the Bone Biologists

Creighton's Robert Recker, M.D., right, and Mark Johnson, Ph.D., help discover a gene that controls bone mass. Could this be "nature's cure" for osteoporosis?

Counterintelligence, the Vietnam War and Terror in America

Face to Face: A Theology of Diversity

Vacanti Brothers: Pioneers in Tissue Engineering
Robert Recker, M.D., right, director of Creighton’s Osteoporosis Clinic, and Mark Johnson, Ph.D., associate professor of medicine, have identified a specific gene mutation that triggers the development of unusually strong bones in people. Their discovery could lead to new therapies for those suffering from osteoporosis, a bone-thinning disease that affects some 10 million Americans. Writer Lori Elliott-Bartle explains more about this gene mutation and how a bit of serendipity led to its discovery.

(Cover photo by Bob Ervin.)
### Features

<table>
<thead>
<tr>
<th>Page</th>
<th>Title</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>18</td>
<td>Counterintelligence, the Vietnam War and Terror in America</td>
<td>Creighton political science professor and former U.S. counterintelligence officer Terry Clark, Ph.D., says he was horrified but not surprised by the events of Sept. 11. Clark writes that in the wake of the Vietnam War, U.S. domestic counterintelligence gathering efforts were largely curtailed.</td>
</tr>
<tr>
<td>24</td>
<td>The Making of a Deacon</td>
<td>American deacons constitute one in five of all ordained U.S. Catholic clergy. Award-winning Creighton photojournalist the Rev. Don Doll, S.J., follows Creighton alumnus Larry Sampier, BSBA'64, who recently earned a master’s degree in Christian spirituality, on his journey to become a deacon.</td>
</tr>
<tr>
<td>32</td>
<td>Face to Face: A Theology of Diversity</td>
<td>Perhaps at no other time in history has it been more important to understand the world’s religions. Creighton theology professor Joan Mueller, OSF, Ph.D., asserts that through interreligious dialogue, we not only come to better understand other traditions, but we can deepen our own faith.</td>
</tr>
<tr>
<td>38</td>
<td>Vacanti Brothers: Pioneers in Tissue Engineering</td>
<td>Jay, Chuck, Marty and Frank Vacanti are all brothers, Creighton graduates, physicians and leaders in the field of tissue engineering. Remember the photo of the mouse with the tissue-engineered ear on its back? That was the work of these illustrious alumni.</td>
</tr>
</tbody>
</table>

---

### Departments

<table>
<thead>
<tr>
<th>Page</th>
<th>Title</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>Letters to the Editor</td>
<td></td>
</tr>
</tbody>
</table>
| 5    | University News | **Following a Dream**  
As a child, Rebecca Rand, who was born with cerebral palsy, dreamed of attending law school. Now she’s living the dream.  
**Revolutionaries and Terrorists**  
Robert White, former U.S. ambassador to El Salvador and Paraguay, tells a gathering at Creighton University that the U.S. is “building a serious security problem” in its own hemisphere. |
| 44   | Development News | **Grafts to Lead Creighton Society**  
Meet Bill, BA’82, and Mary (Fitzpatrick) Graft, BSN’84, of Barrington, Ill., the new National Chaircouple for the Edward and Mary Lucretia Creighton Society. |
| 48   | Alumni News | **AIDS in Africa**  
Creighton alumna Kate Joyce, BA’93, learned about Africa’s devastating AIDS crisis firsthand when she took a “volunteer vacation” to Tanzania. She shares her personal account. |
| 59   | The Last Word | For more than 80 years, Creighton’s Reserve Officer Training Corps (ROTC) program has been training leaders — leaders who have served their country and their communities with honor and commitment. |
Letters to the Editor

California Street fondly remembered

It was with special personal interest that I read your article on the old California Street, “California Street Sketches” (Winter 2001). My grandmother owned three of the large, old Victorian-style houses on the south side of the street, and it was one of these in which I grew up. A unique situation ensued in that I attended grade school at St. John’s, high school (St. John’s) and Creighton University all on this one block of California Street. It might seem to some as quite a limited exposure to the world in general, but I always found it to be a most stimulating and active environment. In retrospect, my years at Creighton on California Street were among the best of all my years. My family’s home was ultimately sold and Creighton to make room for student housing, ending a wonderful association with this great street.

Florence Brit Delhoy, BA’45
Fontana, Wis.

Trolleys should have stayed

I just had the feeling that when we GI’s left the campus that the duplex Butler hut behind the auditorium would be salvaged for its steel and that they would restore those colorful trolleys on California Street rather than those diesel buses with their rank emissions.

William P. McDonald, BS’51
Evergreen Park, Ill.

Appalled by quote

I was appalled to see the quote on page 17 of the most recent Creighton Magazine (quoting the Koran). Our country was attacked by Islam in the name of Allah and you have the audacity to quote the Koran in your publication. It was not appropriate in a Jesuit publication.

Van Argyrakis, Esq., BA’89, JD’92
Omaha

Enron debacle hits close to home

The affairs of a pack of high-paid Enron executives in their pursuit of shareholder gratification have produced drama for Omahans and Creighton graduates now twice in memory. The first event, the acquisition by InterNorth of Houston Natural Gas in the late 1980s, resulted in the termination of hundreds of the company’s Omaha employees and dozens of longtime company executives.

The second drama is now unfolding. Again the affairs of Enron affect Omahans and Creighton grads. Enron’s marketplace dive and subsequent bankruptcy are being traced to questionable, perhaps criminal, behavior by the company’s top management. Their recklessness has left hundreds of vested former employees and executives, many of whom are from Creighton’s Business and Arts schools, with no stock value and scrambling for alternatives for their evaporated retirements.

I am disappointed that Creighton’s latest Business School Alumni Merit Award winner, a Creighton grad, was left spent by Enron also. To make his situation worse, his name now appears as a defendant in dozens of class-action lawsuits. However, his prospects are much more favorable. He cashed in Enron stock totaling $14.7 million in 2001 — his parachute caught him.

The Creighton Alumni Merit search team couldn’t have predicted this event and would not have detected this unfolding disaster prior to choosing Ken Rice for this award. Omahans close to the Enron heartbeat couldn’t have predicted this disaster because Enron’s earning releases never gave cause for concern.

There are many lessons to be learned from this crisis at Enron. I am shocked and disappointed at what has become of my former employer. (I left the company in 1991.) I am lucky to have come through this fairly unaffected.

I am also unabashedly proud of the gem to be saved and fought for in this debacle, Northern Natural Gas. NNG, from its roots at 23rd and Dodge streets, is a sturdy, well-run pipeline that was inspired and created by Omaha’s best and brightest. Someone should be in there fighting to get it returned to Omaha.

Terri A Bahun, BA’82, MBA’86
Keller, Texas
New Vice President for Academic Affairs Named

Marquette University Law Professor and Assistant Vice President for Academic Affairs, Christine M. Wiseman, JD, has been named vice president for Academic Affairs at Creighton University. She will begin her duties in July 2002.

“We are pleased that Christine Wiseman chose to come to Creighton. Her experience and background will be an excellent addition to the University and because of her long career at Marquette, she is deeply imbued in the Jesuit nature of our institution,” Creighton President, the Rev. John Schlegel, S.J., said in announcing her appointment.

Wiseman began teaching in the School of Law at Marquette in 1980. She was named associate vice president for Academic Affairs at Marquette in 1998. She served as associate dean for Academic Affairs at the law school from 1997-1998.

Prior to joining the faculty at Marquette, she served as assistant Wisconsin attorney general with the criminal appeals division and as a law clerk to the Hon. Robert W. Warren, retired Chief Justice for the United States District Court, Eastern District of Wisconsin.

Wiseman received the Marquette law school’s first annual James D. Ghiardi Faculty Award for Outstanding Teaching and the University Faculty Award for Teaching Excellence in 1991.

She is best known for her representation of Texas death row inmate Billy Conn Gardner and was named the Wisconsin Civil Liberties Union Volunteer Attorney of the Year in 1989 for her work on that case.

Wiseman earned her undergraduate and law degrees from Marquette.

Kitty Gaughan Pavilion Dedicated

The Kitty Gaughan Pavilion dedication ceremony was held Oct. 27 on the Creighton campus. A $500,000 gift from John “Jackie” Gaughan, BSC’46, helped pay for the Pavilion’s construction. Named for his late mother, the Pavilion is located near the baseball and softball fields, just north of McGloin Hall. Construction began in the spring of 1999 with the coaches moving into the building in August 2001. The two-level facility serves the University’s baseball and softball sports teams, housing coaches’ offices, locker rooms, an officials’ locker room, a concessions area, a training room and a laundry facility.

Many of the Creighton baseball and softball players and coaches attended the ceremony along with Jackie’s sister, Rosemary Daly. Rosemary is the wife of the late Leo Daly.

In 1995, Jackie Gaughan also established an endowed scholarship at Creighton University in memory of his mother.

Catherine “Kitty” Davis Gaughan lived her entire life in Omaha. She married Michael J. Gaughan and they had two children, John “Jackie” and Rosemary. She was actively engaged in her parish and a frequent volunteer at her children’s schools. She loved to travel throughout the United States, Europe and particularly to Ireland. Kitty was very fond of young people and an ardent sports fan. She died Oct. 15, 1999.

Two Join Creighton’s Board of Directors

The president of FBOP Corporation, Michael Edward Kelly, BSBA’68, MBA’74, and the Rev. Richard J. Hauser, S.J., have been named to Creighton University’s Board of Directors.

Kelly currently is the president of FBOP Corp., a holding company for First Bank of Oak Park, Ill. FBOP includes nine member banks, with Kelly serving as chairman at three of the banks located in Oak Park, Beverly Hills, Calif., and Houston. He also serves on Creighton’s College of Business Administration Advisory Council and has served as a member of the Creighton President’s Council. He also is a member of the board at Dominican University.

Fr. Hauser is professor of theology at Creighton and Rector of Creighton’s Jesuit community. Fr. Hauser, who began teaching theology at Creighton in 1972, is the director of three master’s degree programs: theology, ministry and Christian spirituality.
Jacobs Elected to Institute of Medicine

Danny O. Jacobs, M.D., professor and chair of surgery at Creighton University, has been elected to the Institute of Medicine of the National Academy of Sciences.

Members are elected by the incumbent membership on the basis of professional achievement and of demonstrated interest, concern and involvement with problems and critical issues that affect public health.

Jacobs

“Election to the Institute of Medicine is probably one of the greatest honors an academic surgeon can receive,” said Jacobs, who holds the Dr. Arnold W. Lempka Endowed Chair in Surgery. “I am truly honored to have been accepted for membership, and I will enthusiastically contribute wherever I can.”

Established in 1970 as a unit of the National Academy of Sciences, the Institute is broadly based in the biomedical sciences and health professions, as well as related aspects of the behavioral and social sciences, administration, law, the physical sciences and engineering. It is concerned with the protection and advancement of the health professions and sciences, the promotion of research and development pertinent to health, and the improvement of health care.

Members contribute their knowledge and professional judgment to developing findings and to formulating recommendations that relate to public policy.

CU Participates in $50 Million Effort to Improve Patient Safety

Creighton University faculty member Kimberly Galt, Pharm.D., co-director of the Center for Practice Improvement and Outcomes Research, will direct the University’s participation in a $50 million nationwide grant from the U.S. Health and Human Services’ Agency for Healthcare Research and Quality.

The grants were awarded to major universities, hospitals, professional societies and other organizations for projects designed to reduce medical errors and improve patient safety.

The Creighton team will use its $900,000 three-year grant to study potential medication-related errors in office-based physician practice and possible methods to reduce these potential errors. Researchers will investigate two methods: physicians using personal digital assistants (PDAs) to access electronic information sources while caring for patients, and using PDAs to generate prescriptions in the office.

Physicians will be taught how to use the devices. Researchers will monitor their reactions to and acceptance of this technology for the designated purposes. Several community physician offices, part of the UniNet Healthcare Network made up of Creighton and Alegent physicians, will participate in the study.

“Important new medical information about drug therapies is increasing at a rapid rate, challenging health professionals to keep up with needed information,” said Galt, associate professor of pharmacy practice. “As a result, we believe that more errors are likely to occur. Using practical technologies, such as PDAs, might offer a solution to bringing up-to-date information quickly to the individual physician in office-based practice. This may improve decision-making at the time the physician is providing care. We hope to show that the combination of methods described reduces potential medication-related errors.”

Other Creighton faculty members involved are Eugene Rich, M.D., professor and chair of medicine, co-director of the Center for Practice Improvement and Outcomes Research and medical director of the UniNet Healthcare Network in Omaha; Bruce Houghton, M.D.; Wayne Young, Pharm.D.; Ron Markert, Ph.D.; J.D. Bramble, Ph.D.; and Curt Barr, Pharm.D., all of the School of Medicine or the School of Pharmacy and Allied Health Professions.

“Nothing could be more important than making sure patients receive quality care that doesn’t cause unintended harm,” said HHS Secretary Tommy G. Thompson. “Our investment in this kind of research will pay off in terms of improved patient safety for all Americans. These grants will help identify the causes of medical errors and develop effective solutions to strengthen quality of care across the country.”

Projects will address questions about how errors occur and will provide science-based information on what patients, health care professionals, hospital leaders, policy makers and others can do to make the health care system safer. The results of this research will identify improvement strategies that work in hospitals, doctor’s offices, nursing homes and other health care settings across the nation.

Research will take place in six broad areas: supporting demonstration projects to report medical errors data; using computers and information technology to prevent medical errors; understanding the impact of working conditions on patient safety; developing innovative approaches to improving patient safety; disseminating research results; and developing additional patient safety research initiatives.

For specific information about all 94 grants and projects, go to www.ahrq.gov/qual/newgrants/.
New Creighton Sign Improves Southwest Side of Campus

New signage is up along the south side of the Kiewit Fitness Center, vastly improving the view of the University for travelers along Interstate 480. The old “Creighton University” sign was worn out and in need of replacement. As seen in the photo to the left, the lighted view of the new signage at night is particularly impressive.
Omaha Adds Sister City in Ireland

In a few weeks, Omaha will add a fourth Sister City — Naas in County Kildare, Ireland — to its family of friendships that dot the world, as officials from the Irish town meet in Omaha on St. Patrick’s Day to cement the relationship officially — and even join in a parade.

And with this relationship goes a special tie to Creighton University, as Omaha Mayor Mike Fahey, BA’73, and James P. Cavanaugh, BA’77, JD’80, joined others in November to finalize Sister City plans that include welcoming the Irish delegation next month. Cavanaugh represents the Father Flanagan Chapter of the Ancient Order of Hibernians, an Irish-American cultural group that also is sponsoring the project.

Ties to Naas first began with the town’s poets, a tie that continues to this day.

Several years ago, Irish poet Desmond Egan, based in Naas, was a visiting professor at Creighton. Soon, Creighton’s Irish Studies Program began, which includes the Creighton University Summer School in Ireland — a five-week intensive study of Irish literature and culture at Trinity College in Dublin, a stone’s throw from Naas. The program is part of the Irish Literature concentration in the English major at Creighton.

While visiting Omaha next month, Naas Mayor Tim Conway, who is also a published poet, will provide formal lectures and discussions for students in Creighton’s Irish Studies Program, which is under the direction of David Gardiner, Ph.D.

Naas, which means “home of the kings” because of its history as an ancient royal capital, is also reputedly the site of a visit by St. Patrick, who, while there, baptized the king’s two sons, another reason for timing the Omaha visit on the saint’s day this spring.

Other Sister City relationships for Omaha include Braunschweig, Germany; Shizuoka, Japan; and Siauliai, Lithuania.

Online Veterinary Pharmacy Program Begins

Concerned about medications for Fluffy? Creighton University’s School of Pharmacy and Allied Health Professions now offers an online “Veterinary Therapeutics Program for Practicing Pharmacists.”

The goal of this continuing education course is to help practicing pharmacists develop new skills and expand their knowledge base in veterinary therapeutics for pets. The course was designed so pharmacists can confidently provide pharmaceutical care services to veterinary patients in their communities. Pharmacists throughout the country can easily access this Web-based course to gain up-to-date information and training in veterinary therapeutics, animal disease states and regulatory issues.

“There is a great need for education of pharmacists in veterinary disease states and pharmaceuticals. This course is designed to instruct pharmacists on the pathology, symptoms, diagnosis and prognosis for the 15 most common diseases in pets with particular emphasis on the ability to summarize pharmacotherapy options,” said Elaine Lust, R.Ph., instructor and faculty member in the School of Pharmacy and Allied Health Professions.

“The content is thoroughly referenced and incorporates visual graphics to facilitate understanding of animal disease states or recognition of a veterinary product. Additionally, legal and regulatory issues that affect the practice of veterinary pharmacy will be emphasized,” Lust said.

The course, which began on Jan. 15, is self-paced on the Web with an open enrollment and is approved for 30 credit hours. Participants can begin anytime and can expect to complete the course within six months. The cost of the program is $325 per person. For more information, you can go to the Web at http://pharmacy.creighton.edu/veterinarytherapeutics.

Pharmacists who complete the online course will learn how to: explain, define and distinguish the top 15 disease states in pets with particular emphasis on the ability to summarize pharmacotherapy options; counsel pet owners on proper use and administration, common adverse effects and expected benefits of human- and veterinary-labeled prescription drugs; confidently interpret and fill prescriptions for human-label prescription pharmaceuticals to be used in animal patients; apply the unique legal and regulatory restrictions to veterinary medicine, food-animal medicine and compounding for animal patients by pharmacists and veterinarians; evaluate the appropriateness of compounded medication request and apply federal guidelines when providing services to veterinarians, animal owners and animal patients; and communicate effectively with animal owners and veterinarians to meet state-mandated counseling requirements, enhance medication compliance, solve drug administration problems and recommend appropriate drug therapy choices for the betterment of animal health.

The “Veterinary Therapeutics Program for Practicing Pharmacists” was developed by Creighton University and supported through an educational grant from Schering-Plough Animal Health.
CU Participates in Campaign to Reduce Alcohol Consumption

Creighton University is one of the 32 schools selected to participate in a nationwide study to test the effectiveness of “Just the Facts,” a social norms marketing campaign designed to decrease high-risk alcohol consumption among college students.

The “Just the Facts” campaign is being conducted on Creighton’s campus for two years. The program began last fall as part of a research study funded by the National Institute on Alcohol Abuse and Alcoholism and the U.S. Department of Education.

The approach is based on research that shows that college students believe their peers drink more than is actually the case. As students attempt to fit in and be accepted, some drink in excess, to the drinking levels they believe their peers are reaching. The purpose of the media campaign is to correct students’ perceptions of how much their peers drink, thereby decreasing the perceived pressure to drink and producing reductions in alcohol consumption.

Several schools across the country have implemented social norms marketing campaigns and have seen promising results, but this strategy has never been subject to rigorous evaluation. This landmark study will determine whether this type of campaign is effective in decreasing high-risk alcohol consumption among college students when another survey is conducted in two years.

Among Creighton University students, 63 percent have zero to four drinks per week, according to a random survey of Creighton students. One drink equals 12 ounces of beer, 4 ounces of wine or one ounce of liquor.

“Just the Facts” uses a variety of media on campus, such as newspaper ads, posters, electronic bulletin boards and radio ads, to convey to students the true level of drinking at Creighton. The campaign uses messages that tell students that the majority of their peers make responsible choices about drinking.

“This is a fresh and promising approach to dealing with high-risk drinking behaviors,” said Michele Millard, coordinator of the program and director of Peer Education at Creighton. “We are excited about participating in this study and look forward to promoting positive student behavior and increasing student safety here at Creighton.”

The study is being conducted by Education Development Center, Inc., in Newton, Mass., in conjunction with the Golden Key International Honour Society in Atlanta.

Braden Earns Achievement Award

Creighton University interim vice president for academic affairs, Barbara Braden, Ph.D., SJN’66, BSN’73, recently received a lifetime achievement award from the European Pressure Ulcer Advisory Panel in Le Mans, France. Braden received this award to recognize her outstanding contribution to clinical care, teaching and research understanding of pressure ulceration, or bed sores. The award was presented to Braden at the Fifth European Pressure Ulcer Advisory Panel Meeting.

Braden is the developer of the Braden Scale for predicting pressure sore risk. Her work has helped nursing caregivers around the world help prevent pressure sores and ease the pain of patients. More information about the Braden Scale may be found at http://www.bradenscale.com.

Nursing School Receives Grant

Creighton University has received a three-year $575,624 grant from the Department of Health and Human Services, Health Resources and Service Administration to help alleviate the shortage of qualified advanced practice nurses in rural and underserved areas.

The grant was awarded to the School of Nursing to expand its existing Master of Science in Nursing program. The School of Nursing has begun recruiting for the newly developed program, which combines the Community Health Nurse Specialist (CHS) curriculum with the existing Family Nurse Practitioner (FNP) curriculum. Each graduate will be prepared for dual advanced practice nurse certification as both a community health nurse clinical specialist and a family nurse practitioner.

“Graduates of this program will be particularly well qualified to work with individuals, families and groups within their communities,” said Brenda Bergman-Evans, Ph.D., BSN’80, MSN’83, chairman of the advanced practice nursing programs at Creighton. “Their dual major will enable the advanced practice community health nurse to focus on not only the individuals and families they may encounter in their practice, but also to facilitate change that will affect the general health of their communities.”

One of the objectives of the program is attracting and retaining minority students, as well as those from disadvantaged backgrounds and medically underserved areas. It also is the goal of the program to prepare a significant number of advanced practice nurses who are committed to practice in medically underserved areas.

“The program should be especially enticing to nurses located in rural areas. Community health graduate students will receive laptop computers with video conferencing ability for activities such as community presentations and home visits,” Bergman-Evans said. “The curriculum is largely in a computer-based format to enable students to utilize distance learning.”

According to a 1993 statement issued by the American Academy of Nurse Practitioners, “Nurse practitioners are well equipped to fill the role of primary care provider. They provide nursing and medical services to individuals, families and groups with emphasis placed on health promotion and disease prevention as well as the diagnosis and management of acute and chronic disease.”
Scholars Discuss World Trade Imbalance

For a quick sense of the extent to which we live in a global marketplace, go to your closet — and notice where things have been made.

This globalization of commerce has furnished American consumers with a variety of products at lower costs and provided profits for major corporations. But it also has led to a worldwide economic imbalance, asserts Creighton sociology professor Charles Harper, Ph.D.

Harper, along with Jennifer Reed-Bouley, Ph.D., of Nebraska Methodist College, spoke on “World Trade: Globalization and Catholic Social Teaching” at a discussion hosted by the Creighton Center for the Study of Catholicism in November.

Harper explained that less developed nations provide cheap labor to meet the buying needs of U.S. consumers. Large corporations and their subsidiaries in developing countries, he said, make favored deals in buying and selling — a practice that sometimes forces local companies to go out of business.

This global network of economic power — trade and profits — administered by governments and large corporations divides the world into nations of haves and have-nots, Harper claims, with nations such as Japan and the United States at one end, and such countries as Paraguay and Nepal at the other end. It’s a world of winners and losers, Harper said, with U.S. consumers and major corporations the big winners.

The consequences of this imbalance, the Creighton sociologist said, are many. They include: growing global inequality; the movement of people from villages and rural areas to large cities that are unable to sustain them; environmental damage, species extinctions and global warming; a massive labor surplus; unemployment and poverty; and an increase in the black market and drug trafficking. Some of these tensions are apparent today in Afghanistan, Harper said.

The challenge, Harper said, is to make globalization more humane. Harper suggested that nations with economic power, such as the United States, provide less developed countries access to the world market.

The consequences of the world trade imbalance are many. The challenge is to make globalization more humane where economic powers, such as the United States, provide less developed countries access to the world market.

‘Jesuit Journeys’ Looks at the Society of Jesus 2,000 Years After Christ

From the Pine Ridge Indian Reservation to El Salvador and to India, Creighton University Fine Arts Professor and the Charles and Mary Heider Endowed Jesuit Faculty Chair the Rev. Don Doll, S.J., and former National Jesuit News Editor Elizabeth O’Keefe, BA’89, have created a DVD on the Society of Jesus at the turn of the second millennium.

Included in the DVD, which can be navigated like a CD-ROM, are Jesuit stories done on the Pine Ridge Indian Reservation in South Dakota and in El Salvador and India. In addition, there is a short biography of Ignatius narrated by Tom Lucas, S.J., an art historian at the University of San Francisco.

Also featured are interviews with Vincent O’Keefe, S.J., former vicar general of the Jesuits in Rome; John Sobrino, S.J., theologian in El Salvador; and Fr. Peter...
Rand Follows Dream to Law School

Creighton law student Rebecca Rand has a favorite quote, which she displays prominently on the desk in her residence hall room.

The quote reads: “Some people succeed because they are destined to; most succeed because they are determined to.”

Rand, who has cerebral palsy, places herself in the latter category. When she was born, Rand’s parents were told that their daughter might never walk. Through intense therapy, Rand took her first steps at age 5.

As a young girl growing up in Louisburg, Kan., Rand became interested in law after reading a biography on Sandra Day O’Connor, who had just been appointed the first woman Supreme Court justice.

“I don’t know why I was so taken with the book,” said Rand, now a second-year law student at Creighton. “She (O’Connor) talked about growing up riding horses, which I liked, and the positive effect you can have on people through the practice of law.”

Rand eventually attended Avila College in Kansas City, Mo., earning a degree in business administration and marketing. She then worked for two years at an investment company in Kansas City, but it was a part-time job at a local law firm that rekindled her childhood dream.

“I could see myself in the practice of law,” Rand said. “I knew it would be a commitment — it’s not a 9 to 5 job. But I was ready for that.”

Rand had heard about Creighton’s “great reputation” through friends. She learned more about the law school at a college fair in Kansas City. She was impressed with the school’s focus on individuals.

That caring feeling was reinforced when Rand visited Creighton with her parents. At the time of her visit, Rand had already applied to the school, but hadn’t heard word on her acceptance.

Andrea Bashara, the law school’s assistant dean for admissions, greeted Rand and her parents that day. Bashara and Elizabeth Parkinson, assistant director of admissions, quickly checked with the admissions committee and found that Rand had been accepted. They shared the good news with Rand that very day.

“I had a tear or two in my eye,” Rand said. “I finally got to realize something that I had thought about for so long.”

Another surprise came later, after she had purchased the large stack of books required of first-year law students. Into her book bag, Rand’s parents, who own a hardware store in Louisburg, had slipped a copy of the O’Connor biography. “That was special,” she said. “It was the very same book I read as a child. My parents went to the trouble to buy it from the library.”

Rand admits that law school is tough, with long days and nights of studying, but she’s glad to be at Creighton.

“I think this is a wonderful environment,” she said. “I’m happy to be here. I get to realize something that I’ve wanted to do for a very long time.”


“The Jesuit Journeys DVD is an excellent tool for presenting social justice, especially in our Jesuit high schools and universities. It may even help attract young men to join the Jesuits,” Fr. Doll said.

Fr. Doll, a well-known photographer, was awarded the prestigious Kodak Crystal Eagle Award in photojournalism for his work with Native Americans. His photographs have appeared in many publications, including National Geographic.

O’Keefe was the publications coordinator at the U.S. Jesuit Conference for eight years. She created and produced JRS Online for the Jesuit Refugee Service. O’Keefe also produced the documents of the 34th General Congregation in seven languages and was awarded first place for best article three years in a row from the Catholic Press Association.

Behrens is a documentary filmmaker with more than 18 years of international experience. He started his career in South Africa directing documentaries and dramas for local television. He worked as a cameraman and editor at Britain’s ITN and Channel 4 TV networks to cover the political and military dramas in South Africa.

To learn more about the DVD or to order a copy visit: http://magis.creighton.edu.
Native American Advocate Speaks at Creighton

Suzan Shown Harjo presented a lecture on Nov. 29 in the Skutt Student Center as part of Native American Awareness Month activities on campus.

Harjo (Cheyenne and Hodulgee Muscogee) is a poet, writer, lecturer, curator and policy advocate, who has been instrumental in federal Indian policy since 1975. She helped Native people recover more than 1 million acres of land and numerous sacred places. Harjo developed some of the most important Native cultural laws in the modern era, including the 1996 Executive Order on Indian Sacred Sites, the 1990 Native American Graves Protection and Reparation Act, the 1989 National Museum of the American Indian Act, and the 1978 American Indian Religious Freedom Act. Harjo also initiated the lawsuit, Harjo et al v. Pro Football, Inc., regarding the trademark and name of Washington D.C.’s professional football team, the Washington Redskins.

She is a columnist for Indian Country Today (the leading Native American newspaper) and founding co-chair of the Howard Simons Fund for American Indian Journalists.

Harjo also is the author of numerous publications including the article in the ABA Journal (American Bar Association, March 2000) entitled “The Invisible Americans.” The lecture was sponsored by the Office of Multicultural Affairs, Native American Association and the Creighton Student Union.

Ambassador White Delivers Lecture on Terrorism and Revolution

By Eugene Curtin

The man who 20 years ago stood at the center of America’s controversial involvement in El Salvador told an enthusiastic gathering at Creighton University Nov. 15 that an inability to distinguish between terrorists and revolutionaries is leading U.S. policymakers into trouble in Central America and Latin America.

Robert White, who served as U.S. ambassador to El Salvador in 1980, and to Paraguay from 1976-80, was the keynote speaker at the 8th annual Markoe-DeForres Social Justice Lecture held in the ballroom of the Student Center.

White currently serves as president of the Center for International Policy in Washington, D.C., where he organizes conferences and produces articles for leading publications.

He was introduced by Roger Bergman, director of Creighton’s Justice and Peace Studies Program, as a man who was “fired by the Nixon administration for opposing politicization of the Peace Corps, reprimanded by Henry Kissinger for speaking out on human rights, and, finally, dismissed by Alexander Haig for opposing a military solution in El Salvador.”

White, who received standing ovations before and after his speech from the audience of about 350 people, warned that U.S. policy in Central America and Latin America since the arrival of the Reagan administration in 1980 has relied heavily on military force. That, he said, has built resentment among the common people of the region.

He said U.S. policymakers have proved unable to distinguish between revolutionaries and terrorists.

Revolutionaries, White said, enjoy widespread popular support, resort to arms only after exhausting all other avenues of change and are always willing to negotiate. Terrorists, on the other hand, enjoy no popular support and quickly resort to violence in an effort to inspire insurrection.

The policy of opposing revolutionaries who bear legitimate grievances against ruling oligarchies hurts the United States, White said.

That tendency is most evident today in Colombia, he said, where an influx of U.S. funding aimed at destroying crops used to produce cocaine has fostered corruption in the government and frustration among those who would rather use aid dollars to build roads and schools.

Legitimate revolutionary activity can be suppressed by U.S. intervention, White said, but it cannot be eliminated. It will instead seek success in other countries.

“We are building a serious security problem in the hemisphere, because after Colombia comes Ecuador, and then one country after another,” he said.

It is the chief duty of every American citizen to be involved in public issues, White said, urging his largely student audience to question those who shape U.S. foreign policy. He said it is a patriotic act to seek change that makes the United States more effective in nations mired in poverty.

“The highest responsibility you have is to hold elected officials accountable, praising them when they do well, but criticizing them constructively when you find them wanting,” he said.

White also issued a call for U.S. labor unions to extend their power and resources to their counterparts in Latin America where he said wages are declining even as unions to extend their power and resources. He said U.S. policy in Central America and Latin America since the arrival of the Reagan administration in 1980 has relied heavily on military force. That, he said, has built resentment among the common people of the region.

He said U.S. policymakers have proved unable to distinguish between revolutionaries and terrorists.

Revolutionaries, White said, enjoy widespread popular support, resort to arms only after exhausting all other avenues of change and are always willing to negotiate. Terrorists, on the other hand, enjoy no popular support and quickly resort to violence in an effort to inspire insurrection.

The policy of opposing revolutionaries who bear legitimate grievances against ruling oligarchies hurts the United States, White said.

That tendency is most evident today in Colombia, he said, where an influx of U.S. funding aimed at destroying crops used to produce cocaine has fostered corruption in the government and frustration among those who would rather use aid dollars to build roads and schools.

Legitimate revolutionary activity can be suppressed by U.S. intervention, White said, but it cannot be eliminated. It will instead seek success in other countries.

“We are building a serious security problem in the hemisphere, because after Colombia comes Ecuador, and then one country after another,” he said.

It is the chief duty of every American citizen to be involved in public issues, White said, urging his largely student audience to question those who shape U.S. foreign policy. He said it is a patriotic act to seek change that makes the United States more effective in nations mired in poverty.

“The highest responsibility you have is to hold elected officials accountable, praising them when they do well, but criticizing them constructively when you find them wanting,” he said.

White also issued a call for U.S. labor unions to extend their power and resources to their counterparts in Latin America where he said wages are declining even as the North American Free Trade Agreement encourages economic growth in the hemisphere, even beyond those nations that signed the pact.

“And that,” he said, “is a scandal.”

About the author: Eugene Curtin is a free-lance writer working in Omaha.
Baseball, Softball Squads Set for 2002 Season

The Creighton baseball and softball teams look forward to a successful spring.

Softball — Last season, Creighton’s softball team finished one out away from winning its second Missouri Valley Conference Tournament title in three years. The Jays, winning by one run in the final stanza, ended up losing to Illinois State in 12 innings. Creighton finished the year 30-27, for its fifth consecutive 30-win season.

This year, Creighton, under ninth-year coach Brent Vigness, looks for redemption behind senior pitcher Shelli Mellegaard. Mellegaard started 28 games for the Jays last season, finishing with a 15-10 record.

The Jays also return junior Sami Herbster and senior DeAnn Kaster, who were third and fourth on the team in hitting last season. Herbster and Kaster, along with junior Cara Van Winkle, also were named to the MVC All-Tournament team last season.

Baseball — Led by captains Tim Gradoville, Tom Oldham, Tyler Davies and Chris Hinrichs, the CU baseball team looks to rebound from a 21-31 season when they open the year on Feb. 19 at Kansas State.

Weather permitting, coach Jack Dahm’s club is scheduled to open the home season Feb. 28 when they host the University of Nebraska-Omaha. They’ll host in-state rival Nebraska on April 9 at the CU Sports Complex before the annual appearance vs. the Huskers at Rosenblatt Stadium on May 15.

MVC Tournament play runs May 22-25, with the NCAA Regionals starting the following week. Creighton has advanced to Regional play six times, including 1999 and 2000. Creighton will host the College World Series for the 32nd consecutive year June 14-22 at Rosenblatt Stadium.

For more information on Creighton athletics, visit www.gocreighton.com on the Web.

Creighton opens the season Feb. 15 at the Oklahoma/Nike Classic in Norman, Okla. The Jays’ first home game is March 23 against the University of Evansville. The conference tournament begins May 9 in Normal, Ill.

Destination: Africa

Experience Africa in all her splendor with 11 magnificent days in southern Africa! Enjoy this highly acclaimed Afro Ventures tour with first-class accommodations — for the general public and, in particular, for those associated with Creighton University. Join Creighton alumnus Joe Ricketts, BA’68, who made this remarkable journey last year ...

If interested in Destination: Africa, please respond by March 1, 2002, to receive additional information.

Travel dates: Sept. 14-25, 2002

Mail: 4211 S. 102nd St., Omaha, NE 68127-1031
E-mail: joericketts@ameritrade.com
Phone: 1-800-229-6554

“...I wanted an experience similar to what Hemingway had 70 years ago — and I got it. Southern Africa is absolutely wonderful. And this tour is not only safe but also ‘first class’.” — Joe Ricketts, BA’68
Finding ‘Nature’s Cure’ for Osteoporosis

By Lori Elliott-Bartle

“Luck favors prepared minds.”
— Louis Pasteur

Robert Recker, MD’63, thought about genetic traits and research opportunities in bone biology long before he hired molecular geneticist Mark Johnson, Ph.D., in 1995 to work as part of Creighton’s Osteoporosis Research Center team. Recker recognized the trends in medical research — trying to unlock the genetic codes that trigger diseases. He also knew that to keep up with larger research operations, he needed to add genetic research to the mix of high-quality clinical investigations the team conducts.

Shortly after joining Creighton’s faculty, Johnson began a weekly series to discuss genetic research with the scientists and clinicians working in the center. Later that year, Recker examined a notable patient, marking the first step leading to the discovery of a genetic mutation that causes high bone mass.

The mutation causes the opposite of the bone-thinning disease osteoporosis, which is diagnosed in more than 10 million Americans a year.

“This could be the most important discovery in bone biology over the past 40 years,” Recker said of the finding, which was described in the January issue of the American Journal of Human Genetics. Johnson describes the discovery as “nature’s cure for osteoporosis.”

Osteoporosis is a debilitating bone-thinning disease that occurs when bones lose mass. People with osteoporosis are more likely to break bones, especially in the hip, spine and wrist. The disease represents a major public health threat for more than 28 million Americans who have been diagnosed with the disease or its precursor, low bone mass. Recent research suggests many people have osteoporosis or low bone mass without knowing it.

The Visit That Led To Discovery

The patient didn’t appear unusual in any way. She was 18 years old, 5 feet 4 inches tall and 125 pounds. She had been referred to Recker by an orthopedic surgeon who was seeing her about back pain following a car accident. While reviewing her X-rays, the orthopedist noticed that her bones were “unusual looking,” and he called upon Recker’s expertise.

Recker examined her and conducted a bone scan. He saw that her bones were shaped normally, but appeared to be virtually unbreakable at about 50 percent denser than normal. The patient’s mother had also come to the clinic and Recker conducted a bone scan on her, too. She shared the same trait, and Recker speculated that heredity was at work. Her father and brother, whom Recker also scanned, had average bones.

“This attractive, slender young woman had more bone than her robust 6-foot father,” said Recker.

“There are many high bone mass genes associated with disease,” said Johnson, associate professor of medicine. “In all of them, there is evidence of some lesion or abnormally shaped bone, nerve problems or early death.” But that wasn’t the case here, and that was what piqued the researchers’ interest.

Recker turned to Johnson and to Susan Recker, his wife and a colleague in the center. On a volunteer basis over the next year, Susan Recker tracked down members of the family, scanning obituaries and scheduling office visits, bone density scans and blood draws. The Reckers traveled across the country to meet family members living as far away as California and New York. They devised distinctive research techniques, such as hosting a family reunion in Aberdeen, S.D., and asking for scans and samples. They also asked health care colleagues for favors. They borrowed a mobile unit equipped with a bone scanner and drove it from Billings, Mont., to Jackson Hole, Wyo.,

A computer representation of the LRP5 protein, which was found to trigger high bone mass. The green spheres at top show the normal structure, and the red spheres show the changed structure due to the mutation. Photo courtesy of Mark Johnson, Ph.D.
Finding "Nature's Cure" for Osteoporosis

Johnson, left, and Recker at work in Creighton's Osteoporosis Research Center.

Photo by Bob Ervin
so they could park it in a family member's driveway and gather the information they sought.

"This family has given selflessly of time and energy," Recker said. "Without their goodwill and help, we wouldn't have been able to do this research."

Meanwhile, Johnson examined the samples and conducted linkage analyses - comparing the genetic strands to see where they differed, trying to narrow the possibilities for the mutation's location. He secured a small grant from the Health Future Foundation. He found the gene in question on chromosome 11.

The Partnership and the Protein

In 1996, Johnson and Recker presented their work at a meeting of the American Society of Bone and Mineral Research, and representatives of Genome Therapeutics came calling. The biotechnology company develops medications and diagnostic tools based on genetic knowledge.

The partnership with Massachusetts-based Genome Therapeutics, established in 1997, greatly accelerated the pace of the research. The company put together a team led by Randall Little, Ph.D., assistant director for human genetics, to conduct tests that would pinpoint the specific protein that triggers high bone mass.

And that's just what they did. They found a change in a protein (gene) that was not known previously to play a role in bone. "The gene is a member of a large family of proteins called the lipoprotein receptor family," Johnson said. "We thought the gene, LRP5, for low-density lipoprotein receptor related protein 5, was involved in cholesterol handling in the body. We never expected that it would turn out to be a bone mass gene." The researchers describe the finding with some amazement.

"If you imagine the human genome as Interstate 80, stretching from the East Coast to the West, what we found was a crack in the pavement," Recker said.

We can measure changes in bone, looking at bone mineral density and bone size. We also have looked at genes you think might be associated with bone mass, such as the vitamin D receptor and collagen genes. But even with all that, it's been frustrating to scientists. It has been clear for some time that in most normal individuals, their ultimate bone mass and density is the result of the actions of many genes.

"So there has been concern that we will never be able to get to the complete gene input into bone mass," McGowan continued. "Not that this (high bone mass) gene explains normal bone mass, but rather that it clearly is a controlling factor at least in this one high bone mass population." And there exists a mutation in the same gene that leads to a juvenile form of osteoporosis called osteoporosis pseudoglioma syndrome, indicating the gene's involvement in skeletal regulation. The idea that the mutation causes lifelong high bone mass while maintaining a normally shaped skeleton is crucial. It shows that the regulatory process by which bone repairs itself is working correctly. It is not creating bone in places where it would pinch off nerves, nor is it breaking bone down to the point it cripples.

After pinpointing the trigger protein, researchers bred research mice that had the same genetic trait. The special mice developed skeletons three times stronger than normal and had no unusual health problems.

"The mutation is unusual in that it is a good mutation," Recker said. "Usually mutations come to clinical attention because they are bad for health." Recker and Johnson have identified no negative health consequences related to the gene.

The Next Phase: Developing Treatments

Although everyone involved is thrilled at the advance in knowledge, they also hope that knowledge will lead to better medications that will treat and prevent osteoporosis, which costs the country about $14 billion a year by NIH estimates. The disease promises to become more costly as our population ages.

"The bottom line is that eventually we're interested in ways to manipulate bone mass so that we can create effective treatments for osteoporosis and low bone mass," said McGowan of the NIH. "There are a number of drugs out there approved or near approval, but not everyone can use them. New drugs may be designed that are suggested by the pathways used by this gene, leading to better medications. We're always hoping to see new drugs that have fewer side effects."

Current treatments for osteoporosis prevent further bone loss, but don't help the body build significant amounts of new bone. Genome Therapeutics has partnered with pharmaceutical manufacturer Wyeth-Ayerst Laboratories to try to develop a medication that mimics the recently discovered protein's bone-building actions.

The discovery is important for three reasons, said Creighton's Robert P. Heaney, M.D., an internationally recognized expert on bone and osteoporosis.

"This is the first gene found that directly seems to influence how much
bone you have,” he said. “It represents a new pathway that hadn’t been recognized before as possibly important for bone formation, and it holds out the promise of developing agents that will stimulate the bone to strengthen itself, rather than driving that process with drugs, which is what we do now.”

Researchers suggest the mutation may work by controlling the skeletal system’s “set point.” The idea is that bone has a thermostat-like mechanism that regulates how much bone is built up and maintained. The “thermostat” is set higher for people who have high bone mass, building and maintaining more bone throughout life.

“We have known that the skeleton is a ‘use it or lose it’ organ,” said McGowan of the NIH. “It has been hard to show that exercise increases or helps bone mass, but we have clearly shown that in the absence of exercise, we lose bone mass.” Consider an astronaut working for several months at the space station, or a person bedridden because of serious injury. “Normal ‘loading’ on the bone gives the signal that bone is needed and must maintain its mass,” she said. “Further research will explore the idea that this gene interacts with the loading signal and that we might come to understand how that signal is transmitted to the bone cells.”

**Beyond Bone**

The applications may reach far beyond bone.

“The idea of the set point is a fundamental issue in biology,” said Creighton’s Heaney. “No one has found one before now. This discovery could be the bone set point, and if so, there are far-reaching implications for all cell biology, not just bone research.” All the body’s regulatory systems, such as blood cell production, blood pressure and control of blood sugar, use set points.

The researchers studied about 200 members of the initial family. Since their first research presentation in 1996, clinicians and researchers from around the world have referred them to about 50 more families that seem to have high bone mass, although not the identical mutation as that first family. Further research will examine the pathway by which the result of high bone mass is achieved.

“This all started with a single patient,” Johnson said. “We took what we observed in the clinic, brought it into the laboratory and we were able to uncover a fundamental mechanism in biology which we think may be very important and may lead to treatment for millions of people afflicted with osteoporosis.”

Every discovery raises more questions, offering more challenges for the Creighton team.

“You have a very special group at Creighton that is recognized as a national resource,” said NIH’s McGowan. “They are very thoughtful people. The researchers provide a training ground for metabolic bone research, and they exert national leadership in the bone field.”

*About the author: Elliott-Bartle works in media relations in Creighton’s Office of Public Relations and is host of the award-winning weekly radio talk show “Creighton Healthwise.”*
While I, like all Americans, was horrified by the events of Sept. 11, I admit to not being surprised. As I watched the towers of the World Trade Center collapse, I experienced a sense of overwhelming grief that all of this might have been avoided were it not for the dismantling of much of our capacity to detect and neutralize terrorists before they strike. Those of us who have served in federal agencies charged with combating terrorism (a responsibility most often included under the rubric of counterintelligence), are all too familiar with just how little capability the United States possesses for stopping what occurred on Sept. 11.

First, what do we mean when we talk about intelligence and counterintelligence? Intelligence
includes all activities related to acquiring and processing information on the capabilities and intents of a hostile foreign country. Intelligence is the primary responsibility of the Central Intelligence Agency. Other federal agencies, such as the Department of Defense, that engage in intelligence activities do so under the direction of the director of Central Intelligence, who is also the director of the CIA.

Counterintelligence includes all activities related to acquiring and processing information concerning the capabilities and activities of international terrorism and foreign intelligence agencies. Within the United States, the FBI has primary responsibility for counterintelligence. Outside the United States, the CIA is charged with primary responsibility. Counterintelligence investigations involve acquiring information, either by technical means of eavesdrop, checks of official and unofficial records, the questioning of individuals thought to have information, the interrogation of suspects or other means. Counterintelligence analysis is the process by which information obtained through any investigative means or other activity is turned into an assessment concerning a terrorist’s intentions or capabilities.

In the aftermath of the Vietnam War, the U.S. domestic counterintelligence community came under intense congressional and public scrutiny. The view of many at the time was that counterintelligence agents of the FBI and the Department of Defense had engaged in anti-Constitutional monitoring of the activities of private citizens. Among these activities were wiretapping of private telephone conversations, surveillance of personal movement, and infiltration of organizations and clubs. The sentiment was particularly strong among those who had engaged in the anti-war movement and had therefore, in many cases, been the targets of these agencies.

As a consequence, a series of executive orders and congressional acts followed in rapid order. The first of these was known as the “One June Letter.” Signed by President Richard Nixon in 1973 — just five days before I was commissioned in the U.S. Army and designated a counterintelligence agent — the letter essentially barred all Defense Department activities targeting non-military U.S. citizens both within the United States and abroad. Within a year, the restrictions in the letter were promulgated in an Army regulation, and an executive order was issued barring wiretap, eavesdrop, infiltration, investigation, interrogation and other intrusive means for monitoring the activities of U.S. citizens. These protections against invasion of privacy were later extended to non-U.S. citizens, legally or illegally in the continental United States.

In order to assure that Defense Department counterintelligence offices were not engaged in the newly prohibited activities, we were subjected to multiple announced and unannounced inspections. Agents were held personally liable for any violation, no matter how small. The effect was chilling. Counterintelligence offices shredded any document with information about individuals or groups operating in the United States. Individual agents refused to ask for information from local law enforcement agencies and avoided any meaningful exchange of information. As agents were reassigned to other field offices, their knowledge of possible threats in a
given area or region was lost within a very short time. By the early 1980s, the presumption was that no investigative work could be undertaken without prior authorization from the highest levels of the government and then only under the direct supervision of the courts.

In such an environment, I was never given the opportunity to use the investigative training I received. While I did conduct a number of interviews related to background checks for military personnel with clearances permitting them to have access to classified information, I never engaged in an interrogation, infiltration or eavesdrop effort in 10 years of active military service. Instead, I was relegated to performing services as a security consultant for the military, conducting inspections and security surveys and writing plans and procedures for rectifying any security problems. The goal of these services was defensive, to protect U.S. military personnel and installations from foreign and domestic threats. Virtually no proactive efforts at protection were permitted. Indeed, we were even prohibited from asking other federal agencies about potential domestic threats. In essence, we were left in the position of having to defend U.S. military installations from an enemy about whom we knew little to nothing — an impossible task at best.

This would not have been such a challenge had I had more confidence that the FBI was proactively monitoring threats. In the absence of our own capacity for doing so, the Bureau was now charged with primary responsibility for providing us with the warning necessary to defend military personnel and property against terrorist attacks. (The CIA was charged with this responsibility outside of the United States.) Sadly, the FBI was not adequately prepared for a number of reasons. First, they too were subject to increasing legal and judicial restrictions. At a minimum, virtually no investigative activity, no matter how small, could be undertaken without a warrant. Second, the number of counterintelligence officers was significantly reduced. When I commanded the counterintelligence field office at Fort Hood, Texas, the FBI office with responsibility for one-half the state of Texas, including Fort Hood, had one counterintelligence agent. Third, legal restrictions on interagency exchange of information combined with the chilling environment in which federal counterintelligence agencies existed meant that no information was likely to be made available under virtually any but the most extenuating of circumstances, such as occurred on Sept. 11.

I do not believe that this was the intent of the restrictions placed upon federal counterintelligence agencies in the 1970s, but they were the consequences. As so often happens, a small reaction can quickly become an overreaction. This is all the more likely when there is no reason to focus on just what the effect of policy changes might actually be. In the aftermath of the Vietnam War, the military was prohibited from undertaking domestic operations, and rightly so. However, these initial policy corrections took on a life of their own and led to questionable decisions to restrict the flow of information between federal agencies and to extend civil rights protections to non-citizens. Worse, the direction of change literally spun out of control as the very federal agencies charged with protecting the public welfare became the target of legal and judicial intimidation. I recall on more than one occasion being threatened with a lawsuit by someone I was charged with investigating were I

Agents were held personally liable for any violation, no matter how small. The effect was chilling.

Terry Clark

Photo by Bob Ervin
to report any adverse information. Intimidated by the legal climate, my commanders privately made it known that they would distance themselves from me in the event any legal suits were filed.

The result is that counterintelligence agencies, which previously had possessed a reasonable ability to detect and deter terrorism directed against the United States, by the 1980s were largely reduced to investigating such acts only after they had been committed. A parallel process occurred in human intelligence and counterintelligence operations as well within the CIA and other federal intelligence agencies. In essence, while the U.S. retained a defensive capability, it had largely debilitated its offensive capability, preventing the country from taking positive steps to protect itself. While congressional committees occasionally discussed the threat this posed to the national security, the public was largely unaware of the problem until Sept. 11.

As events unfolded throughout the morning of Sept. 11, I received calls from regional and local news media asking me how this could have happened. One could conclude from the question that they were equally unaware of our country’s vulnerability to terrorism. I would offer instead (perhaps more charitably) that the media were simply naive concerning the ability of defensive operations to guarantee against a terrorist attack. In either case, I admit to being surprised. Having served in counterintelligence I knew our vulnerabilities. Indeed, in more conversations than I now wish to recall, I overheard counterintelligence professionals agreeing that a major terrorist attack against the United States was just a matter of time. They were not “surrendering” but resigned to the inevitable by a policy of overreliance on defensive measures. It is impossible to defend an entire country from a determined terrorist attack. The basic principle is that a terrorist will choose the most vulnerable target. Therefore, as you “harden” one target, the terrorist simply moves to another. Hence, if airlines become too difficult to commandeer, buses and trains might become more likely targets.

The only way ultimately to defend against terrorism is to have the offensive capability to aggressively assess, infiltrate and destroy cells and the communities that provide safe harbor and logistical and intelligence support. Many of those cells and communities now exist in the United States because we gave them 30 years to develop.

The events of Sept. 11 have provided the FBI with the legal basis to investigate the terrorist network operating in the United States. There are hopeful signs as well that the terrorist attack has opened up a debate on how we can avoid recurrences. However, to this point most of the debate has focused on increasing our human intelligence capacity. Substantially less consideration has been given to the state of our domestic counterintelligence agencies, which, as of the writing of this article, remain seriously understaffed and underfunded. In fact, so serious is the situation that they are as yet incapable of determining the extent of the al-Qaeda support network in the United States, the extent of its capacity for inflicting harm on American citizens, the whereabouts of over 100 of its members or even whether it was involved in the anthrax attacks.

Much of the reason for this lies in the fact that many Americans are deeply concerned with proposals to strengthen domestic U.S. counterintelligence capacity. The concerns are rooted in the post-Vietnam notion that federal counterintelligence agencies present a threat to personal freedoms.

If we are to win the war on terrorism, and we must, then we will have to...
reconsider these concerns. In particular, I believe that we must undo much of the harm done to our counterintelligence agencies in the overreaction to the Vietnam War. In doing so, however, I am careful to argue for balance. We do not need yet another overreaction, albeit in the opposite direction. I argue that we can best accomplish this by targeting those restrictions placed on law enforcement that are primarily defensible on grounds related to license rather than any guarantee of fundamental freedoms.

Take, for instance, foreign nationals in the United States on expired visas. The Immigration and Naturalization Service did not know prior to Sept. 11, and still does not know, how many such visitors there are, let alone where they might be. Universities, not wishing to be troubled, don’t even know if international students on student visas are attending class. In the social environment that existed prior to Sept. 11, any effort on the U.S. government’s part would have been decried by a sizable portion of the population as a violation of basic human freedoms or an invasion of privacy.

The only way ultimately to defend against terrorism is to have the offensive capability to aggressively assess, infiltrate and destroy cells and the communities that provide safe harbor and logistical and intelligence support.

A first step, therefore, is to revive the concept that the United States exists first and foremost for its citizens. This is a very difficult position for many, particularly those who view America as the personification of an encompassing, global ideal. Nonetheless, it seems a clearly defensible principle on the grounds that newly arrived immigrants, and visitors in particular, have not yet sufficiently internalized a sense of loyalty to the United States.

A second step is to unshackle counterintelligence agents (not just the agencies) from the pervasive fear of personal liability for violations of law related to investigative proceedings, to include permitting the free flow of interagency information. This is all the more justifiable when one considers that many supposed violations are most often a matter of legal interpretation. While the courts should most certainly issue appropriate clarifications in the many “gray areas” that always exist in the law, individual agents must be shielded from personal liability unless an infraction has occurred of a previously well-established law or procedure. Failing to do this, we cannot expect federal counterintelligence agencies to pursue terrorists with the required resolve.
While it appears that we may be headed toward doing most of the above, a third step, to permit Defense Department counterintelligence elements to once again work for the FBI and other domestic law enforcement agencies, may be more contentious. I am not suggesting that we return to the Vietnam-era practice of permitting Defense Department field agencies to operate independently of the FBI. That would be a mistake. What I am suggesting is that we make Defense Department resources available to the FBI when and where appropriate. The FBI is seriously short of investigators and analysts. While the Defense Department may not be equipped to assist with the former, it has a reservoir of highly skilled analysts, particularly in the area of international terrorism. Blocked from engaging in meaningful investigative work, many Defense Department counterintelligence agents moved into analysis. Given the Defense Department’s mission — studying terrorists, their organizations and their methods — working in analysis was a “good fit” for these agents. These are merely tentative proposals. They do not comprise an exhaustive list.

I gladly defer to a more competent counterintelligence agent than myself to make a more complete list of proposals. However, I think they serve the limited purpose of giving some indication of what must be done to resolve the domestic security dilemma. Even this modest list, however, will undoubtedly give rise to strong objections from some quarters. (I would be quite surprised, and even a little disappointed, if it doesn’t.) Despite the apparent national unity we have witnessed in the aftermath of the terrorist attack of Sept. 11, we remain a deeply divided society. One need look no further than the 2000 presidential elections for evidence. In my view, the national unity is too “thin” and is likely to dissipate rapidly in the near future. The proximate cause will be the debate over the trade-off between civil liberties and security. Given the connection that many make between protection of civil liberties and limitations on domestic counterintelligence agencies, the effort to release those agencies from restrictions placed upon them in order to develop a more proactive and offensive capability against terrorists will most certainly be at the center of that unraveling.

This owes to an essentially winner-take-all, zero sum game mentality on the part of protagonists and antagonists alike. Both sides view any change in the status quo as either harmful to themselves or the other side. This is unfortunate. What is needed is a sense of proportion. Surely, we can find room for compromise. The time has come to correct the overreaction of the post-Vietnam era in order to achieve an acceptable balance between the twin requirements of personal liberty and personal security.

Mohammed and Atwah from the FBI’s “Most Wanted Terrorists” list, and Raed Hijazi (right) an alleged bin Laden associate currently in custody in Jordan.
The revival of the permanent diaconate in the church brings new life to the faith community. Here, the Most Rev. Elden Curtiss, archbishop of Omaha, welcomes Larry Sampier to his new role as deacon.

Larry Sampier, BSBA’64, who earned a master’s degree in Christian spirituality from Creighton in December, joins about 13,000 other deacons across the United States this spring as they prepare for a new year of service to parishioners. Coming from a long church tradition that was rekindled in the late 1960s with the Second Vatican Council, theirs is a ministry that can range from preaching the Gospel to providing grief counseling, helping prepare candidates for baptism to conducting the church’s FOCUS (marriage preparation) classes.

But it can also cover ministry outside the parish — in prisons, shelters, hospitals and nursing homes. First and foremost, the diaconate is seen as a distinct ministry of service, bringing together priests, religious and laity to enrich the life of the church.

Much of a deacon’s level of involvement is determined by the parish pastor, Sampier said, with whom each deacon signs a covenant. Deacons also take a vow of obedience to their bishop at ordination.

Today, there are two deacons for every three parishes in the U.S., and the number of new deacon candidates is more than 2,500 per year.

Approximately 91 percent of American deacons are married. Sampier and his wife, Judy, are among nearly 25,000 deacons and deacon-couples serving in 129 countries around the world.

Sampier was ordained on Nov. 3, 2001, and participated in his first Mass as a deacon at St. Robert’s parish in Omaha the following day. On Dec. 15, he was the deacon at Creighton’s Baccalaureate Mass, then, donning cap and gown, took part in the University’s winter graduation ceremonies later that morning. He calls becoming a deacon a long-held dream.

Even though his family was without a formal religious tradition, Sampier said he had a spiritual experience when he was 10, becoming “aware of something far greater” operating in the universe than what the senses could discern. Exposure to other traditions — and then coming to Creighton — opened him further to spiritual possibilities, culminating in a religious conversion at age 20.

Marriage to Judy followed; then Sampier began a stint in the military. Later, he would build a successful career in management, especially in sales. That same year, he and Judy, who had retired from a public school career as a librarian, began the three-year formation classes for the diaconate.

In the following pages, Creighton Jesuit and award-winning photojournalist the Rev. Don Doll, S.J., captures the Sampiers’ journey from preparation to ordination to first Mass. It’s a journey filled with love, commitment and faith.
“We all have had some powerful experience of the Holy Spirit.”

— Larry Sampier, on the deacon candidates
The Preparation
Susan R. Lawler, (above) Creighton instructor of theology, guides deacon candidates and spouses through a brief history of the early Christian church. The weekly preparation classes not only include formal lectures, but a lot of sharing and prayer. Classes are just one expression of the large commitment that deacon candidates and spouses make for the three-year journey.

Joining Sampier, right, in this nurturing faith community were Creighton-related candidates and spouses Bill and Kathy Hill (bottom left) and Patty and Russ Perry (bottom right).

“It’s like boot camp or any other formation process. You’re growing and learning, but you’re doing it with other people.”
The Making of a Deacon

Above, Sampier with his wife, Judy, who was by his side throughout the entire process.
“Most of us were reveling in the moment. I was amazed how calm I was. I felt very comfortable.”

**The Ordination**

Vestments in hand, (top left) Judy and Larry join Archbishop Curtiss and fellow candidates before the Nov. 3 ordination at Omaha’s St. Cecilia’s Cathedral.

Sampier receives the archbishop’s blessing (left) ... and dedicates his life to the diaconate mission of pastor. (Bottom far right) Omaha priest Emmett Meyer offers a note of welcoming to the Sampiers following the ceremony.
The First Mass
It’s Sunday, Nov. 4, at St. Robert Bellarmine Parish in Omaha, and the Sampiers join Fr. Don Shane for Sampier’s first Mass as deacon.
During the Mass, Sampier had a chance to address the congregation (below). He also shared a special moment with his 93-year-old father, Frank (bottom far right).

“I was nervous during the first Mass. There were many butterflies. But I knew I was among friends.”
“My father is not Catholic and not a believer. But he created the atmosphere for faith to develop. And for that, I am forever grateful.”
More and more Americans have friends and professional colleagues who practice a religion other than Christianity. School children are invited by their friends to attend both first Communions and bar mitzvahs. Gone, for the most part, are Catholic neighborhoods and religious ghettos. Jewish and Christian colleagues — one that tries not only to penetrate the worlds of Hindus, Buddhists and Muslims, but to throw bridges from those worlds to the reader’s world.”

In recent decades it became a trend in academic culture to propose that religious anthropology and sociology could reduce religious diversity to a generic phenomenology composed of common elements underlying all religious traditions. One such textbook outlined its approach as: 1) gathering religious data, 2) searching for patterns, 3) analyzing the structure of patterns and 4) suggesting generalizations. Using these generalizations, textbooks were then arranged by themes such as “Ritual,” “Community,” “The Nature of the Sacred,” “Sacred Language” and “Salvation.”

As Catholic theologians lived with this approach, it became obvious to many that it needed to be abandoned. Although there are similar religious traditions, understanding diversity is
Christians brought back spices and cloth from the East. They copied the glories of Muslim architecture. They were impressed by the Muslim call to prayer. It was through dialogue with Muslim scholarship, whose culture had preserved the writings of Aristotle, that Thomas Aquinas and others acquired the philosophical tools necessary to introduce theology as a science proper to the university. In medieval universities, Muslim and Christian theologians debated the merits of their respective theologies in public forums. Interreligious dialogue is traditionally rooted in the university — it is not something new. There are biblical roots for interreligious dialogue. The verbal attacks uttered by some Christians against certain synagogue leaders resulted in the stoning of Stephen and the expulsion of Gentile Christians from Jerusalem (Acts 6:8-8:1). As a result of this attempted but failed interaction, the concept of

Trinity — Father (Unbegotten), Son (Begotten) and Holy Spirit (Proceeding), united in nature as God from all eternity — as is expressed in the Christian creeds, was the product of interreligious dialogue. Jews could not understand how Christians could claim to worship one God when, in fact, they seemed to pray to both God and to Jesus. Greeks, who through their mythologies knew only too well the price human beings pay when the gods suffer, found it difficult to understand that God would not only assume corruptible flesh, but would suffer and die. Christians, who lived among Jews and Greeks, needed to explain themselves. As a result of this interreligious exchange, the Christian creeds were born. 

Interreligious dialogue has changed Christian culture in other ways. Although the Crusades did not for the most part fulfill their political objectives, they did serve to make the Christian worldview larger and more diverse.

Interreligious dialogue is not new to Christianity. In fact, one might say that Christianity as we know it today is a product of interreligious dialogue. The concept of

A Jewish boy blows a ram’s horn (or shofar), which is sounded on Rosh Hashana (the Jewish new year) to “awaken the soul”; a Christian woman reflects on the Crucifix; and Muslims bow in prayer to Allah.

Toward a Theology of Diversity

Although crucial for interaction with the modern world, interreligious dialogue is not new to Christianity. In fact, one might say that Christianity as we know it today is a product of interreligious dialogue. The concept of

generic and so unwieldy in a phenomenological approach that they satisfy no one. To understand and carry on dialogue with one another, we cannot simplistically work with generalizations that bypass the real differences inherent within cultures.

core to understanding these traditions. The project of “translation,” as Huston Smith suggested, cannot be abandoned. In other words, when examined, religious traditions do have some similar tendencies, but definitions of “God,” “person,” “good and evil” inclusive enough to include all the major religious traditions become so
Face to Face: A Theology of Diversity

Spring 2002

Children will most likely communicate according to the interests, development and abilities of each. If human beings understand this essential aspect of effective communication, certainly God considers the maturity, sensibilities and abilities of particular cultures when communicating with them.

Communication is received and interpreted according to ability. A teacher lectures, but a particular student might understand something entirely different than what was communicated. If we can imagine, as the Old Testament insists, that “I will be their God, and they shall be my people,” is the deepest desire of God’s heart, then we must imagine that God throughout history has and continues to reveal God’s self as people and cultures are capable of understanding. In other words, God, in mercy, self-limits God’s self in order that human beings might be able to understand something of God.

I remember as a child drinking lemonade with my grandma and grandpa on the farm porch. Grandpa told me a story about his youth, and I remember my German grandmother saying, “Ach, Pa, I didn’t know that about you!” I remember being shocked that there were still things after 60 years of marriage and working together on the farm that my grandmother did not know about my grandfather. My grandfather was an extroverted and jovial man who easily shared himself with my grandmother and whomever he might be willing to share a beer with him! Yet, the depth of his mystery was still capable of surprising my grandmother even after 60 years. People, and certainly God, cannot be confined to definitions. The essence of their mystery cannot be mastered. In fact, Christianity and other religious traditions insist that it is idolatrous to limit God to an image, even if that image has been communicated by God.

As an example, let us say the simple phrase: “God is compassionate.” Christian tradition offers us a variety of ways to respond to such a claim. Certainly one could simply say, “Amen. God is compassionate.” One could also consider that any human concept of compassion poorly reflects the truth of God’s compassion and say in this light, “God is not compassionate.” This tradition of negative theology is strange to Western ears, but is common in Eastern Christianity. Those of us educated in the Jesuit tradition might be more fond of saying, “God is compassionate and more.” In other words, our human concept of compassion is small but does contain a likeness of God’s compassion that is always infinitely greater than any concept of compassion that we might hold.

In short, revelation, or God’s gracious desire to communicate with human beings is at the heart of understanding and respectfully appreciating religious diversity. If God communicates in different ways with different cultures, it is perhaps because God’s self-communication, in order to be effective, must be tailored to the cultures and contexts of various peoples. God’s essence, however, remains always a mystery.

Theological Issues

Are all revelations equal? Is Islamic revelation equal to Christian or Hindu revelation? The obvious answer is “no.” It is the question not the answer that is problematic. Interpersonal communication between people or between God and human beings cannot be reduced to equations. Parents who have four children do not communicate with their children equally; they communicate with their children as is appropriate for each child. This self-

Nostra Aetate specifically states: “The Catholic Church rejects nothing of what is true and holy in these religions. With sincere respect she looks on those ways of conduct and life, those precepts and teachings which, though differing on many points from what she herself holds and teaches, yet not rarely reflect a ray of that Truth that enlightens all human beings. But she proclaims and must ever proclaim, ‘the way, the truth and the life’ (Jn 14:6), in whom human beings find the fullness of religious life, and in whom God has reconciled all things to God’s self (cf. 2 Cor 5:18f).”
limiting and other-centered parental communication mirrors the kind of communication God has with human cultures. In other words, loving communication is fashioned according to the ability of the receiver to hear. It is not simply doled out in a similar style to all, irrespective of the needs of the listeners.

The understanding of God’s communication can at times be faulty. One is reminded of the cell phone commercial where the message is spoken clearly but static interferes. The older and more reflective a religious culture is, the more opportunities it has had to reject certain interpretations of God’s communication as faulty. Early Christians found that certain ways of living the Christian message did not promote healthy human and Christian community. These interpretations were branded as heretical, and early Christians rejected them. The position of some Christians, for instance, who wanted the church to become a secret club of select members was rejected in favor of a public and inclusive church.

In all religions, beliefs that undermine basic human values need to be identified as “bad” religion. It is never right for innocent children to starve, it is never right for women to be raped, it is not right for civilians to be used as military targets. Religious factions that promote atrocities of any kind in the name of religion are not hearing God’s message clearly. If grace builds on nature, then any religion that violates nature is the product of bad hearing, faulty interpretation or ill will.

If God communicates with all cultures as each culture is able to hear God, what about the Christian claim that all are saved through Jesus Christ? Certainly, to abandon this claim would be to abandon a foundational Christian axiom. Yet this Christian claim is rejected or at least modified by other world religions.

Again, this apparent contradiction is perhaps understood best within the dynamics of interpersonal communication. The parents in our above family have communicated with their children as was appropriate for each child. As a result of this communication, each child has a particular image of his or her parents. These images will be more or less accurate depending on the ability of each child to receive what has been communicated. Because each child is forming an opinion of his or her parents, who are, at core, mysteries rather than categorical realities, these opinions might seem contradictory and yet, at the same time, be true. One child might think their parents are “the best.” Another that their parents are “the worst.” Another that they “do not care.” And the fourth might feel that “they are always meddling.” On a good day, the parents will smile at all these opinions and simply say, “yes.” In fact, all are

“I’m always one who likes to participate in religious dialogue. I have friends of many traditions — and Dr. Mueller offered this way of accepting many religions: You don’t deny any one religion, and you don’t argue for the supremacy of your own. I feel so glad that I go to a Jesuit school, because I’ve learned so much about other religions in relationship to Catholicism. I am not Catholic, and it was a little intimidating at first as a Protestant Christian coming to a Catholic school. But Dr. Mueller makes it easy to be receptive to other ideas, because she, herself, is always inclusive.”

― Brooke-Lynn Luat
Honolulu
Senior, Journalism/Mass Communication major

“I am a Jain. This is an offshoot of Hinduism. It’s a very old tradition, almost more of a philosophy. Its main principle is non-violence. It’s deeper, and more that I shouldn’t do anything negative, like say something hurtful, to anyone. It’s a true respect for all life. I grew up in this tradition, though my family did not pound it into me. We go to temple, we do not hurt animals, we do not eat meat ... Dr. Mueller is saying that the only way to reach peace is to communicate among religions. It should not be a dividing force. She’s saying you can find a common ground ...”

― Saurabh Lodha
Manhasset Hills, N.Y.
Junior, Biology major
true. In the mystery of the parents’ persons they are able to hold even apparent contradictions.

Is it too much for us to imagine that what seems contradictory to us when we study the truth claims of various religions: “God is one,” “God is Trinity,” “Jesus is the only begotten Son of God,” “God is not begotten,” might actually be capable of being held together within the mystery who is God? If we move beyond the idolatrous belief that a particular religion has “God in a box,” and recognize that whatever we say of God can be negated or at least denied as capable of containing the fullness of God’s mystery, then we have to listen with respect to the revelatory words that God has spoken to others.

Finally, if we admit the possibility of respectful religious dialogue, what happens to Christian missionary activity? If religions reflect revelations of God to diverse peoples, can Christians or others legitimately engage in missionary activity? Certainly one must now proceed humbly. Mass baptisms and forced conversions have long ago been condemned by the church. Today, missionary activity is to be done within the context of respectful dialogue and careful discernment.

Face to Face: The Rewards of Interreligious Dialogue

What happens when Christians, Muslims, Buddhists and members of other religions begin speaking with each other? When this dialogue is positive, it can produce fruit on at least three levels. First, interpersonal respect is always enhanced by engaging in respectful conversation. When people learn about the religious cultures of others, harmful stereotyping and simplistic biases are undermined. Minority cultures are protected when those in the majority view these cultures with respect.

Second, dialogue with those from other religious traditions has the potential of leading one more deeply into one’s own religious faith. When one’s beliefs are questioned, the intelligent person will search more deeply to find answers. As religious traditions developed, some have refined practices that remain underdeveloped in other traditions. For example, Buddhists practice “mindfulness,” the art of living and experiencing the gift of the moment. This type of meditation is also present in the Christian tradition, but it is rather underdeveloped. Christian/Buddhist dialogue has the potential of encouraging Christians to rediscover their own tradition of finding God in every moment, in every person and in all things.

Third, dialoguing from the perspective of one’s own religious culture encourages us to claim our particular cultures more deeply. It is our experience at Creighton that students of non-Christian traditions who major in theology as undergraduates become better Muslims, Hindus or Buddhists. Few become Christians. Interreligious dialogue is primarily about embracing the religious culture given to us by God and sharing the gifts of this culture with others. In saying this, it must be understood that religions are not the same or even equally representative of the mystery of God, that God’s diverse communication with individual cultures cannot be factored out and that the details and theological complexities of these diverse traditions are essential to serious discussion.

“...and look deeper into our own. We then go home and take with us this openness to the world.”

— Jeremy Nicolarsen
Cheyenne, Wyo.
Junior, Biology/Theology co-major
each other from the phenomena of the chocolates. The chocolates, in fact, are not really the point. They serve only as a symbol that communicates a transcendental reality.

When one tries scientifically to dissect ritual, God language, expressions of religious community, et cetera, from the interpersonal dynamics of God’s loving communication within the messy middle of diverse cultures, one may end up with a recipe for chocolate, but one will gain little insight into the vibrant, human convictions that enliven world religions. In fact, apart from the dynamics of God’s loving communication with real inculturated human beings, the symbols of religious communication are essentially nothing more than a box of chocolates. God’s loving communication within particular cultures cannot be understood generically as if the relational dynamism of God’s communication did not matter.

**Christian Theology, Diversity and Contemporary Jesuit Education**

Historically, a distinguishing feature of Jesuit higher education is its insistence upon a philosophical and theological curriculum that offers students the tools necessary to become intelligent leaders in a complex world. Certainly, in order to operate intelligently within their professions and in their relationships, students need more than a curricular nod at religion, but how can one teach theology in a setting where Christians, Muslims, Buddhists, Hindus and others come together?

Creighton’s students, Christian and others, receive substantial education in philosophy and Christian theology, including historical foundations in dialogue, ethics, scripture and theology. In addition, students take at least one course in global studies, a category that includes, among other options, courses in world religions, Islam, Judaism and Buddhism.

The ability to do advanced theological thinking within a particular religious culture in dialogue with a diverse student body and in various intellectual and pastoral forums is certainly a predominant strength of Jesuit higher education. One would feel cheated if one attended a Muslim university and graduated without a respectable working understanding of Islam. Because religion cannot be effectively taught apart from culture, Creighton uses its strength as a Catholic, Jesuit university to invite students to explore the complex questions at the heart of its theological tradition. These questions, however, are entertained within the context of a diverse student body that brings debate, convictions and the human heart into the conversation. Certainly, one must admit that more than ever the very survival of our world requires graduates of Jesuit universities who have acquired this kind of intellectual sophistication and compassionate respect.
A mouse, its naked body pink and wrinkled, peers out of a petri dish and sniffs the air, oblivious to the large elliptical protrusion stretching taut the skin of its back. And oblivious, too, to the impact it would have on the lives of the scientists who would become known, for better or worse, as “the guys who did the mouse with a human ear.”
That image — which prompted double-takes worldwide as newspaper readers awoke to it one day in October 1995 — was the general public’s introduction to the nascent field of tissue engineering, a science begun in the 1970s with laboratory-grown human skin, but developed exponentially in the past 15 years, largely due to the work of four physician-brothers and Creighton alumni. They are Joseph (Jay) Vacanti, BS’70, John Homans Professor of Surgery at Harvard Medical School at the Massachusetts General Hospital; Charles (Chuck) Vacanti, BS’72, professor and chair of anesthesia at UMass Medical Center, Worcester; Martin (Marty) Vacanti, BS’74, MD’82, associate professor and director of hospital laboratories at UMass/Memorial Owned Affiliate Hospitals; and Francis (Frank) Vacanti, BS’74, administrator of Massachusetts General Hospital (MGH) operating rooms and an associate anesthetist at MGH.

“It was very significant,” said Chuck, the brother who showed the mouse to the BBC film crew that got the media ball rolling. “That picture was really the, um ...” Marty interjected. The two, who are the closest in age of the four men and were “always in trouble together, since we could walk,” frequently finish each other’s sentences and speak the same words simultaneously.

“Well,” Chuck said, “I think it started a chain reaction of events that has snowballed beyond anything I had ever even imagined.”

The image’s release increased attention to the field, attracting the research funding, enthusiastic young scientists and enhanced international cooperation that have brought tissue engineering tantalizingly close to everyday clinical application. It spurred the development of the Tissue Engineering Society, with hundreds of members in 17 countries, and helped to catapult the science from obscurity to what Time magazine’s “Visions of the 21st Century” issue called the number one “job of the future” in May 2000. It hastened a human trial that resulted in the successful implantation of a tissue-engineered thumb onto the stump of a machinist who had severed his finger at work. And it resulted in the transplantation of Marty Vacanti, the last of the brothers to leave Omaha, to the East Coast to join in the family collaboration as a leader of the team at Chuck’s lab.

The celebrity came overnight — but the success, of course, did not.

***

According to his younger siblings, Jay
Vacanti is accustomed to getting what he wants. “Jay was the top of his class in grade school, high school, college and medical school,” said Marty. “He was also the most outgoing, most well-liked, best speaker, you know, all of that.” As a young pediatric surgeon at Mass General in the late 1970s, Jay came across something he couldn’t obtain — or at least not often enough to save the lives of all of his young patients: transplant organs. Unlike those who had gone before him, however, Jay saw this not as a defeat, but as a challenge. If he couldn’t get the organs, he thought, he would simply make them; or, more accurately, he would provide the conditions that would allow organs to make themselves.

“I said, ‘Let’s take cells from a tissue, dissociate it down, put them in culture, and reconfigure them, and they’ll help rebuild the tissue,’” Jay recalled.

He knew the procedure was possible from a cell-biology standpoint. Given the proper chemical signals, along with a healthy dose of oxygen, nutrients and some incubation time in a bioreactor, just a few cells will divide until they become chunks of tissue. Unfortunately, chunks of tissue alone are of little use.

What was needed was a structure that would allow these bits of tissue to become a working organ. Creating these structures, however, turned out to be a difficult task. For fabrication expertise, Jay turned to MIT chemical engineer Robert Langer, with whom he had worked in the Harvard Medical School lab of pioneering cancer researcher Judah Folkman. They decided to tackle the liver first, both because of the complexity of the organ and because, Jay said, “there is no surgical procedure in care that’s bigger or harder than liver transplantation in children.”

For months, he and Langer smeared living cells onto various kinds of plastic polymers, scaffolding onto which the cells could build a three-dimensional organ. But there was a problem. The cells would divide on the outside of the scaffolding, but not on the inside — where the thickness of the organ limited the cells’ access to needed oxygen and nutrition.

Then, during a 1986 family vacation to Cape Cod, Jay had a eureka moment. The branching structure of seaweed was similar to that of the liver’s blood vessels; he and Langer needed to mimic that structure inside permeable, water-soluble molds that would harmlessly dissolve in the body. “The solution was enough cells of the correct type,” Jay said, “and a temporary scaffold that was 99 percent porous, so that exchange could occur across the necessary thickness. When you implanted that into an animal, it would signal blood vessels to grow into it. The polymer disappeared and you had a permanent tissue with its own blood supply.”

Today, “the whole world uses that configuration successfully,” said Jay, who is working to improve his scaffolding systems using state-of-the-art computer technology. At his last count, 23 kinds of tissue were in various stages of development.

By 1987 Jay had invited Chuck, who was working as an anesthesiologist at Mass General, to his lab to design experiments using lung tissue. “I don’t have any interest in lungs,” was Chuck’s reply. “Can I work on bones?” Jay quickly agreed.

“We used degradable suture material,” Chuck said, “knotted and frayed at one end so it looked like a feather duster. I put some cells on it and implanted these things onto the backs of animals to give them a blood supply, and they turned into cartilage. It was my first experiment, and I didn’t think anything of it, but Jay and Bob Langer were amazed. It was the first time a specific, free-standing tissue had ever been generated.”

Chuck began sending Marty, then doing advanced training in pathology at Creighton’s Saint Joseph Hospital, tissue specimens to evaluate their histology. “I was just astounded at how close they were to the real thing,” Marty said. But when Chuck and his team drafted a paper and submitted it to a major peer-reviewed journal, he said, “they wrote back and said, ‘Well, this is nice. But we see no practical use for it.’”

Sean McCormack saw a use for it. Born without bone or cartilage protecting his heart, the Norwood, Mass., 12-year-old was told by doctors he would have to wait until he stopped growing to have an artificial plate implanted; meantime, any unlucky bump in the chest could kill him. But in 1994, the Food and Drug Administration allowed a procedure so innovative there were no regulations governing it. Working with Jay and Chuck, McCormack’s doctors harvested cells from the youngster’s malformed sternum, brushed them onto a scaffold awash in growth factors, and let them do their thing in a bioreactor for a few weeks. The resulting implant — which McCormack’s body easily accepted,
since it was made from his own cells — grew along with him. Today, McCormack is a champion BMX racer whose chest looks perfectly normal and is as strong as any other young man’s.

Further indication of the new technology’s promise came with the human ear — the structure reconstructive surgeons consider their biggest headache — allowed to grow on the back of a mouse. And in 1998, Chuck seeded a phalanx-shaped piece of surgical coral with cells from Raul Murcia, who had crushed his thumb in a cargo elevator. The initial operation was a success, and Murcia again has a complete thumb.

When Chuck opened his new lab, at UMass Worcester, he asked Marty to come try his hand at tissue-engineering a section of spinal cord. “My initial response,” said Marty, “was, ‘Well, you’re absolutely crazy.’ Everybody knows central nervous system tissue doesn’t regenerate.”

But Chuck presented his hypothesis from a logical standpoint: When you cut your finger, the skin repairs itself; something must be driving that and similar healing processes throughout the body. There have even been reports of limited spontaneous healing in brain and spinal cord injuries. Marty became convinced the concept was sound — and, like his older brothers, he has always been inclined to disregard conventional wisdom. He packed his bags.

“Everyone said it was impossible,” he said. “That meant absolutely nothing to me. I just didn’t care.”

They thought the key to spinal cord repair lay in a newly described cell type: adult stem cells. These cells, they concluded, might have some of the advantages of fetal stem cells — such as a greater ability to survive an oxygen-depleted environment — without the ethical and political drawbacks.

“Around this time,” said Chuck, “adult stem cells seemed to be mysteriously popping up in cell culture, but no one could identify where they were coming from. And we decided they weren’t manna from heaven; they had to be coming from somewhere.”

Marty set out to find the cells’ precursors, examining slide after slide for more than a year. Finally, one day he noticed a few dots of an almost infinitesimal size and quantity — a spherical shape about a tenth the diameter of a normal cell.

“These had been seen for years,” said Chuck, “but they were so small that people had always been taught they were cell debris. Marty looked at them and said these are too round, too uniform in size, to be debris. He made the intellectual leap.”

Marty placed some of the “junk” — later dubbed “sporelike cells” — into a bioreactor, and a few days later they had multiplied. After awhile, he observed these cells growing larger as well, appearing to go through the stages of development of the specific organ type from which they were derived. Marty became convinced beyond doubt that these were essentially baby adult stem cells — not quite differentiated, but “committed” to becoming a certain kind of tissue.

“We believe,” said Marty, emphasizing that not everyone agrees with the hypothesis but clearly as excited as a kid on Christmas morning, “that in every tissue in the body, Mother Nature has provided a repair or recycling cell. And this repair cell lies dormant in the tissue until you have an injury. We’ve tested them, and these cells can survive the kinds of hostile chemical environments that result from injury, such as acidosis, as well as freezing, overheating, oxygen-depletion, et cetera.”

To see how his sporelike cells would perform in a practical situation, Marty inserted seeded polymer scaffolds into three- to four-millimeter spaces cut into the spinal cords of nine adult female rats. The results could conservatively be called astonishing. The cells differentiated into mature neurons and other cell types, formed some of the fatty protective layer called myelin and exhibited gross synaptic activity. After three months, Marty said, the animals actually recovered the use of both legs in terms of movement and even some ability to use them to help ambulate.”

Or, put plainly, paraplegic rats had begun to walk again.

Frank, the youngest of the doctors Vacanti — they have three sisters and a fifth brother who lives in Omaha — and the last to become interested in tissue engineering, is also looking into cord repair, but from a slightly different perspective. His current research, which he is pursuing in Jay’s lab at Mass General, focuses, like Jay’s, on optimizing the environment to help cells find the straightest path to their proper connections. His theory is that parallel-track tunnels bored into the spinal cord scaffolding will give the cells a higher probability of lining up in a functional succession.”

His research may not be as far along as that of his brothers, but his dreams for the future of medicine — in this family of people who dream big — may stretch even further.

“I think someday,” he said, “you’re going to have people coming in to have their own body parts grow back. And I think tissue engineering is part of the learning curve to get there.”

— Frank Vacanti

“I think someday you’re going to have people coming in to have their own body parts grow back. And I think tissue engineering is part of the learning curve to get there.”

— Frank Vacanti
a few eyebrows. “Of course, I’m only speculating,” he quickly added. “You don’t like to speculate about science. You like to say this is the data, these are some of the conclusions you can draw from the data. To say anything more looks bad.”

But wait: The most surprising thing about Frank’s theory is that once he begins to explain it, it doesn’t sound so wacky after all.

“My thought process is that we can mimic nature,” he said. “In the salamander, there’s a canal that runs the length of the spinal cord, right in the center. When you take out a slice of that canal, the cells in the center multiply and move into the gap. Eventually they redifferentiate and it becomes a functional spinal cord that looks perfectly normal. Humans have essentially the same anatomy — but when we get injured, our cells form scar tissue. What I want to find out is why ours forms scar, when the salamander’s grows back.”

In experiments with spine-injured animals, Frank has gotten some movement, he said, “but not enough to make you want to rush out and have the operation if you’re a patient with spinal injury.” His next step will be to try to identify and reproduce the signals and environment that allow regeneration in the salamander, “so that we get not only tissue, but tissue that interfaces properly at either end and becomes functional.”

---

**Jesuits Encouraged Independent Thinking**

In the early 1980s, when Jay Vacanti told his surgical chiefs at Harvard how he proposed to save some of the thousands of people who die every year while awaiting a transplant — by making organs out of lab-grown tissue — the concept was, he said, “ten standard deviations beyond anything that anybody would suggest. It was completely way off anybody’s radar screen.” But rather than try to stop him, his bosses were supportive. “They said, ‘Do what you think is right.’ So I did."

It’s a response the Vacanti brothers’ off-the-wall ideas have engendered throughout their lives. “When I was a freshman at Creighton Prep,” said Chuck, “we were all lined up at our desks to do our first chemistry experiment. And halfway through I told the teacher I wasn’t going to complete it because it couldn’t be done, the experiment was flawed. He said, ‘What do you mean? I’ve been doing this experiment for 20 years.’ I said, ‘It doesn’t matter. The way you’ve described it, it’s impossible. It’s pointless for me to do it.’” The teacher asked to see Chuck after class, where he sat and listened as his student explained the problem. “When I finished he said, ‘You’re absolutely right.’ And he changed his experiment. He didn’t punish me, he didn’t say I was an idiot. We were taught to think independently.”

The brothers come from a long line of independent thinkers. Their maternal grandfather left Sicily as a young man and took a Union Pacific train across the United States. When asked why he chose to disembark in Omaha, he replied, “Because no one else would.” Their father, Charles Vacanti, BS’47, DDS’52, who died in 1994, held the first chair of endodontics at Creighton as well as several dental patents. According to Marty, “His example made us want to do, I think, something that no one else had done.” And all four mention their mother, who put herself through Creighton’s premedicine studies working in a bomber plant during World War II, as an enormously positive influence.

“I always told them,” said Joanne Vacanti, BS’57, who had eight children in 13 years, “if you want to do something different, you don’t have to go by what anybody else says. Try it yourself. You don’t have to accept what other people say.”

Their genetic predisposition to nonconformism was nurtured outside the home as well. “It sounds corny,” said Chuck, “but part of it is the Jesuit training.” All four went to Creighton Prep and received their undergraduate degrees at Creighton University, where Marty also completed his M.D.

“Educationally,” Jay agreed, “the most important global influence on my career was my Jesuit education. The Jesuit habit of mind is expansive, trying to really get at the nature of things philosophically, reason things out, understand logic.” Jay also credits Harvard, where his mentors encouraged him to “continually improve while pushing the envelope.”

But perhaps the biggest influence the Vacanti boys had was one another. “If you think about it,” said Frank, who got his M.D. at 23, “how many other families are there where four siblings went to medical school? It leads to a very dynamic interaction.” Personality-wise, he said, “We all have bits of each other and we’re all different. Jay’s very outgoing in a socially proper way. Chuck’s more of a person who can go into a room of total strangers and in five minutes everybody’s laughing. I’m the kind of person who goes into a room with total strangers and I go off in a corner because I don’t want people

---

Creighton dental professor Charles Vacanti, BS’47, DDS’52, who died in 1994, is the center of his children’s attention in this 1956 photo. From left are Mary, Jay, Chuck, Marty, Frank and Joni. Sister Cathy would be born later that year.
“Functional” being the key word. It turns out that tissue engineering, begun as a way to solve the organ shortage, has several important advantages over transplantation beyond its initial mandate. Perhaps most important, since the cells are autologous — taken from the patient himself — there are no rejection-related complications or lifelong immunosuppressants. The degradable scaffolding materials have been used for decades with few adverse effects beyond the very rare polymer allergy, detectable in advance of the procedure. There is no possibility of the transmission of infectious diseases such as HIV. And, even given ideal conditions, a transplanted kidney might live only 15 to 20 years — if the patient happens to reside in a country that offers transplantation; in Japan and many other nations, there are enormous cultural barriers to such procedures.

Cultural barriers — also known as ethical concerns — are one of the main reasons Jay chose to explore tissue engineering in the first place. He cites the story of a U.S. woman who announced her intention to conceive for the sole purpose of aborting the fetus and harvesting its stem cells for use in treating her father, who had Parkinson’s disease. “When well-intentioned people are willing to do something like that,” Jay said, “you know the slippery slope is real.”

But even beyond the moral and religious objections, there may be valid scientific reasons for tissue engineering to ultimately prevail over the currently much-hyped fetal stem cell therapy. A case in point: the highly publicized recent setback in which fetal stem cells injected into the brains of Parkinson’s patients not only didn’t help, but actually made some patients’ symptoms worse. There are a couple of possible reasons for this.

First, fetal stem cells are made to differentiate using external stimuli — chemical signals that force them to grow in the desired direction. But generally when you remove those stimuli, said Chuck, “they lose the signal. Quite often they break down and revert to what they were, or they simply die.” Second, it may be that fetal cells are simply rejected in the long run. “Eventually the body figures out that these cells are foreign,” said Marty. “The rejection is just slower than it is with other tissues, which allows for some initial improvement.”

Another rarely mentioned problem with fetal cells, said Marty, is that “if they do generate a tissue, more often than not, they’re also generating multiple other tissues; they become a hodgepodge of various tissue types. There is the potential to get fully differentiated, functional tissue, but it’s very difficult.”

The main objection thus far to tissue engineering has been that adult stem cells are hard to obtain. But that doesn’t seem to be slowing down research in nearly every major teaching institution in the world. There appears, at this relatively early stage, to be virtually no application for which tissue engineering could not work.

Lab-grown cartilage is already being used to help children born with a congenital urinary tract abnormality. At Mass General, research fellows have successfully replicated sections of colon, with obvious implications for the tens of thousands of people diagnosed yearly with inflammatory bowel disease and colon cancer. Chuck and Marty’s team has implanted an entirely tissue-engineered trachea into a sheep. Heart valves, partial livers and complete bladders have flourished; pancreatic progress is coming close to a cure for Type I diabetes, and Jay has gotten a tissue-engineered sheep’s heart to actually beat in the lab. Even the holy grail of modern medicine conjures an imaginable scenario: “If you look at cancer as improperly differentiated cells,” said Frank, “maybe the solution isn’t to poison them and kill them, but to change them — redifferentiate them into their proper state.”

In public, the Vacanti brothers are careful to qualify their words and remain scientifically aloof when discussing the latest finds and possibilities. “I’m not happy to say it’s had an impact until I actually see it translated into patient care,” Jay said soberly. In private, it’s another story: “How cool is this?” he asked, jumping out of his chair to find a paper describing tissue-engineered teeth. “It’s fabulous!”

About the author: Gehrmann is a free-lance writer in Boston.
Bill, BA’82, and Mary (Fitzpatrick) Graft, BSN’84, of Barrington, Ill., are the new National Chaircouple for the Edward and Mary Lucretia Creighton Society. The Grafts will lead the Society for a three-year term. Gifts to the Society raised over $1.4 million in 2000-01 for the University’s Annual Fund.

Established in 1988, the Creighton Society recognizes individuals who give $1,000 or more to the fund. Donors may designate the gifts for use by the general University or for use by an individual college or school. This premier donor group includes 823 members for 2000-01. Gifts ensure that future generations of Creighton students will have access to the University’s quality, affordable education.

“Since the inception of the Creighton Society, we have been blessed with talented, dedicated and inspiring volunteer leaders,” said Mike Leighton, vice president for University Relations. “I’m very pleased and excited that Bill and Mary have agreed to chair the Creighton Society nationally. They will build on the successes generated by their recent predecessors, Vince and Carolyn Mancuso and Jack and Kathi Balousek.”

Bill is a Chicago corporate and commercial real estate attorney who founded the firm of Graft, Jordan & Curtis. Bill said Creighton’s values-centered education merits a high rate of participation in the Society.

“It’s time for our generation, the more recent grads, to consider participating in annual giving at a higher level,” Bill said. “Creighton is a lot stronger when all of us contribute. We can strengthen Creighton for the next generation in many ways. The Jesuits have given a wonderful gift to us through Creighton University. It’s vital that we give back.”

In a changing world, Bill said, Creighton has a sense of a clear moral vision. “The University is not afraid to talk about and encourage values. I love that about Creighton,” he said. “Students today need an education grounded in values. Each gift, regardless of size, helps to sustain Creighton’s already high quality and affordability for this next generation.”

“Annual fund gifts are the base of the giving pyramid,” Mary said. “They are the sustaining roots keeping the whole Creighton family successful.” In addition to co-chairing the Creighton Society, Mary is a member of the Creighton Chicago Alumni Club Advisory Board.

The Grafts, both of whom have family members who are active in Creighton University philanthropy, have four young children who hope to attend Creighton someday.

Reunion Class Gifts Continue to Highlight Annual Reunion Dinner

More than 300 Creighton School of Medicine alumni and friends gathered in September to celebrate the annual reunion weekend. For the third year, School of Medicine classes commemorating their 10th, 25th and 40th reunion classes announced reunion gift projects.

10th reunion class achieves new gift level

With enthusiastic leadership, the five co-chairs of the Creighton School of Medicine Class of 1991 set out to achieve a new standard of giving for future 10th-year reunion classes. Tuition this academic year is more than $30,000. Thus, the Class of 1991 sought to raise more than $30,000 to fully fund a year of tuition for a promising medical student who will receive a Dean’s Reunion Scholarship. On behalf of their classmates, the co-chairs presented M. Roy Wilson, M.D., dean of the School of Medicine and vice president for Health Sciences, with a check for more than $38,000 representing gifts from 52 class members, marking a new record and greatly exceeding their goal. Project co-chairs were Andrew Bauer, BS’86, MD’91, and Nellie Hautzinger Bauer, MD’91, both of Shorewood, Minn.; Bruce Houghton, BS’87, MD’91, of Omaha; M. Paul Palalay, BS’86, MD’91, of Honolulu; and Atul Ramachandran, BS’86, MD’91, of Omaha.

Class of 1976 pays tribute to ‘an uncommon environment’

On behalf of his classmates, class reunion gift co-chair Ronald Arakelian, MD’76, of Turlock, Calif., announced that the Class of 1976 raised more than $46,700 from 36 classmates to help fund a Dean’s Reunion Scholarship. Other class co-chairs of the project were E. Ann Myers, MD’76,
Shanahan Named Assistant V.P. for University Relations

The Rev. Thomas J. Shanahan, S.J., whose service to Creighton University spans nearly three decades, is beginning his latest appointment as an assistant vice president for University Relations.

He joined the University in 1973, serving in a variety of faculty and administrative positions. Earlier this year, he stepped down as rector of the Jesuit Community at Creighton, a post he had held since 1995.

A native of Milwaukee and graduate of New York’s Fordham University, Fr. Shanahan coached track and taught English at Omaha’s Creighton Prep High School from 1961 to 1964.

He is a past member of Creighton’s Board of Directors and is the moderator for Creighton’s Alumni Chapter of Alpha Sigma Nu, the Jesuit Honor Society. He holds an appointment as an associate professor of theology and is assistant director for Creighton’s Master’s Program in Christian Spirituality.

His brother, the late Rev. Robert Shanahan, S.J., who died in November 1998, also was an integral member of the Creighton community for nearly 40 years. He was a longtime member of the history department faculty and, at the time of his death, was chaplain at Saint Joseph Hospital.

“Fr. Shanahan brings to our division a wonderful knowledge of the University combined with relationships with our alumni that he built over the years as a faculty member,” said Mike Leighton, vice president for University Relations. “He will especially strengthen these relationships by providing spiritual opportunities for our alumni.”

Fr. Shanahan said he is excited about his new position’s challenges.

“I think getting to know students, alumni and their families is one of the things we do best,” he said. “I see my work as an outreach to the University community from the Jesuit community.”

Shanahan will represent Creighton at designated events such as weddings and funerals for alumni and friends of the University. He will provide spiritual direction for alumni as requested, and he will provide spiritual development opportunities such as retreats for alumni. In addition, he will assist with fund-raising and alumni relations efforts.

The University Relations Division includes Creighton’s offices of Development, Alumni Relations and Public Relations and Information.

Leighton said that Fr. Shanahan helps fill the void left in the division when the Rev. William F. Kelley, S.J., died in May 2000.

“I’m not taking Fr. Kelley’s place,” Fr. Shanahan said. “It would take about four people to do that, but I am looking forward to contributing.”

of San Francisco, and Sebastian Troia, MD’76, of Omaha.

In a message to their classmates, the co-chairs expressed their gratitude by stating, “In another 25 years, we will all need generous, highly skilled physicians and by returning to Creighton’s founders and supporters, we help develop young doctors for our future. The education we received at Creighton prepared us for our careers as physicians, a career that opened the doors to knowing people and serving them in a wonderful manner. We have subsequently learned that our Creighton education and our collegiality during those years was an uncommon environment.”

The School of Medicine Class of 1991 raised $38,000 for a Dean’s Reunion Scholarship that will fund a year of tuition for a medical student. Pictured above are members of the class.

40th reunion class strengthens Creighton’s lasting legacy

Ever since the will of Mary Lucretia Creighton gave life to the dream of her husband, Edward, to establish a Catholic college in Omaha in 1878, charitable bequests have been a wonderful way for alumni and friends to support the Creighton University School of Medicine and its mission. Thus, the class of 1961, in honor of its 40th class reunion, followed the Creighton family’s example. The class reunion gift project was chaired by Randolph Ferlic, BS’58, MD’61, of Omaha; John Fitzpatrick, MD’61, of Omaha; Albert Frietzsche, MD’61, of San Francisco; and Kennard Kapstafer, MD’61, of Spokane, Wash. The co-chairs “planted the seeds” with their classmates so they would consider including the school in their estate plans.

Drs. Fitzpatrick and Ferlic announced that more than $500,000 in deferred commitments from their classmates had been raised. This unique class gift is a “lasting legacy” whereby all estate designations, when realized, will go into endowed accounts that exist in perpetuity and continue to assist the school and future generations of students.
Creighton’s new science building is on schedule to open in 2003. The new and expanded science complex includes construction of nearly 80,000 square feet in new space, complete renovation of the Rigge Science, Criss II and Criss III buildings and connections between the new and existing buildings.

Total project cost is estimated at $48 million. The facilities will serve more than 50 percent of Creighton’s total student population of 6,200 students through state-of-the-art classrooms, laboratories and technology. Lab space in the Criss buildings will increase 30 percent following the renovations.

U.S. Sen. Ben Nelson (D-Neb.) recently announced a $500,000 U.S. Department of Energy appropriation toward the project.

At the directive of University President the Rev. John Schlegel, S.J., faculty members who will be using the facilities are working closely with Omaha’s HDR architecture firm on the designs for the buildings’ new and renovated labs.

**Creighton’s request to you: naming opportunities**

Opportunities to develop new, top-notch science facilities are rare for a university. Alumni, friends and corporate partners are invited to help us capitalize on this opportunity. The following represents a sample of classrooms, labs and student amenities that may bear the names of donors to recognize their leadership gifts:

- Atmospheric and Environmental Sciences Advanced Remote Sensing Lab
- Behavior Entomology Lab
- Neurobiology/Physiology Lab
- Psychology/Animal Lab
- Microbiology/Immunology Lab
- Biodiversity Collections Lab
- Nuclear Physics Lab
- Atomic Physics Lab
- Particle Physics Lab
- Chemistry Wet Analytical Lab
- Clinical Education Center for Pharmacy Students
- Pharmacology Lab
- Core Genomics Lab
- Core Morphology Lab
- Core Analytical Lab
- Preventive Medicine Molecular Genetics Cancer Lab
- Distance Education Classrooms
- Interactive Computer Classrooms
- Multimedia Lecture Halls
- Five-story Central Atrium

Please contact Creighton’s Office of Development at (800) 334-8794 for more information on giving opportunities.

“As a former Creighton student and a current faculty member of the Department of Chemistry, I look forward to the opening of the new science complex on Creighton’s campus. Housing all of Creighton’s sciences together, undergraduate and graduate, will allow vital interdisciplinary teaching, learning and scholarship for both faculty and students. It will energize our current faculty and students as it attracts greater numbers of bright young minds to Creighton University.”

— Dr. Strauss-Soukup
School of Dentistry Endowment Grows with Latest Gift

A legacy gift from the estate of Dr. Leo (DDS’30) and Mrs. Regina Ripp is helping the School of Dentistry endowment grow.

For many years, Dr. Ripp was a part-time instructor in crown and bridge at Creighton’s School of Dentistry. He also practiced on the seventh floor of Omaha’s Medical Arts Building, retiring in 1975.

Dr. Ripp was known for excellence in his profession. “I have a gold crown in my mouth that he made for me when I was in dental school. It’s still there,” said longtime friend John F. Theisen, DDS’53. “He was an outstanding dentist.”

Friends and family members describe him as a self-made man who was loyal to Creighton. He greatly admired the Rev. Carl Reiners, S.J., Creighton’s president from 1950 to 1962. The Ripps displayed a photo of the priest in their home.

“Leo Ripp worked his way through dental school. Perhaps, he was thinking of that when he provided for Creighton in his will,” said his nephew, Robert Townley, MD’55. “He would have wanted to help students who needed tuition assistance.”

Gifts to the School of Dentistry endowment are important factors in keeping the cost of a Creighton education reasonable. “Our endowment funds make up a significant part of our budget,” said Wayne W. Barkmeier, DDS, School of Dentistry dean. “Much of the credit for keeping tuition costs down goes to donors, such as the Ripps. The endowment they enhanced will be there for the future. It’s a wonderful gift to our students.”

Dr. Ripp was a member of the American Dental Association, the Nebraska State Dental Society, the Omaha District Dental Society and the Pierre Fuchard Academy. As a noted marksman, his hobbies included hunting and fishing. Dr. Ripp also enjoyed playing golf and card games at his local club.

The Ripps most recently lived in Sun City, Ariz. Dr. Ripp died in December 1997. Mrs. Ripp, who passed away in August 2000, was intent on following her husband’s desire to assist Creighton. A Minnesota native, she enjoyed baseball, especially the arrival of the teams for spring training in the desert.

New Tax Laws May Make Estate Plan Reviews Necessary

By Steve Scholer, JD’79
Director of Estate & Trust Services

If ever there was a time to review your existing estate plan or to begin the estate planning process, 2002 may be the year. Many of the sweeping changes made to the federal estate and gift tax laws became effective on Jan. 1, 2002. Numerous tax commentators believe the increased estate and gift tax exemptions dictate the need for a thorough review of your estate plan or the initiation of a planning process to take advantage of the new laws.

Estates are often distributed with reference to “the amount exempt from federal estate tax.” The estate plan may provide, “... an amount equal to the amount exempt from federal estate tax to X and Y, with the remainder to my spouse.” For some estates, the increased exemption will result in a much larger gift to X and Y and may lead to unintentionally disinherit the surviving spouse or whomever is listed as the residual beneficiary of the estate.

How do the increased exemptions comport with your intentions?

When you visit with your attorneys, don’t be surprised when they stress the importance of saving records about your “cost basis” in property and investments. One of the downsides of the new laws is the ultimate elimination of a “stepped-up basis” in your property at the time of your death. In the future, appreciated property that might escape federal estate taxes will now be subject to income taxes if sold by your estate or heirs.

The new laws also make it easier for you to make gifts to your children and grandchildren that double as tax-free investments for their future educational expenses. Changes in the Education IRA, now called the Coverdell Education Savings Accounts, allow for annual contributions of up to $2,000 per year versus $500 in 2001. Starting in 2002, you can use the principal and tax-free earnings to pay for “qualified expenses” at not only college but also elementary and secondary schools.

In 2002, the cost of higher education is further reduced. The new laws now allow a $3,000 deduction for qualified tuition and related expenses, regardless of whether you itemize or not.

The reduction in the estate tax rates and increased exemption amounts also necessitate the need to review carefully your existing life insurance policies that may have been part of your coordinated estate plan. If the life insurance is no longer needed to cover projected taxes, consider gifting the policy to the University rather than letting it lapse. You may be entitled to an immediate income tax deduction for your gift.

One final thought: Experts are quick to point out the increased amount that you can now pass tax-free to your heirs may be a plus for charities. Since your estate will now be subject to less tax, the portion of it earmarked for philanthropy can increase without reducing the percentage given to family or friends.

If you would like additional information about understanding the 2001 Tax Act, remembering Creighton in your estate, funding an endowment or creating a trust that benefits both you and the University, please call (800) 334-8794 or visit www.creighton.edu/development/.
Looking down from a 50-foot tower, a knot forms in your stomach. You grab hold of the thick rope that dangles to the ground below. You take a deep breath and slowly make your way to the edge of the platform. One more quick look. (Yes, it is a long way down.) Another deep breath. And you push away from the wall.

Rappelling to firm ground, you realize, is as much a mental test as it is a physical one. And it is one of many challenges Reserve Officer Training Corps (ROTC) cadets face on their way to becoming commissioned officers.

As a professor of military science at Creighton University, it is my responsibility to find and develop the next generation of leadership for the United States Army. The task of developing military leaders, like the rappelling exercise, involves challenging cadets both mentally and physically.

Creighton’s military science program — a mandatory part of the curriculum until 1969 — has a tradition of meeting this challenge. Since the ROTC program was established at the University in 1919, some 2,246 cadets have been commissioned as Army lieutenants through Creighton.

Today, Creighton’s ROTC program enrolls some 70 cadets annually. These cadets commit to eight years of Army service after graduation. While at Creighton, our cadets on scholarships must maintain a 2.5 GPA; our average GPA is 3.5.

We expect a lot from these young men and women, who are majoring in everything from finance to nursing to journalism, as they will be tomorrow’s leaders — and not just on the battlefield.

Creighton ROTC graduates have gone on to be business leaders (Bruce Rohde, BSBA’71, JD’73, president and CEO of ConAgra), acclaimed authors (Ron Hansen, BA’70), and even a college president (the Rev. Morris Van Ackeren, BA’32, former president of Rockhurst College).

Creighton ROTC graduates also serve their communities. Longtime public relations executive Bill Ramsey, BS’55, tells the story of the late Jim Mulqueen, a 1938 Creighton and ROTC graduate. Mulqueen, a World War II veteran, served as mayor of Council Bluffs, Iowa, during the devastating floods that threatened that city in 1952. Mulqueen’s military leadership experience, Ramsey writes, helped him marshal thousands of workers and volunteers to save the city from the Missouri River. Ramsey tells Mulqueen’s story in a chapter of his yet-to-be-released book “Silent Hills Speak: A History of Council Bluffs, Iowa,” co-authored with Betty Shrier.

Our focus on leadership requires our cadets to exercise discipline, courage and teamwork. The best leaders are the ones who lead by example. That’s why we ask our cadets not just to pass physical testing, but to excel at it. While the Army requires a fitness-test score of 180 out of 300, we push our cadets to score 250. (For a 22-year-old male, that means doing — in two-minute time frames — 54 push-ups and 74 sit-ups, and running two miles in about 14 minutes.)

Our cadets also are required to complete the month-long National Advanced Leadership Camp at Fort Lewis, Wash., during the summer of their junior year. Cadets from the 270 ROTC programs across the country attend this camp and are scored on their performances. These scores, along with GPAs and PT scores, determine the branch of the Army in which the cadets will serve after commissioning. Most Creighton cadets receive their first or second choice.

While the events of Sept. 11 have shaken us all, our cadets remain dedicated — perhaps more than ever — to serving our country. At the beginning of the year, I ask the new cadets why they enrolled in ROTC. While scholarship opportunities are important, nearly all cite a strong desire to serve their country.

Military officership is not for everyone. It requires honor, courage and commitment, and an ability to excel in difficult situations. Like peering down from a 50-foot tower, the call to leadership can seem daunting. Creighton’s ROTC program gives cadets the confidence and courage to grab the rope and begin the journey to becoming future leaders.

About the author: Lt. Col. Werthman was an attack helicopter platoon leader with the 160th Special Operations Aviation Regiment in Desert Storm and a Special Mission Unit Liaison Officer in Somalia. In addition to a Bronze Star for actions in Somalia, Werthman has received four Meritorious Service Medals, four Army Commendation Medals and the Joint Service Achievement Medal.
Share Your Time, Shape a World

The Spirit at Work: Creighton Alumni National Day of Service
March 23, 2002

Join teams of alumni across the nation as they gather in their cities and neighborhoods to serve others on Saturday, March 23, for The Spirit at Work 2002. Choose a project and demonstrate compassion in action. Hold a hand or pound a hammer. Build community and tear down barriers. Use your life and celebrate friendships. Share your time and shape a world.

To connect with people near you for The Spirit at Work 2002:
(800) CU-ALUMS
www.creighton.edu/alumni/

See page 55 for a list of projects, locations and times.

Theresa Smola, BSN’82, of San Diego worked with the San Diego Alumni Club to repair the Catholic Shelter of St. James in Tijuana, Mexico, during last year’s Creighton Alumni National Day of Service.