A Pathway to Excellence
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1980s

In 1979, Dr. Frank Young, the chairman of microbiology and also a professor in the Department of Pathology, became the fourth dean of the medical school. He replaced Dr. Orbison, continuing the line of members of the pathology faculty ascending to the position of dean of the medical school at the University of Rochester (three of the first four deans). Dr. Young was a strong advocate for research as an important component of all faculty job descriptions. Early in his tenure, discussions ensued about the classification of the Department of Pathology and Laboratory Medicine as a “clinical” or “basic science” department, with serious ramifications for faculty salaries and requirements for extramural funding as a criterion for promotion and continued employment. The senior medical school leadership pushed for members of the department to derive significant portions of their salaries from extramural funding. At the same time, and different from the other basic science departments, the members of the Department of Pathology and Laboratory Medicine had increasing, and now significant, clinical obligations. This tension existed throughout the decade.

Cost of a loaf of bread: $0.51
President of the USA: Ronald Reagan
World series winner: Los Angeles Dodgers
Cost of a gallon of gas: $1.31
1980: Smallpox eradicated
1983: HIV identified as virus that causes AIDS

Chair

Dr. Stanley Patten remained as the chair throughout the decade, resigning from his position on June 31, 1989. Dr. Patten died in
January 1997 after moving to Seattle, Washington, to become medical director of NeoPath. Dr. Tom Bonfiglio replaced him as acting chair for the remainder of 1989. Dr. Bonfiglio was a very popular figure within the department, having served in leadership roles for many years. His gentle, soft-spoken demeanor was appreciated by faculty and staff alike.

Upon Dr. Patten’s retirement, an external review of the department allegedly suggested that the institution should infuse major capital into the department in order to increase its research profile. The administration opted against this strategic initiative, despite the increasing pressures on the department to become more research oriented.

In the mid-1980s, Dr. Patten’s leadership team included Dr. Bonfiglio as the director of surgical pathology; Dr. Lapham, who oversaw neuropathology; Dr. Panner, who ran the autopsy service; and Dr. Arvan, who served as the director of the clinical laboratories. Dr. Richter served as the sophomore medical student course coordinator.

Faculty

Dr. Bernard Panner took over as the chief of the autopsy service in 1981, replacing Dr. Donald Stuard, who left the department to assume the role of chair of the Department of Pathology in Reading, Pennsylvania. Dr. Panner successfully recruited Dr. Leon Metlay from Pittsburgh to help with the service. This brought to two the number of full-time faculty members on that service, which was responsible for performing over 400 autopsies. Dr. Metlay, who remains a member of the faculty to this day, also brought expertise in placental pathology and pediatric pathology to the department. In 1983, there was a total of thirteen full-time members of the faculty (eleven MDs and two PhDs), a slight decrease from several years before. This number finally increased to approximately twenty-one by the end of the decade.
In the mid-1980s, Drs. Mark Stoler and David Wilbur (see figure 26), both of whom completed residencies at URMC, joined the faculty in surgical pathology and cytopathology. Drs. Phil Dvoretsky and Catherine Listinsky joined the surgical pathology faculty during this time, as did Dr. Jan Muehlbauer, a dermatopathologist who had a joint appointment in the Department of Dermatology. In 1989, Dr. Glynis Scott was recruited from Yale University to join the faculty as a dermatopathologist to replace Dr. Muehlbauer, who remained on the faculty for only a brief period of time. She remains as the director of this service more than thirty years later. In addition to the dermatopathologists, there was a total of only four faculty members with nearly full-time service responsibilities within surgical pathology.

Dr. Tom Eskin joined Dr. Lapham on the neuropathology faculty in 1980 and stayed for a decade before leaving to become the director of neuropathology at the University of Florida. By 1986, the faculty numbered twenty-three full-time members, including eleven full-time anatomic pathologists.
The clinical services continued to expand rapidly and the growth in faculty numbers increased modestly, contributing to the stresses on research productivity for many.

Dr. Dan Ryan was appointed as an assistant professor in 1981 and given control of the hematology section of the laboratory. His wife, Dr. Charlotte Ryan, also became a member of the faculty, concentrating in surgical pathology. In 1982, Dr. Charles Sparks was recruited to lead the clinical chemistry unit and his wife, Dr. Janet Sparks, joined him first as a research associate and then as a faculty member within the research division. Dr. Charles Sparks was instrumental in helping his younger colleagues within the clinical chemistry laboratory to develop their academic programs. Dr. Kwong provided additional expertise in toxicology, which would later allow the department to build another community outreach program. These early efforts were harbingers of the direction the department was to take in the decades to come. Dr. Alfred Bacharach, who served as the director of clinical chemistry, left the institution in 1983. He had served in this capacity since 1979. By the mid-1980s, there were five MDs in the division of clinical pathology, along with three PhD clinical chemists.

Dr. Neil Blumberg (see figure 27), who completed all of his training at Yale University, was hired after a short stint at the University of Connecticut to serve as the first full-time director of the transfusion medicine service at URMC. He would serve as the only full-time member of this laboratory for the next ten years before recruiting Dr. Scott Kirkley to help him. Dr. Blumberg remains as the director of transfusion medicine at the time of this

![Figure 27. Neil Blumberg, the first full-time director of transfusion medicine (1981–present)](image-url)
writing. Ms. Debra (Debbie) Masel joined the blood bank in 1977 (see figure 28). She would ascend to the role of chief supervisor of the laboratory in 1996, one which she still holds. Ms. Ann McMican held this position for more than a decade before Ms. Masel. Dr. Nancy Wang was recruited from the University of Minnesota to head the cytogenetics laboratory, which by this time resided within the department.

One of the mainstays and educational leaders in the department during this period was Ms. Jean Shaffer. A medical technologist by training, she was an excellent teacher and morphologist and contributed to the education of many of the department’s trainees from 1956 until her retirement. For more than twenty years, she was a central figure in hematology and was given the title of assistant professor in 1978. It is certainly a testament to her importance within the department that she was granted an academic faculty position in the absence of an MD or a PhD. (She was appointed to a faculty position as an assistant professor in the Department of Medicine several years earlier. This reflects the structural organization of the clinical laboratories during her time at this institution.)

Early in the decade, Dr. Robert Mooney joined the faculty as a member of the clinical chemistry team, with an additional basic science laboratory research program. He had recently graduated with a PhD in biochemistry from Johns Hopkins University. In 1985, Dr. David Penney moved from the Department of Anatomy to the Department of Pathology

Figure 28. Debbie Masel, chief supervisor of transfusion medicine (2019)
and Laboratory Medicine, bringing with him his extramurally funded program in lung biology. Dr. Harold Smith joined the research division in 1986.

The faculty roster for 1989–90 included twenty-one full-time members of the team.

Space

The chair’s office suite remained in 1-7423 (currently the site of neuropathology). In addition to Dr. Patten (and then Dr. Bonfiglio), the suite was occupied by several long-standing members of the department. Ms. Sandy Piampiano, Sue Vanthof, and Cheryl Breitenbuecher formed the nucleus of the administrative staff that addressed issues concerning the medical student course, financial issues within the department, and the chair’s administrative functions. At this time, Sue Vanthof served as the secretary for the entire anatomic pathology departmental faculty (see figure 29). This group

Figure 29. Sue Vanthof, the executive administrator to the chair (1979–present)
of support staff remained intact (with modifications in job descriptions) until 2015, when Ms. Breitenbuecher retired. Much of the departmental executive administrative chores fell to Ms. Breitenbuecher during this decade.

By 1983, the department had undergone a significant expansion, now occupying 14,817 square feet of space for anatomic pathology. This included a slight increase in autopsy space, up to 2,920 square feet, but a major increase in the space allocated to surgical pathology, which was now 2,160 square feet and located on the second floor. It was during this period that the “blue light” policy disappeared from the medical center. Up until this time, whenever an autopsy was in progress, a blue light situated outside of the morgue was illuminated, an invitation for any medical student to step in to observe the proceedings as time allowed. Due in part to concerns about the high incidence in tuberculosis amongst trainees, this policy was altered. The diagnostic electron microscopy unit occupied 1,046 square feet in the basement. The histopathology laboratory grew to 1,354 square feet and the resident offices grew to 901 square feet. The establishment of an endocrine/radioimmunoassay/protein laboratory in the 2-3600 area resulted in a further increase of total space. The total space occupied by clinical laboratories in 1983 was 36,910 square feet. This represented an increase of approximately 20 percent in square footage from ten years earlier.

Surgical pathology faculty members occupied a small cluster of offices on the second floor that housed a total of five faculty, three transcriptionists, and four residents. As was the standard at the time, smoking in the hospital was still permissible. Over time, this office suite became stained a unique shade of yellow due to the constant smoking in the cluster. Its distinct hue left a lasting impression on its past occupants. In 1983, there was a slight renovation to this office suite. During the period of renovation, the William B. Hawkins Conference Room was repurposed as a surgical pathology sign-out area and a resident office suite.

The cytopathology suite, also on the second floor, expanded to 1,817 square feet. Cytopathology, which under
the leadership of Dr. Patten had attained a national reputation, resided in space that is currently occupied by the pathology residents, adjacent to the K-207 auditorium. A total of six cytotechnologists occupied this room. Donna Russell, who is still the director of educational activities in the division, joined this group in 1987. Departmental cytotechnologists have continued to occupy a prominent place on the national scene since the early days under Ms. Florence Woodworth. The analytic cytology research laboratories, headed by Dr. Wheeless, occupied space in the perpendicular, adjacent hallway.

Clinical

During this era, each of the laboratories largely functioned independently, with little integration into a coherent and interactive department. Many of the areas of pathology that extended across divisions, such as immunohistochemistry or molecular diagnostics, were not yet fully evolved and not part of the standard of practice. The divisions of anatomic and clinical pathology had completely separate administrative functions with little to no overlap. There was little sense of a common purpose or common goals between the divisions.

Dr. Jan Muhlbauer’s arrival in the department led to an abrupt increase in the surgical pathology volume, which increased by 10,000 dermatologic cases that year, peaking at 20,103 cases in 1983. Unfortunately for the department, that increase in volume was transient, as Dr. Muhlbauer was able to transfer that book of business to his new private office when he chose to leave the department after only a short stay on the faculty. The surgical pathology volume had dropped to 14,056 by 1985. The number gradually increased throughout the remainder of the decade, reaching 20,000 cases again in 1990. Dr. Bonfiglio continued to preside over the unit, accompanied by Dr. di Sant’Agnese, who ran the electron microscopy unit, and Dr. Wilbur, who oversaw the earliest phases of the immunocytochemistry laboratory. As of 1983, all patient record documentation within the divisions of anatomic pathology
(except for cytopathology) was still manual, with no computerized information system in place.

The autopsy numbers decreased from their highs in the 1970s down to approximately 400 cases per year by 1983. The autopsy volume remained between 350–400 cases per year during the decade of the 1980s. These numbers remained relatively stable. Nationally, the rate of autopsies had fallen to 5–10 percent of all hospital-based deaths. The rate at URMC, while low, exceeded this rate.

The early 1980s saw the development of the immunohistochemistry laboratory. At this point, most antibody detection was by direct immunofluorescence performed on frozen tissue, and the department had a library of approximately twenty antibodies at its disposal. Dr. di Sant’Agnese served as the director of the laboratory later in the decade.

The cytopathology unit reviewed approximately 65,000 cases per year during the early 1980s, with the majority of cases coming from private practitioners in the region. Two faculty members devoted the majority of their time to cytopathology as the volumes remained relatively constant. Dr. Wheeless was spearheading many studies in quantitative analysis within this laboratory during this period. By the end of the decade, the cytopathology volume had increased to approximately 80,000 cases.

By 1983, many clinical laboratories had been relocated, largely consolidated under the Department of Pathology and Laboratory Medicine, and modernized. During this era, Dr. Paul Woolf in internal medicine oversaw the endocrine laboratory, Dr. Richard Miller ran the obstetrics and gynecology-affiliated laboratories, and the tissue typing laboratory resided within the Department of Surgery. Special coagulation was brought into the hematology laboratory from the Department of Medicine in 1981. Cytogenetics became available, but only through collaboration with a laboratory at Roswell Park Cancer Center. The total number of clinical laboratory tests increased from approximately 1.9 million tests in 1985 to 2.5 million in 1990. The clinical chemistry laboratory was divided into four discrete sections, overseen by Dr. Charles
Sparks upon his joining the faculty in 1982. He personally took charge of the automated sections of the laboratory. The protein laboratory and the radioimmunoassay laboratory were supervised by Dr. Robert Mooney. Dr. Tai Kwong oversaw the toxicology laboratory and served as the associate director of the clinical chemistry laboratory. Dr. Kwong also assumed control of the immunoassay section of the laboratory. Dr. Theodor Mayer was also on the clinical chemistry faculty at this time. He would leave for Rochester General Hospital shortly thereafter. Clinical hematology was overseen by Dr. Dan Ryan. It was late in this decade that the department purchased its first clinical flow cytometer. The flow cytometry laboratory was overseen by Dr. Ryan and had three full-time technologists. The blood bank continued to be run by Dr. Blumberg. While the numbers of units transfused and associated testing continued to increase, the number of technologists was able to remain largely stable due to slowly advancing automation. Test by test and laboratory by laboratory, Dr. Arvan and his colleagues were slowly consolidating laboratory testing under the domain of the Department of Pathology and Laboratory Medicine.

Research

Dr. Mark Stoler, working with Dr. Tom Broker, began his seminal work in human papilloma virus and cervical carcinogenesis. His in situ hybridization techniques represented cutting-edge science at the time and his work was funded by the NIH. His work helped to maintain the prominence of the cytopathology division at the national forefront of the field. Dr. Stoler likely had the first National Institutes of Health R01 grant awarded to a member of the surgical pathology faculty at URMC. Previous NIH awards had been granted to members of the department whose roles involved the performance of autopsies and medical student teaching, with little or no surgical pathology responsibilities. The “basic science” department
had now become truly a clinical department with a basic science component.

Extramural funding was at approximately $800,000 in 1980 and peaked at $1.6 million in 1988, declining slightly thereafter. The department garnered approximately $1.5 million in extramural funding in the last years of the decade. Drs. Robert Mooney, Leon Wheeless, and Harold Smith were the major contributors to the researcher division, studying insulin actions, quantitative analysis of sickle cells, and ApoB mRNA editing, respectively. The public health support into the department ranked twenty-ninth nationally. Dr. Glynis Scott, whose primary appointment was in dermatology, but who was a mainstay on the dermatopathology service, thrived with her work in signaling pathways and melanoma biology. Drs. Charles and Janet Sparks also had significant extramural funding during this time.

Education

Dr. Patten served as the director of the residency program throughout his tenure as chair. By the 1980s, residency training in pathology bore a striking resemblance to the present program. At this point, combined training in anatomic and clinical pathology required a total of four years, while training limited to either of the subdivisions required a total of three years. In 1985, the American Board of Pathology requirements changed to five years of training (which would later be reduced back down to four years, but not for more than a decade). Residents were required to spend six months on the autopsy service, three months of training in cytopathology, three months in neuropathology, and nine months in surgical pathology. The clinical pathology rotations included three months in each area: the blood bank, clinical chemistry, hematology, and microbiology laboratories. Various elective rotations completed the four-year training program. In 1986, the department was the home to sixteen residents in pathology. This number hovered around sixteen to eighteen for most
years during this decade. Subspecialty training was also offered in neuropathology. From 1984–88, one of the outstanding residents was Dr. Dawn Riedy. She was a medical student and year-out student fellow at URMC and winner of the Hawkins Award prior to beginning her residency. Dr. Riedy went on to become the chair of the Department of Pathology at Rochester Regional Health System, the position she currently holds.

The cytopathology rotation was both “free form” and rigorous, with Dr. Patten administering a notoriously demanding exam for all residents at the end of the rotation. Dr. Charles Sparks served as the Residency Review Committee director within the department from 1987–1989.

As early as the mid-1980s, there was pressure from the faculty to develop subspecialty fellowship training programs. No ACGME-accredited programs existed in the department, despite the increasing awareness that these types of programs were being established at most major academic medical centers. This became a source of some tension within the department. The neuropathology division had sponsored a neuropathology fellowship program, but decided to discontinue the program in 1982.

The department (in conjunction with the Department of Microbiology and Immunology) provided clinical training fellowships in clinical microbiology for two microbiology PhD students each year. This program attained great national prowess and continues to thrive up to the present. Dr. Marilyn Menegus oversaw the program, which trained many future chairs and leaders in the field in various departments of microbiology. Since her death in 2017, the program has been overseen by Dr. Nicole Pecora and continues to attract stellar trainees.

Early in the decade, the second-year medical students participated in a two-semester course. The fall semester was directed by Dr. Goetz Richter and was entitled General Pathology. The spring semester course, run by Dr. Bernard Panner, was entitled Systemic Pathology. By mid-decade, Dr. Leon Metlay had taken over the General Pathology semester-long course. The Systemic Pathology course had been replaced by
a series of organ-specific courses into which pathology lectures were integrated. The trend of pathology having diminished classroom time with medical students was to continue over the next several decades, with a significant impact on the department’s ability to recruit future residents, especially from the university’s medical school class.

The year-out program for medical students continued to thrive, with six student fellows in 1986. Most of the decade saw at least two students per year within the department.

The PhD program, under the direction of Dr. Mooney, granted sixteen PhDs between 1970 and 1986. The program remained small but continued to have a strong and well-structured curriculum.

New Developments/Achievements

This decade saw the influx of great advances in technology. The department began to use flow cytometry and molecular diagnoses in the clinical setting, along with great advances with mass spectrometry in the toxicology laboratory. Immunohistochemistry had begun to replace electron microscopy as the principle diagnostic adjunct to routine histology.