

S P R I N G 2 0 0 1

# CREIGHTON

UNIVERSITY

MAGAZINE



## Revelation

It's All About Stars ...  
AND THE EVILS OF CITIES

St. Francis Seen  
in Assisi

Bluejay Soccer  
Goes the Distance

The Next 100 Years in  
Biomedical Sciences



S P R I N G 2 0 0 1

# CREIGHTON

U N I V E R S I T Y M A G A Z I N E

## C O V E R S T O R Y



Photo by Monte Kruse, BA '83

**14 REVELATION: IT'S ALL ABOUT STARS ... AND THE EVILS OF CITIES** World-renowned biblical scholar and Creighton theology professor Bruce J. Malina, Ph.D., writes that to fully understand this last book of the Bible one must first know the culture in which it was written.

**ABOUT THE COVER** This early 15th century painting depicts Saint John on Patmos, part of present-day Greece, where he experienced the vision described in Revelation. The painting shows a triumphant Christ surrounded by 24 elders crowned and dressed in white. In the eagle's beak is a traveling writing desk.

Photo by Giraudon/Art Resource, NY

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Photo courtesy of Francesco: Il Musical



Photo by Don Doll, S.J.

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Photo by  
AP Wide World Photos

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**ECONOMIC SLOWDOWN** Will the slowing U.S. economy experience a "soft" or "hard" landing? Creighton economist Ernest P. Goss, Ph.D., examines the issue.

#### CREIGHTON UNIVERSITY MAGAZINE'S PURPOSE

*Creighton University Magazine*, like the University itself, is committed to excellence and dedicated to the pursuit of truth in all its forms. The magazine will be comprehensive in nature. It will support the University's mission of education through thoughtful and compelling feature articles on a variety of topics. It will feature the brightest, the most stimulating, the most inspirational thinking that Creighton offers. The magazine also will promote Creighton, and its Jesuit Catholic identity, to a broad public and serve as a vital link between the University and its constituents. The magazine will be guided by the core values of Creighton: the inalienable worth of each individual, respect for all of God's creation, a special concern for the poor, and the promotion of justice.



## RILEY DESERVING OF HONOR

We are at a time when awards and honors are as numerous as the breezes of a summer's day. Many times, too many, those already graced with position or prestige are singled out for acclaim in the often misguided hope that the glory of the recipient will reflect back on the organization bestowing the honor. Many times, too many, awards and plaques are given by organizations to their own in a self-laudatory attempt to elevate the organization midst what the poet may call "the idle smoke of self praise."



But once in a while someone gets this business of honors and awards exactly right.

Creighton Law School has done so by naming Thomas C. Riley, Douglas County public defender, the recipient of the 2000 Alumni Merit Award.

"Riles" he was, back in those days of our law school youth. He was the lad from Massachusetts, where families idle away two hours of a Chicopee Sunday afternoon listening on the radios to the somewhat inartfully named "Irish Hour." "Riles" he was, with a voice so lovely that when he sings "Danny Boy" even the most cold-hearted and soulless denizen of John Bull's England must give pause and quietly wipe away a tear.

Fortunately for all, brother Riley remained in Omaha and has dedicated his career to tirelessly representing those that too many of us view as "the least among us." His passion for the law is matched only by his skill in the courtroom. He has an amazing willingness to represent vigorously and skillfully the most unpopular of defendants in the most unpopular and difficult cases. He does so with grace and dignity, unmoved by any romantic notions of an unrealistic justice, but always honoring the humanity of each individual he represents.

No other Creighton law graduate is more deserving, whether it be judge or professor, successful corporate lawyer or politician, and no other graduate better exemplifies Creighton University's ideal of service to others. Tom Riley is a lawyer we Creighton law graduates can admire and one whose passion and commitment we would all do well to emulate. He does the school proud, and for him the Irish proverb rings true: "The work praises the man."

The law school's selection is all the wiser, for it not only recognizes an outstanding lawyer and public servant, but also shines a bright and necessary light on those who give of themselves to ensure that the right to a fair trial for all citizens is more than a

hollow and meaningless promise. It reminds us that the engine that drives the machinery of criminal justice is not the judiciary or prosecutors, but the individual lawyer who provides "Assistance of Counsel" as guaranteed by the Sixth Amendment, who breathes life into all of the other guarantees of the Bill of Rights, and who ensures that those rights will never be taken away simply because the rest of us may have taken them for granted.

**John P. Murphy, JD'74,  
District Judge, 11th Judicial District  
North Platte, Neb.**

## STOICISM ARTICLE REKINDLES MEMORIES

I wanted to tell you how much I thoroughly enjoyed the article "The Rebirth of Stoicism" by William O. Stephens, Ph.D. (*Creighton University Magazine*, Winter 2000).

Many years ago, in the 1960s, when I was an undergraduate student at Creighton University, my professors in history and philosophy told me that the education process at Creighton worked slowly and that I would begin to appreciate my history and philosophy more and more each year after graduation.

I have extended my interest in both philosophy and history. Professor Stephens' article on stoicism brought back my Creighton days and reinforced for me the great importance of philosophy in modern day life.

Again, thank you for that article.

**Richard A. Hess, MD'70, Peoria, Ariz.**



Letters to the Editor can be e-mailed to Editor Rick Davis at [rcd@creighton.edu](mailto:rcd@creighton.edu), faxed to (402) 280-2549, or mailed to *Creighton University Magazine*, 2500 California Plaza, Omaha, NE 68178. Letters may be edited, primarily to conform to space limitations. Please include your name, city, state, year of graduation (if applicable) and telephone number on all letters.

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## ECONOMICS PROFESSOR AND CHAPLAIN REV. NEIL CAHILL DIES

The Rev. Neil Cahill, S.J., BSC'43, MDiv'77, an assistant professor of economics and chaplain of Creighton University's College of Business Administration, died at Mercy Care Center in Omaha Jan. 13 after a long illness. He was 77.

The longtime Creighton professor was remembered by friends, former students and colleagues for his dedication to the priesthood and his commitment to teaching. Fr. Cahill, in his 1996 book, *Creighton University College of Business Administration: The First Seventy-Five Years*, professed his "love and zeal" for Creighton.

"I am only one of many classmates, former students, faculty and staff who glory in being members of 'the Creighton Family,'" he wrote.

That same Creighton family gathered during Fr. Cahill's final hours and after his death.

"These four elements of Neil Cahill are the principal strands out of which the fabric of his active, professional, and religious life was woven: Jesuit, priest, teacher and counselor," Creighton President the Rev. John P. Schlegel, S.J., said at the funeral Mass. (His complete homily can be found online at [www.creighton.edu/President/Speeches/FrCahill.html](http://www.creighton.edu/President/Speeches/FrCahill.html).)

Fr. Cahill served as chaplain and as an economics professor in Creighton's College of Business Administration for nearly 40 years, until his retirement last June.

As chaplain, Fr. Cahill was charged with the spiritual and personal well-being of students, faculty and staff. In 1993 he received the Distinguished Faculty Service Award from the president of Creighton. He was named Outstanding Teacher of the Year in the College of Business Administration in 1979.

"Fr. Cahill was totally committed to Creighton, to his friends and alumni, and to our mission as an institution," said Robert Pitts, Ph.D., dean of the College of Business Administration. "Even though he retired last June, we still had a class scheduled for him this semester. He wanted to carry on despite his illness. He really represented the spirit of this College for decades."

His teaching interests, which included economic principles, labor economics, history of economic thought, economic history and business ethics, led to travels all over the world. The outwardly gruff Cahill could be a tough taskmaster in the classroom. Students who skipped class were known to get

calls from Cahill, his voice booming: "There's an old teacher's axiom, 'You can't teach empty chairs.'"

He also had an eagle eye for pure speculation on a paper or a test. For that occasion, he had a special stamp made that he could apply to the words in question. "Twaddle!" the stamp read.

But those who knew Fr. Cahill also knew he had a love for Creighton alumni and students that went well beyond the classroom. Omaha alumnus Jon Jacobsen, BSBA'83, who along with many others regularly visited Fr. Cahill at Mercy

Care Center, estimated that the Creighton Jesuit performed some 500 baptisms and 350 weddings. Photos of those he married and babies he baptized covered his walls.

"If there was one disciple who took his mission to baptize seriously, it was Fr. Cahill," said the Rev. Thomas Manahan, S.J., assistant to the dean in the College of Business Administration.

Fr. Cahill also was recognized for his contributions to Creighton's Phi Kappa Psi fraternity. A room in the fraternity's new house has been named in honor of Fr. Cahill.

Fr. Cahill was born in Woonsocket,



Fr. Neil Cahill — 1923-2001

S.D., on May 5, 1923. After graduating from high school he moved to Omaha to attend Creighton University. After receiving a bachelor of science degree in 1943, he entered the St. Stanislaus Seminary in Florissant, Mo., where he completed work for a bachelor of arts degree. In 1950 he earned a master of arts degree in economics and the licentiate in philosophy from Saint Louis University.

From 1950 to 1953, Fr. Cahill taught at Campion Jesuit High School in Prairie du Chien, Wis. He then attended St. Mary's College in St. Marys, Kan., where he received the licentiate in theology.

He was ordained in June of 1957, completing his final year of Jesuit training at St. Andrew College in Lavantal, Austria. He did graduate studies at Johns Hopkins, Georgetown and Laval University in Quebec. In 1991, he earned a Doctor of Ministry degree from the San Francisco Theological Seminary in San Anselmo, Calif.

Memorials to the Neil Cahill, S.J. Endowed Scholarship Fund for the College of Business Administration can be sent to Creighton University's Office of Development, 2500 California Plaza, Omaha, NE 68178.

## CIVIL RIGHTS LEADER SPEAKS AT CREIGHTON

In celebration of Martin Luther King Jr. Day on Jan. 15, the Rev. C.T. Vivian was invited to campus to deliver a lecture entitled "Dr. Martin Luther King Jr.: 21st Century Man." Rev. Vivian also



*Rev. Vivian*

offered a reflection at a multi-faith gathering held later in the day at St. John's Church. The theme of the service was "Call to Advocacy and Unity."

Vivian is a living legend of the Civil Rights movement. A Baptist minister, his first use of non-violent direct action was in 1947 to end segregated lunch counters. Later, he founded the Nashville Christian Leadership Conference, organizing the first sit-ins in 1960 and the first Civil Rights march in 1961. He rode the first "Freedom Bus" into Jackson, Miss. Vivian went on to work alongside Dr. Martin Luther King Jr. as a member of Dr. King's executive staff.

Over the years, Vivian's leadership and activism have not waned and today, he is board chairman of the Black Action Strategies and Information Center (BASIC), the Center for Democratic Renewal and the Southern Organizing Committee. An eloquent and uplifting speaker, he continues to speak out for racial justice and democracy.

## LOCATELLI ADDRESSES JUSTICE EDUCATION AT CREIGHTON LECTURE

Calling the world "a scandal of injustice," Santa Clara University President the Rev. Paul Locatelli, S.J., spoke at Creighton University on Oct. 30, giving the annual Markoe-DePorres Social Justice Lecture. Locatelli told a near-capacity audience in the Skutt Student Center Ballroom that "half the nations are worse off today than they were 10 years ago."

To stem this worldwide decline, Locatelli called for "people with talent and magnanimity," not those with just a sense of self-advancement. Echoing the words of the Very Rev. Peter-Hans Kolvenbach, S.J., superior general of the Society of Jesus, Locatelli said, "Tomorrow's whole person must have a well-founded solidarity with the real world." He said our world as Ignatius envisioned it features "God 'in the thick of things,'" in a world "not only of suffering, but of wonder."

Speaking to an audience of students, faculty, staff and administrators, Locatelli outlined his vision for a faith that does justice and is securely based in the Creighton curriculum.

Locatelli, who has served as a principal initiator of the national project on justice education in American Jesuit universities, believes justice education does more than supply the student with a factual understanding of social problems. It goes on to produce a wider sense of having learned from the underserved community. It is a reflective experience, he said.

An essential question Jesuit universities must ask, Locatelli said, is "How should all of us live together in this world?"

The recipe for a peaceful world calls not only for love of God, but love of our neighbors, he said. "Without justice and love of our neighbors, love of God is a farce. You cannot separate faith from justice. Our Judeo-Christian faith requires that justice be

done." Reconciliation with God means reconciliation with others, Locatelli said.

Since 1975, when the "Faith That Does Justice" slogan was adopted by the Society of Jesus, that vision has been expanded to



*Photo by Dore Wenzel*

*Fr. Locatelli visits with students after his lecture on Oct. 30.*

include justice for the environment, women and others marginalized in the area of human rights, he said.

"We need to make it clear that all voices are welcome, all views respected, that all parties recognize the limits of their own perceptions," in order to keep that vision vibrant. Thus, dialog is essential to the life and the vision of the university in the area of social justice, Locatelli said.

Justice education is more than just community service, he added. Done right, educating for justice "opens us to the problems of the world ... and teaches us to live in solidarity with that world."

The lecture was a project of the Justice and Peace Studies Program at Creighton and was a Jubilee 2000 event. It also was sponsored by the Justice Education Committee at Creighton, the Office of the President, the Office of the Vice President for Academic Affairs, and the College of Arts and Sciences.

## TOBACCO SETTLEMENT MONEY TO BENEFIT BIOMEDICAL RESEARCH

Trisha Frisch can walk again, thanks to treatment from a Creighton University surgeon.

The 19-year-old Creighton, Neb., woman was confined to her bed or a wheelchair all last spring and summer. The steroids she takes for a kidney ailment caused her bones to become brittle and to break.

A Creighton surgeon treated her fractured vertebrae by inserting a small balloon to create a space where a type of plastic can be injected, lifting and supporting the vertebrae. The treatment turned Frisch's life around. She is now back in college.

That is just one example of the life-changing and life-saving work being done in the field of biomedical research in Nebraska. For the last century, biomedical research has served as the foundation for superior health care and education in the United States. Nebraska has the good fortune to be home to two academic health centers where patient care, teaching and research are top priorities.

Creighton University and the University of Nebraska Medical Center, along with Boys Town National Research Hospital and the University of Nebraska-Lincoln, are working with the Nebraska Legislature to advance a bill that if passed would direct a portion of the state's tobacco settlement money to biomedical research.

This initiative is one of the first major public/private partnerships in the state targeting the field of biomedical research.

*By annually allocating about a third (\$16 million) of the tobacco settlement money to biomedical research, all Nebraskans stand to benefit as a result of ground-breaking medical discoveries, improved disease prevention, diagnosis and treatment.*

It capitalizes on the strengths of each partner and puts the best scientific minds to work for the benefit of all Nebraskans. The plan has the endorsement of Gov. Mike Johanns.

By annually allocating about a third (\$16 million) of the tobacco settlement money to biomedical research, all Nebraskans stand to benefit as a result of ground-breaking medical discoveries, improved disease prevention, diagnosis and treatment. In addition, the education of future health care professionals will be enhanced with the latest techniques and approaches.

With a portion of the state's tobacco settlement money targeted to biomedical research, Nebraska researchers will continue investigations into established areas of expertise, such as hereditary cancers, osteoporosis, neurological diseases and the genetic underpinnings of health and disease. Funding to initiate

new projects can be leveraged into further support from the federal government and private sponsors.

"This historic partnership would enable our scientists to join forces with their colleagues from UNMC, UNL and Boys Town to work on many diseases that affect so many Nebraskans today," said M. Roy Wilson, M.D., interim vice president for health sciences at Creighton University and dean of the School of Medicine at the University.

At least 26 other states have committed or are considering investing tobacco settlement funds in biomedical research projects. The biomedical research initiative in Nebraska will help the state keep pace with the rest of the nation.

## JESUIT HONOR SOCIETY INDUCTS NEW MEMBERS

The Creighton University Chapter of Alpha Sigma Nu, the Jesuit Honor Society, inducted eight honorary members and 49 student members at a ceremony and banquet held Dec. 2.

Receiving honorary memberships to the society were: Jeannie S. (Blakey) Brayman, MA'73; the Rev. Don Doll, S.J., professor of fine arts-photography and holder of the Charles and Mary Heider Endowed Jesuit Chair; the Rev. Robert P. Hart, S.J., adjunct assistant professor of theology; Virginia (Dotterweich) McGill, BA'88, administrative director for the Institute for Latin American Concern (ILAC); Donna Pawlowski, Ph.D., associate



Brayman



Fr. Hart



Pryor



Tarbox

professor of communication studies; Bernadette (Maxwell) Pryor, MSEdu'71; Lawrence Raful, J.D., professor of law; and Loretta Jeanne (Feeney) Tarbox, Arts'51.

Brayman, Fr. Hart, Pryor and Tarbox were nominated

by the Creighton Alumni Chapter of Alpha Sigma Nu, while Fr. Doll, McGill, Pawlowski and Raful were nominated by the Student Chapter.

Those inducted into Alpha Sigma Nu embody scholarship, loyalty and service and demonstrate an intelligent appreciation of time and commitment to the ideals of Jesuit higher education.



## WINTER COMMENCEMENT CELEBRATED

More than 190 students participated in December commencement ceremonies Dec. 16. The ceremony was held at the Omaha Civic Auditorium's Music Hall.

The December graduates established a new milestone at Creighton University, pushing the number of degrees awarded from Creighton to more than 60,000 since 1891. This commencement also marked the first for new Creighton President the Rev. John P. Schlegel, S.J.

During the ceremony, Creighton presented an honorary doctor of cultural science degree to Charles E. Trimble of Omaha, and presented the Alumni Achievement Citation to Mary Katherine Wolpert DeFilippes, Ph.D.

Trimble is president of Charles Trimble Co., a national consulting firm dedicated to fostering economic development on Indian reservations. Trimble also is president of the Red Willow Institute, a non-profit corporation created to provide technical and management assistance to Native American non-profit organizations. He serves as president of the John G. Neihardt Foundation and as a board member of the Nebraska Community Reinvestment Coalition; the Red Cloud Indian School, in Pine Ridge, S.D.; the St. Vincent de Paul Family Emergency Shelter; and the Red Cloud Indian Heritage Center.

In 1969, Trimble founded the American Indian Press Association and served as its executive director until 1972, when he was elected executive director of the National Congress of American Indians in Washington, D.C.



Trimble

A student of Western history, Trimble served on the board of trustees of the Nebraska State Historical Society for seven years and was president from 1995 to 1997.

Dr. Wolpert DeFilippes graduated *cum laude* from Creighton University in 1963 with a bachelor of science in pharmacy. She currently is chief of the Grants and Contracts Operations Branch in the Developmental Therapeutics Program of the Division of Cancer Treatment and Diagnosis at the National Cancer Institute.

Wolpert  
DeFilippes

From 1976 to 1981, Wolpert DeFilippes was a pharmacologist in the Drug Evaluation Branch of the National Institutes of Health, where she became deputy chief of the Drug Evaluation Branch in 1982.

From 1985 to 1988, she was a pharmacologist in the Office of the Associate Director. In 1986, she was issued a patent on tetraplatin, a platinum anti-cancer drug used in the treatment of testicular cancer.

For the next nine years, she served as program director and then branch chief for the Grants and Contracts Operations Branch of the National Institutes of Health.

Dr. Wolpert DeFilippes has strong family ties to Creighton. Her father, three brothers and two sisters, along with a niece, have all graduated from Creighton University. Her father, Paul L. Wolpert, BSM'34, MD'36, also was a recipient of the Alumni Achievement Citation. He received the award in 1975.

## COLLEGE OF BUSINESS PARTNERS WITH DELOITTE &amp; TOUCHE

Creighton's College of Business Administration (CoBA) and its Master of Science in Electronic Commerce program are teaming up with Deloitte & Touche and its Enterprise Risk Services (ERS) for risk management solutions.

Deloitte & Touche will assist Creighton with the design and development of an Internet lab appropriately configured to simulate e-commerce traffic and the associated security

risks and controls. Deloitte & Touche also will provide hardware, software, access to firm resources and experts who will lecture on specific e-commerce security topics.

The degree program, which is offered through CoBA with the support of the Joe Ricketts Center in Electronic Commerce and Database Marketing, started in January 2000. The Joe Ricketts Center was created in May of 1999 to partner with local and national businesses

to share knowledge and create industry-specific programs.

The degree is designed to prepare students for leadership positions in the field of e-commerce as it relates to business, government and institutions. Students are taught the strategies and tactics of e-commerce and how to apply them in the ever-changing business environment. Marketing, diagnostic techniques, strategic business models and the security,

privacy and legal issues of e-commerce also are addressed in the curriculum.

Deloitte & Touche provides assurance and advisory, tax and management consulting services, and has been recognized as one of the "100 Best Companies to Work for in America" by *Fortune* magazine for three consecutive years. Deloitte & Touche is part of Deloitte Touche Tohmatsu, one of the world's leading professional services firms.





Photo by Darce Weaver

### U.S. AMBASSADOR TO THE DOMINICAN REPUBLIC DELIVERS LECTURE

*The United States Ambassador to the Dominican Republic, the Hon. Charles T. Manatt (pictured above), spoke at Creighton on Nov. 20. Ambassador Manatt's lecture was titled "Contemporary U.S. Dominican Relations." The event was sponsored by Creighton's Montesinos Center for the Study of the Dominican Republic.*

### PHARMACY EDUCATION FOCUS OF GRANT

What courses are best suited to meet the educational needs of today's pharmacy students? What is the most effective method of teaching the skills students will need on the job? Those questions will be put to the test at Creighton University's School of Pharmacy and Allied Health Professions, thanks to a three-year, \$156,000 grant from the Department of Education's Comprehensive Fund for the Improvement of Postsecondary Education.

The purpose of the grant is to create a performance-based testing program for evaluating pharmacy curricula. Michael S. Monaghan, Pharm.D., will

direct this program for the School of Pharmacy and Allied Health Professions.

In the United States, there are more than 80 pharmacy schools or colleges educating more than 22,000 students. The American Council on Pharmaceutical Education (ACPE) recently revised accreditation standards for schools with an emphasis on measuring what and how students learn.

According to the ACPE guidelines, assessment should measure the student's skills in cognitive learning, communication, and the use of data in critical thinking and problem solving, as well as measure the

student's mastery of practice skills.

The grant will allow the School of Pharmacy and Allied Health Professions to develop an accurate assessment or testing program customized to each year of a pharmacy program. The assessment also will consist of cases in which the students can showcase their cognitive, communication and critical thinking skills.

The student performance data gathered, as well as the cases developed, and the recommended curricular changes will be distributed via the Internet for all pharmacy schools to share.

### CREIGHTON AMONG MOST PRAYERFUL SCHOOLS

According to surveys conducted by the *Princeton Review*, Creighton University is among five Catholic colleges that have made the top



20 in a list of colleges where students pray on a regular basis.

Creighton ranked 11th out of the top 20. The other Catholic colleges and their rankings are: University of Dallas in Dallas (3rd); College of the Holy Cross in Worcester, Mass. (8th); Loyola Marymount University in Los Angeles (14th); and St. Louis University in St. Louis (19th).

No Catholic colleges make the *Princeton Review's* top 20 list of colleges where students ignore God on a regular basis.

The rankings are included in *Princeton Review's* 2001 edition of "The Best 331 Colleges," published by Random House. The guidebook, which profiles the nation's top schools, also ranked schools in 60 other categories including best dorms, best libraries and best campus.

## CREIGHTON TAKES LEADING ROLE IN HERNIA STUDY

When a physician diagnoses a patient with an inguinal hernia — a common affliction among men characterized by a bulge or knot in the groin area of the lower abdomen — the recommended treatment is almost always surgery.

But is that surgery — which can cost anywhere from \$2,000 to \$8,000 and can limit a patient's physical activity for up to six weeks — always necessary?

Robert Fitzgibbons, MD'74, the Harry E. Stuckenhoff Professor of Surgery at Creighton University and a leader in the study of hernia, is directing a national study investigating just that question.

"We are trying to determine if we, as physicians, can safely tell a patient, 'If an inguinal hernia is not bothering you, it's OK to delay surgical treatment, as long as we keep a close eye on it,'" Dr. Fitzgibbons said.

Dr. Fitzgibbons is the immediate past president and founding member of the American Hernia Society and the lead editor of the

fifth edition of *Hernia*, generally regarded as the single most authoritative book on the subject.

Inguinal hernias occur when weakened or torn muscles (often the result of a congenital defect or a strain or injury) allow a person's intestines to protrude through the abdominal wall. While approximately 700,000 inguinal hernia surgeries are performed annually in the United States, the severity of the hernia can vary greatly.

The \$6 million study headed by Creighton University will examine those patients with minor, or minimally symptomatic, inguinal hernias who may benefit from a "watchful waiting" approach. The study is being carried out in collaboration with the American College of Surgeons, Northwestern University and the Veterans Administration Cooperative Studies Program. Study participants are being recruited at medical centers in Omaha, Dallas, Los Angeles, Albuquerque, N.M., and Marshfield, Wis. Patients will continue to be enrolled until July 2002.

## CREIGHTON ALUMNI TOUR OF IRELAND



Join Mike Leighton, BA'70, vice president for University Relations, for this 10-day tour of the Emerald Isle.

**When:** Depart Friday, Aug. 24  
Return Sunday, Sept. 2

**Cost:** \$2,639 (twin rate)  
\$2,939 (single rate)

### Itinerary at a Glance:

Day 1 Overnight Flight to Shannon  
Day 2,3 Bunratty Castle Hotel, Bunratty  
Day 4,5 Great Southern Hotel, Killarney  
Day 6 Granville Hotel, Waterford  
Day 7 Kinnitty Castle, Birr  
Day 8,9 Radisson SAS St. Helen's Hotel, Dublin  
Day 10 Depart from Dublin

### Questions:

Contact the Office of Alumni Relations at  
1-800-282-5867 or 402-280-2222.

### To make reservations:

Contact Collette Tours, 180 Middle St.,  
Pawtucket, RI 02860 Attn: Midwest Sales Team-NAZ  
or call 1-877-894-1244.



## SPORTS SHORTS

**Arch Madness**

The Creighton men's basketball team will be shooting for its third straight Missouri Valley Conference Tournament title when it travels to St. Louis for Arch Madness. The State Farm Missouri Valley Conference Tournament will be played March 2-5 at the Savvis Center (formerly Kiel Center) in St. Louis, with the 8 p.m. (CST) championship game scheduled to be broadcast live on ESPN March 5. The Bluejays were chosen by the league's coaches and media as the preseason favorite to win the conference crown.

Creighton ranks first among league schools with six all-time MVC Tournament titles (1978, 1981, 1989, 1991, 1999, 2000) and is attempting to become only the second team in Valley history to win three in a row. Southern Illinois first completed the feat in 1995. This year's team also has a chance to become the first in Creighton's history to reach the postseason four straight years. Creighton qualified for the NCAA Tournament in 1999 and 2000 and the NIT in 1998. *For more information on obtaining tickets to the MVC Tournament, contact the Creighton Athletic Department at (402) 280-2720.*

**Altman gets 100th Creighton win**

Dana Altman picked up

his 100th win as the head coach of the Creighton men's basketball team with a 96-50 season-opening victory over Western Illinois Nov. 20. Altman became the sixth C.U. head coach to record 100 or more wins at the University.

**Women's hoops**

The 2001 State Farm Missouri Valley Conference Women's Basketball Tournament will be in Springfield, Mo., March 8-10, at the John Q. Hammons Student Center. As of the magazine's press time, the Creighton women were shooting for their ninth



straight appearance in the MVC Tournament under head coach Connie Yori. *For more information on obtaining tickets to the MVC Tournament, contact the Creighton Athletic Department at (402) 280-2720.*

**Men's soccer accolades**

The 22-4-0 Creighton men's soccer team picked up a host of honors on its way to winning a conference title and finishing as national runner-up in the NCCA Tournament. Among those receiving honors were: Mike Tranchilla, Brian Mullan, Ishmael Mintah and Mike Gabb, NCAA all-tournament team; Peter Henning, Lane Percy and Mintah, MVC all-tournament team; Henning and Mullan, all-MVC first team; David Wagenfuhr and Matt Jewett,

MVC all-newcomer team; and Gabb, Mullan and Henning, MVC scholar-athlete first team. In addition, Mullan



was named the MVC all-tournament MVP and NSCAA second-team All-America. *See the photo spread on Creighton's appearance in the College Cup, soccer's Final Four, beginning on page 28.*

**Women's soccer, volleyball honors**

Senior Kersten Flink and freshman Lulu Quigley were named to the MVC all-tournament team for the 9-11-0 Creighton women's soccer team this past season. Flink also received all-MVC first team honors, while Quigley and Franny Hyllok were named to the league's all-freshman team. Kori Dahlkoetter, Flink and Heather Houska garnered first-team scholar-athlete honors. ... Junior Melissa Walsh earned conference all-tournament and first-team scholar athlete awards, and teamed with junior Kailey Reyes to make the all-MVC first team for the 16-12 Creighton volleyball squad. Walsh also was named to the Verizon/CoSIDA academic all-district VII first team.

**Softball team looks to defend titles**

The Creighton softball team began swinging for its fourth straight regular-season conference title and third consecutive MVC Tournament crown when it opened play Feb. 16. The Bluejays finished 31-28 last season, after earning their second straight NCCA Tournament berth. *For schedule information, go to [www.gocreighton.com](http://www.gocreighton.com).*

**Baseball squad opens season**

Ten years after its appearance in the 1991 College World Series, the Creighton baseball team is looking to return to the pinnacle of college baseball in 2001. The Bluejays, fresh off back-to-back appearances in the



NCAA Tournament (1999, 2000), opened play Feb. 16. *For complete schedule information, visit [www.gocreighton.com](http://www.gocreighton.com).*

**Did you know?**

Creighton is one of three Division I institutions that has sent its men's soccer, men's basketball and men's baseball teams to the NCAA Tournament in each of the last two years. The other two schools to boast the achievement are UCLA and Stanford.

## AROUND CREIGHTON

### Fr. Agresti resigns as Arts & Sciences dean

For reasons of health, Fr. Al Agresti, S.J., resigned as dean of the College of Arts and Sciences on Dec. 31. He remains on the faculty.

"This is a great disappointment for Fr. Agresti, the College and all those who worked closely with him. Fr. Agresti has renewed the College and moved it forward in many positive directions. We are grateful for his accomplishments and wish him good health and success in the future," said Charles Dougherty, Ph.D., vice president for Academic Affairs.

While a search for a new dean is conducted, Patricia Fleming, Ph.D., associate dean of the College of Arts and Sciences, will serve as interim dean of the College.

### Moderate alcohol intake may increase bone density

Milk may not be the only drink that keeps bones strong.

A Creighton study found that having two to four alcoholic drinks per week can increase bone density in post-menopausal women.

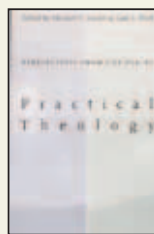
Reported in the November issue of the *American Society for Clinical Nutrition*, the study showed that moderate alcohol consumption is the key to bone benefits. Other research has shown that heavy drinking can increase the likelihood of osteoporosis and bone fractures.

Dr. Prema Rapuri, a postdoctoral fellow and author of the study, said that moderate alcohol intake probably affects certain hormones that trigger the breakdown of bone tissue. Dr. Rapuri worked with Dr. J. Christopher Gallagher, professor of medicine, and other Creighton researchers on the study.

Further research is needed to understand the effects of alcohol on bone health. In the meantime, health care professionals encourage people to get enough calcium into their diet, to exercise and to avoid smoking.

### Theology faculty publish book

*Practical Theology: Perspectives from the Plains* has been published by Creighton University Press and contains articles by



Creighton faculty members. The subjects addressed in the book include church, authority, gender, the envi-

ronment and gambling.

Faculty contributing to the book include: Michael Lawler, Ph.D.; Wendy Wright, Ph.D.; Bruce Malina, S.T.D.; Ronald Simkins, Ph.D.; Susan Calef, Ph.D.; Dennis Hamm, S.J.; David Schultenover, S.J.; John O'Keefe, Ph.D.; Rusty Reno, Ph.D.; Julia Fleming, Ph.D.; Roger Bergman; Todd Salzman, Ph.D.; Joan Mueller, Ph.D.; and Richard Hauser, S.J. The book was edited by Dr. Lawler and Gail Risch, both of Creighton's Department of Theology.

### A Look at the Historical Jesus

Bryan Le Beau, Ph.D., Kenefick Faculty Chair in the Humanities, Leonard

Greenspoon, Klutznick Chair in Jewish Civilization, and Dennis Hamm, S.J., Department of Theology, have published *The Historical Jesus Through Catholic and Jewish Eyes*. *The Historical Jesus* includes essays on questions in historical Jesus research answered from the Catholic and Jewish perspective.

### Former faculty, Prep Jesuit pass away

John F. Sheehan, Ph.D., former professor and chairman of the Department of Biology at Creighton, died Oct. 31 at the age of 94. Sheehan began his career at Creighton in 1930 as a biology instructor. In 1958, he became a research associate professor of clinical cytology and later a professor of pathology in the School of Medicine. He retired in 1987. Sheehan was the first recipient of Creighton's Golden Jubilee Service Award, which commemorated his 50 years of service at the University.

Fr. Charles F. Mullen, S.J., a longtime member of the Creighton Prep Jesuit community who lived at Creighton for more than three years, died Nov. 28.

Dr. John S. Baumstark, a professor emeritus in the School of Medicine, died in November. Dr. Baumstark was an eminent researcher in the field of protein biochemistry, and was the first recipient of Creighton's Distinguished Research Career Award, as selected by his peers. He was promoted to professor emeritus of obstetrics and gynecology, pathology and biochemistry in 1995.

## ILAC RECEIVES AWARD, GRANT

The Brugal Foundation recognized the ILAC Mission as the best organization in the Dominican Republic for its continuous effective service in struggling rural communities. The Brugal Foundation is based in the Dominican Republic.

Among more than 200 private non-profit organizations, ILAC was selected with four others in an initial award given by categories including education, social assistance, culture and arts. The prize for each of these five organizations was a check for 300,000 Dominican pesos. From the five organizations, ILAC was then selected as the best with the maximum

award of 1 million pesos. With both awards, ILAC received 1.3 million Dominican pesos (approximately U.S. \$90,000) to help develop agriculture projects in rural communities.

Fr. Ernesto Travieso, S.J., executive director of Creighton's Institute for Latin American Concern, also accepted a 1.5 million Dominican pesos grant offered to ILAC by the Japanese Embassy for the construction of a Youth Vocational Center in the town of Juncalito located in the central mountain range. This center will provide training and jobs for many young people who otherwise would abandon the rural areas.



## WE ARE ALL 'WATER COUSINS'

By John M. Scott, S.J.

Do you consider your body to be your own personal property? Does it belong to you alone and to no one else? Does it have the sort of permanence that reminds you somewhat of the Rock of Gibraltar or the stone faces on Mt. Rushmore?

Now consider some interesting facts. Your body is some 70 percent water. The water you drink is as old as the hills. The water in your glass is older than the pyramids, older than the ancient dinosaurs.

It is true that water is made undrinkable by the waste poured into streams. But let it evaporate into the atmosphere, and it becomes clean and refreshing again.

When you turn on your faucet, you are getting water from ancient seas, the final source and reservoir of Earth's water.

This means that the water you drink today, you may drink in years to come. If not the exact cupful, some of the same molecules. This hydrological cycle has a starting point. There has been no more and no less water on Earth. Water is not used up but simply changed from one form to another. Some of the water in your glass today may have passed the lips of a Crusader or lapped the boards of Noah's ark.

Some of the molecules coasting through your bloodstream this very moment may once have flowed through the veins of Saint Louis, king of France. Perhaps some of the water molecules in your head once slaked the thirst of a mighty elephant as he drank by a river's edge in Africa. Molecules of water in your right hand may once have been in the hand of Alexander the Great or Richard the Lion-Hearted.

Through water molecules, you are linked to the millions of people who have lived before you. You don't belong entirely to yourself. You are "part" of others, a part of our spaceship, planet Earth. You are cosmic.

There is no such thing as "private water" that is "yours only." Through water, you are united to the whole human

race, plus no doubt a few zebras and roosters.

Some people may find it somewhat humiliating to realize that you cannot call your body your "own." It is made of "reused" and "reusable" molecules, molecules forever "on

the move"; molecules that have been part of other people in the past and will be part of other people in years to come.

This should give us a sense of unity and close association with all the world and the people who live on it. Through water, we are made a cosmic family. We become "water cousins."

Remember, your body is only a temporary resting place for vagabond water molecules from the deep sea, the wide lake and the blue sky.

Dr. Deepak Chopra, a medical doctor and the author of such best-selling books as *The Seven Spiritual Laws of Success*, puts it this way. "In order to stay alive, your body must live on the wings of change. At this moment, you are exhaling atoms of hydrogen, oxygen, carbon and nitrogen that just an instant before were locked up in solid matter; your stomach, liver, heart,

lungs and brain are vanishing into thin air, being replaced as quickly and endlessly as they are broken down. The skin replaces itself once a month, the stomach lining every five days, the liver every six weeks and the skeleton every three months.

"To the naked eye, these organs look the same from moment to moment, but they are always in flux. By the end of this year, 98 percent of the atoms in your body will have been changed for new ones."

We sometimes refer to our spaceship as "Mother Earth" and well we may. Not only did God make this sphere for our cruise through space, He continually uses materials from planet Earth to make our bodies.

—About the author: Fr. John Scott, S.J., is a former high school physics teacher living in the Jesuit community at Creighton and the author of numerous books.



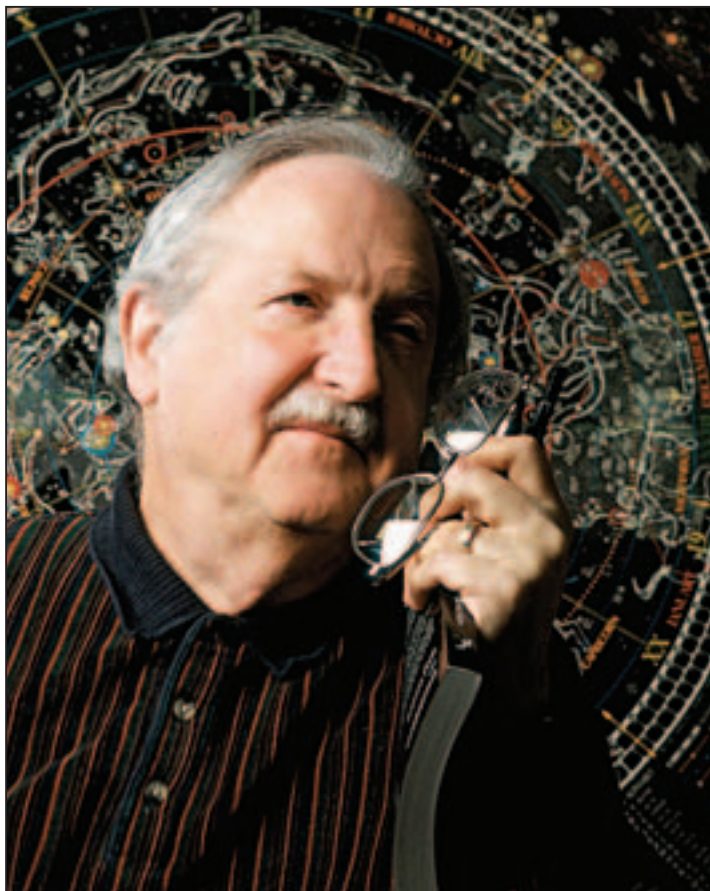
# Revelation

## IT'S ALL ABOUT STARS ... AND THE EVILS OF CITIES

By Bruce J. Malina, Ph.D.  
Professor of Theology

*Editor's note: A world-renowned biblical scholar, Creighton's Dr. Malina takes a timely look at this often-confusing last book of the Christian scriptures. After all, this text — with its images of apocalypse — may figure once more into our popular culture as end-of-the-world forecasters have made their voices heard with the arrival of a new millennium.*

In the Roman Catholic tradition, the first task in a considerate reading of the Bible is to discover and understand what the human author said and intended to say. After all, a gap of millennia separates us from the Bible's original writers, who also lived in and were shaped by cultures totally different from our own. Thus, when a 21st-century American ponders such a book as Revelation, he or she must abandon the prevailing culture



*Creighton theology professor Dr. Bruce Malina writes that to understand the literal meaning of the book of Revelation one must know the culture in which it was written.*

and behold the writer's world with new eyes.

The Catholic Church agrees. In fact, the Church's statement in Vati-

can II reads, "The interpreter must investigate what meaning the sacred writer intended to express and actually expressed in particular circumstances as he used contemporary literary forms in accordance with the situation of his own time and culture" (Vatican II, *On Revelation* 12, following Pius XII and repeated in the Pontifical Biblical Commission's *On Reading the Bible in the Church*, 1993).

Because meaning in a written document is always rooted in and derives from the social system of the author, to understand the literal meaning of a biblical author one has to know the social system of that author, in that

author's time, place and culture.

What is the first-century, literal meaning of the book of Revelation? To begin to understand this closing

Photo by Monte Kruse, BA'83



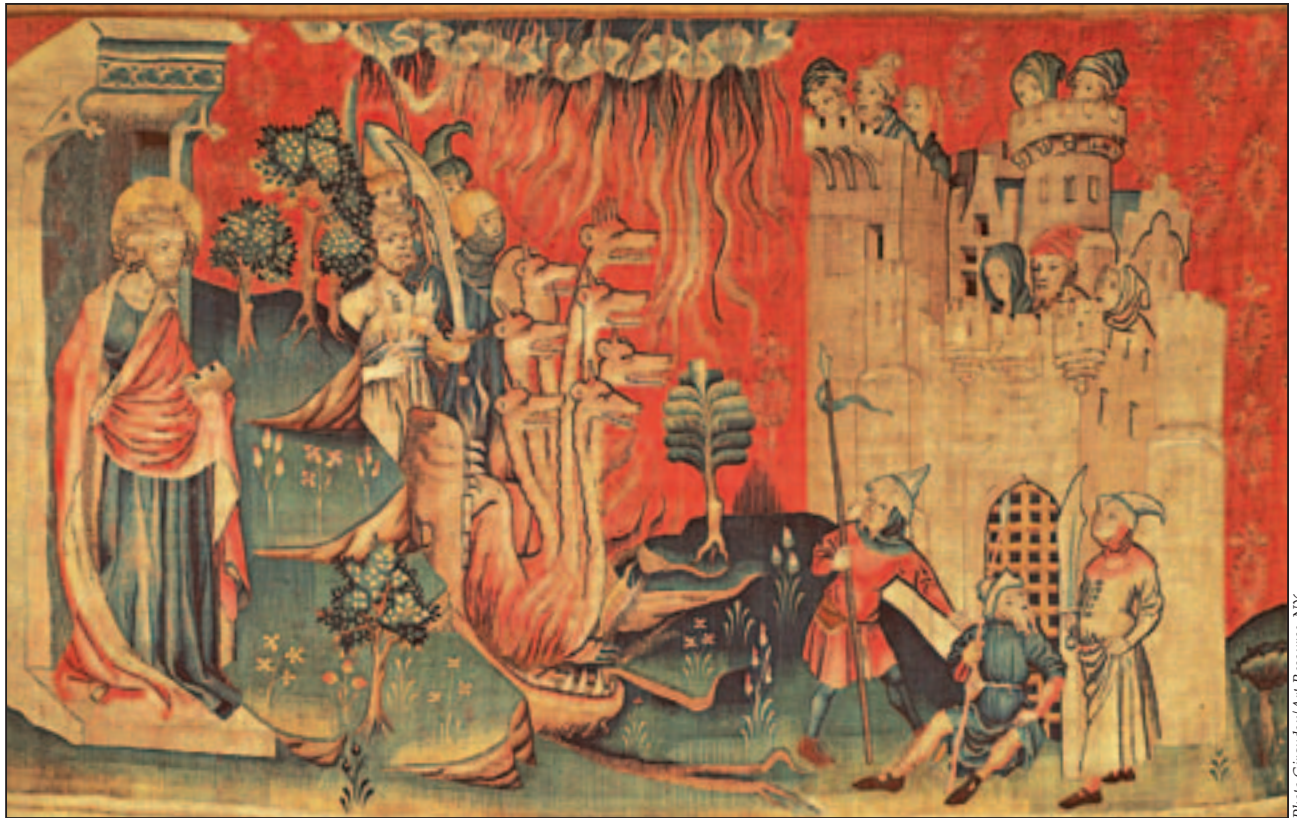


Photo Giraudon/Art Resource, NY

*This 14th century French depiction of Satan besieging the city is from the Apocalypse of Angers tapestry, a 300-foot long by 14-foot high wall-hanging that illustrates some 70 scenes from the book of Revelation. St. John, like many of his contemporaries, had a distrust of the cities, which were mainly the gathering places for wealthy landowners and their retainers.*

book of the New Testament, one must step into the author's first-century Mediterranean world. That world was at the center of the universe, as our first-century author — or authors (for Revelation was compiled by more than one writer) — understood it.

Stars and planets not only swung across the sky in well-known patterns, but were understood to affect directly the affairs of the people below and could be called upon for protection — or a show of mercy. For the stars and planets could also be forces for ill, as the first-century Mediterranean understood them, and a citizen of this world needed to know a prophet or seer who could read the stars' intentions and could control

their capricious influences.

What did first-century Mediterranean, Hellenistic peoples know



**Stars and planets not only swung across the sky in well-known patterns, but were understood to affect directly the affairs of the people below...**

about the sky and its denizens? From abundant astronomical infor-

mation from that period, we learn that they saw a round earth at the center of creation; it was encapsulated within the vault of the sky along which stars, in constellated form, moved in regular pathways. One pathway fell above the earth's equator, the celestial equator. The other ran along the pathway of the sun, the ecliptic, forming the zodiac. (See old world map, page 18.)

Many believed that where these pathways crossed were the "gates of heaven" — or the place of access to a transcendent reality, the other side of the firmament where God (or the gods) was enthroned. In the region below the firmament and above the moon (which was seen to be a planet) moved the six other planets, in the first century





The Granger Collection, New York

*This colored woodcut, reminiscent of 16th century engravings, illustrates the old belief that the earth was surrounded by a vast star-studded dome with the realm of God located just beyond.*

# The Visions of Revelation

## Vision 1

Let us consider the visions of John of Patmos, the chief author of Revelation, with our 21st-century “cultural filters” exchanged for those of a first-century Mediterranean. We adopt the role of a priest of a Jesus-group, and we eagerly await what a trusted holy man has to say to us:

*The Cosmic Role of Jesus the Messiah.* John himself begins with a letter (1:4-8), followed by a description of his introductory or inaugural vision (1:10-20), duly noting the circumstances of his personal condition (altered state of awareness) and time (the Lord’s day — that would be the Sabbath). He sees and inter-

acts with an astral being of constellational proportions (like a “Son of man,” hence like a human being in shape). This personage is much like the Resurrected Jesus described in the late first-century writing, the Gospel of Peter.

This Cosmic Lord Jesus directs John to write edicts to the controlling angels (or priests) of seven



understood to be the sun, Mars, Mercury, Jupiter, Venus and Saturn. To our first-century Mediterraneans, Night and Day, composed of darkness and light respectively, were not understood to be controlled by the sun and were seen as separate entities.

The stars were intelligent beings; the presence of comets (called by their shape: bowls, horses, trumpets, etc.) overhead indicated negative consequences; and the sky was full of invisible, person-like beings (various sorts of angels, demons and spirits).

The sky and its

inhabitants were believed to directly influence the lands over which they were located. The constellations, named early on by Babylonian scholars, were of great

prominence and significance to our early “Jesus-group” seer of Revelation. (John was a member of one of many groups following Jesus in this first-century Mediterranean world.) Babylonian lore had passed through Phoenicia, Egypt and Israel to Greece and then to Rome. In fact, our constellational names are largely Greco-Roman appropriations of originally Semitic designations. For example, Capricorn (Latin), Aigokeros (Greek), Gedy (Phoenician), Enzu (Babylonian); Virgo (Latin), Parthenos (Greek), Adamath (Phoenician), Eritu (Babylonian) have come to us down the ages.

The importance of knowing the constellations also had a concrete significance for first-

specific Jesus-groups, called churches, in Roman Asia (chaps. 2-3).

## Vision 2

**How God Controls the Universe and Deals with Israel.** This whole set of John’s visions deals with events supposedly leading up to the destruction of the city of Jerusalem in 70 A.D., explaining that the lugubrious event took place because Israel would not repent. (Notice the wrath unleashed against the city.) The passage starts with the prophet John passing through “an open door in the sky” — to his contemporaries, the familiar “gates of Heaven” — (4:1) to see the realm proper to God, at the controlling center of the cosmos. In Israel, this center was believed to be located in the sky

over Jerusalem. John sees God’s throne (constellation: Throne) attended by seven spirits (4:1.5), and surrounded by the thrones of

24 sky entities — stars or constellated stars known as “decans,” a Greek term synonymous with “elders” (4:4), and four animate constellations: Leo, Taurus, Scorpio, and Pegasus or Thunderbird. Along with this sight, John hears singing, praising God, singing as the ancients expected to hear it in the upper reaches of the sky.

The cosmic drama opens, cued by the notice of the sealed scroll with God’s directives, at God’s right hand (5:1). One of God’s “mighty” angels proclaims a search for some being of sufficiently exalted status to be privy to God’s secrets (5:2); this being is revealed as “the Lion of the tribe of Judah, the root of David, the one who conquered” (5:5). This is none other



Museum Studium Biblicum Franciscanum, photo by Garo Nalbandian

*This 12th century carving of the cosmic lamb shouldering a symbolic cross was found in front of the Holy Sepulchre in Jerusalem. Note that the lamb's head is turned backward as if slaughtered, like St. John's vision of the constellation Aries.*





century Mediterraneans. These were, after all, advanced agrarian people whose very existence depended on planting at the correct seasons, cued by the motions of the stars.

This first-century world was highly animated, a world where even stones were seen as influenced by sky forces, which is how the concept of the birthstone came into vogue. Every contemporary Roman city had its guardian or genius, again, a denizen of the sky. The constellation Orion, a Greco-Roman hunter, was Israel's warrior

*This 17th century world map shows a round earth at the center of the universe surrounded by the celestial horizon and the zodiac. Plato and many first-century Mediterraneans after him believed that where these two intersected was the opening to the realm of God.*

than the "Lamb situated (in the sky) as though slaughtered," and located in the center of the decans (5:6). The constellation Aries (in Semitic: *Taleh*, Lamb) was believed to be the first of God's stellar creations. It was always represented with its head turned backward so as to be facing Taurus, hence observed as having a broken neck, "as though slaughtered," yet quite a living constellation. Once the Lamb — the Cosmic Lord Jesus — accepts the scroll, the whole cosmos breaks out in song.

Chapters 6 to 11 set before us the content of what God has decreed in the scroll, now disclosed by the Lamb as it opens the seals of the scroll. Comets shaped like horses, with riders, emerge over the land and cause gradual destruction of Israel and its capital, Jerusalem.

We are told those who are to be rescued from judgment and revenge

include a limited number of Israelites in the land (only 144,000), and a limitless number of Diaspora Israelites "from every nation and

he constellation Aries (in Semitic: *Taleh*, Lamb) was believed to be the first of God's stellar creations.

tribe and people and tongue" (7:9). With the opening of the seventh and final seal, a new series of seven trumpet-shaped comets unleashes further negative events on the land.

After the sixth trumpet, we are

finally told what this wrath is all about: There is no change of heart forthcoming from those who offend God and their fellow humans (9:20-21). Hence, the destruction of the city, vindicating God's honor. The result is the inauguration of the rule of God and God's Messiah over the land of Israel.

### Vision 3

*The Cosmos Before the Flood: Why the Present Condition.* This vision refers to two periods, first before the completion of creation, then the period before the Flood described in Genesis. First, we learn about how the deceiving serpent of Genesis 3 ended up in the Garden of Eden. To begin with, John the seer beholds a great sign (the first of three) of a constellation described as a Pregnant Woman (Virgo) with the sun passing through it (12:1-2).



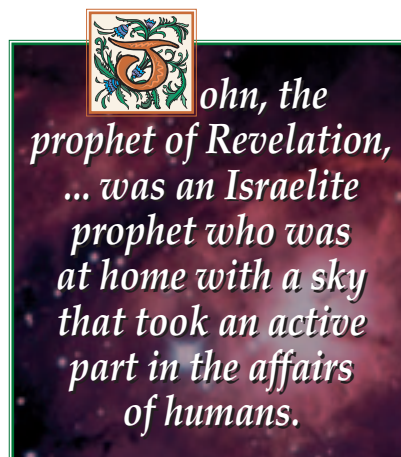
guardian Michael, well-known among early Jesus-groups as well.

It is important to remember that the first-century Mediterranean world featured a “consensus reality” different from our own. It was a world that took in stride other states of consciousness. People saw nothing abnormal about Jesus’ marvelous walking on the sea, or his vision of God at baptism, or his disciples seeing him transfigured or the visions of the seer of Revelation.

Social psychologists today list some 20 states of consciousness as “normal” in our consensus reality, yet omit many altered states of awareness common to 90 percent of the population of the planet.

John, the prophet of Revelation, then, was an Israelite prophet who was at home with a sky that took an

active part in the affairs of humans. He also lived in a culture that featured a consensus reality that was



comfortable with prophets capable of trance visions and sky journeys. Thus his detailed description of what he saw in the sky or on the

other side of the sky belonged to the same category as ancient sky readings concerning the fate of kings and peoples.

John perceived those visions of astral phenomena through Israelite cultural filters and his faith in Jesus as Israel’s Messiah and cosmic Lord. In his perception, he was much like Israel’s prophets of old, Ezekiel, Zechariah, Daniel and Enoch.

It is also important to understand that John, in Revelation, is speaking to his fellow Jesus-group prophets, not to all fellow believers. In antiquity, celestial revelations were for kings, priests and prophets, not for ordinary people. For the most part, members of the Jesus-groups were Israelites who believed Jesus was Israel’s Messiah

This is followed by another sign, that of a constellational Dragon with falling stars in its wake, in the southern sky (12:3-4) waiting for the Pregnant Woman to give birth. Her cosmic Child (Israel’s “Son of man”) was taken up to God and seated on God’s throne (12:5). Before God completed his Creation, the Dragon, identified with the Devil and Satan of Genesis 3, engaged in battle with the angel Michael (Orion), who ejected the Dragon from the sky (12:7-8). The seer is then told of the Dragon’s interactions with the cosmic Woman, now on earth. The “seed” of this woman are the Holy Ones (see 14:12), with God from the time of creation.

Next, one constellation (Cetus) rises in the sky over the horizon of the sea (13:1), and the second (Lepus) rises in the sky over the horizon

of the land (13:11). The sea Beast (constellation Cetus) serves as vice-regent of the Dragon, taking on “the

Holy Ones” in battle.

Meanwhile, John recounts a whole series of new scenes, dealing



*This 17th century depiction of the constellation Cetus, the sea Beast in Revelation, is from Johann Bayer’s Uranometria. In Revelation, the sea Beast takes on “the Holy Ones” in battle.*



soon to come with power. A major message from their prophets to these believers was the caveat not to be deceived, a theme that John underscores in Revelation to his fellow prophets as well. Later Christian usage would presume John's work was addressed to all Christians, but there is no evidence for this in the document.

With only 5 percent of the population living in cities at the time, John shared the majority's distrust of cities, which were in fact the gathering places for wealthy landowners who planned wars and levied taxes for their own benefit. Thus, cities figure quite negatively in the work.

John's work consists of five sets of visions (see "The Visions of Revelation," starting at the bottom of

## Revelation:

### *What Meaning Is There for Us Today?*

The New Testament documents in general, and the book of Revelation in particular, are in fact the witness of our ancestors, in this case our ancestors in faith. The purpose of the culturally informed, historical study of the New Testament is to identify with those ancestors, their culture, their problems, their choices, their interactions and their concerns. They inform us of how God founded the Jesus-group by calling Israelites and Gentiles alike. They thus witness to a universal God — a radical step from Israelite concrete or abstract henotheism (the God of Israel).

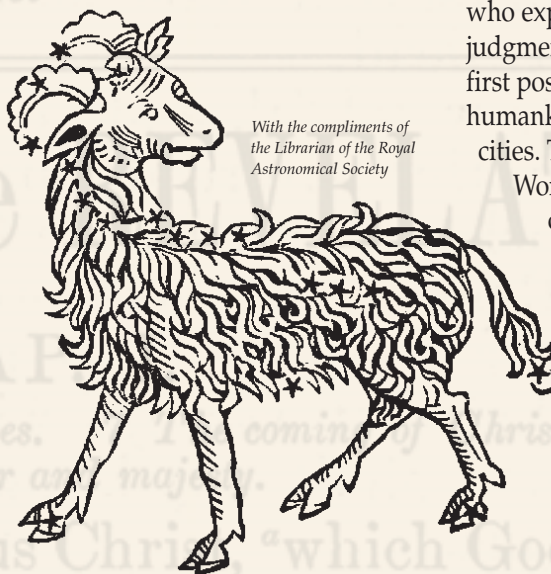
As much as it hurts the sensibilities of U.S. Christians, culturally informed historical methods bring us into contact with a range of first-century Mediterranean personages largely within the Israelite version of

with the cosmic Lamb "setting" over celestial Zion; and a trio of angels proclaiming the hour of God's judgment, the fall of Babylon the Great (14:8), and a caveat against any trafficking with the sea Beast (14:9-11). Finally, two sickle shaped comets, at the direction of two angels, "harvest" the earth, a traditional symbol of judgment in early Mediterranean cultures.

Now a third sign appears, consisting of seven bowl-shaped comets yielding seven injuries (chap. 15), meant to vindicate God's honor. Chapter 16 concludes with the splitting of land into three (16:19). (The ancients believed that after the Flood, the world was divided into three: Europe, Asia and Africa, hence the three sons of Noah.)

The vision thus describes the celestial events that led up to the

Flood. Now the seer beholds the first significant city after the Flood, Babel/Babylon.



*With the compliments of  
the Librarian of the Royal  
Astronomical Society*

*This 15th century woodcut, from C.J. Hyginus' Poeticon Astronomicon, shows the constellation Aries as a Ram with its head turned back.*

### Vision 4

#### *The First Postdiluvian City of Humankind: Babel and Its Fate.*

Chapter 17 opens with an angel who explains the significance of the judgment on Babylon/Babel, the first postdiluvian city of humankind, typical of all human cities. The city is personified as a

Woman, both because this was customary in the Hellenistic period and because

Babylon's protecting star at that period was Venus (Aphrodite, Isis, Ishtar). Chapter 18 opens with another angel announcing the fall of Babylon (18:1-3), and still another inviting his proteges to leave the city (18:4-8). Finally we are told about a set of

Mediterranean society, their interactions, their reactions and their beliefs. It is people in context, living their beliefs, that form the witness to the Christian faith; it is their beliefs in God, beliefs in what God was doing in Jesus.

When a 21st century reader disparages the authors and audience of those first-century New Testament documents or attributes motives that were simply historically or culturally beyond them, obviously this is unfair, just as unfair as the universal polymorphic images of Jesus conjured up for whatever people want to do “in his name.” In all fairness to those ancestors in faith and in support of their witness to Jesus and the God who raised him, culturally informed, historical approaches to the New Testament are the only appropriate and suitable methods to discover what they said and meant by their witness.

Whether people today find this relevant or not is beside the point. It is like asking whether great, great grandparents are relevant or not. The fact is that without them we would not be here. Our biological gene pool is rooted in them, just as our theological pool of traditions is rooted in the New Testament. It is often good to see who stands at the head of that pool — our New Testament witnesses.

people who regularly interacted with the city and now lament the city's passing (18:9-20).

The seer then hears a cosmic chorus of praise evoked by God's just judgment on the wayward city. The sea Beast (Cetus) and its false prophet (the land Beast, Lepus) are thrown into a burning sulphurous pool, in the sky (19:11-21). With the two Beasts vanquished, it is finally the turn of the Dragon. The seer envisions an angel who binds the Dragon for 1,000 years (20:1-3), that is for a “day” in the sight of the Lord (see 2 Pet 3:8). During this period, those who witness to Jesus live and reign with him (20:4-6). But at the end of this period, Satan is released for destruction with the Beasts (20:7-10).

In this way, John explains events during his own generation: His fellow Jesus-group members can look

forward to some final period of deception and testing by Satan.

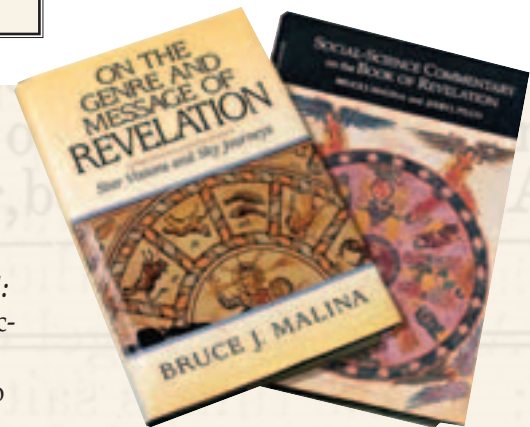
### Vision 5

**The Final City of Humankind: Celestial Jerusalem.** The final section of the work describes the rewards promised to “those who overcome” in the seven edicts (chaps. 2-3) as the author tells of God's judgment of humankind (20:11-15), and sees the celestial Jerusalem. The coming of the new Jerusalem through the opening in the sky over old Jerusalem marks a new creation — a new sky and new earth (21:1-5).

This comes as no surprise since ancients believed that when the sky returned to its original configuration as established by the Creator, all would be renewed. The first of God's celestial creations — the Lamb (Aries) — now passes over

page 16) inserted within the format of a letter. Some anonymous person added a preface (1:1-3), labeling what follows as “a revelation” (Greek: *apokalypsis*, hence the name of the work).

John the prophet believed he was instructed by God to tell his fellow Jesus-group prophets about his visions. Armed with knowledge of and appreciation for how God rules both Israel and the world and how Jesus is now Cosmic Lord, reading or hearing this text, Jesus' followers could live confidently, without deception and with assured trust in God's will as revealed through Jesus. This, in brief, is what the book of Revelation meant to its first-century Mediterranean audience.



*To learn more about Revelation, pick up Malina's 1995 book **On the Genre and Message of Revelation** or his recently published **Social-Science Commentary on the Book of Revelation**, which was co-authored with John J. Pilch, a professor of biblical studies at Georgetown University.*

the opening in the sky where it was first created and thus comes in conjunction with another celestial entity, the new Jerusalem. Enjoying God's presence in this way is what John's fellow Jesus-group members looked forward to. ☐



# St. Francis Seen in Assisi



Photo courtesy of Francesco: Il Musical

*Francesco: Il Musical, a new musical on the life of St. Francis, opened in Assisi, Italy, last summer. Creighton theology professor Joan Mueller served as historical consultant for the production. Actor Antonello Angiolillo, left, portrayed St. Francis and actress Aisha Cerami, right, portrayed Francis' good friend St. Clare.*

By Joan Mueller, OSF  
Associate Professor of Theology

**T**he spirit of St. Francis has reawakened in Assisi, Italy, with the opening of the musical *Francesco: Il Musical* this past summer. As historical consultant for the musical's production, I was lucky enough to be a part of this wonderful project.

It all began when Texas billionaire, Richard Leach, and his wife, Rosemary, were touring the town of Assisi several years ago with a local taxi driver as their guide. Leach (perhaps best known as the creator of Barney, the purple dinosaur known by children everywhere) and his wife were traveling from one historic Assisi church to another, the taxi driver explaining the sites and spiri-

tuality of the famous Italian town. Suddenly, something clicked for Leach: Wasn't it time to "bring St. Francis home" to the little town, his life story told in the form of a musical? And wouldn't it be wonderful to stage the ongoing production in a theater of its own?

Meanwhile, I had written a book titled, *Why Can't I Forgive You? A Christian Reflection*, published by a subsidiary of Leach's Lyrick Corporation. The book had gone well, and the publisher asked if I would be interested in writing another. It was then that I learned about Leach's trip to Assisi and his dream to build a 1,000-seat theater and produce a musical on St. Francis. He was



hoping to make the musical and theater a permanent fixture in Assisi, much as the passion play is in Oberammergau, Germany.

Being a scholar of the early Franciscan movement, I immediately wrote a letter to Leach and enclosed my resume. Within the week, I was hired as historical consultant to the project and was appointed to a team of creative people that would eventually include writer

Vincenzo Cerami of Academy Award-winning *Life Is Beautiful* fame. I also would have the privilege of writing a historical novel on St. Francis of Assisi that would be part of the musical project.

In an age when civil and religious leaders throughout the world are concerned with the American export of violence through media, Leach's idea of presenting the life of St. Francis on stage appealed to the imaginations

## Francis and Clare

Francis (1182-1226) and Clare (1194-1253) were contemporary citizens of the tiny village of Assisi. Francis, born into the rich merchant Bernadone family, and Clare of the noble Offreduccio family experienced firsthand the conflicts and violence of 13th century Assisi. As a young woman, Clare and her family fled Assisi and took refuge in the neighboring city of Perugia, while the merchant's son, Francis, raided the castles of the vanquished nobility.

The conflict between merchants and ancient noble families over the emerging money economy came to a head in

Assisi in the battle of Collestrada. Dressed to the nines in newly acquired armor, Francis was captured and taken as a prisoner of war to Perugia. There he was confined for a year. His health and spirit broken by the hardships of his imprisonment, Francis began to question his family's seemingly unquenchable thirst for money and power.

Disillusioned, Francis began skipping work in his father's shop and took to the mountains near Assisi to try to sort things out. Alone one day in the tiny church of San Damiano, he heard a voice from the cross telling him to rebuild God's house. Looking around at the dilapidated structure, Francis began immediately the project of rebuilding the small church. After stealing luxury cloth from his father's business in order to finance this rebuilding, Francis was disowned by his family.

Pope Innocent III, desperate to regain the growing ranks of those tempted to follow heretical movements, was seeking men who were able to entertain the masses in the service of the church. Just at this time, Francis and his small group of followers appeared in Rome asking for permission to preach. After seeing Francis' talent in action, the pope blessed the efforts of the ragtag group and gave them the permissions requested.

Clare, who had also suffered from the hardships of war, was searching, too, for a peaceful way to live her life. Hearing Francis preach of the possibility of downsizing one's life instead of questing for money and power, Clare also became enamored with the poverty movement. Escaping from her home, Clare, with the permission of the bishop of Assisi, joined Francis and his brothers. The knights of her family pursued her, but after she showed them her tonsured head, she was disowned, her shorn hair making her no longer valuable as a bride. Her sister, Catherine, followed Clare a few days later to the horror and embarrassment of the men of the Offreduccio clan.

The Franciscan poverty movement grew quickly, given the disillusionment with war, violence and the pursuit of endless riches. Both the Franciscan brothers and monasteries of Clare's sisters expanded quickly during the early 13th century and today — along with a lay order established by Francis — are linked around the world.



Giotto fresco of St. Francis



Giotto fresco of St. Clare

# St. Francis Influences Jesuit Founder

St. Ignatius (1491-1556), the founder of the Jesuits, was influenced by the life and teachings of St. Francis. Before his conversion, St.



St. Ignatius

Ignatius, much like St. Francis, lived the courtly lifestyle. St. Ignatius was the son of a noble and wealthy family in Spain, a military leader, who, by his own admission, was "given to the vanities of the world."

It was while recuperating from a war wound — the result of a cannonball smashing into one of his legs — that St. Ignatius began reading about the lives

of the saints, including St. Francis. In his *Autobiography*, St. Ignatius recalls that in reading about the saints he began to contemplate a different lifestyle, one in service to God and others.

"In reading the life of Our Lord and of the saints, he (Ignatius) stopped to think, reasoning within himself, 'What if I should do what St. Francis did, and what St. Dominic did?'"

Joan Mueller writes about these Franciscan roots of Ignatian spirituality in *Practical Theology: Perspectives From the Plains*, a recently published book featuring Creighton authors. "Ignatius' gift to the church, the Spiritual Exercises, outlines the basic dynamics of the penitential program also followed by St. Francis," Mueller said.

of many, including that of the Vatican, which sponsored the project, even before production, as an official Jubilee year event. The small town of Assisi put aside its many ordinances against foreign investments and offered Leach an old factory building in the valley for the project. With a clear view of the mountain town and the Basilica of San Francesco in the distance, the land negotiation was settled.

My role as historical consultant was to write a source book for the musical writer Cerami. There are literally thousands of pages of Franciscan source material, and much scholarly work has been done in the last century to identify which sources were closest and truest to the experience of the early Franciscans. The next three years of my life were spent responding to constant requests for materials from writers and musicians, and reviewing and critiquing various drafts.

I even became an expert on 13th century, middle-Italian clothing styles. (Yes, the brown robe and rope belt seen on renditions of Francis today were the blue jeans of his time.) I also became expert on typical housing styles; the exact parameters of the city walls of Assisi; the look and construction of 13th century, middle-Italian armor; and the color and texture of the luxury cloth that Francis' father sold. (It took me a week and a half to locate an example of this 13th century silk brocade, which I finally hunted down in the Vatican Museum.)

One year prior to the opening of the musical, I also had completed a historical novel, *Francis: The Saint of Assisi*, that has been translated into Italian, German and Dutch. Again, accuracy of detail was paramount. At one point, my office window at Creighton was filled with genealogy maps of Assisi. Because every character in the book is an archival character, each one must be backed by historical evidence, including social class, where each family lived and how they were connected.

Finally, six weeks before the musical's opening date of May 28, 2000, I flew to Italy to oversee the final rehearsals.

I had been to Assisi many times before, praying, working on research, writing and studying manuscripts. This time, however, would be like no other. Since we were opening both a new musical and a new theater, rehearsals had to be held in the old community theater until the new theater complex was completed.

One wakes up in Assisi to the sounds of swallows and church bells. I opted to stay at a small pension rather than at a hotel in order to be near the sites that Francis and his friend St. Clare had loved. The sun was



hot and the air still dew-laden as I worked my way down the narrow streets to the old theater. There was a sign on the door, "Only Staff Allowed." I passed through the heavy green velvet curtain and introduced myself to the Italian cast and crew. One sensed immediately the energy and professionalism of the team.

I settled in with my paper and pencil, intending to make notes as we rehearsed scene by scene. There were details that needed to be fixed. No, the musical's religious brothers could not remove Clare's veil. The brothers' tonsures (the circular baldpate and fringe haircut that marked them as members of a religious community) were cut too big. The bishop appeared a bit too sinister. After each scene, the team met for a review. The hours usually extended long into the night.

For two hours every day the martial arts instructor practiced with the actors armed with swords enacting a battle scene. Why such emphasis on pitched battle? In his youth, St. Francis had dreamed of becoming a knight. Francis' father was a merchant who had made his money in the luxury cloth trade. But Francis had little inclination for his father's business. He loved nature and enjoyed the good life, and he dreamed of proving himself in battle.

Although I have studied the life of Francis for the past 20 years, watching the martial arts rehearsals gave me a new appreciation for Francis' youth. The instructor shouted, "Lunge!" "Balance!" "Guard!" Both the team and the actors had committed themselves to using real swords with all the danger this would imply. Besides being dangerous, the swords were heavy, and the actors needed constant practice in order to build the strength necessary to do the scene. Luckily, no one was injured.

Scenes were choreographed again and again. Music was written, rewritten, arranged and pitched to suit perfectly the voices of each singer. What impressed me most as we proceeded day after day with the creative work was the growing dedication of the cast. What

began as a job was turning into a mission.

Over the years, I had endured some poor efforts to portray the lives of Sts. Francis and Clare, including the dreadful 1973 film *Brother Sun, Sister Moon*, which insisted on portraying Francis and Clare as lovers — which they, of course, were not.

When we began this project, I had a number of dreams. Being a scholar of St. Clare, I dreamed of the possibility of portraying Clare not as a hapless woman drawn by some sort of misguided love of Francis, but, as the medieval sources tell us, as a woman whom Francis sought out because of her already established

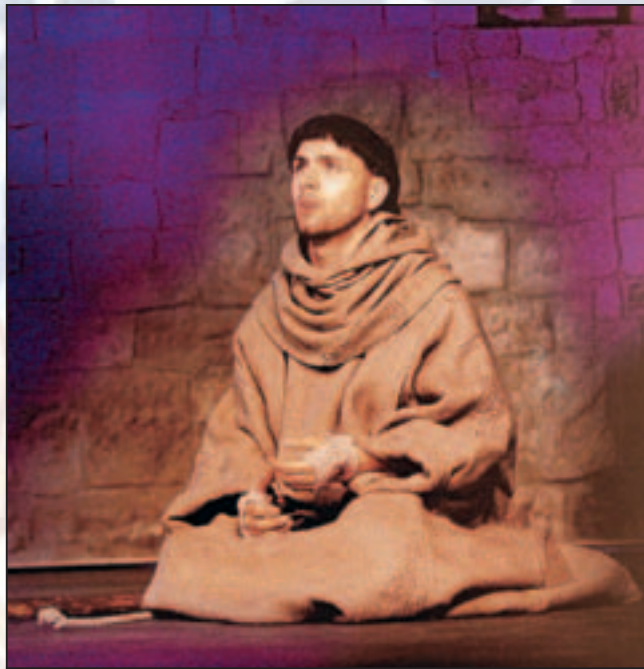
reputation for integrity, strength and holiness.

Over and over again, the team was tempted to turn the musical into a love story. Can't holiness be entertaining enough, I wondered. Doesn't the Christian path toward God contain enough drama to keep an audience engaged? Did the well-proven American formula of love, sex and violence need to be employed even if this violates both the history and the theology of the subjects being dramatized? The discussions were long and hard. In the end, Clare is portrayed as a woman in

love with God and with the Franciscan project. She and Francis are friends, as they were in real life. They are not lovers.

There was another dream that I had when we began the project. In his *Last Testament*, Francis says that he was converted by the lepers of Assisi. The story is well known. Before Francis' conversion, he had a reputation for being generous toward poor people, but he had a difficult time being civil to lepers. Lepers were frightening to their contemporaries, as no cure for leprosy existed, and there was always the risk of catching the disease. They were marked by a foul odor and often were disfigured.

Sick, alone and confused, Francis had recently returned to Assisi after being held as a prisoner of war



Angiolillo portrays St. Francis in prayer at San Damiano.

Photo courtesy of Francesco: Il Musical



Photo courtesy of Francesco: Il Musical



Photo by Gerhard Ruff, for Casa Editrice Bonelli, [www.bonelli.it](http://www.bonelli.it)



*Above, this dramatic scene from the musical depicts St. Francis' life-changing encounter with a leper. Over the ages, in an effort to encourage pilgrimage and tourism, the leper was expunged from many of the accounts of this important event in St. Francis' life. Even in the famous Giotto fresco, shown at left, the scene is changed to St. Francis giving his coat to a young knight. As the musical's historical consultant, one of Mueller's goals was to bring the leper back into the story of St. Francis.*

leper reached out to him and gave Francis the kiss of peace. The leper's poverty and humanity touched a chord in Francis' aching heart, and after this very human encounter, Francis began to visit the leper hospital nearby, not only bringing the lepers money but also caring for their physical needs. The one who had been a benefactor of the poor was now taking the critical step of becoming poor. Francis had learned firsthand that following the way of riches leads to depression, violence and a greedy spirit. Here, among the lepers, the poorest among the poor in Assisi, he was finding peace.

When we began the musical project, my dream was to bring Francis'

in Perugia, Italy, for a year. He displayed classic symptoms of post-war syndrome. He found it difficult to return to his ordinary life; he frequently disregarded his duty to manage his father's store and instead disappeared into the caves of Mount Subasio, sometimes for days at a time. He demonstrated signs of severe depression, and he radically questioned the commercial exploits of the fathers of Assisi who were sending their sons into war, often just to gain access to a shipping road for their goods.

One day, as he was riding his horse near the small church of St. Mary of the Angels — interestingly enough, probably at about the point where the theater is now located — his horse reared; in front of him was a leper.

Francis dismounted and went toward the leper. The

encounter with the leper back home to Assisi. Over the ages, in the quest to encourage pilgrimage and tourism, all signs of the leper had been purged from Assisi's perimeters. Even in the famous Giotto frescos, the conversion scene of the leper is changed into Francis giving his coat to a young knight. This idealized scene was even incorporated into the Basilica of San Francesco, despite the fact that St. Francis tells us in his own words that it was the lepers who converted him.

The story that one tells makes a difference. Even today, beggars near Assisi's basilicas are carefully controlled and, as also happens in this country, are often removed when there are visits from dignitaries. Francis' embrace of the leper is as critical to the Christian story of conversion today as it was during the Middle Ages.



Writer Cerami and composer Benoit Jutras brilliantly wove the leper into the center of the musical. Francis, sick from his imprisonment, anguishes in bed. In the midst of his writhing, the voice of the play's leper, Lucilla Tumino, is heard. Francis sits up only to see that he is surrounded by lepers all reaching out to him. The first act closes with this scene, and the lyrics of the song are haunting:

Everything has but one name, Love.  
Under this sky,  
Poverty and evil,  
Undying hatred,  
Also sorrow and pity,  
Everything has but one name, Love.

The lepers surround Francis, and, oddly enough, the music coming from so many of these voices brings one a strange sense of well-being. During opening night's intermission, there was a comfortable, yet distinguishable, silence. The first act was powerful. Then, one woman started singing the song of the lepers and others joined her. I swallowed hard, full of emotion. My dream had come true; the first seeds of welcoming the leper back home to Assisi had been planted.

While my hope was to stage Clare as the strong, intelligent woman that she was, and to allow the leper an entrance back into the story of St. Francis, Leach had additional dreams. He wanted the audience to be entertained, to be dazzled with the beauty of costumes, lights, music and dancing, and to leave happy, whistling the songs. During the months of creative work, the team carefully fostered his vision, and somehow we struck a balance.

In Act I, Francis celebrates with his friends before heading off to war. This party rivals any other that has been staged in the opera houses of Italy. There are exquisite costumes, sumptuous food, and riveting music and dance. A temptation scene, complete with the devil, is done in vaudeville style. There is a beautiful and warmly humorous Nativity scene featuring the actors and actresses as statues, during which the young friar Francis struggles to hold a sneeze that will eventually bring the characters to life. Francis' trial before the Bishop of Assisi finds Francis stripping off his luxurious garments and disowning his father. His mother begs his father to have mercy on their son. The oriental scene of Francis who is captured during the crusades and brought before the sultan is further dramatized by a small group of women dancers, veiled in black, who wail and dance their grief for

their dead Muslim husbands.

The musical and theater opened as scheduled and remained all through the first run, until Nov. 30. While a film of the play will be shown in the winter months, Leach hopes to reopen the show this spring. Meanwhile, now that the show is produced, the task will be to market the musical to tourist agencies. If this effort is successful, the story of St. Francis will be told in Assisi for years to come.

## St. Francis: The Novel

If you are not going to Assisi anytime soon, but would like to learn more about the lives


of Sts. Francis and Clare, check out Joan Mueller's new historical novel, *Francis: The Saint of Assisi*, produced in tandem with the musical.

Written as a novel, the book still contains the best historical information known on Sts. Francis and Clare. Meet within its pages the leper who helped St. Francis see beyond money and change his life; the bishop who guided Francis and Clare in their journeys toward



Photo by Monte Kruse, B.A. '83

Mueller in front of a statue of St. Francis in Omaha.

God; and the people of Assisi who interacted daily with their town's famous son. Wayne Hellman, OFM, Franciscan historian, of Saint Louis University says: "This book is a giant step forward in writing anew the life of St. Francis." 





# Creighton Soccer in the Final Four

Photo by Christopher Record/The Charlotte Observer



*Senior All-American forward Brian Mullan celebrates after scoring a goal just three minutes into the second half to tie Creighton's Final Four match against Indiana at 1-1.*

In what some thought was a rebuilding year, the Creighton men's soccer team won its seventh conference tournament title, advanced to the NCAA Tournament for the ninth straight year and reached the Final Four for the sec-

ond time in five years.

And then — with a 2-1, triple-overtime win over two-time defending national champion Indiana — they did what no other Creighton team, in any sport, has ever done. They played for a national title!

Award-winning Creighton photographer the Rev. Don Doll,

S.J., followed the Bluejays to Charlotte, N.C., in December for their Final Four appearance, capturing the joy, heartbreak, camaraderie and determination that encapsulated Creighton's thrilling season.

Photo by Don Doll, S.J.

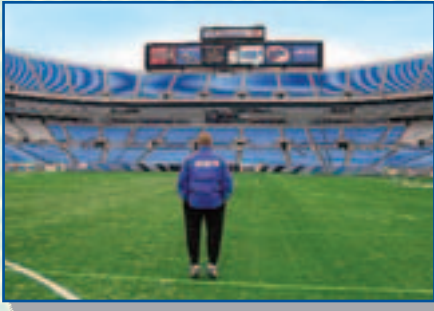


*Andrew Brown, left, catches up on some studying, while Joe Wieland, Shane Havens and Mike Tranchilla joke around with a card game on the plane ride to the Final Four in Charlotte, N.C.*



Photo by Don Doll, S.J.





*Far left: Junior goalkeeper Mike Gabb spends some time alone before Creighton's semifinal match against Indiana. Left: Mullan takes a shot on goal against the Hoosiers. Below: Tranchilla blows kisses to his girlfriend after scoring the game-winning goal in the third overtime against Indiana, while teammates Corey Fox, Mullan and David Wagenfuhr celebrate in the background.*



Photos by DonDoll, S.J.



*Above: Coach Bret Simon and his son, Benjamin, on the team bus, with trainer Ben McNair seated behind them reading about Creighton's win.*

*Left: Ishmael Mintah, Peter Henning (obscured), Tranchilla and Keith Sawarynski are happy but exhausted after Creighton's triple-overtime win against Indiana.*





*Top: Creighton's Matt Jewett tries to weave his way through the stingy UConn defense, which featured Hermann Trophy winner (soccer's version of the Heisman Trophy) Chris Gbandi (4).*

*Above: Coach Simon draws up plays during halftime of the UConn match.*



*The Bluejays gather for a team huddle before their national title match against the University of Connecticut.*





*Left: From left, Pat Davis, Ryan Small, Zach Piercy and Mullan sign soccer balls for fans at the Final Four.*

*Below: Creighton's Henning, along with the rest of the team, is greeted by cheering fans at Eppley Airfield upon the team's arrival back in Omaha.*



*Fox, left, consoles Sawarynski after Creighton's loss to UConn in the national title match. The Bluejays finished the season with a record of 22-4-0.*

*Photos by Don Dolf, S.J.*



# Life AND Death

## The Next 100 Years in Biomedical Sciences



Photo by Monte Kruse, BA '83

By Robert P. Heaney, M.D.  
*John A. Creighton University Professor*

*Editor's note: This is the first installment in a year-long Creighton University Magazine series on health care. Future articles will focus on the case for universal health coverage, the high cost of prescription drugs, and the pros and cons of managed care.*

In 1972, Nobel Prize-winning physician and infectious disease expert Macfarlane Burnet looked back over a century of triumphs won by vaccines, hygiene and antibiotics and predicted that the future of infectious disease would be very dull.

That was just shortly before the recognition of Lyme disease, AIDS, Ebola virus and antibiotic resistant tuberculosis. The truth is no one is an expert about things he or she has not experienced.

It would be folly to predict what biomedical science will look like during this new century. But there are some well-defined forces, mainly outside of medicine, as well as a few new developments within medicine, which surely will affect medicine in the future.

Some of these external forces include our ever increasing energy use, the graying of the population, sedentary lifestyles, stricter mandates for safety and efficacy, myriad ethical issues and technophobia. Let's briefly examine each.

### **External forces: From energy depletion to technophobia**

The United States, with less than 5 percent of global population, consumes more than 30 percent of total world energy. The problem is not

*Pictured left is Dr. Robert Heaney.*

confined to North America. Nor is it just gasoline and electricity. Everything we use and throw away is based in energy. Every service and product we buy has an energy equivalency. Energy is the ultimate currency. Jobs in the production sector are dependent upon our buying and using and discarding, and then buying again.

Per capita energy consumption in the United States doubled from 1960 to 1980 and continues to increase today. Available fossil fuel reserves are being depleted faster than new sources are being discovered, and many oil industry executives predict that there will be serious petroleum shortages by 2025. When the imbalance finally constricts utilization, the Western economies will be hard hit. Science will be affected, just like all other sectors of society, but medicine particularly so, since research funding demands a healthy economy and health care costs already consume a large share of our gross domestic product.

By 2040, the number of Americans over age 65 will more than double; the number of those 80 and older will increase six-fold. Health care expenditures in the United States today account for about 15 percent of the gross domestic product, the highest in the world. With the rise in the numbers of dependent elderly, health care costs will at least triple. Today in the United States, there are about four employed individuals for every retired person. Within 25 years, that

ratio will drop to 2-to-1. It is not just a question of funding Social Security. Many of the elderly need a great deal of care. Who is to provide that care? And who will pay the bill?

As we have become a more sedentary society, one health consequence, already too prominent to

cause of these problems and still watch them increase all around us. The truth is: The machinery of the human body was shaped by evolution to do physical work, not to be idle. Our bones and muscles atrophy when we are inactive, and our bodies grow fat. There is no fix for that except a four-letter word: work.

Often ignored in the health care debate is the cost-inflating effect of our societal mandate for safety and efficacy. While no one wants unsafe or unproven treatments, we have failed to reckon the cost. Actual costs for drug development have increased more than seven-fold over the past 35 years, after adjusting for inflation. In my field of osteoporosis research, the last three agents approved by the FDA cost their manufacturers more than \$600 million each in efficacy testing costs alone; further, these tests used up most of the patent lives of the drugs before the first pill could be sold. Naturally, therefore, the cost per pill is high. Only diseases with large patient populations can sustain the associated costs. Dozens of promising drugs have been pulled out of

development in recent years simply because their manufacturers sat down and reckoned the return, and decided to cut their losses. Third-party payors also limit or resist reimbursement for new, expensive drugs and procedures, creating barriers between research advances and the people who need them. Finally, we are confronted daily



Photo by Monte Kruse, BA '83

*Laurie Smith, a third-year occupational therapy student at Creighton, assists 83-year-old Joseph Bant of Omaha. By 2040, the number of Americans 80 and older is expected to increase six-fold, putting a tremendous strain on our country's health care system.*

ignore, results from the combination of a sharp decline in physical work and easy access to empty calories — obesity. Epidemic obesity has overwhelmed this country, with its associated cluster of medical problems — adult onset diabetes, hypertension, micro-nutrient malnutrition and degenerative arthritis. It is frustrating to understand the





Photo by AP Wide World Photos

*Liz Welch holds a “CampBULLS” sign during a rally last summer in Minneapolis protesting genetically engineered foods, specifically targeting Campbell’s and Kellogg’s brands. Is this opposition to genetically altered food part of a growing technophobia in Western society, which could greatly hinder medical progress?*

with the spectacle of politicians posturing about high drug costs and the need to rein in an out-of-control industry. But it is government that escalates the requirements for drug approval and we who tell government what to do. In the words of Pogo, “We have met the enemy and he is us.”

While there are many ethical issues, perhaps the most vexing questions surround the issue of rationing of scarce resources. How do we say “no”? To my view, the problem is most clearly seen in its real human dimensions in the story behind the establishing of a bone marrow transplant unit in Croatia 20 years ago. There, in a socialist economy with perhaps the world’s most democratic input into health care resource allocation decisions, a workers’ committee sent a child with leukemia across the border to Vienna for a transplant. The Austrians, unable to pay their employees in *dinars*, demanded

payment in advance — in U.S. dollars — 100,000 of them.

Fortunately, the transplant worked. But how do you stop at one? A second worker’s child needed a transplant, and he was sent to Vienna as well. After a few more, it became clear to Yugoslav authorities that the economy could not sustain this hemorrhage of scarce foreign currency reserves. But, instead of saying “no” to transplants, the Ministry of Health opted instead to set up its own transplant unit in Zagreb.

The most poignant aspect of this resolution was the frank admission that doing transplants at all, whether inside or outside of the economy, effectively diverted Yugoslav health resources from raising health levels in rural communities, and that the same money could have saved far more lives and produced far more health benefits had it been used in that way. The workers’ committees did say “no,”

not to the faces in front of them, but to the faceless throng behind them, the faces they could not see, with problems they knew only as statistics, not personally.

Finally, while advances in medicine — the cure and control of disease — are all technology-based, there seems to be a growing technophobia in Western society, which could greatly hinder medical progress. We see this technophobia in such diverse ways as the opposition 40 years ago to the fluoridation of municipal water supplies and the recent repeal of fluoridation in many communities. We see it in resistance to immunization and the recent epidemic of measles in the Netherlands in children whose parents refused the measles vaccine. We see it in current opposition to genetically engineered foods and to the use of animals in medical research, in the rise of herbal and alternative medicine, in the lure of the “natural” as somehow better, and in a new, militant vegan movement. How much difference these diverse pressures will make is hard to say, but they succeeded in blocking until just this year the radiation sterilization of meat; they have led to the expunging of the word “nuclear” from nuclear magnetic resonance imaging (now “MRI”); and they have significantly increased the cost of feeding ourselves and of doing business generally, as well as doing medical research specifically.

### Can medical progress save us?

Even with a cloudy crystal ball it is easy to see that the aggregate effect of these external forces will be a slowing of medical progress; the increase of some old, familiar diseases; the emergence of new

problems; and a constriction and limitation of resources.

But, one might object, medical progress, by preventing disease, will surely reduce costs and demand. Unfortunately, it does not usually work that way. We all must die sometime and of something. Old autos develop multiple problems toward the ends of their working lives. So do old bodies. To die young and quickly is costly for underpopulated societies perhaps, in terms of lost talent and productivity, but it is cheap medically. We are increasingly good at repairs and replacements, and organ cloning promises to expand our capability substantially. But providing those services is not cheap. Organ transplants today typically cost \$100,000 to \$200,000 and major joint replacements \$50,000. There is no foreseeable way of reducing those costs appreciably. If every person over age 65 were to have just one additional high-ticket procedure in his or her remaining life, health care expenditures in the United States would increase by \$300 billion.

Even if emerging technologies were somehow, miraculously, to offer the potential of preventing the need for these costly procedures, I am not optimistic that we would thereby solve the problem, in part because our record to date has been so poor and in part because even a "miracle" fix will be costly.

A good example is the case of sickle cell anemia. Over a half century ago Linus Pauling discovered the cause of this disorder — the substitution of a single, wrong amino acid in the hemoglobin molecule. The discovery was literally the dawn of the age of molecular biology since, for the first time, a disease was shown to be caused by a

mistake in the genetic blueprint. We suddenly understood both the cause and how it produced the illness. As scientists we had "solved" the problem. What did we do? We dusted off our hands and went on

**If every person over age 65 were to have just one additional high-ticket procedure in his or her remaining life, health care expenditures in the United States would increase by \$300 billion**

to new intellectual challenges. And, 51 years later, we have yet to apply that knowledge to help a single sufferer of sickle cell anemia. That is partly because sickle cell anemia is a minority problem, but mainly because there is a wide chasm

between the cause and the cure. Finding a way to bridge that chasm is time-consuming and expensive. With sickle cell anemia, the market is deemed "too small" to repay the investment needed to develop a safe, effective treatment.

For more common disorders, where the market is larger, the economies for drug development are right. But here, the prospect of mass medicating whole populations lifelong, even with inexpensive interventions, often turns out not to be cost effective. And the problem of dealing with inevitable safety issues, of unavoidable idiosyncratic reactors to any drug imaginable and their associated costs, is daunting at best.

#### **New developments: From genetics to microtechnology**

To single out any of the many currents in today's stream of



*Cloned piglets, such as these from Scotland-based PPL Therapeutics, born last March, may soon be genetically engineered to switch off certain genes so that their organs or cells would be more readily accepted by the human body. While this would greatly expand our capabilities to provide organ and cell transplants, it wouldn't necessarily make these procedures any less expensive.*





Photo by AP Wide World Photos

*In June, President Clinton joined Dr. Craig Venter, left, president of Celera Genomics Corporation, and Dr. Francis Collins, right, director of the National Institutes of Health, to announce the completion of the initial sequencing of the human genome, the working blueprint for human beings. The discovery was seen as one of history's great scientific milestones, the biological equivalent of the moon landing.*

biomedical technology is itself an exercise in prediction, and hence inherently risky. But let's examine two areas that seem to qualify unreservedly as progress — gene research and microtechnology.

High on everybody's list is the human genome project and advances in molecular genetics generally. The genome project is the mapping of the entire set of blueprints for the machinery of human life. The translation of the blueprint was completed last June, but the work is not over, since we have found that, in most cases, the blueprints are for biological machines whose functions we do not yet understand. Nevertheless, the work is opening immense new territories for exploration and providing unprecedented tools for unraveling biological func-

tions and their problems. Scientifically, at least, this frontier promises to be both challenging and exciting.

But the funds supporting this work are ultimately disease-driven

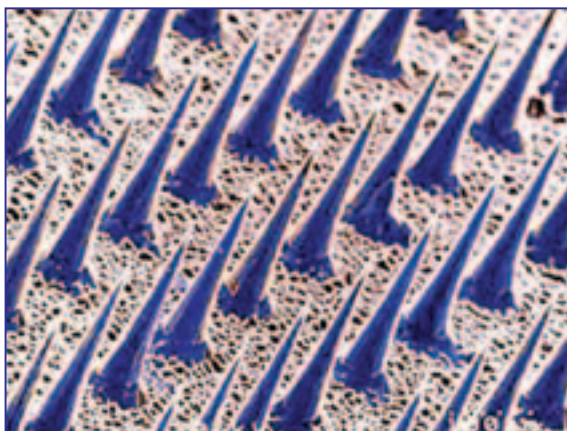


Photo by AP Wide World Photos

*Miniaturization will continue to impact medicine. The above image, generated by an electron micrograph, shows an experimental microneedle, with 400 tiny spikes. The tiny needles can deliver drugs without pain because they penetrate only the outermost layer of skin that contains no nerve endings.*

and sooner or later some payback in terms of health will be expected. Virtually nightly we read in the paper about the discovery of a gene for this disease or that. The promise always, at least implicit, is that we will soon be able to treat or prevent the disease concerned. And maybe we will. But that development will generally be determined by market forces. Nevertheless, the pharmaceutical industry is pouring literally billions of dollars each year into this work. As new pathways causing disease are uncovered, new opportunities emerge to tailor-make drugs to fit very specific applications.

Science also is working on the business of replacing defective genes. So far we have not been very successful, but it seems likely that we will ultimately figure out how to do it. Whether doing so will ever be inexpensive is less clear. But cost effective or not, success will force us to address the question of what genes we should change. The genes for killer diseases, of course. But every aspect of our bodies and their functioning has at least a partially genetic basis and is therefore susceptible to tinkering. Should we do so? Probably not. Will we? If we can, almost surely we will — creating yet other ethical issues.

We also are surrounded by marvels of miniaturization — computers, cellular phones, GPS systems, headset radios. Medicine is no exception, with tiny fiberoptic TV cameras to probe every nook and cranny of our bodies, diagnostic and surgical procedures that can be done with less

invasiveness, less incidental trauma, and shorter hospital stays and disability — but interestingly, not much less cost. (The new tools cost far more than knives and clamps.) On the diagnostic side, it now takes far less blood to analyze for hundreds of substances important for health, all because of miniaturization. More spectacular still is the marriage of electronic chips and biological sensing mechanisms that, when implanted in diabetics for example, can potentially monitor blood sugar levels constantly and control release of insulin from implanted reservoirs far more physiologically than is possible with the current “prick and stick” methods. The result: almost certainly a better quality of life for many individuals with chronic diseases, and fewer complications as well. But, unfortunately, not at less cost.

### What does this all mean for us?

I have sketchily outlined a few of the forces that will shape this next century of biology and medicine. It would be foolish to try to predict precisely how they will play out, interacting with and against one another. However, let me take just three of them — decreased physical activity, genetic engineering and technophobia — and illustrate some of the ways that at least these three must interact.

Decreased physical work means decreased energy expenditures, which means we cannot afford to eat as much. And even though we eat less, it tends to be more than we need, and so we get fat. Also the reduced quantity eaten leads to micro-nutrient malnutrition. This is because the concentration of many

essential nutrients in most foods is too low to sustain health at reduced total food intakes.

Unless the inevitable energy crisis forces us all to do physical work once again, I do not see the trend toward decreased physical activity reversing. Here there is an opportunity — indeed a need — for engineered foods. We have done similar engineering in other dimensions of our response to environmental factors. The human body was evolved for the climate of equatorial East

Photo by AP Wide World Photos



*Researchers have found that with a single genetic alteration, they can turn up a natural metabolic furnace in mice so the animals burn more fat. Will humans someday be able to control their weight through genetic manipulation?*

Africa, and in order to move to higher latitudes, we have had to engineer our physical environment — first with shelter and clothing, then with heating.

The technology exists for adding needed nutrients in the manufacture of food products as well as for changing the genetic structure of food plants and animals to make their products richer sources of the

nutrients we need. That movement is already under way, but it also is running up against the technophobes who fear and oppose all such engineered products. It is doubtful that the technophobes will win, but they will at least make engineered foods more costly.

But if ever there was a conjunction of need and opportunity, it is the meeting of sedentary lifestyle and genetic research. The tendency to eat more food than we need for current energy expenditures — to store energy, in other words — was programmed into our genes in paleolithic times as a hedge against future food shortages.

Famine is no longer a problem for most of us in the developed nations. But our bodies still follow the ancient blueprints. Moreover, without physical activity, children fail to achieve their genetic potential for bone mass, and adults lose some of the bone they have. Basically we maintain only as much bone as we need for current workloads. It is programmed into our genes to operate this way. The problem is that the skeletal mass needed to sit at a computer terminal or television screen is not enough to protect against fractures when we slip and fall. If we cannot realistically change our physical activity, can we change how our genes work — for control of appetite and for bone mass? The answer is probably yes. As I have already noted, the pharmaceutical industry is betting billions on the general prospect.

In the case of bone, researchers at Creighton have discovered a mutant gene that, in effect, tricks the body into thinking it does not



have enough bone for current mechanical loads. Individuals carrying that gene, therefore, make more bone tissue and thus have a much stronger skeleton than average. New drugs developed to be active in the pathway express-

ing that high bone mass gene are very likely to do for the rest of us what the gene does for its possessors, that is, give us more bone than we really need to sit at a terminal (but enough to withstand occasional injury).

These are some of the possibilities. Something like them will surely happen.

I opened with a quote from a Nobel Prize winner, an erroneous prediction as it turned out. Let me close with a quote from another

## Medical advances come with major questions

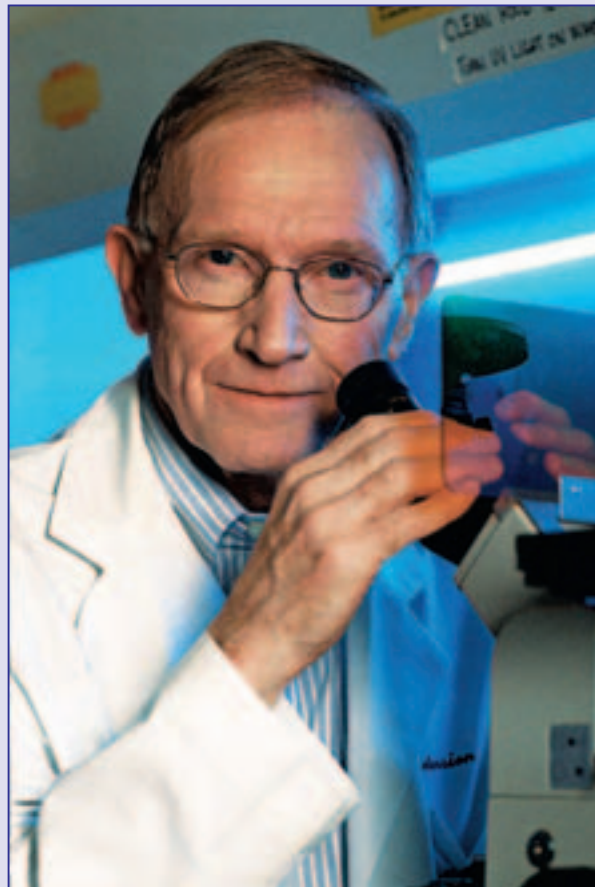
By Richard L. O'Brien, M.D.

*Professor of Medicine, Center for Health Policy and Ethics*

At the turn of a new millennium, be it Jan. 1, 2000 or 2001, it is tempting to look to the future, to imagine changes in medical science and health care. Of one thing we can be certain: Changes in science and technology will be revolutionary — and costly. But the major challenges of these revolutionary changes will be social and ethical. The most important will arise from technology that will enable us to manipulate human biology in ways that now would seem (almost) unnatural. Humans will ask: *Should* we do what we *can* do? Who should have access? And how will we deal with the consequences?

These are not new questions. But their cogency and urgency will increase as we more effectively control and manipulate natural processes and phenomena. In the short term, say 50 years, the major challenge will be one of justice. Will we distribute

health care resources equitably or reserve them to the few who can command them by wealth, sympathy or political clout?



*Dr. O'Brien believes access to health care and use of technology will be the major issues facing medicine in the future.*

It is easy to imagine medical advances in the next 50 years. The pharmaceutical revolution will continue, accelerated by knowledge of the effect of genes on individual responses to pharmaceutical agents. Gene therapy will be well established, organs for implant will be grown in laboratories, robotics will be important in health care, imaging advances will eliminate invasive diagnostic procedures.

But let's venture into a more distant future, say 250 to 1,000 years from now. Admittedly the crystal ball is a little murky. Things undreamed of will be known. But let's be brave! Let's venture into a "brave new world."

A mother's womb will no longer be necessary for birth. It will be possible to initiate and sustain fertilization, embryo formation and fetal development through full gestation outside the womb. Family planning? We will be able to plan, or rather, design our progeny! It will be possible to design babies by

*Photo by Monte Kruse, BA '83*

Nobel Laureate, Niels Bohr, one of the founders of modern physics, who said: "Prediction is very difficult, especially about the future."  
—About the author: Dr. Heaney is a world-renowned scientist in the field of bone tissue. He has published

more than 300 scientific articles and chapters and is the author of three books — one of which was honored in 1988 as one of the 10 best scientific books for the general reader. Heaney also was named by the New York Times as one of the 10 most influential

people of the year in 1986 for starting what the Times called "the calcium craze." Heaney has served as The John A. Creighton University Professor — Creighton's first all-University endowed chair — since the chair was established in 1983.

selecting sperm and ova with completely known genomes. And sometime in the next 1,000 years we will be able to design our progeny completely. Having the ability to manipulate genes will make possible the design of a child with exactly defined characteristics. Will we, *should* we? If there is consensus on one or a few most desirable genotypes, it may become difficult to distinguish one individual from another. Everyone may look alike! What a world that would be!

More satisfying, genetic manipulation will move us from what Lew Thomas called halfway technologies to fully curative and preventive medicine. Through gene therapy, we will be able to ablate, repair or supplement defective genes; everyone may be made disease free.

These advances will render health care less expensive and will reduce the need for much, if not most, health care. At lower cost we may be able to provide this wondrous technology to all. A truly salutary effect!

The major role of health care will be provision of efficient gene therapies applied to children or fetuses to eliminate most diseases before they develop. Or we may design disease out of the human genome completely.

Trauma will remain with us, as will continuously evolving and emerging microbial pathogens. And

if societies remain free, there are likely to be individuals with behavior-induced diseases.

Of course, this superb control of disease will further exacerbate population aging. Most will reach the natural limit of human age, perhaps 120 to 130 years.

We will still have to deal with the effects of aging, to provide comfort as we wrinkle, weaken and

**We may find ourselves  
able to postpone greatly  
aging and death. Or  
eliminate them?  
SHOULD we?**

wear out in our inevitable disease-free decline toward the end.

Or will we?

*Methus'lah lived nine hundred years.*

*Methus'lah lived nine hundred years.*

As genomes are analyzed and manipulated, genes related to aging will *not* be ignored. Genes that promote or retard aging have been found and characterized. The life spans of flies and worms have been doubled or quadrupled by genetic manipulation, those of mice significantly extended. We may find ourselves able to postpone greatly aging and death. Or

eliminate them?

**SHOULD** we?

Will death become voluntary ... or mandated?

What will be the retirement age? If life expectancy is 900 years, is retirement age 750? Oh, let's hope that technology has progressed to the point that production of food, goods and services necessary for the GOOD LIFE is so automated that it requires light oversight by only a few of us, or perhaps none of us if our robots are good enough. Then most or all of us can engage in a perpetual round of pleasure.

Can we do that? For how long?

Maybe Gershwin hinted at the nature of the dilemma (and offered an answer to whether we should) when he suggested:

Methus'lah lived nine hundred years.

But who calls that livin'  
When no gal will give in

To no man what's nine hundred years?

—About the author: A 1960 medical alumnus of Creighton University, Dr. O'Brien served as dean of the School of Medicine from 1982-92 and vice president for Health Sciences from 1984-1999. Before returning to Creighton in 1982, he conducted research in molecular and cellular biology and immunology at the University of Southern California. He also was director of the USC/Norris Comprehensive Cancer Center and Hospital. ■



# Fr. Hauser Scholarship Fund Answers Call for Teachers

by Therese Vaughn

Director of Development Communications

*"Education is not merely a means for earning a living or an instrument for the acquisition of wealth. It is an initiation into life of spirit, a training of the human soul in the pursuit of truth and the practice of virtue." ~ Vijaya Lakshmi Pandit*



Photo by Dave Weaver

Fr. Richard J. Hauser, S.J., in the Creighton board room.

Today, aspiring teachers from all disciplines are in critically high demand, and trained theology teachers are an even greater rarity. Creighton University has answered the call for religious educators through the Theology major/Education co-major and Youth Ministry program. Designed to accommodate the growing number of students interested in education and theology, the program will prepare new teachers to take their places in parochial schools around the country. In addition, Creighton's nationally recognized Youth Ministry program, offered in partnership with the Archdiocese of Omaha and the Center for Ministry Development in Connecticut, provides career opportunities for Catholics and Protestants in teaching, service and youth ministry.

"With Nebraska being one of only two states to offer certification in religious education, the conditions are ripe for Creighton's initiative," said longtime chair of the theology department Fr. Richard J. Hauser, S.J. "It is a sad fact that many religion teachers have never had formal training in theology and that many religion teaching jobs go

begging every year for lack of qualified applicants. Furthermore, the fastest growing area in ministry is in youth ministry. Jesuits have always tried to serve the Church where the need was the greatest. What a golden opportunity for Creighton to serve the Church."

As chair of the Department of Theology from 1978 to 1990 and

1996 to 1999, as well as director of three master's programs, Fr. Hauser captures the spirit of the initiative. He once said, "I'd die a happy man if my calling as a theology professor and Jesuit priest would warrant the epitaph: He helped us recognize God's presence in our lives."

To honor Fr. Hauser's extraordinary presence, the Creighton

community, alumni and friends formed a core group to support the Theology major/Education co-major and to spearhead the Richard J. Hauser, S.J. Endowed Scholarship Fund. Core group members include: T.J. Bolt, DDS'84; Pat Cooper, BA'99; Al Fleming, MD'84; Joe Hauser, BA'77; Harry Jenkins, MD'54; Joe LaFave, BA'76; Jerry Mancuso, MD'86; Bob McQuillan, MD'88; Bill Nosek, BSPha'60; and Joe Coleman, BSBA'82.

The Fr. Hauser Scholarship will enable Creighton students, majoring in theology, to train in youth ministry or elementary and secondary parochial school education. Moreover, scholarship recipients will go on to live, work and teach by Fr. Hauser's example. Private solicitations have already yielded more than \$200,000, which is expected to grow significantly as an appeal is made to the entire Creighton community for support. Contributions to the scholarship fund will help ensure that Fr. Hauser's teachings continue to inspire not only his students but those scores of youngsters they go on to teach after graduation.

One of the most important objectives the fund will serve is to enable students to pursue a course of study in theology and education they might otherwise abandon because of financial reasons. Renowned for its tradition of public service, Creighton remains committed to the principle that a liberal arts education should be accessible to any high-achieving person, irrespective of the student's ability to pay. The Fr. Hauser Scholarship Fund will help reduce the amount of debt that recipients incur so that they may pursue careers in fields that are traditionally underpaid such as teaching, theology, social work and ministry.

### About Fr. Hauser

Ordained in 1968 when Vatican II's spirit of *aggiornamento* was first taking root, Fr. Hauser has long provided students with a distinctive education that forms character, informs the mind and transforms the spirit. Themes of discernment, personal prayer, mysticism, suffering and contemporary spirituality in today's real world resonate throughout his teaching, three books and numerous published articles.

Former Hauser student Gail Ritsch said of Fr. Hauser's special connection with young people, "Father looks after (Creighton's theology) programs, and the students involved, with more than administrative care. He truly enjoys getting to know students, their life experiences and career goals, and helping students overcome obstacles, financial and otherwise, so they can achieve a degree."

With his unique insight into

young people, Fr. Hauser taps into today's students' quest for meaning.

"Never in my many years at Creighton have students come with such a thirst for deeper spirituality," he said. "These students recognize that something is missing in their lives and find this missing dimension here at Creighton. They, then, want to share the treasure they found with others. I'm hoping the scholarship makes this possible."

### Did you know

The year 2000 marked the 25th anniversary of Fr. Hauser's celebrated Candlelight Mass.

Every Sunday since 1975, Fr. Hauser has presided at the 10 p.m. Mass in St. John's Church on Creighton's campus. Nearly 400 students gather for this weekly student-centered celebration, which Fr. Hauser describes as his "most religious, most pastoral experience of the week."

Joe Coleman, BSBA'82, an attorney in Dallas, helped spearhead the Fr. Hauser Scholarship. He said of the scholarship:

*"We are amazed at the initial response of alumni in supporting the Hauser Scholarship and are particularly pleased to announce the scholarship to the entire Creighton family in this article. The Hauser Scholarship has apparently hit a chord with a lot of people. Whether it is the cause — to enable students desiring to learn how to teach religion — or the man it is honoring, the scholarship seems to address important issues on several levels. Creighton's Admission's Office reports that many high school seniors are enthusiastic about Creighton's new joint Theology major/Education co-major in general and the Hauser Scholarship in particular. Nationwide, virtually all dioceses are in serious need of qualified religion teachers to fill the void left by the significantly diminishing number of nuns, priests and brothers over the last several decades. Not only does the Hauser Scholarship directly fulfill Creighton's mission, but it honors a man who helped many, many people truly find Jesus in their daily lives. The core group is excited not only by the alumni's initial response, but also by the long-term ripple effect the scholarship will have upon the religious formation of children for generations to come. Our challenge, at this point, is to raise sufficient funds to enable the Hauser Scholarship to have an impact worthy of its name."*

Gifts and pledges to the Richard J. Hauser, S.J. Endowed Scholarship Fund may be sent to the Creighton University Office of Development, 2500 California Plaza, Omaha, Nebraska 68178-0115 or you may call 1-800-334-8794.

For more information, please visit [www.creighton.edu/hauserfund](http://www.creighton.edu/hauserfund).



### PHONATHON MORE EFFICIENT WITH SMARTCALL

Hear your phone ringing? It may be an old friend calling. Through Creighton University's Office of Development, current students contact alumni, parents and friends during the school year to encourage Annual Fund participation. Gifts to the Annual Fund contribute more than \$11,000 each day to underwrite the University's operating expenses. These gifts are used immediately and help hold the line on tuition increases. For students, this means a "hidden annual scholarship" of more than \$630 each.

The University reaches out to its constituents through letters, cards and phone calls. Staffed by student callers, Creighton's phonathon has been vastly enhanced through a new phone system, appropriately named SmartCall. The high-tech phone system will enable student callers to contact all Creighton graduates in one school year.

Assistant Director of the Annual Fund Joseph Gnorski said, "The new system provides students with more potential to develop relationships with the entire Creighton community. It also allows our alumni to catch up on what's new on campus, and gives students an opportunity to realize the legacy of which they're a part. Students hear about Creighton's living history and ever-growing community."

Each year, more than 10,000 people participate in Annual Fund giving, many through the phonathon. Their support advances Creighton's mission of education, research and service, as well as enhancing the stature of the University and the value of a Creighton degree.

### ANONYMOUS DONOR SHOWS FORESIGHT WITH GIFT TO CREIGHTON'S DIVISION OF OPHTHALMOLOGY

A potent force, gratitude is a lens through which life's blessings appear rich and multi-chromatic. This past year, a member of Creighton's community, who wishes to remain anonymous, demonstrated far-reaching vision with a gift to Creighton's Division of Ophthalmology in the Department of Surgery. Having been treated for retinal disease, the donor was very grateful for the restoration of her vision. What truly made a difference, however, was her physician who was concerned with her emotional and spiritual health as well. She

showed her appreciation for this Jesuit tradition of *cura personalis*, or care for the whole person, by helping the division purchase more than \$100,000 in new medical equipment. Her extraordinary gift will help enhance Creighton's ophthalmology division and aid countless members of the community.

Creighton physicians, nurses and staff are often asked by their patients, "How can I say 'thank you' to those people who made a difference?" The Grateful Patient

Program offers a meaningful way to recognize and celebrate the care patients or their loved ones receive at Creighton University's Medical Center.

Creighton physicians and Saint Joseph Hospital serve in the Jesuit tradition of service to others, providing care to those who may not be able to afford medical attention. Gifts to Creighton's Grateful Patient Program help advance Creighton's mission of education, research and service to new levels of excellence.

Chief of the Ophthalmology Division Dr. Ira Priluck is excited

about the effect the contribution will have on both the Division of Ophthalmology and future patients. "Creighton University and Saint Joseph Hospital are fortunate to have thoughtful friends who support the work that we do and the services we provide," he said. "When others join in the Jesuit spirit of patient care, a greater good is achieved for the entire community. I am very grateful to this donor for helping enhance Creighton's ophthalmology care and development."



Photo by Monte Kruse, BA '83

*M. Roy Wilson, M.D., interim vice president for Health Sciences, dean of the School of Medicine and professor of surgery (ophthalmology), works with some of the new equipment.*

### NEW FACES IN DEVELOPMENT OFFICE

Creighton's Office of Development is pleased to welcome two new staff members, Carrie Albers and Joseph Gnorski.

Albers joined the Creighton staff from Aurora University where she served as the coordinator of the annual fund. Currently an assistant director of annual giving, Albers oversees the Annual Fund direct mail campaign.

Prior to joining the Creighton development office, Gnorski held the position of assistant director of the annual fund at Marquette University. Gnorski manages the Annual Fund phonathon program, also serving as an assistant director of annual giving.



Photo by Monte Kruse, BA '83

*Gnorski and Albers*

## THE REV. JACK ZUERCHER, S.J. ENDOWED SCHOLARSHIP HELPS STUDENTS IN THE SCHOOL OF LAW

Since 1976, the Rev. Jack Zuercher, S.J., has been a beloved friend, teacher and Jesuit to the Creighton community. Known for his uncommon wit, Fr. Zuercher wears many hats — literally — from fedora to sou'wester to straw-hat, depending on the season.

Recently, a Creighton couple, who wished to remain anonymous, paid tribute to Fr. Zuercher by creating The Rev. Jack Zuercher, S.J. Endowed Scholarship Fund to assist Creighton law school students. One of the donors studied at the law school while Fr. Zuercher, or Fr. Z as many fondly call him, served as the school's chaplain. According to the graduate, Fr. Zuercher had a powerful influence on her education and life while she was a student, and continues to be both counselor and friend to her and her husband.

The grateful couple fully endowed the scholarship fund through a bequest in their will of \$125,000 and are making annual contributions of \$1,000 to ensure

immediate impact on recipients.

The first scholarship recipient, Martin Klein, is an active third-year law student. Klein serves as treasurer of the Phi Alpha Delta legal fraternity, is a member of the



Fr. Zuercher and Dean Borchers

Robert M. Squire chapter of the American Inn of Court and is a member of the Creighton Law Review.

"This scholarship allows me to work fewer hours, so I can devote more time to my studies," Klein said. "I am grateful for the contribution the couple has made to my academic endeavors."

Fr. Zuercher is honored to be associated with the scholarship fund. At Creighton

since 1976, Fr. Zuercher was rector of the Jesuit community and part-time instructor for the psychology department. In 1983, Fr. Zuercher established Creighton's Collaborative Ministry Office, while serving as chaplain of the law school. Students remember him for his responsiveness, accessibility and a weekly publication, called *Fr. Z's Briefs* that included various anecdotes, stories and words of wisdom. Currently, Zuercher is serving as the regional assistant for the Christian Life Communities' (CLC) North Central Region.

Patrick Borchers, dean of the School of Law, is thrilled to have thoughtful alumni who care about the school, its former chaplain and future students.

"Our school is extremely fortunate to have caring alumni and friends who wish to assist our students in financing their legal education," Borchers said.

"Through their generosity, more and more young men and women are able to achieve their professional goals."

## ESTATE AND TRUST SERVICES HELPS ALUMNI AND FRIENDS

by Steve Scholer, JD'79, Director of Estate & Trust Services

It is my pleasure to introduce Creighton University Magazine's first Estate and Trust Services column. Long before estate taxes were instituted, Mary Lucretia Creighton decided to honor her husband and provide immigrant boys an education through an estate gift. Out of this gift has evolved an institution that has now granted more than 60,000 degrees and touched the lives of millions of people.

Private giving continues to shape the mission of Creighton University. It is often assumed that tax deductions

motivate private giving, but my 15 years of working with Creighton benefactors have led me to believe that alumni and friends support the University in order to thank their *alma mater* and help advance the institution's mission of education, research and service.

Over the years, I have heard scores of Creighton donors express to me why they give to the University: "*Creighton worked with me and helped me financially. It is my turn to help others.*" ... "*The Jesuits, faculty and staff are so dedicated that I wanted to express my appreciation for their efforts.*" ... "*Creighton meant everything to my husband. It is where we met and he received his degree. It is only appropriate, therefore, that his name be*

*forever linked at Creighton with a perpetual endowment.*" ... "*It gives me great joy to share with others, especially those I do not even know.*" These representative comments provide a glimpse into the motivation behind private giving to Creighton.

Creighton's Office of Estate and Trust Services helps alumni and friends create plans that best express their charitable wishes for the University. It is our pleasure, at no obligation, to discuss how Creighton supporters can translate their unique philanthropic visions into named endowed scholarships, faculty chairs, library funds and other programs. Please contact us at (402) 280-2740, or 1-800-334-8794 for more information.



Scholer



# Is the Economy Headed for a 'Soft' or 'Hard' Landing?

By Ernest P. Goss, Ph.D.

*Jack A. MacAllister Endowed Chair of Regional Economics*

The United States is enjoying its longest period of uninterrupted economic expansion ever. Since March of 1991, the U.S. economy has grown at an annual rate of 1.4 percent, as measured by job growth.

The number of employed Americans has climbed from 108 million in 1991 to more than 132 million today; unemployment has dipped to its lowest levels since 1969; and productivity, in terms of output per worker, has increased at a rate of more than 3 percent per year.

But how long will this prosperity last?

The Federal Reserve has long viewed the economic expansion as "too strong" because of the danger of inflation. In an effort to cool the expansion, the Fed has increased interest rates six times between June 1999 and May 2000.

These rate hikes increase borrowing costs for consumers and businesses as banks pass along the rate hikes to borrowers. Thus, businesses are less likely to expand their plants or acquire new equipment, and consumers are less likely to purchase new homes or automobiles. The 1.75 percent in rate hikes were intended to place economic growth on a slower, more sustainable, pace — resulting in what is often termed a "soft landing."

Despite these rate hikes, the national economy has continued to grow at a strong pace and unemployment, this past fall, dipped to levels not experienced in more than three decades. In fact, national employment data indicate that the rate hikes have failed to significantly slow job growth, with employment growth rising from 1.9 percent in June 1999 to 2.2 percent in September 2000.

However, there is mounting evidence that employment growth has slowed significantly for the nation's mid-section. Data from two Creighton University economic surveys show that since the Fed began raising interest rates in June 1999, employment growth has dropped in the nine Mid-American states and three Mountain states covered by the monthly surveys. (The Mid-American states are Arkansas, Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, Oklahoma and South Dakota. The Moun-

tain states include Colorado, Utah and Wyoming.)

Our data show that employment growth over the past two years among the Mid-American states was primarily a result of new workers entering the work force from high school, college or from the household. Only a small share of the new workers, 0.6 percent, came from interstate migration. Among the Mountain states, only Colorado attracted more workers from other states than it lost.

Because of record-low unemployment rates and an inability to attract new workers, most states in the two survey regions will not have the labor force needed to

match the economic expansion experienced over the past two years.

Creighton University began its monthly 12-state economic survey — which queries more than 1,100 of the region's purchasing managers and business leaders — in September 1994. This work is supported by a grant from Wells Fargo Bank of Nebraska.

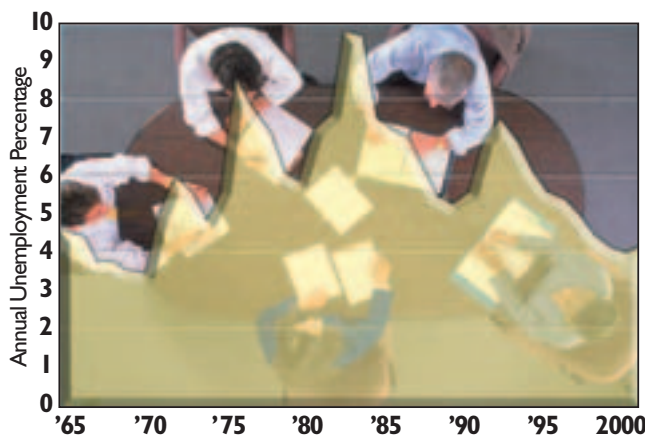
The indices computed from the survey serve as leading economic indicators and,

since the survey's beginning, have generally pointed to robust growth in the 12 states.

However, recently, these surveys have portrayed a less optimistic future economic picture — with higher energy prices, higher borrowing costs and a booming trade deficit slowing economic growth.

What this means for our continued economic expansion nationally is difficult to predict. As I expected, the Fed reduced interest rates in the first quarter of 2001, which should improve the growth picture for the second half of 2001. But I expect any growth to remain on a slow pace for most states in the two survey regions with states in the Mid-American region and Wyoming growing at roughly half the pace experienced one year earlier. Even Colorado and Utah, which have benefited from attracting workers from other states, will see somewhat slower growth.

With the economy slowing nationwide in 2001, it will be a soft landing, with a preview of this soft landing for the nation's mid-section already under way. ■



*The national unemployment rate dropped to 4 percent in 2000, its lowest level since 1969.*

# A Gentle Shepherd Remembered

He was known appropriately as the gentle shepherd, a lover of God and people.

The Most Rev. Daniel E. Sheehan served as the archbishop of Omaha for 24 years (1969-1993). With his death this past October, the Omaha Archdiocese, the Catholic Church and the religious community lost a dedicated servant.

They, along with Creighton University, also lost a beloved friend.

Archbishop Sheehan, a Nebraska native, attended Creighton in the late 1930s, before his calling led him to the priesthood. An untiring supporter of Catholic education and of Creighton University, Archbishop Sheehan received an honorary Doctor of Law degree from the University in 1964.

As Omaha's third archbishop, Fr. Sheehan was loved and respected among fellow priests and brothers for his compassionate heart and guiding hand.



Archbishop Daniel E. Sheehan — 1917-2000

Photo by Bill Ramsey, BS '55

Creighton University will honor the memory of this dear friend and tireless ambassador for Christ. The award the University confers at its Annual Dinner and Basketball Game for Priests and Brothers will be named the Most Rev. Daniel E. Sheehan Award.

The award will recognize a priest or brother from the Omaha or surrounding dioceses who has distinguished himself for service to society, to the Church and to education ... works that marked the career of Archbishop Sheehan.

"Archbishop Sheehan was well loved by the priests in the diocese. They really had a deep respect for him," said the Rev. Thomas Shanahan, S.J., rector of

Creighton's Jesuit community. "I think that this award is really fitting, and I think Archbishop Sheehan would have been honored."

The first Sheehan Award will be presented at Creighton's Annual Dinner and Basketball Game for Priests and Brothers on Feb. 26.

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