Personalized breast cancer treatment now possible

BY GWYN EREICCON

A set of 50 genes can be used to reliably identify the four known types of breast cancer, according to research conducted at the School of Medicine and arts collaborating institutions. Using this 50-gene set, oncologists can potentially predict the most effective therapy for each breast tumor type and thereby personalize breast cancer treatment for all patients.

"Unlike a widely used genomic test that applies only to large node-negative, estrogen-receptor positive breast cancer, this new genomic test is broadly applicable for all women diagnosed with breast cancer," said breast cancer specialist Matthew Ellis, M.D., Ph.D., professor of medicine in the Division of Medical Oncology.

The study was reported Feb. 9 through advance online publication in the Journal of Medical News: A role in shaping women's health research.

Clinical Oncology. Ellis' collaborators include co-authors Charles Perou, Ph.D., associate professor of genetics and pathology at the University of North Carolina at Chapel Hill School of Medicine; Philip S. Bernard, M.D., assistant professor of pathology and medical director of the molecular pathology laboratory at the University of Utah Huntsman Cancer Institute; and Torsten Nielsen, M.D., Ph.D., assistant professor of pathology and laboratory medicine at the University of British Columbia.

Breast cancer results from genetic aberrations in breast tissues, but not all breast cancers have identical genetic alterations. Ellis and his colleagues analyzed the gene activity of more than 1,000 breast tumors to identify and validate the genetic signature of each of the four types of breast cancer.

Although the cancer types are distinguished by thousands of genetic differences, the researchers were able to narrow the list down to a set of 50 of these genes that could uniquely identify each type.

These tumor types have been previously defined and are known as luminal A, luminal B, HER2-enriched and basal-like. The latter three types are generally considered types with a poor prognosis. Another genetic test commonly used in clinical practice, Oncotype DX, does not identify all four tumor types.

"Our test is the first to incorporate a molecular profile for the basal-like type breast cancers," said Ellis, a member of the Siteman Cancer Center. "That's important, because these breast cancers are arguably the most aggressive yet the most sensitive to chemotherapy. By identifying them, we can ensure they are treated adequately."

Breast cancer experts typically also identify a fifth breast cancer type known as normal-like. The 50-gene set also recognizes the normal-like type. But the researchers found that instead of being a fifth type of breast cancer, the normal-like classification is an indicator that a sample contains insufficient tumor cells to make a molecular diagnosis and that a more extensive sample needs to be taken.

In this study, the researchers also compared the activity of the 50-gene set to how well 133 breast cancer patients responded to standard chemotherapy. They found that their genetic test was highly sensitive and very predictive for chemotherapy response. The test was more predictive than typically used clinical molecular markers such as estrogen receptor status, progesterone receptor status or HER2 gene expression status.

They found that luminal A was not sensitive to the chemotherapies, suggesting that patients with this good-prognosis type can forgo chemotherapy in favor of hormones.

Biologist presents 'sacred' nature of sustainability

BY RACHEL SHULMAN

Global warming and environmental sustainability are concerns that fit neatly within the precepts of religious naturalism, according to S. Jay Goodenough, Ph.D., professor of biology in Arts & Sciences.


Religious naturalism neither requires belief in God nor excludes faith. Rather, the movement is based on what Goodenough described as "an exploration of the religious potential of nature." Goodenough spoke on this topic at the annual American Association for the Advancement of Science (AAAS) meeting Feb. 14 in Chicago. His symposium was titled "Toward the Science and Ethics of a Culture of Sustainability: A Sacred Basis." Like all religious traditions, religious naturalism is anchored in a cosmological narrative, a set of stories accounting how the earth and its inhabitants came to be. While conventional religious generally are based on older cosmological narratives such as those found in the Old and New Testaments, religious naturalism is based on a much more recent narrative.

"During the past 100 years or so, we have been provisioned with a new story that tells us about the universe," Goodenough said, referring to groundbreaking advancements in science that help explain the interconnectedness of nature. "It's a pretty big story," Goodenough said. "So, it is going to be something written down on some tablet or a one-size-fits-all kind of thing. It's understanding nature." Goodenough said cosmological narratives serve as a basis for three kinds of activities that are at the core of all religious traditions, including religious naturalism.

Steinberg Hall to be rededicated with celebration

BY CYNTHIA GEORGES

The Steinberg Hall of Art and Archaeology's gift from Elta Eisenstein Steinberg in memory of her husband, Mark C. Steinberg, formally opened its doors May 15, 1960, with a gala reception that included an inspirational visionary. Her death in 1951.

Having undergone a renovation that completes the new facilities unveiled the Sam Fox School of Design & Visual Arts, Steinberg Hall once again will take the spotlight at a rededication celebration Monday, Feb. 23.

The event, sponsored by the Sam Fox School and the Department of Art History & Archaeology in Arts & Sciences, will take place at 4 p.m. in Steinberg Auditorium, which will be renamed for philanthropist and visionary Elta Steinberg, who died in 1974.

World-renowned contemporary artist Fred Tomaselli, whose dazzling paintings intersperse images from medical texts, catalogs, field guides, flora and fauna, will discuss his work as part of the program.

Joining Tomaselli will be WUSTL alumna James Cohen, owner of the James Cohen Gallery in New York and Shanghai. Tomaselli and Cohen will discuss the collaborative relationship between artist and gallery owner.

Mark C. Steinberg's career took him from office boy in the St Louis brokerage firm of Albrecht & Rawlings to founder of Mark C. Steinberg & Co., a brokerage firm he headed until his death in 1951.

The daughter of Aurelia S. Steinberg and David Eisenstein, an owner and president of the Sheep Dry Goods Co. in St. Louis, Elta Steinberg was an inspirational visionary. Her devotion to St. Louis and WUSTL enriched many lives through the educational, recreational and health-care-related projects she so ardently supported.

Through the Mark C. Steinberg Charitable Trust and personal donations, Elta Steinberg funded the Mark C. Steinberg Memorial Skating Rink in Forest Park (1957), the Mark C. Steinberg Professorship in Art History at WUSTL (1965) and the Mark C. Steinberg Science Hall at WUSTL.

In a photo from the 1960-61 academic year, Elta Eisenstein Steinberg (left) and daughter Florence Steinberg Weil attend the opening of an exhibition of works by Alexander Calder in Steinberg Hall.
Olin abroad WUSTL students debate the financial implications of Croatia's and Turkey's application to join the European Union and further enlargement of EU membership in a mock parliament exercise in Brussels. Debate of the issue was witnessed by state officials and experts in 18 European cities to prepare for the exercise. This is the second year students have participated in the EU study tour as part of Coly's International Internship Program. "The tour is designed to teach the students about the EU by giving them the chance to conduct research in most of the EU countries and then utilizing that information to debate in a mock parliament," said Nicholas S. Hugh, European programs director. "The research-driven thinking applied in debate is a great example of Olin's innovative approach to experiential learning and preparing students for the corporate world." The students also visited the European Investment Bank, Luxembourg Parliament and the European Parliament and Commission before flying out across Europe for full-time internships in London, Paris, Madrid, and Koblenz, Germany.

Primates evolved to be social, not aggressive, Sussman tells AAAS

By NEIL SCHONHERR

Primates are social animals, but why did they become social? The answer lies in the unusual causes for the differences in social structure among various primate species... Robert W. Sussman, Ph.D., professor of anthropology in primate species? causes for the differences in social, but, due to competition for food resources, they must be species. Because of these pressures, they are forced to be social, but, due to competition for food resources, they must be social. "Primates are social animals. Their behavior is maintained social," Sussman said. "The evidence, however, does not prove that animals are altruistic. They only help each other if they know they'll be helped in the future. The third is sexual selection. Animals are forced to compete, in order to live in social groups, they must also recombine with each other."

In each of these views, Sussman said, the animal is forced to live socially. "That's a terrible way to think of the world," he said. He proposes an alternative theory. "None of the concepts in the previous example are actually altruism," Sussman said. "There is more altruism in cooperation. Cooperation and altruism are only animals that are aggressive." He said animals and humans, for that matter, are stimulated when we cooperate.

Steinberg Family has made 'lasting contributions'

Memorial Hospital (1967), now a trustee of Washington University since 1967. In recognition of her service, the University awarded her the honorary doctor of humanities in 1967. Sussman has found through his examination of primate species that which is an important aspect of, as a group, social interaction. An example may be the fact that, in some species, it can be as intransient as once every 175 days. "Obviously a major aggressiveness in which the individual is injured or dies in a factor that affects the behavior, but how that affects the evolution of a species is questions addressed in this paper.

Another theory on the evolution of primate social behavior, the ecological constraints model, suggests that as group size increases, so does the competition and fighting within the group. The theory predicts a direct correlation between the number of animals in the group and the energy expended by those animals. Sussman questions how this model can explain cooperative social behavior. "Sociobiologists would explain it in three ways," he said. "First, the kin selection. Animals aren't really altruistic, they're just social, they pass along their genes. The second is reciprocal altruism. Animals only help each other if they know they'll be helped in the future. The third is sexual selection. Because animals are forced to compete, in order to live in social groups, they must also recombine with each other."

In each of these views, Sussman said, the animal is forced to live socially. "That's a terrible way to think of the world," he said. He proposes an alternative theory. "None of the concepts in the previous example are actually altruism," Sussman said. "There is more altruism in cooperation. Cooperation and altruism are only animals that are aggressive." He said animals and humans, for that matter, are stimulated when we cooperate.
Looking to the future of women's health research

BY CAROLINE ARBANAS

What are your priorities for women's health research? The National Institutes of Health (NIH) wants to know.

Washington University will host a new, four-day meeting arranged specifically for NIH to begin to develop research priorities for the next decade. The meeting begins with a public hearing to gather input from external stakeholders, patients, community groups, advocacy groups and other interested parties.

It is the first of several regional conferences to explore new avenues and directions into diseases and issues that affect women.

"This is a wonderful opportunity for researchers, clinicians and the public to make a significant impact on the ongoing study of federally funded women's health research," said Jami L. Stanley, Jr., M.D., vice chancellor for research.

The meeting includes panel discussions and workshops to transliterate unmet medical needs into new research initiatives. Additionally, the conference brings together physicians, scientists and public policy officials who will work in small groups to develop specific recommendations and priorities in new, emerging and neglected areas such as eating disorders; genetics and infectious diseases of the urinary and reproductive tracts; obesity and endocrine disorders; and women's and urological cancers.

"We think the conference will translate into new research initiatives," said Sarah Marcotte, chair of the Department of Urology at the School of Medicine. "It is the first of a series of meetings and we are excited about the possibilities that could be realized as a result of this unique effort."
Speaking frankly about race and identity in America

BY BARBARA REA

The inauguration of the first African-American president was a milestone in race relations; but, to most members of a minority that judges that the United States is now a post-racial society is quite premature. At lunch Wednesday, Feb. 25, in the Danforth University Center (DUC), WUSTL students and faculty will gather for a conversation about race and identity.

The Assembly Series event is free and open to the public and will take place in the DUC's Fun Room (room DUC-124).

Representatives from student groups will join Bob Hanson, associate professor of architecture and artist-in-residence in the Sam Fox School of Design & Visual Arts' College of Architecture, and, in attendance, PLD, assistant professor of Arabic with a joint appointment in the Department of Asian & Near Eastern Languages and Literatures and Languages, and in the Islamic, Jewish, and Near Eastern Studies Programs, both in Arts & Sciences, in a frank discussion designed to move ideas of race and identity forward.

The goal is to have meaningful dialogue that will produce growth and understanding.

Opportunities for audience participation will be welcome as well.

For more information on this Assembly Series program or upcoming events, call 935-6629 or visit assemblies.wustl.edu.

Brown Clouds • Imprinted Polymers • Big Tobacco

“Throughout the 1990s,” said Ellen Seiler, a professor of history at the San Diego State University, “we began to understand the extent of the tobacco industry’s assault on people who smoke.”

Seiler is one of the authors of “The Profit from Poison: How the Tobacco Industry Betrayed the Public Health,” a new book that chronicles the industry’s efforts to manipulate and control public health policies.

“Tobacco is a big business,” she said. “It takes a lot of money and a lot of resources to keep it going.”

Seiler noted that the industry has spent billions of dollars on advertising and lobbying to prevent health laws from being enacted.

“Tobacco companies have been very successful in their efforts to keep us from regulating them,” she said. “But we’re beginning to see some results now.”

Exhibits

“Eo Satire: Shaping the Future.” Through April 37, Mildred Lane Kemper Art Museum.


University Events

Tuesday, Feb. 24

4 p.m. Science and Engineering Series Seminar.


5:30 p.m. Science and Engineering Series Seminar.


7:30 p.m. St. Louis Symphony Orchestra.


Wednesday, Feb. 25

4 p.m. Energy, Environmental and Chemical Engineering Seminar.


7:45 a.m.-6:30 p.m. Surgery CME Conference.


Thursday, Feb. 26

7:30 a.m.-6:30 p.m. Surgery CME Conference.


8 a.m.-5 p.m. Science and Engineering Series Seminar.


5:30 p.m. Science and Engineering Series Seminar.


Friday, Feb. 27

9 a.m.-12 p.m. Science and Engineering Series Seminar.


5 p.m. Science and Engineering Series Seminar.


Saturday, Feb. 28

9 a.m.-5 p.m. Science and Engineering Series Seminar.


Monday, March 2

10 a.m. Electrical & Systems Engineering Seminar.


2 p.m. Energy, Environmental and Chemical Engineering Seminar.


4 p.m. Science and Engineering Series Seminar.


Tuesday, March 3

9 a.m.-12 p.m. Science and Engineering Series Seminar.


5 p.m. Science and Engineering Series Seminar.


Wednesday, March 4

11 a.m. Annenberg Seminar Series.


2 p.m. MUSIKFEST National Conference.


4 p.m. Annenberg Seminar Series.


Tuesday, March 10

9 a.m. Science and Engineering Series Seminar.


5 p.m. Science and Engineering Series Seminar.


6 p.m. Science and Engineering Series Seminar.


Thursday, March 12

9 a.m.-12 p.m. Science and Engineering Series Seminar.


5 p.m. Science and Engineering Series Seminar.

A 949 World's Fair, the Inter-Parliamentary Union, the unification of national parliaments, met at the Hall of International Congresses to observe the world peace and to adopt a resolu-
tion calling for a second Hague Peace Conference. This resolution, adopted in what is now known as Ridgley Hall, ultimately led to the 1910 Hague Conference Respecting the Laws and Customs of War on Land. The conference is one of the most important humanitarian law treaties of the post-World War I era.

The IPU also played an instru-
tmental role in the establishment of the Permanent Court of Arbitra-
tion in The Hague and would later contribute to the establish-
ment of the United Nations. The IPU is a distinguished group of international law experts from around the world who gather at the law school April 12-15 to begin work on a Special-
ized Committee on Crimes Against Humanity as part of the Washington University School of Law's Institute Against Crimes Against Humanity.

The steering committee will gather at Ridgley Hall to commemorate the link to the historic 1904 meeting.

**Bernheimer to speak on Writing Program**

**By Cynthia Georgides**

Action writer Kate Bern-
heimer will read from her new book, The Last Tycoon, at noon in Da-
ucker Hall, Room 201, Hunt
n Lounge for the Writing Program in Arts & Sciences, beginning at 11 a.m. and concluding at 1 p.m. Bernheimer is also the author of three collections of stories: "The Complete Tales of Ketzia Gold" (2006) and the forthcoming "The Complete Tales of Merry Gold," based on themes found in German, Russian and Yiddish fairy tale folklore.

The author is the editor of two essay collections: "Mirror, Mirror: Writers Explore Their Favorite Fairy Tales" (1998) and "Brothers & Sisters: Writers Explore Their Favorite Fairy Tales" (2007). Bernheimer is also a professor and founder of the Journal Fairy Tale Review, the leading literary jour-

**Sports**

**Saturday, Feb. 28**

11 a.m. n éléments for young people series. "Rat under the School House: A Picture Book" by M.J. Hines, 935-6043.

12 p.m. K.C. Miller Series: Jim "Java" Blatt for his favorite characters." Call 321-2359 or 282-2051 to reserve a seat. 100-200 students and children. Edson Theatre.

**Sunday, Feb. 22**

11 a.m. n éléments for young people series. "Rat under the School House: A Picture Book" by M.J. Hines, 935-6043.

12 p.m. K.C. Miller Series: Jim "Java" Blatt for his favorite characters. Call 321-2359 or 282-2051 to reserve a seat. 100-200 students and children. Edson Theatre.

**Saturday, Feb. 28**

11 a.m. n éléments for young people series. "Rat under the School House: A Picture Book" by M.J. Hines, 935-6043.

12 p.m. K.C. Miller Series: Jim "Java" Blatt for his favorite characters. Call 321-2359 or 282-2051 to reserve a seat. 100-200 students and children. Edson Theatre.

**Saturday, Feb. 28**

11 a.m. n éléments for young people series. "Rat under the School House: A Picture Book" by M.J. Hines, 935-6043.

12 p.m. K.C. Miller Series: Jim "Java" Blatt for his favorite characters. Call 321-2359 or 282-2051 to reserve a seat. 100-200 students and children. Edson Theatre.

**Saturday, Feb. 28**

11 a.m. n éléments for young people series. "Rat under the School House: A Picture Book" by M.J. Hines, 935-6043.

12 p.m. K.C. Miller Series: Jim "Java" Blatt for his favorite characters. Call 321-2359 or 282-2051 to reserve a seat. 100-200 students and children. Edson Theatre.

**Saturday, Feb. 28**

11 a.m. n éléments for young people series. "Rat under the School House: A Picture Book" by M.J. Hines, 935-6043.

12 p.m. K.C. Miller Series: Jim "Java" Blatt for his favorite characters. Call 321-2359 or 282-2051 to reserve a seat. 100-200 students and children. Edson Theatre.

**Saturday, Feb. 28**

11 a.m. n éléments for young people series. "Rat under the School House: A Picture Book" by M.J. Hines, 935-6043.

12 p.m. K.C. Miller Series: Jim "Java" Blatt for his favorite characters. Call 321-2359 or 282-2051 to reserve a seat. 100-200 students and children. Edson Theatre.

**Saturday, Feb. 28**

11 a.m. n éléments for young people series. "Rat under the School House: A Picture Book" by M.J. Hines, 935-6043.

12 p.m. K.C. Miller Series: Jim "Java" Blatt for his favorite characters. Call 321-2359 or 282-2051 to reserve a seat. 100-200 students and children. Edson Theatre.

**Saturday, Feb. 28**

11 a.m. n éléments for young people series. "Rat under the School House: A Picture Book" by M.J. Hines, 935-6043.

12 p.m. K.C. Miller Series: Jim "Java" Blatt for his favorite characters. Call 321-2359 or 282-2051 to reserve a seat. 100-200 students and children. Edson Theatre.
More than 20 drugs from Page 1
Treatment

More than 20 drugs treat breast cancer
— From Page 4

Based therapy. They showed that among the prognosis tumor types, basal-like breast cancer was the most responsive to the chemo therapy and luminal B the least. The overall survival of the very poor prognosis group, and none of the current conventional therapies are effective against.

Ellis said, "The ability to identify luminal B tumors accurately makes it possible to develop better therapies for this type.

Ellis said more than 20 drugs are available to treat breast cancer. The researchers are now investigating how each tumor type responds to potential drugs to help determine the best treatments for each.

A 50-gene set can be as preserved in tumor samples collected from patients during standard diagnostic procedures, so the group plans to study the same breast cancer cases going back a decade or more.

Since the patients in these cases have already been treated, the researchers can relatively quickly discover how well the different drugs worked for each breast cancer type.

The genomic test technology is patented and will be distributed through University Genomics, a company co-owned by WUSTL, the University of Utah and the University of North Carolina. This year, University Genomics is working with Associated Regional and University Pathologists Inc., a reference laboratory in Salt Lake City, to provide a location where the 50-gene test will be available.

Ellis said the inventors of the test and hold patents for the technology described.

Sacred

The synergy between science and religion — from Page 1

The first activity is interpretation. Goodenough wrote, "In general, enough liked this process to "what the preacher says on Sunday and the scholar says from ancient texts," she said.

"Scientific inquiry is the primary tool for deriving the narrative," Goodenough wrote. "But the interpretive mode, in this schema, has to do with how the religious perspective is brought into this narrative — historically, atheologically and so forth.

The second activity is spiritual practice. Goodenough claimed the fundamental spiritual meaning defined as one's spiritual response to the experience of the sacred.

This reaction includes "awe, wonder, humility and gratitude ... that a world is in being and praying," she said.

Religious naturalists exhibit such reverence toward the earth, existence and to what Goodenough referred to as "the epic of evolution," a scientific worldview of our place in relation to the universe, earth and life.

The third activity, ethos, was the basis for Goodenough's presentation at the AASAS meeting. In religious ethics, Goodenough wrote, "the understanding of humanity's impact on the Earth is combined with a religious viewpoint of nature given rise to economically, a planetary ethic that gives life to the divine plan. Goodenough wrote.

Scientific evidence suggests that humanity is on a dangerous trajectory. Human activities are very likely the primary driver of the "global warming," expert groups say that accumulation of greenhouse gases will lead to climate change, rising ocean waters and shifting weather patterns.

Degradation of ecosystems is increasing human susceptibility to natural disasters such as hurricanes, tsunamis, pest-outbreaks and disease. The expanding human footprint is contributing to a mass extinction of species at a scale comparable to that of the end of the Cretaceous period, when the dinosaurs disappeared. And the list goes on.

Goodenough said taking a religious perspective of the (and of the science that elucidates the meaning of) life can prompt us to take better care of it.

In more and more mainstream science, you're seeing an increased emphasis on the earth and its ecosystems. We've heard the sounds of the music of the earth is a cosmological perspective of religious naturalism is one based on an understanding of the Earth as a sacred whole, Goodenough wrote.

The second part draws on research, writing and publication of "The Story of Race and Race." The book will contain two separate but interrelated essays. "The Future of Race and Race," Western Science and Society" and "The Future of Race for director of the center, at 935-4008 or cmuthac@wustl.edu.

Miller & Sussman

In these essays, Sussman will trace the historical development of the race — polygenic vs. monogenic model — and its consequences for our understanding of race among the poor-prognosis tumor types. They showed that Luminal B tumors are a very aggressive type of cancer that likes to drain the native search for more in American modernism of the early 20th century. The work studies "home grown" or native modernism in the United States in relation to a longer historical time that reaches from 19th-century literature to ideas about nation, place, space and identity in the arts of the early 20th century.

The second one hand while contributing to development of social Darwinism, he also contributed to the concept of race.

In her new essay, the fellowship program is designed to attract leadership and intellectual environments for undergraduate and graduate students. Taken together, these essays outline a detailed provincial history but also bring to light the ways in which these ideas might prompt us to take better care of the earth.

Health Snapshot winners announced

In January, the Office of Human Subjects Protection at WUSTL announced those who participated in Your Health Snapshot, WUSTL's health risk assessment program, could enter a drawing for cash cards valued at $100, $50 and $10.

The January winners are:

- Anna Blanchard, Department of Biochemistry and Molecular Biology, School of Medicine, WUSTL, $100
- Mirkill Jamerson, Internal Medicine, Cardiovascular Division, School of Medicine, WUSTL, $50
- N. Agnew, University College in Arts & Sciences, WUSTL, $10

Additional drawings will be held for February and March.

For more information, go to cmuthac@wustl.edu or contact 935-4008 or cmuthac@wustl.edu.

New master’s degree in engineering offered

T he Department of Energy, Environmental & Chemical Engineering has launched a new master of engineering program that not only expands on the undergraduate program but also includes development of leadership and entrepreneurial attributes.

The one-year program will train students to work toward professional pursuits in areas such as sustainable trajectories of innovation, technology, environmental engineering, environmental health, environmental education and sustainable international development.

"To get the master of engineering degree in energy, environmental and chemical engineering, students can choose a pathway of specialization in specific topical areas," said Prasim Bhowmik, Ph.D., the Steil & Quinette Jess Prof of Environmental Engineering and Science and chair of the department. "We also will provide train in leadership and teamwork and field/international experiences."

Discussions are also under way with the Olin Business School to explore collaborative opportunities for course work.

Bhowmik said the degree requires 30 credits and be completed by students who enroll part-time, but this will extend their length of study. A summer practicum worth six credits is required.

An external advisory board comprised of technology leaders from outside industry will advise the faculty and the help students explore career opportunities.

Students who have completed a bachelor's degree in engineering (any discipline), physical sciences or life science disciplines are eligible to apply, and applicants can apply online.

The deadline is June 1. For more information about the program or application process contact the program director at 935-6070 or visit www.masterengineering.as.
McFarland, professor emeritus of physical education, 84

Wayne "Paddy" McFarland, Ph.D., professor emeritus of physical education, died Jan. 18, 2009, at Park Village Health Care Center in Dover, Ohio, following a brief illness. He was 84.

McFarland joined Washington University in 1966 and taught as associate professor of education in Arts & Sciences, Arts & Sciences, was named professor of physical education in 1964 and professor of physical education in 1964. From 1964 to 1966, he served as WUSTL's director of athletics. Beginning in 1966, McFarland served as chair of education for one year and then became chair of physical education in 1976. He was named professor emeritus in 1998.

McFarland was born in Newcomerstown, Ohio, in 1924. After graduating from Newcomerstown High School in 1942, McFarland was part of Gen. George Patton's European Theater Army and participated in the Battle of the Bulge. At the time of his death, he was the last surviving member of the ranks of lieutenant. In 1949, McFarland earned a bachelor's degree from the University of Wisleyn. He went on to earn a master's degree in education from Columbia University in 1954 and a master's degree from WUSTL in 1959.

McFarland served as principal of Dependents School from 1952-57 at the U.S. 3rd Air Force Base in England. He then accepted a teaching position at Madison Elementary School and later became an elementary school principal in Caldwell, N.J. Before joining WUSTL, McFarland served on the faculty of rider's University and New York University.

McFarland was a sports enthusiast and an active participant in the Rotary Club, the Benevolent & Protective Order of the Elks, and the American Legion. He served as mayor of Newcomerstown in 1961 and 1962. He was an active member of the Catholic church.

In addition to his wife, Natalie, sons Jeffrey W., William C. and Samuel A., daughters-in-law Sofia and Lori, grandsons Caleb and Ethan, sister-in-law Jean McFarland Deesker, and his former wife, Marjorie C. McFarland, a service was held in Dover Jan. 26.

Memorial contributions may be made to Newcomerstown Rotary Club, P.O. Box 669, Newcomerstown, Ohio 43832 or to the charity of the donor's choice.

Obituaries

Glynne, founding father of the Newman Center, 94

Monseigneur Gerard Glynne, founding father of the Newman Center at Washington University — also known as Monsigneur Glynne — died Feb. 4, 2009. He was 94.

Glynne was first assigned to the Newman Apostolate at Washington University in 1950, when it was known as the Newman Club. He was meeting for two years in the basement of Our Lady of Lourdes church.

Under his leadership, funds were raised to acquire a building on Skinker Boulevard, which was then the original Newman Center.

Glynne continued to serve the church and ministry, and in 1982, he was able to purchase the Catholic Student Center's current location on Forsyth Boulevard and construct a chapel addition on the site of the original building. In addition to these several conversions of residences for institutional use that would continue on Forsyth directly across from the University campus.

Over the years, Glynne garnered support from many St. Louis-area Catholics to secure the Cardinal Student Center. This building, now an endowed endowed Catholic religious education for students of Washington University.

A fund was held Feb. 9 at the Cathedral Basilica of St. Louis. Monseigneur's Bouvier and Millbrook Student Center.

Barke named director of Campus Y

Terry Barke has been named executive director of the Campus Y on the Danforth Campus.

Previously, she served as the campus Y's program director since 2001 and was elected director since November 2008.

"I am very excited about the new opportunity," she said. "I often tell my TSCA colleagues that I have been very lucky in the YMCAs. I am very excited to meet the students and develop a new program at the Catholic Student Community in St. Louis campuses,

The Campus Y has wonderful potential for developing service groups on campus, such as the Community Service Office and the Glass Institute, while also developing new partnerships with other University departments.

Barke has received a three-year, $186,451 subaward from the University of Tennessee through a grant from the National Science Foundation for research titled "Novel 3D Nanodiamonds."...

Barke has received a five-year, $1,210,761 subaward from the U.S. National Science Foundation for research titled "Control of Actin Assembly and Cell Migration by Actin-binding Proteins,"...

Barke has received a two-year, $275,000 grant from the National Institute of Health for research titled "Central Action of Assembly and Cell Migration by Actin-binding Proteins."...

Barke has received a three-year, $368,540 subaward from the U.S. National Science Foundation for research titled "Plasticity of the Synaptic Inhibitory GABAA Receptor."...

Barke has received a four-year, $558,000 grant from the National Institute of Health for research titled "Novel Apoptosis Induction in the Midst of an Active Genes Network."...

Barke has received a five-year, $1,210,761 subaward from the University of Missouri-Columbia for research titled "Null Apo proliferation in the Midst of an Active Genes Network."...
Peter MacKeith (right), associate dean of the Sam Fox School of Design & Visual Arts and associate professor of architecture, critiques a work by student Xiao Feng. "Architecture is not just a shallow representation of eclecticism," MacKeith says. Rather, architecture "has its own substance and should invest itself in material sensibilities," he says.

Thanks in large part to those efforts, the Graduate School of Architecture & Urban Design has doubled in size, from 110 students in 1999 to 220 in 2008, while its national reputation has steadily risen.


"Peter has spent years working behind the scenes to bring this exhibition to campus," says Carmon Colangelo, dean of the Sam Fox School of Design & Visual Arts and associate professor of architecture. "This spring, as 'St. Louis coordinator for the exhibition 'Eero Saarinen: Shaping the Future' — currently on view at the Kemper Art Museum — MacKeith has focused renewed attention on the Finnish-American architect whose monument to western expansion has so shaped the region's identity. "Peter has spent years working behind the scenes to bring this exhibition to campus," says Carmon Colangelo, dean of the Sam Fox School of Design & Visual Arts and associate professor of architecture. "This spring, as 'St. Louis coordinator for the exhibition 'Eero Saarinen: Shaping the Future' — currently on view at the Kemper Art Museum — MacKeith has focused renewed attention on the Finnish-American architect whose monument to western expansion has so shaped the region's identity."

By LIAM OTTEN

Peter MacKeith (right), associate dean of the Sam Fox School of Design & Visual Arts and associate professor of architecture, critiques a work by student Xiao Feng. "Architecture is not just a shallow representation of eclecticism," MacKeith says. Rather, architecture "has its own substance and should invest itself in material sensibilities," he says.

Thanks in large part to those efforts, the Graduate School of Architecture & Urban Design has doubled in size, from 110 students in 1999 to 220 in 2008, while its national reputation has steadily risen. In 2005, MacKeith published "The Dissolving Corporation: Contemporary Architecture and Corporate Identity in Finland" and also reunited with Pallamass with the collection "Encounte: Architectural Essays," short-listed for the 2006 Royal Institute of British Architects’ International Book Award.

"Peter has spent years working behind the scenes to bring this exhibition to campus," says Carmon Colangelo, dean of the Sam Fox School of Design & Visual Arts and associate professor of architecture. "This spring, as 'St. Louis coordinator for the exhibition 'Eero Saarinen: Shaping the Future' — currently on view at the Kemper Art Museum — MacKeith has focused renewed attention on the Finnish-American architect whose monument to western expansion has so shaped the region's identity. "Peter has spent years working behind the scenes to bring this exhibition to campus," says Carmon Colangelo, dean of the Sam Fox School of Design & Visual Arts and associate professor of architecture. "This spring, as 'St. Louis coordinator for the exhibition 'Eero Saarinen: Shaping the Future' — currently on view at the Kemper Art Museum — MacKeith has focused renewed attention on the Finnish-American architect whose monument to western expansion has so shaped the region's identity."