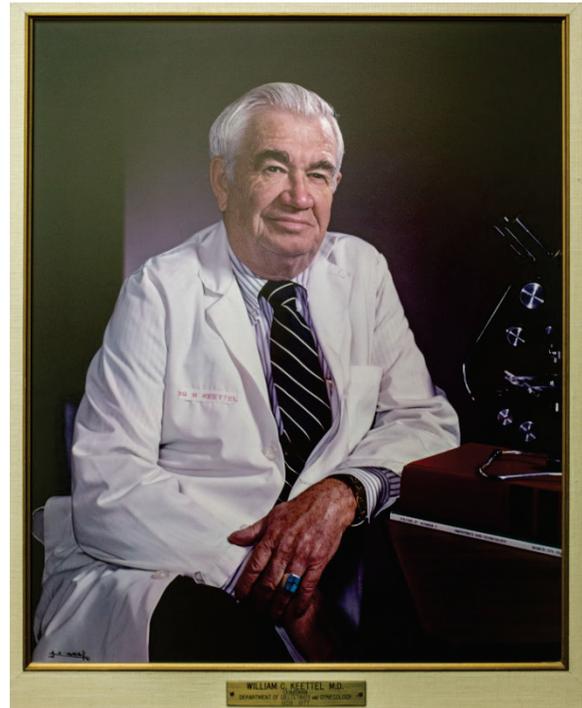
While he had a keen understanding of those he knew and was regarded as a natural confidant to many, he confided little if at all about his inner, personal self. This was especially evident in national meetings where he would talk with many different people and in the process come away with a good understanding of the challenges and problems faced by various departments and programs, but no one would have any intimate understanding of his personal feelings and situation.

### **Retirement**

As he neared 65, Keettel advised the dean of his wish to resign his administrative post with the appointment of a replacement. He was approached about a portrait, but he was unenthusiastic, a reaction that surprised no one. Eventually, he agreed to have a photograph made. The world famous portrait photographer, Yousef Karsh, was engaged and came to Iowa City. He spent an evening over dinner with his subject and then took a number of photos the following morning. Everyone agreed that the one selected was a perfect characterization that captured the subject perfectly. The portrait was presented to the University at a large and elaborate dinner held in late 1977. Copies were sent to each member of the Alumni Society.

The process of identifying a successor was detailed and lengthy, but eventually (on October 1, 1977) it was completed. He intended to continue teaching and

limited clinical work, but to lessen any danger his presence might inhibit a new administration, he took three months' leave from the University. Returning, he took up clinical and teaching activities and began work on the departmental history. Before long, unfortunately, a deteriorating physical condition necessitated a change in plans. Several years earlier, he had been diagnosed with idiopathic pulmonary fibrosis and he began experiencing progressive respiratory symptoms. The first public acknowledgement of his illness came in September 1978 when, while giving a paper at a national meeting, he paused and apologized for having to speak slowly because of his illness. He came home from that meeting and was placed on continuous oxygen treatment.



**William C. Keettel, photographic portrait by Karsh of Ottawa, 1977. Photo by Zach Sanderson**

While on oxygen, he came to the hospital every week or so and spent an hour or two on office work. There were always residents and faculty waiting in line to see him at these times. He completed work on the department's history and participated in arrangements for publication, but unfortunately he did not live to see it in print. He experienced one or two serious medical problems in association with respiratory infections, but he recovered from these with hospitalization and treatment. Nevertheless, his course was generally downward, and he died at home on July 28, 1981. Following a funeral service in Trinity Episcopal Church, he was buried in Oakland Cemetery.

## **CONCLUSION**

During the half-century from 1926 to 1977, the University of Iowa evolved from a little-known and lightly-regarded Midwestern educational institution to become one of the nation's premier research universities. This phenomenon reflected the growing prominence and recognition of many of the University's components, notably its College of Medicine and its University Hospitals and Clinics. This paper has traced how one department of the University's medical school and hospital was at the forefront of this march to prominence.

Over this span of 51 years, the Department of Obstetrics and Gynecology was led by only three individuals, a stability of leadership that was undoubtedly part of the reason for success. The three leaders were quite different in personality, characteristics,

and contributions, and they incorporated into the department's fabric a variety of perspectives. More important than their differences, however, were their similarities. Chief among these was the consistent emphasis on the primacy of patient welfare, teaching the very best practices in women's health care, and an underlying commitment to generation of new knowledge. With the dizzying changes in medicine, which can be predicted reliably to continue and increase, attention to the important principles laid down by E. D. Plass, John H. Randall, and William C. Keettel will continue to foster a striving for excellence.

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