

Physical Therapy Education at the University of Missouri

as compiled by Marilyn Sanford Hargrove, December, 2011

Prologue

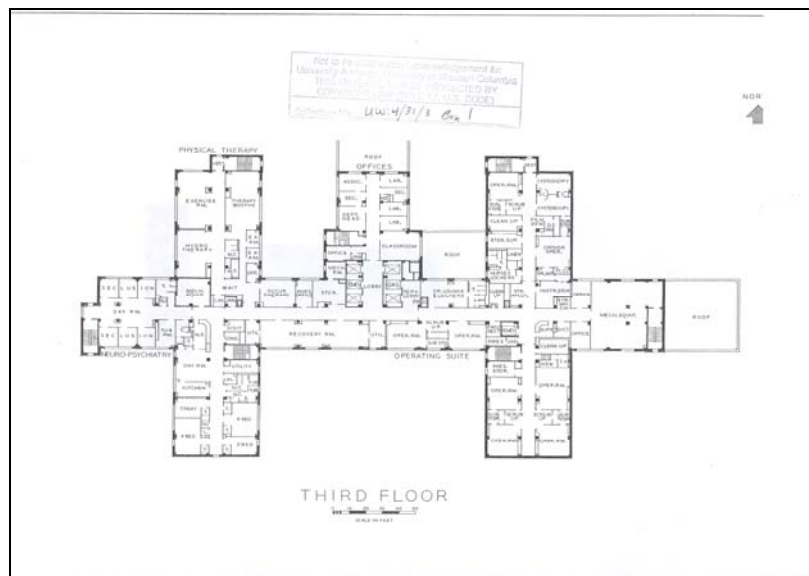
In mid-September, 1963, nine women and one man started classes with 17,000 other students at the University of Missouri in Columbia. Considerable effort had been expended on their behalf to start a physical therapy program, and several of these students had been waiting hopefully for months. Others knew they were part of a "first class," but took the opportunity for granted, unaware of the events in the preceding months and years that led to the implementation of the new curriculum.

The first physical therapist (PT) training programs in Missouri were at St. Louis University and Washington University. PT education at the University of Missouri (MU) was not undertaken until the new University Hospital was constructed. PT education at a public university in Missouri depended on the resurrection of medical education in Columbia, efforts that spanned many decades. Without the existence of a medical school, it is unlikely that the PT program would have developed at MU.

Medical education in Columbia had a difficult history, having begun in the 1840s, but sputtering to a near halt in 1911 after the infamous report of Abraham Flexner, MD, who described the dismal condition of medical education in the United States. Nearly 2/3 of the medical schools in the US closed or scaled back. The four-year program at MU was reduced to a two-year pre-medical curriculum. Classes continued to be held in the Parker Memorial Hospital, gift of a Columbia businessman (now Parker Hall) that opened in 1902; Adolphus Busch funded a clinical amphitheater in connection with the hospital. These structures joined McAlester Hall, named for Dean of Medicine Andrew McAlester, "The Father of the University of Missouri School of Medicine." During this 50-year hiatus, the buildings were used for the two-year medical curriculum, and provided space for medical services for students and the local community. MU students transferred to four-year medical schools elsewhere to complete the MD degree.

A four-year medical curriculum nearly resumed in the 1930's, but instead, the Missouri General Assembly funded the independent Ellis Fischel State Cancer Hospital in Columbia. Finally, in the early 1950s, Missouri physicians persuaded the Missouri legislature to appropriate funds to build a university hospital as a teaching laboratory for future physicians, and bring a public, four-year medical school, back into being. On December 11, 1953, an architect's contract for the design of a new Teaching Hospital, Laboratory, and Nurses' Home Building (McHaney Hall which eventually housed the first Rusk Rehabilitation Center) was signed by the Board of Curators.

In 1955, ground was broken for the university hospital. In 1957, the new hospital was dedicated, and the four-year School of Medicine reopened. Space on the third floor of the hospital was dedicated to PT; the original plans included rooms for hydrotherapy, exercise, treatment booths, and a gym. A nearby room was labeled occupational therapy (OT).



Original Floor Plan and Photo of hospital

The 1960's: the program gets started.

In 1959, an opening for a chief physical therapist was posted by MU. Raymond E. Hogue, RPT, applied. In a 2005 interview he said "They flew me in; I stayed at the Daniel Boone Hotel I met with School of Medicine Dean Vernon Wilson, and Hospital Administrator John Curry. During the meeting, I mentioned something about a physical therapy school, because in the back of my mind I thought, 'you know, it's the University, and there is bound to be a need for a physical therapy program.' The response was 'we'll talk about that later'. " Ray Hogue, RPT, was 27 years old when he accepted the position as Chief Physical Therapist.



Ray Hogue

Soon after Mr. Hogue arrived on campus, he was asked to teach kinesiology in the Department of Physical Education. College of Education Dean Herbert Schooling approved the appointment. Mr. Hogue went on to complete the Master of Education degree, including a year of medical school gross anatomy (finishing first in class), neuroanatomy, and nursing physiology as part of his program. He eventually completed the PhD from the University of Missouri. Mr. Hogue recalled that during this time he realized that he wanted to be a teacher, and that he needed to build relationships in both the School of Medicine and the College of Education if the dream of a physical therapy curriculum at MU was to come about. He also saw the need to build relationships with physical therapists in Missouri. In 1960, at a state physical therapy meeting in Springfield, he requested a future meeting in Columbia. The following year, in Columbia, the first clinical instructors for a PT program at MU were recruited.

In 1962, Lester E. Wolcott, MD, was hired to lead the section in Physical Medicine and Rehabilitation (Physiatry), in the Department of Community Health and Medical Practice. A general practitioner in Michigan until he completed a residency in physical medicine, Dr. Wolcott explained to Mr. Hogue that physical therapists had taught him important aspects of rehabilitation science. Together, Mr. Hogue and Dr. Wolcott wrote the letters and completed the American Medical Association (AMA) paperwork necessary for the initiation of a new physical therapy program. They were able to overcome obstacles along the way, including an apparent national physical therapy community attitude that there were too many programs, even though a shortage of physical therapists was recognized. By late summer, 1963, the new program was ready to admit students.



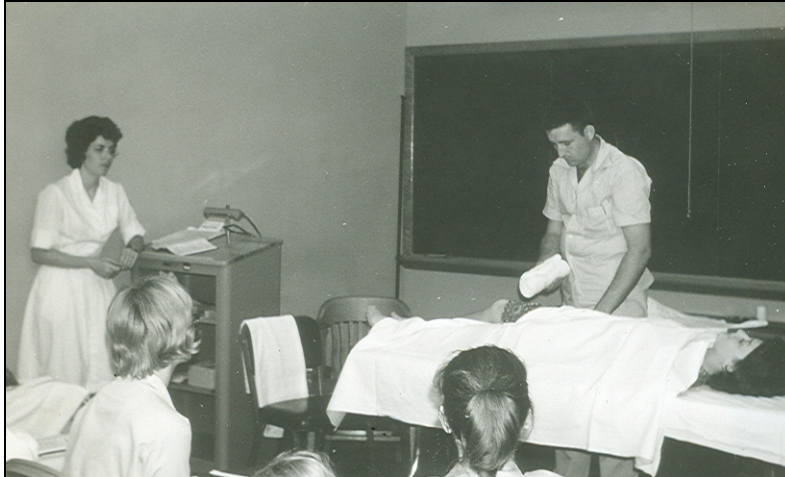
Lester Wolcott

Because of the shortage of rehabilitation professionals in the 1960s, Mr. Hogue and Dr. Wolcott applied for, and receive, a federal grant that supplied Vocational Rehabilitation Administration (VRA) traineeships for all members of the first class. Students were not required to complete individual applications. In 1963-64, each student received \$508 (\$400 stipend, \$108 tuition); in 1964-65, \$625 (\$500 stipend, \$125 tuition). The total amount of the grant was \$21,769, and also helped fund salaries, equipment, and teaching supplies.

The first fall semester courses included Introduction to Physical Therapy and Gross Human Anatomy. The anatomy laboratory was on the third floor of the University of Missouri Medical School. Physical therapy students met at the same time as the medical students: Tuesday, Thursday and Saturdays, 7:40-11:30. The PT students were assigned three cadavers along the north wall, with windows framing Jesse Hall in the distance. The medical students' cadavers filled the remainder of the room; their class would continue for two semesters. The condensed physical therapy anatomy course lasted one semester, for seven hours of credit. The professors included Dr. Milton Overholser, the white-haired and distinguished retired chairman of the Department of Anatomy who received the Citation of Merit award from the MU Alumni Association in 1964. Dr. Dan Overrack, an anatomist who had previously taught physical therapy students at the University of Indiana, was attentive to the needs of the PT students; he later moved to the University of Oklahoma. Bone boxes were checked out to individual students, (later, pairs of students as class sizes increased). Mr. Hogue taught most of the classroom anatomy content as well as Introduction to Physical Therapy.

Early students also completed various other courses; some needed human physiology or an additional biological science such as bacteriology. Others needed a second physics course. One course that all PT students took their first semester was either educational or child psychology to satisfy a College of Education requirement. For several years, there was a question as to which campus entity would confer the eventual Bachelor's degree to the physical therapy students. An agreement was worked out between the School of Medicine and the College of Education--and part of the agreement was to require physical therapy students to take certain College of Education courses. Early diplomas included both College of Education and School of Medicine.

The second semester (Winter, 1964) included Kinesiology, taught by Mr. Hogue, plus Theory and Techniques of Physical Therapy, Basic Clinical Medicine I, and Applied Physiology. In this semester, students spent more time in or near the hospital physical therapy department. The Physical Therapy Department was rather centrally located on 3-West. At one end of the hall was a medical intensive care unit. In the other direction was Surgery. PT included a spacious gym, with windows on two sides: to the west, the eight story dormitories of Laws and Lathrop Halls. Adjacent space contained a large Hubbard Tank and whirlpools. Curtained cubicles led to the staff PT office that had desks around the walls. Next door was a large room used for patient rounds. Around the corner, across from the elevators, was a small room that would hold a dozen people. Here, Sylvia Maune Hughes, RPT, taught two months of therapeutic massage. She looked sharp in her white uniform and flesh-colored stockings. She, like all of the early faculty members, carried a substantial patient load in the physical therapy clinic.



Massage Class

The third semester (Fall, 1964) courses included Pathology, Basic Clinical Medicine II, Physical Medicine and Rehabilitation, Organization and Administration, Theory and Technique of Physical Therapy II, Therapeutic Exercise I, and Clinical Practicum. Paul Wheeler, MD, taught the 2-credit-hour Pathology course. He was physically disabled and blind. As his voice was very soft, he taught the course from memory, with students gathered closely around his desk.

In January, 1964, anticipating the increased workload, Mr. Hogue recruited Walter Gault, RPT, to be Clinical Supervisor of Physical Therapy and to teach. At the start of the Fall, 1964, semester, the number of PT students more than doubled, with twelve admitted to the second class. Mr. Gault and Bob Briggs, RPT, Director of the Missouri Crippled Children's Program, co-taught the Organization and Administration course. Uncomplicated clinical research projects that incorporated basic statistics were required of students.



Bob Briggs with three PT students

Most PT classes met in the TDs, or temporary dormitories, on the north side of the hospital and medical school. These buildings were originally built as barracks during World War II, and were to have been taken down years before. Students spoke jokingly but affectionately about the TDs. The creaking wood floors were polished from years of use; the heating system was ancient, and cooling was nonexistent. In addition to the PT classes, the TDs housed various program offices that overflowed from the medical school and its grants: the Missouri Crippled Children's program, the Human Ecology and Behavioral Sciences faculty, and even patients who needed a place to stay for outpatient care.



The Mall Looking South toward University Hospital

The MU physical therapists' primary responsibility was clinical, though several taught small course segments. Individuals and the years their employment began were Barbara Ritterbusch (1964), Pam Reser (1966), and Fran Bussert (1967). Physiatrists who taught course content or held rounds with Dr. Wolcott were Robert Baer, MD, and Vic Schell, MD. Dr. Matovich, a neurologist who wore her black hair in a tight bun, taught part of the Clinical Medicine course.

Because classes the first two years were small, memorable patient care rounds and presentations comprised a substantial part of the course work. One patient was an infant with congenital lower limb length deficiency. Where his knee should have been, his leg ended in one long toe. The physicians and prosthetists discussed at great length how they might harness that toe to provide some function in a prosthesis. (Eventually the toe was amputated to permit him to be fitted with a standard prosthesis.) Another presentation was of a man and his daughter. The little girl was having difficulty walking. When the pair left the room, students were beckoned to the doorway to watch them walk away down the hall; the father's and daughter's gaits were very similar, an unforgettable clinical example of familial peroneal palsy or Charcot-Marie-Tooth Disease.

Several women in the early PT classes lived in McHaney Hall, the nursing student dormitory. Funds for McHaney Hall were donated in the late 1950s by University Curator Powell McHaney and his family. McHaney was instrumental in resurrecting the four-year medical school. The residence hall allowed nursing students to live close to the hospital, convenient for evening or night duty. A condition of the donation was that if the name of the building ever were changed, the property would revert to the McHaney family. Students who had declared a pre-nursing major were able to stay in the dormitory even after they transferred to the new PT program.

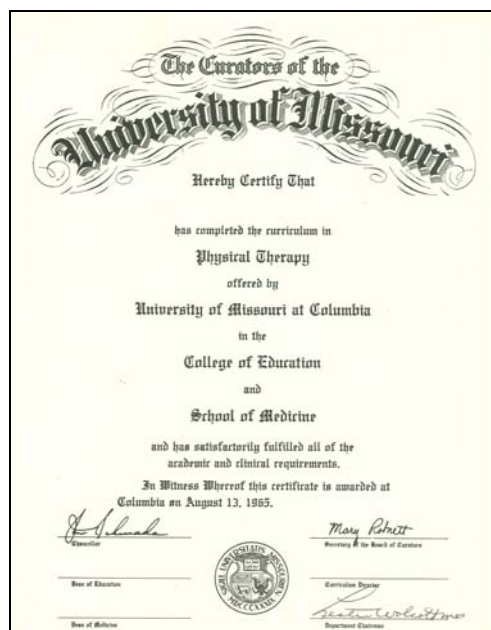
Students were advised to join the American Physical Therapy Association. Attending the Missouri State PT meetings was not mandatory, but encouraged. The first of these meetings attended by MU students, at Mai Tai Lodge at the Lake of the Ozarks, was in 1964. At that time, there were two APTA chapters in Missouri, an Eastern, and a Western, and there was talk of combining the two chapters into one. A field trip in 1964 was to the Federal Medical Center in Springfield, MO, where a physical therapist operated a small clinic. Students visited a small factory where prisoners made brooms. Students also visited the shop of a Springfield prosthetist, Paul McCullough, who was an early clinical instructor.



PT Class of 1965 in Temporary Dormitory (TD) Classroom

In 1965, a student organization was started, and members of both classes attended evening educational sessions with faculty. Prospective students were included in these meetings.

The Clinical Practicum in the '60s took place in three clinical sites in Columbia: the University Hospital (Walt Gault, RPT), University Student Health (Mary Keller, RPT), and Boone County Hospital (Melinda Wallach, RPT). Distant clinical sites were in Mexico, MO, at Audrain County Hospital (Duane Rankin); in St. Louis at Jewish Hospital (Robert Hickok), Jefferson Barracks (Evelyn Walters), St. Louis Children's Hospital, the St. Louis Special School District, and St. Louis County Hospital. Kansas City sites were Research Hospital and The Rehabilitation Hospital (Denise Kendall); in Springfield, Burge Hospital (which became Cox, Fred Brice), and St. John's Hospital (Ray Trlica). The four final, full-time clinical rotations lasted four weeks each, and continued through the summer after graduation. Diplomas were awarded in May, and a certificate was awarded after the last rotation in August.

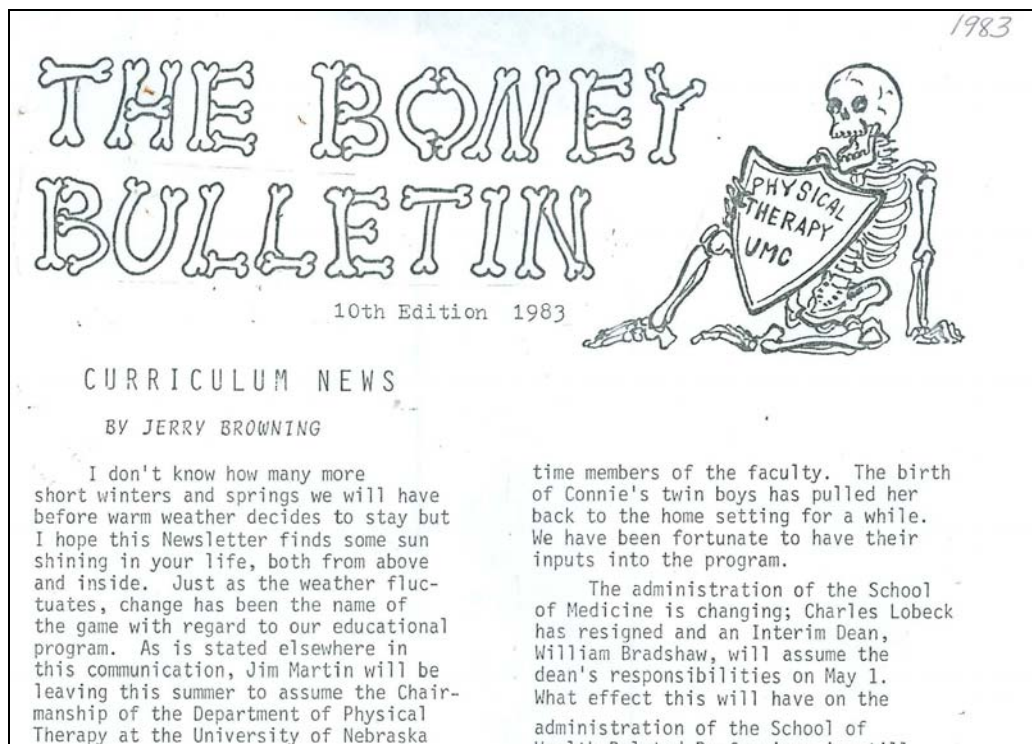


Sample BS diploma, Aug. 13, 1965

Before leaving campus, students sat for the Physical Therapy Registry Examination that was sponsored by the American Medical Association. PT licensure was not required in Missouri. By 1968, the Missouri legislature passed a bill licensing physical therapists, an effort started more than ten years earlier. The Registry Examination was phased out, and a licensure examination produced by the Professional Examination Service (PES) was implemented. Subsequently, the designation for a physical therapist was "PT." When the Registry examination was no longer required, the designation Registered Physical Therapist, or "RPT," for new therapists became obsolete. By this time, the old Eastern and Western Missouri APTA Chapters were merged into one Missouri chapter. Mr. Hogue, now Dr. Hogue, served as the Missouri Physical Therapy Association chapter president during this period, and Marilyn Sanford was chapter secretary.

In early 1967 the first of several newsletters was compiled from PT faculty and graduates from the classes of 1965 and 1966. Graduates had ended up in several parts of Missouri and in other parts of the world: Morocco, Switzerland, and Mexico. Eight of ten members of the first class responded; one member of the first class was in medical school. Eight of 12 of the second class responded, one was headed for a position in Hawaii; another was working in Colorado. Walt Gault was teaching six courses and managing clinical education. Ray Hogue was in the final stages of his PhD program. Newsletters continued through 1983.

Faculty research included Walter Gault's efforts to show that direct electrical current (DC) was effective in healing chronic wounds or decubitus ulcers. Ray Hogue presented several papers during this time, including one on tarsal tunnel syndrome in the foot.



1983 Physical Therapy Newsletter: The Boney Bulletin

In 1968, the PT students' anatomy classes changed from fifteen weeks in the fall semester to eight weeks in the summer; the course remained at seven credit hours. There was no longer sufficient space in the laboratory for medical students and increasing numbers of physical, and soon, occupational therapy students. The anatomy laboratory migrated over the next 40 years from the 3rd floor of the old medical school, to three rooms on the 6th floor, to the basement of the new School of Nursing, and finally to the first floor of the renovated medical school near the new Health Sciences Library. The new School of Medicine building and Health Sciences Library were to occupy the site where the infamous TDs had stood.

Those who joined the University of Missouri as faculty members, while also working in the clinic in the late 1960s were Gerald W. Browning (St. Louis U, '60), and Neva Greenwald (UNC). Several resident physicians such as Robert Allen, MD also taught in PT. In 1968, 40 students graduated in PT. By that time, several graduates from

earlier MU PT classes were working in the university hospital clinic, supervising students and occasionally lecturing: Doris Fike Patient (65), Jean Brody (66), Margaret Griffin (67), Susan Landwehr Steuber (68), Susan Annegers Havens and Jane Cook Lucke (69).

Graduation banquets were first held in 1969. The banquets honored new graduates and recognized outstanding students. The first MU PT award was in memory of Judy Kleiboeker Frieders who died shortly after she graduated in 1968. Her family established the award that continues to be based on nominations by clinical instructors.

In January, 1969, the PT Curriculum and the Department of Continuing Education in the School of Medicine sponsored a workshop on clinical education. Out-of town attendees illustrate the breadth of clinical education at that time: Nevin Almquist, Bothwell Hospital, Sedalia; William Dunn, Memorial Hospital, North Kansas City; Paul Giesenhagen, Methodist Memorial Hospital, St. Joseph; Robert Hickok and Beverly Monical, Jewish Hospital; Claire Bittner, St. John's Mercy Hospital, and Evelyn Walter, Veteran's Administration Hospital, St. Louis; Laverne Freydon, Trinity Lutheran; Denise Kendall, Rehabilitation Institute; Dennis Conger, Research Hospital, and Henry Thompson, Mercy Hospital, Kansas City; Duane Rankin, Audrain County Hospital, Mexico, MO; Ray Trlica, St. John's Hospital, Springfield; and Carolyn Rozier and Carolyn Vittes, St. Anthony Hospital, Oklahoma City.

The 1970s—Major Changes

By the early 1970's, space had become a premium in the university hospital. A decision was made to move rehabilitation services and education programs to McHaney Hall. During this same period, PT program personnel changed substantially. James (Jim) Martin (69) and Marilyn Sanford (65) joined the faculty in 1972, both having been hired to work in the hospital clinic the year before. Dr. Hogue, Dr. Wolcott, Walter Gault and Neva Greenwald all left MU in 1973. Gerald Browning (St. Louis U) was named program director in 1973. Susie Rice became the curriculum secretary. Before the departure of key members of the rehabilitation community, a group photograph was taken in front of McHaney Hall.



McHaney Hall, group photo

In July, 1973, Dr. Charles Peterson replaced Dr. Wolcott as Chairman of the Department of Physical Medicine and Rehabilitation. MU PT graduates who were employed in either the University Hospital Clinic or McHaney/Rusk at that time, in addition to Jane Lucke and Susan Havens, were Ann Herbst Ritchey and Mary Ellen Stephenson (72), and Janet House Brooks (73). Jane Lucke left in 1974, and Carmen Casanova Abbott (73), Pat Ezell (74), and Pat Thalhammer (69) joined the clinical PT staff. Karen Tempfel, who had been curriculum secretary, became secretary for Physical Medicine and Rehabilitation. She had been Dr. Wolcott's patient following a serious automobile accident. Karen's husband Floyd Tempfel studied prosthetics and orthotics during the time Karen was receiving rehabilitation services, and he gave demonstrations to students in the P & O workshops in the basement of the new Rusk. The P & O staff also created upper extremity prostheses that students could use to simulate having an arm amputation necessitating the use of a "hook."

In 1974, the clinical PT services and the education program were split administratively, each entity answering to its own director: Gerald Browning for education, and Janet House Brooks (73) for the clinic. The PT faculty completed its move to the south end of the second floor of McHaney Hall. The anatomy lecture and Clinical Pathophysiology I and II were held in M328 of the School of Medicine, but the remaining PT courses were held in one room in the new Rusk. The former nursing dormitory lounge became the physical therapy classroom and laboratory. In the classroom/laboratory, a slide projector was mounted on the wall about two-thirds of the way back in the room, making it convenient for a students to insert a "surprise" slide in an instructor's presentation. Fold-away treatment tables were built by prisoners in Jefferson City. Classroom desk chairs were stackable, and were put away when laboratory activities were scheduled and the treatment tables were set up. Most of the time, the tables worked beautifully, but occasionally, someone would forget to put the pin in the lock, and the legs would fold, dropping one end of the table, and either the head or feet of a subject (usually a student; rarely a faculty member) to the floor.



Photo of McHaney classroom: Aging Simulation

David Horrell (71) joined the faculty in 1974, and taught neurophysiologic concepts. His research on the effectiveness of postural drainage in pulmonary disease was the subject of his Master's Degree. One of his colorful lung radiographs was featured as the cover of the Journal of the American Physical Therapy Association. He returned to clinical practice in 1982, but continued to teach neuroanatomy and neurophysiology as a guest lecturer until 1987.

In 1975, Mary Beth Barone (St. Louis University '71), a clinical instructor at the St. Louis County Hospital, became the chief therapist at the Medical Center PT department, and Academic Coordinator of Clinical Education (ACCE) for the PT program. She and Marilyn Sanford (65), along with Stan Bigos, PT 70, MD), incorporated the new concepts of joint mobilization into the rapidly expanding orthopedic curriculum. Connie Hayden (75) and Marilyn Sanford attended a two-week course taught by Stanley Paris in 1976, and incorporated that content into the orthopedic course.

During the 1970s, in addition to the steady growth of orthopedic content using the texts from Calliet, Maitland, and Hoppenfeld, other developing concepts were added. Bobath's neurorehabilitation methodology, and proprioceptive neuromuscular facilitation (PNF) according to Knott and Voss found new or expanded places in the curriculum and laboratory. Visiting faculty included Shirley Randolph who introduced students to neurorehabilitation according to Rood. PT and OT students enrolled in the course "Human Ecology and Behavioral Science" alongside medical students, and were introduced to death and dying, human sexuality, and patient interview methods. The "team approach" to patient care was touted, and PT students shared a new learning center with OT and medical students. Slide/audiotape learning programs were available, along with books, journals, and anatomical models. In 1973, Jim Martin incorporated the educational concept "mastery learning" in the Gross Human Anatomy course. The intense process involved having students pretest, test, and retest twice, if needed, in order to earn an "A" in the course.

Until 1975, kinesiology was taught by PT faculty members; that year, PT students enrolled in Kinesiology with Ms. Jane Bennett and Dr. John Roberts in the Department of Physical Education. This arrangement continued for 20 years.

The large number of students who applied to the physical therapy program was a challenge through the mid-1970s. With the move to McHaney Hall/Rusk, the class size was reduced to 24 for two years because of faculty and space reductions. In 1976, a decision was made to only accept applications from Missouri residents indefinitely. That dropped the number of applicants by almost half, from about 450 to roughly two hundred fifty, where it remained until the "managed care" revolution of the mid-1990s when the number of applicants decreased again. Also in 1976, the pre-clinical rotations that had taken place in the fall were moved back to the summer session. This allowed students a full semester of coursework before full-time clinical rotations the following winter semester.

Throughout the '70s, students participated in intramural sports, MPTA activities. They held picnics and receptions for incoming students, and fund-raisers for MD, MS and other charitable causes. In October 1976, the first All-Class Physical Therapy Reunion was held. Twenty-five alumnae and several faculty members and guests, including Mr. Roger Williams, attended. The reunion was dedicated to the memories of Mrs. Judy Klieboecker Frieders Miss Janet Geel, Miss Debbie Kelly, and Dr. Paul Wheeler.



MPTA skit by MU PT students, class of 1973

Graduation banquets continued. In 1979, Dr. Howard Rusk and his wife attended. Dr. Rusk, who was born in north Missouri, practiced medicine in New York where the original Rusk Rehabilitation Institute is located. Dr. Rusk was instrumental in the development of rehabilitation methods for combat survivors of World War II. Not surprisingly, the new Rusk Rehabilitation Center at the University of Missouri was named in his honor.



Dr. and Mrs. Rusk



Roger Williams and Cynthia Driskell, 1979

In March 1977, Sandra Williams Ballenger (70), moved from her supervisory position in Rusk Rehabilitation to become the Academic Coordinator of Clinical Education (ACCE). Marian Minor (KU 65) received an appointment in physical therapy so that she would have an academic home from which to carry on research in arthritis and exercise.

On July 1, 1978, the University Board of Curators approved the new School of Health Related Professions (SHRP), consolidating five bachelor degree programs (medical technology, occupational therapy, physical therapy, radiological technology and respiratory therapy) plus the master's-level health services management program under one administration within the School of Medicine. Herbert Goldberg, PhD, Associate Dean of the School of Medicine, became the Director of SHRP, with Dr. Roger Harting, representing the College of Education, the Associate Director. The Class of 1979 was the first to graduate with the new baccalaureate degree Bachelor of Health Science with Emphasis in Physical Therapy.

An advantage of being in the "new" Rusk building was the proximity of clinical physical therapists and patients to students, the curriculum offices and classroom. Equipment could easily be borrowed from the clinic. Occasionally students held laboratory in the clinic, thus a more realistic experience could be had, especially when the Rusk patients participated. However, space was extremely short, and faculty even used a storeroom for student checkouts. There was little opportunity for growth of the program, and new quarters were needed.

News From the Management



Marilyn Sanford

Marilyn Sanford has had another busy, productive year. She wants everyone who was at her house before the kitchen was remodeled to know that the job is finally finished and the mess is cleaned up. The Sanfords have also gone back to nature by installing a wood stove in their home. The kids are now 12 and 8 years old. Marilyn's husband has been gone alot this year, being involved with environmental problems resulting from—"The Great Sturgeon Train Derailment and Chemical Spill."

In the last year, Marilyn has become interested in the rehabilitation of cancer patients, following a class the senior students had at Ellis Fishel Cancer Hospital. She has also headed a program for scoliosis screening of school children. With the help of the PT students, school nurses, Jim Martin, Sherri Kuntz, and Dr. Bob Gaines about 1700 children have been screened.

Marilyn is on the University of Mo.-Columbia Safety and Risk Management Committee, so if anyone has any suggestions about things such as crosswalks, potholes, or fallout shelters, just let her know. She is also involved in developing a brochure for the new "School of Health - Related Professions" and she says, "Anyone who was around the last time I did this will understand the trepidation with which I undertake the task."

Marilyn is involved in setting up the state meetings of the MPTA in 1980. She is also planning to go to the national convention this summer in Atlanta and hopes to see some of you there.

PT Curriculum Faculty and Staff - (left to right) Shayne Arbuckle, Susie Rice, Jim Martin, Jerry Browning, David Horrell, Marilyn Sanford and Sandy Ballenger.

PT faculty, 1979: Arbuckle, Rice, Martin, Browning, Horrell, Sanford, Ballenger

The 1980s: Stability

By 1980, the physical therapy program faculty had defined the student admissions expectations more rigorously. A system of coding and weighting criteria necessary to enter the program was refined. Although the admissions process was always challenging, and a great deal of faculty effort went into the process, the revised system provided a greater sense of fairness and consistency for student admission.

By the early 1980's the use of computers for creating handouts and examinations was well established, and the old, laborious, cut-and-paste method of editing typewritten tests and class materials came to an end. In 1981, Susie Rice, secretary, was replaced by Mary Ann Stogsdill.

Ann Tobben Schaeperkoetter (76), who was part-time faculty starting in 1979, assisted Dr. Browning with Proprioceptive Neuromuscular Rehabilitation until 1984. Connie Hayden (75) joined the faculty in 1981, continuing until 1984 after her twins were born. Debbie Marzolf Whitley (70) (later Cooke) joined the faculty in 1982 to teach pediatrics and modalities. In 1983, Carole Riggin succeeded Sandra Ballenger as ACCE. Jim Martin left the faculty in 1983 for a position in Nebraska.

By 1984, Rusk Rehabilitation Center in McHaney Hall was so crowded that the PT and OT programs needed to move. Lewis and Clark Hall, originally a private dormitory built in the late 1960s, offered space on the first and basement levels when a medical school grant came to an end. Old office walls and closets were demolished, and PT and OT classrooms, laboratories and offices were installed. The PT Class of 1985 spent its first year using the McHaney\Rusk classroom, and its second year met in the new PT classroom and laboratory in Lewis Hall. That class was the first to be assigned laundry duty. With the move to Lewis Hall, University Hospital laundry facilities were no longer available, and commercial services were too expensive. A washer and dryer were installed in the old pool pump room in the basement of Lewis Hall.

In 1984, Randy Smith, a PhD exercise physiologist by training, joined the faculty. He completed a PT degree in 1989, and left the program in 1992. Charlene Roberts, ('81) joined the faculty as ACCE in 1985, replacing Carole Riggan who opened a clinic in Jefferson City. Charlene taught Theory and Technique course, Clinical Kinesiology, and parts of Gross Human Anatomy. She obtained plaster casts of amputee residual limbs for students to practice stump wrapping, and used an accumulation of spinal and lower extremity braces and prosthetic samples in her courses.

Beverly Denbigh became program secretary in 1986. Three children later, she continued to be the "go to" person in the office. She and her husband John, manager of the University Dairy farm, hosted campfire cookouts and hay rides at the farm. Students continued their extracurricular group fun with float trips and picnics.



Float trip: Class of 1986

In 1989, responsibility for the Gross Human Anatomy course was handed to the Department of Pathology and Anatomy, ending an era of PT and OT Department management. However, PT and OT students continued to serve as laboratory assistants during the summer course. Also in the summer, a one-credit hour course Introduction to Physical Therapy addressed a variety of topics: vital signs, infection control, medical terminology, history of physical therapy, and a tour of the University Hospital and the Health Sciences library .



Anatomy Lab: Chris Merlo, Terry Cox, Janet Lackey: Anatomy TAs, Class of 1987

Sharon Coffman, an APTA-certified Cardiopulmonary Clinical Specialist, and KU graduate from Kansas City, traveled to Columbia to present two days of cardiopulmonary rehabilitation content for the first time in 1989. This arrangement continued until 2008.

The 200,000th student to graduate from MU was Angie Hoffman, PT, '89; she was pictured on the cover of the Missouri Alumni magazine. Both the sesquicentennial of the University of Missouri and the 25th anniversary of the first PT graduating class were in 1989, too.



Angela Hoffman, Class of 1989, Graduation

That fall the second all-class Physical Therapy reunion was held. Both program founders: Raymond Hogue, PhD, and Lester Wolcott, M.D., were in attendance and addressed the group. Six of nine living members of the first PT class of 1965 attended.



Ray Hogue and Jim Martin



Reunion of Class of 1965, in 1989

The 1990s: Changing with the Times

In 1992, the last accreditation of the PT program as a bachelor's degree-granting entity was completed. The next accreditation 10 years later would be for the master's degree in PT.

Faculty members hired in 1992 were Carmen Abbott (73) and Kim Nevins (78). Carmen had been a guest lecturer on a variety of clinical topics for a number of years. Her teaching responsibility related to various modalities meant that she obtained equipment for class from various companies; in so doing, she kept up-to-date equipment in front of students, and reduced the need to store large items. She also served as Faculty Advisor to the Student Physical Therapy Organization, and was Co-director Four Winds Learning Community.

Kim Nevins was recruited from the Columbia Public Schools and Columbia Regional Hospital to teach pediatrics in the PT program. She was instrumental in developing, as a Service-Learning opportunity, Special Olympics Track and Field, Sibshop, and Special Olympics Gymnastics. The gymnastics program has continued with the supervision of faculty members, and with PT and OT student volunteers. Max Lewis, JD, started leading the children's activity from his wheelchair, and has continued to do so for many years.

In 1993, after 20 years chairing the program, Dr. Gerald Browning became Associate Director of the School of Health Related Professions. Marilyn Sanford, PT (65), PhD, became program director. The first faculty member Dr. Sanford hired was Karen Wingert (73), PT, RN. She brought both clinical and teaching experience, and expanded the neurologic rehabilitation course. One of her guest speakers was Jeffrey Krug, (U Wis '91) who subsequently was hired as a faculty member.

In 1995, Teresa Sapp Briedwell (81) began as a laboratory assistant to Charlene Roberts, teaching goniometry and muscle testing. Sue Castleman Lindaman (78) started as a laboratory assistant to Carmen Abbott teaching modalities. Kyle Gibson, (Northern Illinois, 89) started teaching as a volunteer laboratory assistant to Dr. Browning, who had taken responsibility for the orthopedic content from Dr. Sanford. In 1997, Kyle took over ACCE duties from Charlene Roberts. Staff members during this period, in addition to Bev Denbigh, were Hayden Wood, June Turban, and Pam Morrison.

Much of Dr. Sanford's efforts were directed at completing the work started by Dr. Browning--converting the program to the Master of Physical Therapy level. In an agreement with campus administration, in order to secure the move to the Masters level, 50 students a year, up from 36, were to be admitted. Most physical therapy programs in the United States had already reached the Master's level when the University of Missouri program started its Master's degree program. Classroom and laboratory space switched to gain room for a larger class, and storage closets were built into one corner of the "new" laboratory. The program office moved from 121 to 106 Lewis Hall to accommodate an additional office staff member.

Physical therapy space gradually increased in Lewis and Clark Hall. In 1995, the Occupational Therapy Program moved to the third floor, leaving PT with two-thirds of the first floor. When the Missouri Kidney Program moved out, Physical Therapy acquired the remainder of the first floor of Lewis Hall. The bathrooms were switched in the ground floor of Lewis so women students would have the larger space for a changing room.

In 1995, with pressure to sacrifice programs not considered essential, the College of Education closed the Department of Physical Education. With the loss of the H380 Kinesiology class, Human Kinesiology was reinvented as a campus service course, managed by PT. Jane Bennett, who had taught physical therapy students their introduction to kinesiology for many years, remained with the College of Education. Dan Wilson was hired to teach Human Kinesiology. Charlene Roberts and Kim Nevins later took charge of the course.

In 1997, Dr. Sanford implemented problem-based learning (PBL) in the course Approaches to Long Term Care. She and Dr. Browning had been interested in starting a PBL course in physical therapy for some time. The MU School of Medicine had incorporated the method several years earlier. Dr. Browning traveled to Hamilton, Ontario, to see how PBL was implemented in the McMaster University physiotherapy program. Later, Dr. Patty Solomon traveled to Missouri to teach faculty how McMaster applied PBL. The amount of formal lecture time was reduced; laboratory activities continued. The major change involved having "tutors" sit with small groups of students to discuss patient-based cases several hours each week. Among the early tutors were Donna Pavlick (PT, JD), Karen

Funkenbusch, (Agriculture), Larry Petterborg (Anatomy), Lisa Wright, (88) and Evan Prost (87) who eventually assumed responsibility for the PBL courses, and became the go-to person for technical computer assistance.

In 1997, the School of Health Related Professions separated from the School of Medicine. The School (SHRP) dropped the term "Related" and became the School of Health Professions (SHP). Programs in the new school became Departments. Program Directors became Department Chairmen.

In 1998, Kim Nevins returned to the Columbia Public Schools; Jason Kendall (96), a clinician from Sedalia who had experience treating children, taught the fall pediatrics course. In 1999, Connie Blow (77) returned to Columbia to take over the pediatrics content.

A survey of graduates was undertaken in 1999. Of the 369 respondents, 62% were living in Missouri; 78% were female; 79% agreed that overall they were prepared to meet the needs of patients/clients. About half of the older graduates were making over \$50,000/year compared to 17% of recent graduates (1996-1999).

And in 1999, the last Bachelor of Physical Therapy students graduated.

The 2000's: Doctor of Physical Therapy on the Horizon

There were no regular graduates in physical therapy in 2000. Because the Master of Physical Therapy had been approved, students admitted in 1998 would not complete the program until 2001. However, a special student, Gertrude Motavali, was awarded the first Master of Physical Therapy degree from the University of Missouri. An experienced physical therapist educated in Germany, she had worked in several foreign nations, Guam and Wisconsin. The Missouri Board of Healing Arts would not grant her a license. It was possible, using a combination of previous coursework and her participation in a pediatrics grant supervised by Jan Johnson McElroy (72), to award her the Master of Physical Therapy degree.

The number of patients at the new Health South/Rusk Rehabilitation Center rose to the level that triggered the funding of the PT Health South Professorship in 2000. Marybeth Brown, (USC) PhD, PT, FAPTA, filled the position in 2001, bringing her strong research credentials, and extensive knowledge of geriatric physical therapy.

Through the decade of the 2000's, several faculty members completed either the PhD or the transitional clinical doctorate/ DPT: Karen Wingert, Kyle Gibson, Teresa Briedwell, Carmen Abbott, Evan Prost, Jan McElroy, Kim Nevins, Lisa Wright, Jeff Bridges.

Marilyn Sanford retired in 2000, but stayed with the department to continue the transition to the longer curriculum and help prepare accreditation documentation. In 2002, Marian Minor, PT, PhD, was named Chairman of the department. Under her leadership, the research efforts of the department expanded significantly. Erin Danneker, PhD, and Steve Sayers, PhD were hired in 2003 to expand the departmental research effort. Space in Lewis and Clark Hall grew to include a large research and patient/client care area on the ground floor of Clark Hall.



Browning, Sanford retire (2001)

Nationwide efforts to advance the Doctor of Physical Therapy (DPT) as the preferred degree accelerated in the late 1990s. By 2002, it was clear that MU had to make the same change in order to remain competitive for students and to allow graduates to compete in the marketplace. While a potential PhD program in the School of Health Professions was pushed back, Dr. Minor was able to move the DPT forward with approval for the change to become effective for the PT Class of 2010. As part of the effort to maintain the high quality of physical therapy student ability with the advent of the Doctor of Physical Therapy degree, admissions were opened to non-Missouri residents in 2005.

New staff joined Beverly Denbigh in the department offices: Dawn Davis, Becky Dodson, and Jackie Bohm. Administrative responsibilities were divided among the faculty: Teresa Briedwell was named Director of Admissions and Academic Affairs; Kyle Gibson was named Director of Curriculum and Instruction. Kelly Alberty Della Rocca (98) served as ACCE, followed by Dana Wiswell Martin (03).

In 2009, the last Master of Physical Therapy students graduated.



MU PT Faculty and Staff, April, 2006

Back row: Kyle Gibson, Marian Minor, Lisa Wright, Erin Dannecker, Beverly Denbigh, Carmen Abbott, Teresa Briedwell, Karen Wingert, Evan Prost.

Middle row: Connie Blow, Marybeth Brown, Becky Acton, Dawn Davis, Peggy Nigh.

Front row: Stephen Sayers, Jeff Krug, Marilyn Sanford Hargrove.

Not present: Kim Nevins



MU PT Faculty and Staff, September, 2008

Back row: Connie Blow, Marybeth Brown, Jeff Krug, Karen Wingert, Jackie Bohm, Evan Prost, Kyle Gibson, Stephen Sayers, Kim Nevins, Nancy Dietz.

Front row: Erin Dannecker, Becky Acton, Marian Minor, Carmen Abbott, Kelly DellaRocca, Teresa Briedwell, Beverly Denbigh, Marilyn Sanford Hargrove, Dawn Davis.

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A disclaimer is in order. At the request of Marian Minor, PT, PhD, Chairman of the Department of Physical Therapy, this history of the PT program at the University of Missouri was initiated. The narrative is primarily composed of the recollections of Marilyn Sanford Hargrove, a member of the first class of 1965. Some memories have been verified through written records or in talks with other students and faculty, but most is composed of her sometimes fuzzy recall, thus all statements are to be taken with a "grain of salt". Dr. Sanford, more recently Dr. Hargrove, was a clinical instructor during the time she was employed as staff physical therapist at Boone County Hospital (1965-1970). She was staff physical therapist at University Hospital 1971-72, started teaching in the program in 1972, and has continued up to the present. She served as program director from 1993 to 2000 when she retired from the university, returning as a part time faculty member. It is certain that some "facts" are skewed, and that some important people have been left out. It is hoped that concerns will be made evident so that corrections can be made!

Marilyn Sanford Hargrove, December, 2011