Building For The Future – 1980 Forward

The history of the Creighton School of Medicine during the last decade can be characterized as a period of prosperity and growth. Not only has there been a significant advance in faculty size, but additions to the faculty have held increasingly prestigious credentials and reputations. New programs have been established at the School, including the many Centers of Excellence, which have strengthened Creighton’s reputation as a regional health center. The decade has also been a time of financial stability, enabling the School to maintain excellent facilities and to utilize advanced technology to teach and heal. There has been a dramatic increase in sponsored research at the School, which in turn has lead to significant contributions to medical knowledge. Of equal importance, the School of Medicine has continued its primary mission of educating competent, caring physicians for the future. Under the leadership of Dr. Richard L. O’Brien, this further development of the School of Medicine during the last decade has made the name Creighton synonymous with quality medicine, and has laid a firm foundation for a bright future.

The early 1980’s was a time of administrative transition for the School of Medicine. The deanship of the School changed not once, but twice. A new Acting Dean was appointed in 1980, followed by a permanent Dean in 1982; a change was also made in the office of the Vice President for Health Sciences. In 1984 an Acting Vice President for Health Sciences was appointed and made permanent in 1985. Furthermore, in 1984, St. Joseph Hospital, our principal teaching facility, was sold to an international corporation. This sale generated much controversy at the time, but it provided substantial benefits.

New Leadership

On November 3, 1980, Dr. Joseph M. Holthaus resigned in response to administrative reiteration of the ten-year rule for the tenure of deans. Dr. Robert Heaney, then Vice President for Health Sciences, described the situation:

In the interim the medical school was so torn apart, there were factions and problems, it was so torn on the issue, and so destructive of one another, it was a hotbed of snakes. If I had appointed this person or that person or the other person as dean while we were searching for a replacement, it might have torn it further apart. So I pulled a surprise on the faculty, and appointed Father Jim Hoff.

Father James Erwin Hoff’s background was unconventional for a medical administrator. A native of Milwaukee, he pursued a pre-med course at the University of Notre Dame and Marquette University, was accepted into the freshman medical class at Marquette in 1953, but instead decided to pursue a priestly vocation. He earned a B.S. in Biology and an M.A. in Philosophy at Spring Hill.
College, Mobile, Alabama; an M.A. in Theology from St. Louis University and a Ph.D. in Theology from Gregorian University in Rome. After serving for five years as Director of Novices at Jesuit College in St. Paul, Minnesota, he studied legal and ethical issues in health care at Tufts Medical School, Harvard University, and Boston University Law School.

He first came temporarily to Creighton in 1969 as Assistant Professor of Theology, then returned in 1976 as Associate Professor of Ethics in the Health Sciences. In addition, he held an Associate Professor appointment in the Department of Medical Jurisprudence and Humanities at the University of Nebraska Medical College. He became known in the Omaha area for his involvement with the cause of terminally ill patients and his advocacy of the hospice movement. At the time of his appointment as Acting Dean, he was one of only eight medical school deans in the United States not holding an M.D. degree, and the only one of the 125 who was a priest.

His appointment, according to Dr. Heaney, "completely knocked the Medical School off their stride." Yet Dr. Heaney recalls that it was a good choice, since Father Hoff "knew the territory and he had a clean record . . . he was a neutral person." Father Hoff had not been a part of the turmoil which had involved the School in the preceding months so was able to assume the position politically unencumbered.

Beginning in May 1981 a Search Committee chaired by Dr. Raymond W. Shaddy began looking for a permanent dean. A field of eighty-one candidates was narrowed to forty-nine, and interviews were held. In May 1982 it was announced that effective November 1, Dr. Richard L. O'Brien, a 1960 Creighton Medical School graduate, would return to his Alma Mater in the capacity of Dean.

Dr. O'Brien brought back to Creighton his extensive experience in many aspects of academic, clinical and research medicine. Following graduation from the Medical School, he served his internship and residency in Internal Medicine at Bellevue Hospital in New York City. He then accepted a two-year post-doctoral fellowship from the National Institute of Health serving at the University of Wisconsin Institute for Enzyme Research. The two years following that were spent as a Captain in the U.S. Army serving as Assistant Chief, Department of Molecular Biology at the Walter Reed Army Institute of Research in Washington, D.C. He then joined the faculty of the University of Southern California School of Medicine Department of Pathology as Assistant Professor, becoming a full Professor in 1976. At USC, in addition to teaching responsibilities for students at all levels of medical education, Dr. O'Brien had administrative responsibilities of increasing importance, culminating with his appointment as Director of the USC Cancer Center and Kenneth Norris Jr. Cancer Hospital and Research Institute. Concurrent with these activities, he continued his research endeavors, earning a national reputation in cell biology and cellular immunology.
Soon after becoming Dean, Dr. O'Brien addressed the following remarks to Medical alumni in the December 1982 Creighton University Health Science News:

My primary reason for returning is the opportunity to assist and guide faculty members and students of this school, toward which I feel strong bonds of loyalty, to realize their potential. I want to participate in the School of Medicine's being a great institution which provides for its students an outstanding education, opportunities to develop any of the many careers available to physicians, and which contributes in major and constructive ways to the advancement of the science and art of medicine.  

Beginning in April 1984, Dr. O'Brien had occasion to expand his scope of assistance and guidance at Creighton to include not only the School of Medicine, but all of the Health Science schools. At that time he was appointed Acting Vice President for Health Sciences, replacing Dr. Robert Heaney in that office. Dr. Heaney had been Vice President for Health Sciences since 1971. In March 1983 he became the first incumbent of the newly created John A. Creighton University Professorship. This was a new faculty post, outside usual departmental organizational structures, whose flexibility allowed for research, teaching and special projects. A search committee was established in 1983 to aid in the selection of a new Vice President for Health Sciences. Dr. Heaney continued to serve until his successor could be found. 

Effective April 23, 1984, Dr. O'Brien was named Acting Vice President for Health Sciences for a period of one year, in addition to his duties as Dean of the School of Medicine. After another extensive search, in June 1985 Dr. O'Brien's Vice Presidential appointment became permanent. This consolidation meant that Dr. O'Brien was not only the chief administrator of the School of Medicine, but had responsibility for overall administration of the other Health Science schools and programs as well. Nursing, Dentistry, Pharmacy and Allied Health Schools, the Bio-Information Center and the Health Sciences Instructional Research and Pastoral programs. He was also the principal liaison with St. Joseph Hospital. As Vice President for Health Sciences, he was his own supervisor in the capacity of Dean of the School of Medicine. Later in August 1991, as he approached his tenth academic year as Dean, Dr. O'Brien announced that he would vacate the office effective July 1, 1992, and devote his full efforts to the office of Vice President for Health Sciences.

Sale of the Century 

Late in 1983, American Medical International (AMI) expressed interest in the possible purchase of St. Joseph Hospital. AMI was an investor-owned health management firm based in Beverly Hills, California, which had $2.22 billion in revenue and $129.3 million in net income during 1983. It operated some 160 health care facilities nationwide, 111 of them hospitals, several hospitals overseas, and was the second highest profit-making hospital corporation in the United States. St. Joseph, it will be remembered, was owned and operated by the non-profit Creighton Omaha Regional Health Care Corporation. The financial structure of the hospital was stable at the time, yet there was much concern for the future. A study done in 1983 by a consulting firm concluded that for continued survival and growth,
St. Joseph Hospital would need to affiliate with a hospital group. The hospital still owed roughly $64 million from its construction. In addition, Dr. O’Brien noted, in April 1984:

We intend to continue to care for the poor and to continue our teaching mission. But quite frankly, the cost of indigent care threatens us. The hospital needs to find a way to cover the cost of indigent care, to offer more competitive rates and to have future funds for replacing equipment and upgrading facilities.7

Objections were many to the proposed sale. A primary complaint was the for-profit nature of AMI. Questions were raised as to how the Catholic mission of the hospital could continue in a for-profit structure. What would happen to Omaha indigent medical care, the bulk of which St. Joseph had always shouldered, if the profit motive were involved? How could a Catholic identity be maintained as part of a for-profit chain? Continued membership in the Catholic Health Association might be challenged if such a transition were made.

Loss of local control was another issue raised by dissenters. The issue of abortions being done at other AMI-owned hospitals was a concern. Many of those who objected to the proposed sale felt the hospital did indeed need to consider some sort of group affiliation, but since finances were not presently critical, they felt more time should be taken to explore other alternatives.

Controversy continued but exploratory negotiations began with the AMI group in April 1984. Two Creighton/St. Joseph assessment teams visited an AMI-owned hospital in Birmingham, Alabama—Brookwood Medical Center—late that month. Chosen because of its similarity to St. Joseph in size and teaching programs, Brookwood stood up well under Creighton scrutiny when team members observed facilities and operations and talked at length with staff.10

AMI made a formal proposal in May 1984 to purchase St. Joseph Hospital. After more discussions, St. Joseph Hospital, AMI and Creighton University reached an agreement in principle early the next month, and a Certificate of Need was filed with the Nebraska State Department of Health Review Committee as required by state law. A final contract was signed by all parties August 17, 1984. Approval was given by the State Need Committee on October 11, and by November 1984, after the thirty-day appeal period had expired, the sale was completed. St. Joseph Hospital was now part of American Medical International, one of the first times in history that an academic medical center had merged with an investor-owned health care corporation.

Why was the Hospital sold to American Medical International, despite all the initial controversy and objections? The answer lies in the terms of the sales agreement. Creighton officials believed that the sale best assured the future financial health of the hospital and its participation in the School’s teaching mission. Objections had been effectively answered by AMI and others, and the advantages of the sale for the future of the School were evident. Key points of the sales agreement included the following:
American Medical International was to pay $99.3 million to the Creighton
Omaha Regional Health Care Corporation for the purchase of the hospital.
After St. Joseph's outstanding debt was paid, the remaining sales proceeds,
between $35 million and $40 million, would be used to establish an Omaha-based,
non-profit, tax exempt foundation (later named the Health Future Foundation). The
income from this initial endowment would be used to finance teaching, research and
program development for the Health Science schools at Creighton and also aid in
financing continued indigent care at St. Joseph.
St. Joseph Hospital would remain a Catholic hospital. AMI was legally
bound to maintain "the Catholic mission, tradition, values, tenets and name of St.
Joseph Hospital." All pastoral programs would remain intact.
AMI would provide a $3 million outright gift to the Foundation on behalf
of the Health Science schools of Creighton University.
The St. Joseph policy on indigent care would not be changed. The new
foundation established by the proceeds of the sale would provide $1 million per year
to partially offset indigent care costs, until other sources of community /government
support could be identified.
Abortions would not be performed at St. Joseph or any other facilities in the
Omaha area which AMI might acquire at a future date.
AMI was legally bound to spend about $10 million between 1984 and 1989
for new equipment and parking facilities at the hospital.
AMI would provide a grant of $200,000 annually for a period of ten years to
establish a Center for the Study of Health Policy and Ethics at Creighton University.
Hospital policy would be formulated at the local level by a Board of
Directors, a majority of whom would be composed of representatives of the Omaha
lay community, St. Joseph medical staff, Creighton University and Boys Town
Institute. AMI would have only three representatives on the Board, one of which
would be John C. Gaffney, the hospital's President/Chief Operating Officer.
AMI would honor all existing affiliations for teaching programs with the
Creighton University Health Science schools, and all commitments in effect with the
Boys Town National Institute for Communication Disorders in Children.
St. Joseph would become a "flagship" hospital in the AMI group, a model
for other AMI facilities nationwide.
There would be no change in employee status, seniority or benefits, nor in
volunteer programs maintained at the hospital.
AMI would conduct a feasibility study within three years to determine how
and where to proceed with a new Center for Mental Health.
If AMI should be unable or unwilling to fulfill its contractual commitments
to St. Joseph, or if it should be acquired by another entity, the Creighton Omaha
Regional Health Care Corporation and/or Creighton University would have the
right to repurchase the hospital from AMI. Further, AMI would provide 80 percent
of the funding to do so.11
Additionally, the sale gave St. Joseph the advantage of scale, meaning that
AMI, as a large management organization, could save money by buying necessities
in large volume, could use centralized services which avoided duplication, and
could provide access to capital to be reinvested in research and education.12
Furthermore, a for-profit hospital, as opposed to a tax-exempt entity, would benefit
the community in the form of state and local taxes, estimated to be more than $4
million in 1984.13
All parties to the agreement were enthusiastic. Walter L. Weisman, President and Chief Operating Officer of AMI, noted:

Saint Joseph Hospital is an institution of extraordinary tradition, extraordinary prestige and—most importantly of all—extraordinary merit, presently and prospectively. We wanted to come together with an institution of this kind of excellence and grow with it.14

The Creighton University viewpoint was summed up by President Father Michael Morrison:

With the ominous changes facing all hospitals at this time regarding health care reimbursement, this merger will provide Saint Joseph Hospital the long-term financial security needed to guarantee the continuation of its traditional mission. The merger can only enhance the health science education programs of Creighton University and enable us to pursue better our goal of becoming one of the premier academic medical centers in the United States. The opportunity for this affiliation at this particular time in our history, I believe, can only be regarded as providential.15

Curriculum Changes

A continuous problem for every medical school is dealing with an ever-growing body of medical knowledge. In the years when the John A. Creighton Medical College was founded, it was the happy hope of medical educators that all licensed physicians would share the same body of knowledge. Even then, however, some recognition of specialty fields was developing, and this gradually evolved into our present situation in which every new medical school graduate is expected to continue years of learning and training in just one area of medicine. Extending the years of study and dividing medicine into specialty fields has helped cope with the over-burdening knowledge problem, but there still remains a staggering amount of medical information which every school wants students to obtain by the time they graduate and select their particular specialty for continued study. Every curriculum committee has grappled with the constant question of what basic material should be included in a core curriculum and what is the best way to instruct medical students to insure that they understand and retain that core information.

The Creighton School of Medicine, like other medical schools, made interesting curriculum changes over the years. Thirty or forty years ago, Creighton students spent hundreds of hours in laboratory activities in keeping with an educational dictum that doing and seeing is important for learning and retention. Although we accepted the truth of that principle, the pressure to provide more knowledge interfered with its practice. Students complained that lengthy laboratory hours were less valuable than the same time spent in intensive, individual study. With no penalty for lack of attendance in basic science courses, students frequently skipped lectures, and more often, laboratory sessions. The argument was simple. Why spend three hours in laboratory time learning material more easily learned in thirty minutes of reading? Arguments to the contrary were not persuasive, and in the 1950's and increasingly in the 1960's, the time spent in laboratory activities diminished. In recent years, some lab activities with dissection and microscopic study
have continued, being regarded as most essential and unavoidable but involving fewer hours than previously required. Laboratory work in many subjects has become more of a demonstration than an activity carried out by the students themselves.

Efforts to define and present the core curriculum of each subject has created some interesting experimental efforts. During the late 1960's, the School tried a few years of block teaching. Medical students would be taught only one subject such as Anatomy intensively, and would complete it in its entirety within a few weeks' time. A student would then move on to another subject such as Biochemistry and study nothing but Biochemistry for another period of a few weeks. With this arrangement, it appeared that many students did quite well, but two problems developed. The tremendous teaching demand placed on a single department for a few weeks gave the faculty a difficult, unbalanced schedule for the academic year. As for the students, many did very well. For those who did not, there developed the special problem of failing one of the initial courses and then feeling that they lacked the fundamental knowledge to continue with other basic courses. This problem was noted by students in the customary curriculum, but the intensity of single-subject study seemed to aggravate it. At any rate, after a few years of experimental effort, the curriculum slid back to the traditional multi-course pattern.

In the late 1970's, Dr. Robert Heaney advanced the idea of creating a core curriculum by defining the essential knowledge base beginning at the top instead of at the bottom. Traditionally, the idea had always been to build a curriculum from a base of intensive understanding of body structure. On that, an extensive study of body function was added, and on that an extensive study of disorder and dysfunction. Dr. Heaney's alternative approach was to decide what needed to be known about disorder and dysfunction, and in order to understand that, identify what needed to be known about function, and then structure. This approach tended to streamline basic science studies by eliminating those elements of basic science not essential to clinical learning.

The theory was good, but the procedure proved to be too difficult. For a period of more than two years and funded by a special grant from the Kellogg Foundation, several teams spent many hours considering every curriculum subject. The final result looked impressive, but efforts to institute it ran into endless problems. A single course in medical school is not taught by a single instructor. Each presenter has his or her ideas about the best way to present a particular subject and the depth to which that subject should be presented. A few courses did follow the recommended outline fairly well, but this was not continued with any consistency.

Another move to curriculum reform which appears to be more successful was the creation in 1988 of a new basic science department, Biomedical Sciences. Three basic sciences have contended for the attention of first year medical students: Anatomy, Physiology and Biochemistry. Each one demanded a lot of time and attention from the student. In spite of much inter-relatedness in these three subjects, they competed for curricular time and position. In 1988 Dr. Richard O'Brien recruited Richard F. Murphy, Ph.D.
Ph.D., a Professor of Biochemistry with much experience in research, teaching and administration, to create and serve as Chairman for a single department encompassing these three sciences as divisions within the department. To a critical observer the increase in coordination and flexibility has been significant. The course presented by the Division of Physiology may now easily include some presentations by anatomists and biochemists. The flexibility has been even more important to graduate students who may now relate easily and comfortably to faculty from any one of the three divisions.

Dr. Murphy, Chairman of the Department of Biomedical Sciences, is a native of Ireland, and holds Masters degrees in Chemistry from the University College at Cork and a Ph.D. in Biochemistry from the University College at Galway. For several years he held the personal chair in Molecular Endocrinology at Queen’s College in Belfast and was Head of the Department of Biochemistry at Queen’s College before coming to Creighton in 1988.

Other important changes in the curriculum have been evolutionary rather than dramatic. In recent years there has been more emphasis on problem-solving and self-instruction. Small group teaching is more common. Requiring all students to pass Part I of National Boards before promotion to the junior year has insured that each student thoroughly review basic science material before clinical contacts become extensive. The Part I rule also provides an external measure of how well Creighton students may be doing in comparison with students from other schools and assures our own basic science departments that the information in their course work meets national standards.

The use of surrogate patients, begun successfully during the 1970’s with the assistance of a grant and discontinued only because of financial constraints, began again in the Fall of 1991. According to Dr. William J. Hunter (M.D. 1971), Associate Dean for Academic Affairs, surrogates will initially be used for breast and genito-urinary examinations by sophomore students. The following year, this will be expanded to include GYN exams by students in the junior year, and some specialized medical/surgical exam procedures. Finally, there are plans to use surrogates the year following this for structured certifying examinations. The program is expected to continue indefinitely.16

Student Affairs

Students now seeking an M.D. degree at the Creighton School of Medicine have the same concerns and interests as those who came before them: 1) How to get into medical school; 2) How to pay for medical school once accepted; and 3) How to stay in medical school and graduate.

For prospective Creighton medical students in the 1980’s, getting into medical school was difficult. Entrance requirements changed little over the decade, but competition for acceptance was intense. Ninety college semester hours were required, as a minimum, for admission to the School of Medicine, with preference given to those holding a Bachelor’s degree. Almost all, in fact, who were accepted had graduated from a four-year college before entering the School of Medicine. Times had proven Dr. George Simmons incorrect. Quoted in a May 1904 edition of the Journal of the American Medical Association, Dr. Simmons had this to say concerning medical education entrance requirements:
All will agree that a full college course before entering on the study of medicine would be very nice, but all are not ready to say that it is desirable, much less that it should be insisted on. It is too utopian to imagine that the minimum requirement for entrance to the professional school shall be the full college course... If our allotted time on earth were twice as long as it is, the ideal would be the full college course, but when it takes till one is twenty-seven, or twenty-eight years of age to complete it, it is not ideal.17

In the last decade, the MCAT examination was still an important entrance requirement for aspiring medical students and had to be taken a full year before projected entry into medical school. The students also had to submit a written evaluation from their college Premedical Committee and by the end of the decade were required to attend a formal interview on the Creighton campus before acceptance to the School of Medicine.

These requirements plus much paperwork and fees did not deter prospective students from applying to our Medical School. While figures rose and fell during the last decade, there were always at least 4,000 applicants for the 110 available freshmen seats in the School of Medicine. In fact, according to Dr. William Pancoe, Associate Dean of Student Affairs, “Creighton’s total pool of applicants has been going up steadily since 1986.”18 Graduates of Creighton University were still given preference for Medical School admission, all other factors being equal. Most School of Medicine entering classes, therefore, were composed of about one-third to one-half Creighton University graduates.

Once accepted to the School of Medicine, the immediate question became one of finances. The cost of educating medical students has risen rapidly, causing necessary increases in tuition rates. Tuition for the 1980-81 school year was $6,282. The tuition rate for the 1991-92 school year was $16,934. Although these figures may be daunting, Creighton medical education is a bargain. In 1983 Dean O’Brien noted that the Creighton medical tuition rate was the fifth lowest of all fifty private U.S. medical schools.19

Financial aid to medical students at Creighton has become increasingly available. In the 1990-92 Creighton University Bulletin of the School of Medicine, seven full pages are devoted to financial aid of all types, from grants and scholarships to loan programs. Many of the scholarships and loan programs were established by or in memory of Creighton medical graduates. Examples are the Dr. Joseph M. Shramek (M.D. 1910) Scholarship and the Dr. Joseph M. Shramek Loan Fund; the Arthur (M.D. 1915) and Esther Barr Loan Fund; the Louis McGuire (M.D. 1917) Loan Fund; the Purl Reed (M.D. 1925) Scholarship Fund; and the Michael Cavaleri (M.D. 1968, died 1969) Memorial Fund.

Other current long-term loan donors to the School of Medicine include the Crenshaw Medical Loan Fund; C. J. Gibson and R. F. McLaughlin; Robert Wood Johnson; W. K. Kellogg; Teena V. Lane; Dr. Cyrus J. Loverro; Charles Pfizer; Jesse Smith Noyes; Anna M. O’Connor; and Carl and Caroline Swanson. Henry and Dorothy Ogram and the Rotary Club are among emergency loan fund donors for medical students. Scholarship funds have been donated by the Carollo family; John A. Gentlemen; James and Mary Gutch; Lena Lorge; the Reals family; Margaret Ryan; Francis and Delores Taylor; Edward R. and Ruth West; the Creighton family; the Isaacson Trust; and the Roland F. Mueller Memorial Endowment.
Once accepted into the School of Medicine and the issue of financial sources is settled, the new medical student is faced with his main objective—the study of medicine. There has been a steady evolution of the curriculum, based on a growing body of research in medical education. The freshman year is devoted to a study of the basic sciences and their relevance to normal human functioning. This includes Anatomy, Physiology, Biological Chemistry, Behavioral Science, Preventive Medicine and assorted subdiscipline courses within each.

Sophomore year sees a continuation of the basic sciences with an emphasis on Pathology, Medical Microbiology and Pharmacology, leading to a study of pathological processes, diagnosis and therapeutics. Introduction to Clinical Medicine is incorporated during this year and correlates basic science with clinical reality, both in the classroom and in clinical settings.

Junior year is composed entirely of student clerkship experiences in each of the five major departments: Surgery, Medicine, Pediatrics, Psychiatry and Obstetrics/Gynecology. Current clinical settings utilized for these clerkships and also for the senior year to follow include: St. Joseph Hospital (AMJ St. Joseph, as of 1984); the Health Professions Office Complex adjacent to the Hospital, serving as the major ambulatory clinical teaching unit of the School of Medicine and offering learning experiences in at least twenty-eight specialties and sub-specialties; (By 1991 annual visits to the Clinic numbered close to 200,000.) The Boys Town National Research Hospital; the Omaha Veterans Administration Hospital; Douglas County Hospital; and Family Practice model units. In addition, teaching affiliations are maintained at Archbishop Bergan Mercy Hospital; Ehring Berquist USAF Hospital; the Veterans Administration Hospital in Lincoln, Nebraska; Mercy Hospital in Council Bluffs, Iowa; and St. Elizabeth's Hospital, Lincoln, Nebraska.

The senior year curriculum is composed entirely of selective courses chosen by the student with the aid of a faculty advisor. Electives are offered at the School of Medicine in at least twenty areas. In addition, approved extramural electives, taken away from the Creighton campus through other educational institutions, are allowed, up to a maximum of four such rotations.20

A unique six-week family practice elective rotation was offered seniors for several years beginning in 1982. A refugee medicine program, conducted by the National Catholic Relief Services in Nong Khai, Thailand, allowed students an opportunity to work in the areas of Internal Medicine, Pediatrics and Obstetrics, and to do so half a world away.

A camp of some 30,000 Laotian and Cambodian refugees who had fled the turmoil of their homelands and who were in the process of being relocated was maintained at Nong Khai and included an eighty-bed hospital. The School of Medicine joined a consortium, which included the medical schools of Georgetown, St. Louis and State University of New York at Buffalo, whose goal was to provide direly needed health care for these refugees, in addition to valuable learning experiences for medical students. Faculty members of consortium schools also served rotations at Nong Khai to supervise students and provide patient care. Dr. Joseph Holthaus, former medical Dean and Professor of Medicine, served as the Director of the program at Creighton.21 Student research as a component of medical education has received increased emphasis in recent years. A Summer Research Program was instituted in 1982 to give students exposure to biomedical research and an opportunity to work with...
faculty researchers. Lasting ten weeks, the program paid modest stipends to students to conduct research, and submit a written report at the program’s conclusion.22

This program led directly to Creighton involvement in the Midwest Student Medical Research Forum, which the School of Medicine co-sponsors with the University of Nebraska College of Medicine. The Forum, which attracts students from 21 medical schools, provides them the experience of meeting to present and discuss research and familiarizes them with the scientific meeting format.23

A more basic introduction to research was provided to students in a summer course instituted in 1986. Sponsored by the Department of Surgery and coordinated by Dr. Robert T. Bailey, Jr., Education in Research Techniques encompassed an intensive orientation to scientific research. Basic research techniques from a multitude of disciplines were amalgamated into a two-and-a-half-week composite course. Topics included research design, protocol writing, use of biostatistics, use of computers in research, caring for research animals, developing audio-visual materials in research presentations, bibliographic literature searches, especially computerized, grantsmanship and scientific speaking and publication.24 The intent of the course was to teach students the mechanics of research, and to whet their appetites for such academic pursuits.

Medical school is certainly stressful but perhaps not to the extent popularly believed. According to a research study of two classes of freshmen medical students conducted in 1982-83 by four Creighton researchers, including Dr. Robert Mitchell, either the stress on entering medical students is considerably less than previously thought, or students tolerate stress better than believed. Results of this study were published by The Journal of Medical Education.

According to Dr. William L. Pancoe, Associate Dean for Student Affairs, students at the School of Medicine in recent years have been extensively involved in volunteer activities, both those organized in a formal fashion and coordinated through his office, and also a great many others done on their own initiative. These have included work at medical facilities, such as the Indian-Chicano Health Center in South Omaha and the Charles Drew Health Center on North 30th Street; volunteer efforts for the American Cancer Society and the American Heart Association; and a variety of chores, including serving meals and painting, at such social service facilities as St. Anthony’s and Francis House, both shelters. Many students have helped at the Health Fair of the Midlands, and still others have appeared at or helped organize career days at local schools, some specifically focused on the information needs of minority schoolchildren.25

**Health Future Foundation and Centers of Excellence**

One of the provisions in the sale of St. Joseph Hospital which has had continuing impact on the Creighton Health Science schools was that which established an endowment fund from the net proceeds of the sale. The Health Future Foundation was created with the monetary difference ($35-$40 million) between the total sale price of the hospital ($99.3 million) and the aggregate of the hospital’s indebtedness. The interest from this foundation’s capital was earmarked for the encouragement of research, teaching, capital improvements, faculty development and the establishment of new programs at the Creighton Health Science schools.
Charles P. Monasee was named President and Executive Director of the Foundation and continues in that office at present. Shortly after its beginning, Mr. Monasee said that the purpose of the foundation:

is to establish a nationally renowned research and referral center. This is to be accomplished by developing centers of excellence at Creighton University. We look for situations in which if we granted funds we would initiate a long range research facility or project which can gain national support from federal and other agencies. 20

The impact for Creighton of the Health Future Foundation has been, and continues to be, phenomenal. Between July 1985 and June 1989, over $18.5 million has been awarded to the Creighton Health Science schools for various projects and programs. 27 This in turn has generated additional funding from external sources. Some Health Future Foundation funding has been used to establish entirely new “centers of excellence,” specific areas of expertise and knowledge, making Creighton a regional nucleus in those areas. These new centers of excellence have attracted to Creighton not only patients seeking the latest advances in technology but nationally and internationally recognized experts to join the Creighton faculty.

A portion of Health Future funding has been spent to augment Creighton programs already extant and successful. Such areas as Cardiology, Osteoporosis, and Cancer research, for example, have been encouraged to even greater progress. A segment of Foundation funding has been devoted to Young Investigator Awards, grants given to junior faculty members new to research, to stimulate interest and productivity. These grants, while comparatively small, serve to launch careers in academic research and establish programs which attract support from outside sources.

Following are details of some of the areas of progress experienced at Creighton from 1980 forward. All of these developments were aided directly or indirectly by the Health Future Foundation. They are indicative of the spirit of innovation, progress, and striving for excellence which has come to be synonymous with Creighton University.

Creighton Center for Health Policy and Ethics

As part of the St. Joseph Hospital purchase agreement in 1984, AM1 agreed to provide $200,000 per year, for a period of ten years, for the operation of a “Center” of a different sort from the rest. This would be a center to examine health policy in regard to its ethical implications. In December 1986 the Center for Health Policy and Ethics officially began its activities with a conference on health care for the uninsured. 25 At the same time a search was begun to select the new Center’s first Director. This resulted in the appointment of Dr. Chanes Dougherty in May 1988.
Dr. Dougherty, who has a Ph.D. in Philosophy from the University of Notre Dame, joined the Philosophy Department of Creighton University in 1975. He served as its chairman from 1981-1988, and still retains a Professorship in Philosophy. In addition to administrative duties at the Center, he teaches about 120 medical students each semester, and also teaches an undergraduate Philosophy course each year. He is the author of American Health Care: Realities, Rights and Reforms and Ideal, Fact and Medicine. His research interest centers on questions of health care access from an ethical point of view. In June 1991 he testified before the United States Senate Committee on Aging on the issue of health care rationing. Additionally, he has authored a report for the Catholic Health Association presenting their position on the issue of health care rationing, and has headed an ad hoc leadership task force for that Association on health care reform.29

The Center's effort, as Dr. Dougherty describes it, is to face controversial ethical and health policy issues openly, within a Catholic, Jesuit framework. Generally, goals for the Center should ensure that "Creighton-educated health professionals continue to provide conscientious care to individual patients and on health professions."30 In addition, he identifies three specific goals the Center has pursued since its inception.

One goal is the reorganization and strengthening of the instruction in ethics presented to Creighton Health Science students. Toward this end, medical students now participate in required medical ethics courses for each of their first two years in the School of Medicine. The other Creighton Health Science schools have similar requirements. Currently in the developmental stages are courses for medical students in their final two years of studies.

A second goal, according to Dr. Dougherty, is to conduct research projects. A notable example of the Center's operation in this context can be seen in the 1989 grant of $46,633 by the U.S. Department of Health and Human Services. The grant was for the Center to develop a national policy that would protect the confidentiality of mothers and babies infected with AIDS. The Center's personnel traveled to eight nationwide sites conducting interviews with doctors, nurses, social workers, medical records professionals and others dealing with such information on AIDS patients. The result is a series of ethical guidelines for those involved with the complicated issue of who has the need and/or the right to know such information.

The third goal identified for the Center is to provide service to the University community and to the community at large. This is accomplished through lectures, workshops, seminars and other such gatherings of professionals to exchange ideas and information. As noted, the Center began operations in December 1986 with a conference on access to health care. Since then, additional conferences have included those on hospital payment, the aged, children with AIDS, hospital ethics committees, and medical malpractice. Planned for July 1991 was the Center's first week-long institute to train professionals in medical ethics. Anticipated for the Fall 1991 was a conference on living wills, sponsored jointly with the University of Nebraska Medical Center.

Instrumental in the Center's singular success has been its outstanding faculty. Within the first year of operation, Dr. Dougherty hired four professionals who provide the Center with well-rounded expertise. Dr. Amy Haddad is a nationally recognized expert on home health care who also deals with ethics in Pharmacy and Nursing. Dr. Winifred J. Pinch has special interest in community health care, the development and function of ethics committees, and the ethical dimensions of care...
for high-risk newborns. She has just made a film, “I’m Only the Mother,” an examination of the complex issue of parental decision making in cases of handicapped newborns. Dr. Kate H. Brown, the Assistant Director for Health Policy, is known for her research on rural health care. A medical anthropologist, her special interests also include practitioner-patient communication, and minority and women’s health issues. Dr. Joseph G. Allegretti, Assistant Director for Law and Religious Ethics, holds both a law degree and a Master of Divinity. He is concerned with the intersection of religion and public policy, and also with death and dying issues. Two new faculty members joined the Center in the Summer of 1991. Dr. Ruth Bryant Purtilo, returning to Omaha after chairing the Medical Ethics Department at Massachusetts General Hospital in Boston, is nationally prominent in medical and clinical ethics. She will further develop the consultation role which faculty members have assumed in local hospitals, and will also aid in the development of medical ethics courses for third and fourth year medical students. Also joining the Center is Dr. Delfi Mondragon, who has a background in both ethics and economics. At the Center she will deal with minority issues and health care economics.

When selected as Director of the Center, Dr. Dougherty stated, “Although we primarily will be serving regional health care providers, our ultimate goal is to make Creighton University a national player in discussions on health policy and ethics.” With grants to formulate national policies such as the one involving AIDS, Dr. Dougherty and the Center for Health Policy and Ethics have come a long way toward this goal.

Cancer – Research and Programs

At Creighton the war on cancer proceeded during the 1980’s with a many-pronged attack. Dr. Henry T. Lynch, Chairman of the Department of Preventive Medicine and Public Health, continued his pioneering work on the role of genetics in cancer begun many years before and for which he became internationally famous. In 1979 the Creighton Institute of Familial Cancer Management and Control was incorporated, with Dr. Lynch as Director. In 1985 the name of the Institute was changed to the Creighton Hereditary Cancer Institute. In 1986 the Health Future Foundation funded a National Cancer Genetics Referral Center, which was to work in close collaboration with Dr. Lynch and the Hereditary Cancer Institute.

As Director of the Center, Dr. Lynch has continued his pioneering research in the field and continued to bring world-wide attention to Creighton. Among the larger grants received was a $247,812 NIH research grant in 1981, National Cancer Institute grants of $191,849 in 1986 and $330,000 in 1987, and a $549,121 grant from the U.S. Public Health Service in 1989. Dr. Lynch continued to publish his findings, editing and/or contributing chapters to seven books between 1981 and the present, and authoring a number of articles in professional journals. He conducted several international symposiums in his field and served as a consultant for both the National Cancer Institute and the World Health Organization. His impact in the field has been so pervasive that subdivisions of nonpolyposis colorectal cancer, discovered during his research, were named after him – Lynch syndromes I and II.

In March 1991 Dr. Lynch presented team research findings on gene-linkage studies to a section of the American Cancer Society. These studies were conducted by scientists at the International Agency for Research on Cancer in Lyons, France, and at McGill University in Montreal, as well as at Creighton. They have identified...
a gene in one segment of chromosome 17 that appears to be involved in hereditary breast and ovarian cancer. This might make it possible to identify families in which the cancer-causing gene is present, and if so, careful monitoring for the signs of cancer could be done on individuals involved.3R

Within the Department of Medicine, the Division of Oncology continued the battle to cure cancer and aid its victims. Under the direction of Dr. James Mailliard (M.D. 1952), the Division initiated The Optimum Care Team, a multidisciplinary group of professionals and paraprofessionals treating cancer patients in a holistic manner. In addition to specific medical needs, this group has been concerned with the emotional, spiritual, social and nutritional needs of the cancer patient. This concept originated with Dr. Mailliard, the Rev. John Holbrook, S.J., of St. Joseph Pastoral Care, and Dr. William Albano (M.D. 1971).3y

Under the auspices of the Oncology Division, a program to train oncological nurses was begun in the late 1970's and has continued. Creighton has been one of the few health centers training nurse specialists to meet the particular needs of cancer patients, including both chemotherapy and supportive psychological counseling.46

In 1981 a new technique was developed by School of Medicine oncologists to benefit patients with metastatic cancer of the liver. This was a method by which chemotherapy drugs, with the aid of a battery-driven pump, could be put directly into the liver without passage through the bloodstream. It allowed patients to escape many of the undesirable side effects of chemotherapy, while delivering much stronger doses of drugs than had been possible previously. Also, the patient could spend more time at home, as opposed to repeated hospitalizations.47

In 1982 the only board-certified gynecologic oncologist practicing in the state of Nebraska joined the Creighton faculty. He was Dr. James Daly, who came to Creighton from the University of Florida College of Medicine in Gainesville.48

Another important prong of the Creighton attack on cancer was the establishment of the Creighton Cancer Center of Excellence. Among the first group of grants given by the Health Future Foundation in July 1985 was a $304,563, two-year award for further development of the oncology program, to include such a center.43 The Creighton Cancer Center was oriented to both basic and clinical research and was to emphasize prevention, diagnosis and patient treatment. Close collaboration with the Creighton Hereditary Cancer Institute, headed by Dr. Lynch, was planned.48

A search was conducted for a Director of the Center, leading to the appointment of Dr. Bruce Bowman, effective September 1, 1987. Dr. Bowman came to Creighton from the M.D. Anderson Hospital and Tumor Institute at the University of Texas System Cancer Center in Houston. His primary interests in organizing the Creighton Cancer Center were the
establishment of a strong basic research program, while providing assistance to local physicians in patient treatment and the structuring of a close interface between cancer research and clinical oncology. Organizationally, he set up four basic divisions within the Cancer Center: medical oncology, radiation oncology, cancer biology and cancer statistics. Further projects were initiated at the Center in 1988. One of these was the formation of the Nebraska Colon Cancer Research Group, which involves physicians statewide doing collaborative studies in new colorectal diagnostic and treatment methods. It also involved the establishment of a new multidisciplinary research team, composed of oncologists, surgeons, pathologists, gastroenterologists and radiation therapists. The Creighton Cancer Center serves as the research base for all of these activities. Another project begun in 1988 was the physical combination of the Oncology Center and the radiation therapy unit into one location at St. Joseph Hospital. This is the present plan within the Cancer Center.

Cardiology – The Beat Goes On

The Creighton Cardiology Center, directed by Michael Sketch (M.D. 1963), always one of Creighton's premier programs since its founding in the early 1960's, continued in the forefront of progress and innovation during the 1980's and into the present. Following are some highlights of recent Cardiac Center history:

- Early in 1981 the data section of the Cardiac Center was relocated to more extensive, renovated quarters in the Boyne Dental School.
- Also in 1981, an Outreach Cardiac rehabilitation service was established, by which outlying hospitals in Nebraska and Iowa could benefit from the specialized expertise of St. Joseph/Creighton personnel in such areas as exercise physiology, physical therapy, social services and dietetics. The outreach service aided these smaller facilities in patient education, evaluation, exercise prescription and methods of monitored exercise for cardiac patients.
- In 1982 a Cardiac Drug Evaluation Clinic was opened. This is one of a select number of sites, working with the Federal Drug Administration and pharmaceutical companies, to conduct clinical studies assessing the safety and effectiveness of investigational drugs. Because of this clinic, patients who are not responding to conventional treatment may be able to benefit from innovative treatment, using drugs not generally available on the market.
- In 1982 the Cardiology Center was chosen by the National Heart, Lung, and Blood Institute, as one of thirty-five sites nationwide to participate in a program to obtain and evaluate data on pri-
mary pulmonary hypertension. Creighton became part of a national patient registry to collect and classify such pertinent data.49

The Creighton Pacemaker Clinic, one of only four or five nationwide when established, continued its Pacemaker research and its services to Pacemaker recipients. In 1985 this included a special birthday celebration for one of its patients, its oldest. Ed Smith celebrated his 103rd birthday at the Pacemaker Clinic, having received his Pacemaker some six years earlier, at age 97.49

In 1986 the Cardiac Center commemorated its Silver Anniversary year with news coverage and "stock-taking." In its first twenty-five years, the Cardiac Center had come a long way. By 1986 the staff numbered some 150 persons, including twelve full-time and six part-time cardiologists, three Ph.D.'s, a Pharm.D., twelve R.N.'s and seven Cardiac Fellows. It accommodated more than 2,500 annual patient visits in its Outpatient Clinic, served 170 hospitals and clinics in the Dataphone EKG Interpretation Service and nineteen hospitals in the Outreach Clinic Program. Since 1962 it had trained seventy cardiologists. At the present, the staff has grown to include fifteen full-time cardiologists, eight Ph.D.'s and one Pharm.D., with an additional number of about 190 support personnel.

Many forms of complicated cardiovascular surgeries had become commonplace, including open heart surgery, angioplasty, heart valve repair and replacement, coronary artery bypass and congenital heart disease reconstruction. A development emphasized during the Silver Anniversary year was the CREIGARD heart monitoring system, developed by Dr. Floyd Nolle, who joined the Creighton Cardiac Center in 1977. Put into operation in 1986, CREIGARD was a computerized enhancement of a monitoring system combining computerized technology and human interaction for more precise monitoring of cardiac rhythm. It was the most advanced system of its type at that time.51

Early in 1987 a state of the art color Doppler echocardiography system was put into use, the first in Nebraska. This allowed non-invasive diagnosis of blood flow abnormalities through a new form of ultrasound scanning.52
Two new clinics begun in 1987 served to enhance Cardiac Center services. A Lipid Clinic to evaluate and treat abnormalities in blood lipids was established, headed by Dr. Mary Heintz. A new Cardiac Electrophysiology Lab, directed by Dr. Tom T. Hee (M.D. 1976), also began operation. This lab conducted electrophysiologic studies (EPS) concerned with heart rhythm and conduction abnormalities and in conjunction with other Creighton clinics helped evaluate antiarrhythmic drugs and devices.

In February 1988 a Cardiac Emergency Network was put into effect by the Center, another means of sharing expertise with smaller community hospitals throughout Nebraska and Iowa. The largest of such networks nationwide, the new service reduces the time between heart attack onset and delivery of appropriate treatment, thereby saving heart muscle from irreversible damage. This was done by providing the seventeen participating hospitals with round-the-clock consultation service and, if appropriate, the then new and extremely expensive drug, tPA (tissue plasminogen activator), to treat coronary blockage. If cardiac surgery was indicated, the Life Flight helicopter was available to transport the patient to St. Joseph Hospital.

Cardiovascular Surgery

Much recent interest in Cardiovascular Surgery has dealt with testing of the Pulsemaker Heart Assist System, developed by the Novacor Medical Corporation. The system involves the implantation of a mechanical device, a circulatory support system, to aid rather than replace a damaged heart. Close cooperation between the Department of Surgery and the Creighton Cardiac Center resulted in approval by the Federal Drug Administration of Creighton University as a Pulsemaker test site, in February 1987. Dr. Richard Schultz (M.D. 1958) was the primary cardiovascular surgeon involved in implantation, Dr. Aryan Moss the chief cardiologist. Work has since continued under the direction of Dr. Jeffrey T. Sugimoto, Associate Professor of Surgery. Creighton was one of five centers nationwide to receive such approval.

Plans for the testing began in earnest. Health Future Foundation funds had been allotted in 1986, for the development of a cardiovascular training and research unit. Included in these funds were provisions for the renovation of space in the School of Dentistry for a new NOVACOR research section to study Pulsemaker implantation in large animals, as the F.D.A. required. Consisting of a radiology section, a four-room surgical suite, animal holding areas, a reserve operating room, computers for data analysis and an analytical lab, the renovation was complete by Autumn 1987 at a total cost of about $500,000.

A multidisciplinary team of Creighton surgeons, cardiologists, anesthesiologists and hospital staff traveled to California in mid-1987 for special training in implantation methods. This was conducted at Stanford University Medical School and at the Novacor Medical Labs in Oakland, California.

By January 1988 six NOVACOR test implant surgeries had been performed on sheep to familiarize the team with operating techniques and surgical results, all in preparation for the use of NOVACOR in humans. The majority of financing for the project has come from the Health Future Foundation, with additional funding from St. Joseph Hospital and AMI for clinical trials.
A cardiovascular "first" was recorded May 10, 1990, the day the first heart transplant was performed at St. Joseph Hospital. Approval had been given by the United Network for Organ Sharing in Summer 1989 for the hospital to obtain donor organs through the Nebraska Organ Retrieval System. This approval also meant that St. Joseph's could place its heart patients on a national registry of those seeking organs. During the first year of the heart transplant program, three patients received new hearts and five others were evaluated as potential recipients. Dr. Martin L. Rothberg is the heart surgeon with the transplant team.

Osteoporosis and Hard Tissue Research

Another area which has brought national and international attention to Creighton for many years is osteoporosis and bone research, spearheaded initially by Dr. Robert P. Heaney. Dr. Heaney has continued his research to the present time, and it has been enhanced by several key developments and the addition of other researchers. As a result of activities in this area, Creighton medicine has been favorably spotlighted in recent times.

In June 1962 after years of initial research, Dr. Heaney, at a meeting of the American Society for Bone and Mineral Research, presented guidelines for the prevention of osteoporosis. He has been widely quoted in the media's efforts to familiarize the general public with the problem of osteoporosis. In July 1982 he testified before the Select Committee on Aging of the U.S. House of Representatives. In 1984 at a National Institute of Health conference, Dr. Heaney released exact guidelines for the recommended amounts of calcium intake, again being widely quoted.

In January 1987 Dr. Heaney was cited by the New York Times as "the physician who set off the calcium craze," and therefore as being one of the key players behind the scenes of American business during 1986. He is credited with inspiring the proliferation of new calcium fortified products and calcium supplements that hit the market in 1986.

Again in 1989 Dr. Heaney gained national attention, this time with the publication of his book Calcium and Common Sense, co-authored by M. Janet Barger-Lux. The book, which focuses on the link between calcium and osteoporosis, was named one of the top ten books of 1988 in the American Health Books Awards Competition. Excerpts from the book were published in Family Circle magazine, and Dr. Heaney was quoted at length in "The Truth About Calcium," a February 1989 Readers Digest report.

Also in 1989 Dr. Heaney headed an international panel making recommendations on the use of fluoride tablets for treatment of fractured vertebrae due to osteoporosis. Further, he was named Honorary President of the third International Symposium on Osteoporosis and Consensus Development Conference in Copenhagen, Denmark, in 1990.

In 1986 the Health Future Foundation awarded Creighton a five-year grant of $1,314,354 to establish and administer a Center for Hard Tissue Research. This Center was to conduct bone research both from a medical and dental point of view. Dr. Robert Recker (M.D. 1963), director of St. Joseph's Metabolic Research Unit and...
a frequent research collaborator of Dr. Heaney’s, was appointed the first Director of the new Center.67

Just as hoped when the Health Future Foundation was established, their grants served as catalysts to attract other money to Creighton research. For example, the National Dairy Council awarded a $486,000 grant to a research team from the Center for Hard Tissue Research for a five year study of calcium’s role in preventing osteoporosis. Principal researcher was Dr. Robert Recker, Director of the Center. Harkening back to the “cancer van” of Dr. Henry Lynch’s during the 1970’s, this project was brought to its subjects via a specially equipped fourteen-foot van complete with computer, X-Ray equipment, patient waiting and exam rooms and a densitometer, which measures bone density. Post-menopausal women in various northeast Nebraska communities were evaluated and were to have their calcium intake monitored for a five-year period. This was the most extensive study of the role of calcium in osteoporosis prevention to date.68

Likewise, the NIH awarded Creighton $3.8 million late in 1987 to establish an osteoporosis research center. Creighton was one of only three centers throughout the country, out of the fourteen competing for the grant, mandated to establish a specialized center of osteoporosis research. Dr. Robert Recker, already Director of the Center for Hard Tissue Research and a principal investigator, was named program director of this new center. Dr. Stephen L. Gordon, Director of the NIH’s Musculoskeletal disease program, stated:

Creighton’s already established reputation in osteoporosis research was one reason why it was selected . . . Creighton’s selection was a clear statement that we were impressed with the investigative team at Creighton and particularly with the research projects they proposed.69

Furthermore, the NIH cited continuing Health Future Foundation support as being in Creighton’s favor in making grant determinations.

**Center for Diabetes Treatment and Research**

The Creighton Center for Diabetes Treatment and Research was one of the several new centers of excellence established at the School of Medicine in the 1980’s. It was begun in 1985 as a result of initial funding of $527,879 as part of a $1,408,451 grant from the Health Future Foundation in July of that year.70 The original grant recipient, Dr. Robert Recker, Chief of Endocrinology, noted the tremendous changes being made in the treatment of diabetes and the need to aid practicing physicians in keeping abreast of these new advances. The closest comparable resource facilities offering such services were in St. Louis or Minnesota prior to this. Therefore, the new Center filled a definite need and continues to do so.

The Center has three major thrusts. Education is an important goal, both of students in the Health Science schools and of diabetic patients themselves in the use
of new technologies, new drugs, and monitoring of their conditions. The ultimate hope is that this will lead patients to self-reliance in managing their illness. The actual clinical care of diabetic patients is another goal of the Center, as is research, both basic and clinical.

In March 1986, after an extensive search, Dr. Marc Rendell was named Director of the new Diabetes Center. Dr. Rendell is a nationally recognized researcher, whose work has included identifying new treatment techniques for adult diabetics and the use of aldose reductase inhibitors to prevent and possibly eliminate diabetes-related complications. Before coming to Creighton, Dr. Rendell established and directed the Diabetes Institute at the City of Faith Medical and Research Center in Tulsa, Oklahoma. He also served as Chief of Endocrinology and Director of the Radioimmunoassay Lab for the United States Public Health Service Hospital in Baltimore. Dr. Rendell continues to serve as Director of the Center for Diabetes Research and Treatment at the present time.

Gastrointestinal Diagnostic and Research Care Center

A five-year 1985 Health Future grant award of $863,159 provided start-up funds for this new Center of Excellence at Creighton. Dr. Tom DeMeester, Chairman and Professor of Surgery, was primarily responsible for its development, and again, the focuses were threefold: diagnosing and treating disorders of the upper digestive system; conducting research regarding this area, and promoting interdisciplinary collaboration among gastroenterologists, neurologists, radiologists and endocrinologists, and with other medical centers in treating these disorders. A Division of this center, more generally known to the public and operating independently, is The Swallowing Center. Focusing on the more specific problem of swallowing, this division saw its first patients in August 1986.

Geriatrics and the Creighton Center for Healthy Aging

The proportion of the U.S. population which is elderly is increasing. Greater longevity for a greater number brings with it new areas of concern in health care. In light of this fact, the School of Medicine and all of the Health Science schools at Creighton have given increasing commitment to programs meeting the special needs of the elderly. Dr. Richard L. O'Brien, Dean of Medicine and (at that time) Acting Vice President for Health Sciences, stated in early 1985:

Devising ways to produce better quality care for the aged, and at less cost, is getting a top priority throughout the health sciences at Creighton... This comprehensive education and social commitment to a rapidly expanding segment of the population is not only compatible with— but is dictated by—the basic mission of Creighton University.
This commitment to the needs of the elderly has taken many forms at Creighton. In 1983 a Geriatric Assessment Group was established under the leadership of Dr. Henry Uhl, Chief of Geriatric Medicine, and Dr. William MacInnes. The job of this interdisciplinary team, composed of social workers, nurses, nutritionists, audiologists, physicians and psychologists, was to evaluate elderly patients physically, prescribe necessary management and therapy for any problems, physical or otherwise, and refer patients to specialists, if indicated.13

Also beginning in 1983, the Department of Family Practice opened gerontology clinics geared to the needs of the ambulatory elderly patient. The first one was opened in Park Tower South, a high-rise apartment complex for senior citizens. A similar clinic was opened in 1984 in Burt Tower, another senior citizen highrise.14

In 1986, with a $332,387 grant from the Department of Health and Human Services, the Department of Family Practice expanded its residency training in the area of Geriatrics. The curriculum adjustments for Family Practice residents meant that instead of 20 hours spent in Geriatric training, a third-year resident would receive some 200 hours in learning the skills necessary to deal effectively with the complex health needs of the elderly.15

The main element of Creighton’s increased attention to the area of Gerontology has been the establishment of the Creighton Center for Healthy Aging and Human Development. Planning for this Center began in 1985 with an initial planning grant from the Health Future Foundation. A 1986 Health Future five-year grant of more than $1,000,000 established the Center under the direction of Dr. David Haber, who joined the faculty January 1, 1987. The Center for Healthy Aging was first located in the Center Mall shopping center, as “a one-stop health and wellness ‘shopping center’ for senior citizens.”16 The Center offered a varied menu of services to the elderly: comprehensive medical and dental assessments focusing on all aspects of life for senior citizens, rather than the purely physical aspect of health.

A self-care component was initiated within the Center for Aging to aid the elderly in self-sufficiency. This aspect of the Center was formalized into the Geriatric Self-Help program in February 1989 with a $150,000 grant from the Administration on Aging. A service of this program, the first of its kind in the country, is a statewide directory of self-help groups for those with chronic illnesses, begun in April 1989.
Since its beginnings, the program has been modified as experience proves necessary. The nature of service demands at the Burt, Park, and Center locations required more intensive evaluation and medical care than was easily provided. By 1991 these services had been moved to the various Department of Family Practice outpatient clinics located on Ames, 72nd, Cuming, and 30th Streets. The Center now has administrative offices in Criss on the Creighton campus. Education is still emphasized by the Center but directed more at care giving, and increasing attention is given to research. Continuing education for health care professionals on geriatric-related topics is provided, as well as information for caregivers of the elderly and clinical training for medical and other health science students.81

Helping the Center expand on its theme of geriatric education was a three-year, $750,000 grant awarded in 1987 by the Public Health Service Division of the U.S. Department of Health and Human Services. With this grant, the Creighton Regional Geriatric Education Center was established, directed initially by Dr. Eugene Barone, Chairman of the Department of Family Practice. Specific objectives included providing workshops, lectures, mini-fellowships and other programs of continuing education in the area of geriatrics; providing a referencing service of available resources, including bibliographies, audio-visual materials, print materials, computerized data bases and speakers; and offering professionals telephone access to geriatric health information and appropriate community referral information.82

Another area of expansion for the Center for Healthy Aging has focused on worksite wellness and aging. In 1987, in cooperation with the Wellness Council of the Midlands, the Center began the development of model wellness and aging programs, to be established in conjunction with places of employment. Objectives included both maintaining employees’ health as they aged and providing information and aid to employees caring for elderly relatives.83

The Corporate Elder Care Program offered businesses the services of a geriatric social worker, to come to the worksite and counsel employees on caregiving responsibilities. Also, Elder Care Management Services Program more directly intervened to aid family caregivers with specific problems.84

On a lighter side, the Center co-sponsored a Search for Omaha’s Healthiest Seniors contest in April 1988 to highlight the benefits to the elderly of healthy living. After a confidential health screening, information on each participant was compared to an ideal senior health profile. Those closest to the profile became finalists in a Health-On, where they were asked to complete a series of simple tasks. Winners in each of three age categories won vacation trips and gift certificates and were honored at a special reception. The contest succeeded in making our local elderly more aware of Creighton’s activities and the importance of their own responsibility to health care.85

**Electron Microscopy Center**

A three-year $582,831 Health Future Foundation grant in July 1986 helped to establish the Creighton Electron Microscopy Center.86 Funds were also provided by Creighton University, St. Joseph Hospital and the Boys Town National Research Hospital. Using state of the art-electron microscopes, this new center provides high magnification and high resolution analysis of cells and body tissues to facilitate diagnoses, biomedical research and teaching. For the sake of efficiency and economy, the new Center is a joint-use facility, utilized by the two hospitals and all
of the Creighton Health Science schools. It is located in the Boys Town National Research Hospital under the direction of Dr. Robert Cox, Professor of Pathology, and Dr. Patrick Brookhouser, Professor and Chairman of Otolaryngology and Director of the Boys Town National Research Hospital. Immediate supervision is provided by Dr. Barbara J. Morley. The Center currently has three electron microscopes in use, two electron transmission microscopes, and one microscopy scanning scope.

Center for Transtracheal Oxygen Therapy

The Health Futures Foundation provided a three-year $463,539 grant in July 1986 to establish a Center of Excellence whose purpose was the development of new approaches to long-term oxygen therapy for patients with chronic lung disease. Called the Creighton Center for Transtracheal Oxygen Therapy, the new entity became one of the first facilities in the nation to provide an alternative to a bulky oxygen canister and obstructive tubes for patients needing supplementary oxygen therapy. In a study directed by Dr. Walter O'Donohue, Professor and Chairman of the Department of Medicine, patients received oxygen via a small, flexible catheter passed through a small surgical opening in the outer neck to the trachea (tracheostomy). Results of the Center's study, published in the November 1988 issue of the Journal of Cardiopulmonary Rehabilitation, were extremely encouraging. Besides an increase in patient self-image, the study showed that patients needed 42 percent less oxygen when resting and 21 percent less during exercise than with traditional oxygen therapy, and there was a 23 percent increase in exercise tolerance. There was 100 percent patient acceptance.

The Center for Transtracheal Oxygen Therapy is under the direction of Dr. Walter O'Donohue. It continues offering this innovative technique and conducting research on other methods of helping pulmonary patients.

Creighton Perinatal Center

Another new Center for Excellence, established in early 1986 and funded with a five-year $916,391 Health Futures Foundation grant in July 1986 is the Creighton Perinatal Center. Specializing in the identification of high-risk and complicated pregnancies, with care for both newborns and mothers, the Center operates a Level Three perinatal nursery program, the highest licensing level recognized by the State of Nebraska. It includes an intensive care nursery and provides specialized services in the newborn nursery as well as labor, delivery, and postpartum care.

In 1986, early in the Center's existence, it was the first and only medical facility to use a new innovative device, the portable uterine monitor for expectant mothers who were at risk of premature labor. This device gives early warning of pre-term labor. Another