

dean's notes



Arthur F. Thurnau
Professor,
Professor of History,
and Dean
Terrence J. McDonald

LSAonline

www.lsa.umich.edu

UM-PKO EXCHANGE WEBSITE:
www.umich.edu/~michchem/UMPKU

Inspiring Curiosity

IT WAS MY PRIVILEGE to spend 10 days in China and Korea this summer visiting universities with which the College has relationships, as well as meeting our large group of wonderful alumni in those countries. But of all those I met—university presidents, provosts, and faculty members, among others—the most memorable were: Tiffany Chen, Justin Lomont, Brian O’Keefe, Wei Wang, Xiaowen Feng, Xiaoxue Zhou, and Yiran Shen. These seven extraordinary young people are undergraduate chemistry students from LSA and Peking University in Beijing (PKU), and they are the pioneers in a remarkable exchange program we launched this summer with the help of the National Science Foundation, the Dreyfus Foundation, and generous alumni such as Rich Rogel (’70) and his wife, Susan.

Because chemistry is chemistry the world over, Professors Brian Coppola and James Penner-Hahn of LSA’s Department of Chemistry proposed an exchange between our undergraduate chemistry majors and those from PKU, who were selected by chemistry faculty in China under the leadership of Professor Zi-Chen Li. As a result, three of our students (Tiffany, Justin, and Brian) were in China this summer and four PKU students (Wei, Xiaowen, Xiaoxue, and Yiran) were here. Each worked on a project in the lab for eight weeks, culminating in a “poster session” in which the students and their faculty sponsors presented their work to one another via a high-speed Internet transmission. The pre-program orientation and many on-site logistics were organized by a joint institute that the College shares with PKU, which was founded by the Director of our Center for Chinese Studies and a Frederick G. L. Huetwell Professor of History, James Z. Lee. We hope to spread these scientific opportunities to other disciplines in the sciences over time.

You can meet these wonderful students yourself

at the website for this project listed on the left. While in Beijing, I asked our students how their lab meetings were going, and Justin pointed out that chemical formulas are the same everywhere. Similarly, Xiaowen writes on his blog: “Chemistry=Chem-is-try.”

International understanding is certainly all about trying, and that begins with the recognition of the things we have in common with others such as the scientific method. It is the goal—indeed duty—of liberal arts colleges to inspire a curiosity for all things human. And when chemistry majors with no background in Chinese studies jump at the chance to study chemistry in Beijing, we have succeeded.

It was the same kind of curiosity and pioneering spirit that led early leaders of the University to begin our deep relationships with all Asian countries. University President James B. Angell served as Minister to China in 1880 and former Regent John M. B. Sill became Minister to Korea in 1894. These early connections led to UM having the largest number of Asian students of any university in America by the 1930s. Our “Oriental Civilizations Program” began in that decade (succeeded today by the Department of Asian Languages and Cultures) and in the 1940s our various Asian studies centers began their own rise to national prominence.

While in Beijing it was an honor to meet with the current U.S. Ambassador to China, Clark T. Randt Jr. (J.D. ’75), an alumnus of UM’s Law School, who said he selected UM because of its broader reputation in Chinese studies. From Angell to Randt, the tradition continues. We stimulate curiosity about the world in part so we can make the Michigan Difference in it.

Copyright © 2007
University of Michigan

ARTICLES APPEARING IN LSA MAGAZINE MAY
BE REPRINTED BY OBTAINING
PERMISSION FROM:

Editor
College of Literature, Science,
and the Arts
University of Michigan
Suite 5000
500 South State Street
Ann Arbor, MI 48109-1382
734.615.6333
lsamagazine@umich.edu

Terrence J. McDonald
ARTHUR F. THURNAU PROFESSOR,
PROFESSOR OF HISTORY, AND DEAN,
COLLEGE OF LSA

Peggy Burns
ASSISTANT DEAN FOR LSA
ADVANCEMENT

Lara Zielin
EDITOR

Rebekah Murray
ASSISTANT EDITOR

Patricia Claydon
ART DIRECTOR AND DESIGNER

Regents of the University

Julia Donovan Darlow, ANN ARBOR
Laurence B. Deitch, BINGHAM FARMS
Olivia P. Maynard, GOODRICH
Rebecca McGowan, ANN ARBOR
Andrea Fischer Newman, ANN ARBOR
Andrew C. Richner, GROSSE
POINTE PARK
S. Martin Taylor, GROSSE
POINTE FARMS
Katherine E. White, ANN ARBOR
Mary Sue Coleman, EX OFFICIO

The University of Michigan, as an equal opportunity/affirmative action employer, complies with all applicable federal and state laws regarding nondiscrimination and affirmative action, including Title IX of the Education Amendments of 1972 and Section 504 of the Rehabilitation Act of 1973. The University of Michigan is committed to a policy of nondiscrimination and equal opportunity for all persons regardless of race, sex, color, religion, creed, national origin or ancestry, age, marital status, sexual orientation, gender identity, gender expression, disability, or Vietnam-era veteran status in employment, educational programs and activities, and admissions. Inquiries or complaints may be addressed to the Senior Director for Institutional Equity and Title IX/Section 504 Coordinator, Office for Institutional Equity, 2072 Administrative Services Building, Ann Arbor, Michigan 48109-1432, 734-763-0235, TTY 734-647-1388. For other University of Michigan information call 734-764-1817.

HELLO
my name is

~~POWER~~ ~~math~~
Risk generosity
VICTORS

What's in a Name?

AROUND OUR EDITORIAL OFFICES, we began referring to this issue as the “power” issue: We showcase China as a rising superpower (p. 12); we look at the viability of ethanol and other alternative fuels to power our vehicles (p. 62); and of course there’s our article on James Earl Jones (’53), one of the most powerful men on screen and on stage today (p. 22).

Yet perhaps we should have called this the “math” issue. We interviewed Bob Megginson, Assistant Dean of Undergraduate Education, and he told us how he’s helping LSA students look at numbers in new ways (p. 8); we asked alumna Fran Allen (M.A. ’57) how she used her math degree to become a renowned success as a computer programmer (p. 50); and we spoke with LSA Professor Hyman Bass, who was just awarded the National Medal of Science for his contributions to the field of mathematics (p. 66).

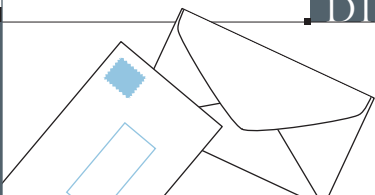
Then again, we could have called this the “risk” issue. Alumnus Sam Zell (’63, J.D. ’66), the new owner of media assets such as the *Chicago Tribune*, talked to us about the role risk plays in success (p. 56). Zell joins other alumni success stories, including those in our article “If I Can Make it There,” which tells the story of how four alumni in New York City went from having nightmare jobs to dream careers (p. 28).

We could also call this issue the “generosity” issue—but then we’d have to call every issue the generosity issue since UM alums continue to answer the call to fund critical research and teaching opportunities that might otherwise be jeopardized due to cuts to the University’s state funding. Two alumnae, Beverly Hamilton (’68) and Amy Rose Silverman (’89), have funded programs for students to study abroad (p. 55); David Evans (’85) honored the memory of his grandfather by giving to the Department of History (p. 58); and Randall Kaplan (’90) started a scholarship for students who were in the foster care system, after he found out his grandmother had been a foster care child herself (p. 49).

Then again, we might as well just call this issue—and every issue for that matter—the “victors” issue. Because all faculty members, students, and alumni with ties to UM prove, time and time again, that they can apply their knowledge and their degrees in fantastic ways, with results that impact the world. *Hail, hail* indeed.

LARA ZIELIN, EDITOR

(letters)



PIGSKIN PIONEERS

Fielding Yost, Fritz Crisler, Bo Schembechler. They are University of Michigan football greats, but their legacies extend beyond the college arena. All three men changed the very way the game was played.

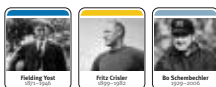


PHOTO: MICHAEL GOODMAN/UMICH. PHOTO: BO SCHEMBECHLER/UMICH. PHOTO: BO SCHEMBECHLER/UMICH.

by John U. BACON

21

Your story on Mary Frances Berry reminded me

of my brief encounter with her, one that made me pay attention to her career as it unfolded. It was during the mid-1960s (I don't recall the exact year), when I was a graduate student in history. Taking a break on a bench outside Haven Hall, I was approached by a determined-looking young African-American woman. She declared: "My name is Mary Frances Berry, and I am here to get a Ph.D. in history. Where is the history department?" I gave her directions and she disappeared into Haven Hall; I never saw her again in Ann Arbor.

For some reason, her manner and directness made a deep impression on me, and I've always liked to think that I played the smallest possible cameo role in helping Mary Frances Berry get her career started on the right foot at Michigan.

DONN C. NEAL (M.A. '63, Ph.D. '73)

Enough already with the diversity mantra!

While diversity is nice, it is really a sideshow for the vast majority of your readership, and doesn't merit the constant and unremitting attention it has received for far too long by UM. Let's turn the page so to speak. It would be preferable if UM's President and the Dean of LSA could talk about something else once and awhile. I thought that your magazine was primarily for alumni? Does the Dean in his "Notes" column really think the most important thing alumni are desperate to hear about is how UM will do everything in its power to assure "diversity" will continue regardless of the decision by the people of the state of Michigan?

What I and many, if not most, alumni want to hear about is how the university is going to improve itself. When I was at UM there was no question Michigan was the second-best state university in the na-

tion, behind UC Berkeley, and even as good as several Ivy League universities. Now we are tied with UCLA, often behind UVA, and always behind the Ivy League universities, as well as many universities that never used to be mentioned in the same breath as UM.

I submit that the Dean of LSA would be better advised if he told us how he and the rest of the university are going to improve the quality of "our" university so we can return to our former elite status. Trust me, focusing on diversity all the time won't accomplish this. As a successful UM alum, my experience has been that what is vastly more important to success in life is the quality of one's education, not how diverse my classes were.

Higher academic rankings, not diversity, is what I bet will make UM alumni proudest.

BILL SULLIVAN ('72)

I really enjoyed Mr. John Bacon's article, "Pigskin Pioneers," in the Spring 2007 issue of *LSAmagazine*. However, the accompanying item called "Seconds on the Clock" contains an error. Pertaining to the Indiana game on October 27, 1979, it says, "The 10th ranked Wolverines were trailing Indiana with the ball on Indiana's 45 yard line and just six seconds left in the game." Actually, the game was tied and Michigan was not trailing. A tie against Indiana was like one was trailing, but the statement is incorrect nevertheless.

Tell Mr. Bacon I look forward to his upcoming book on Bo.

JOHN F. BEDNARSKI ('84)

Editor's Note: Thank you for bringing this to our attention. We regret the error.

The newest issue of the mag is by far the best

one I've ever seen. I usually just casually scanned the issues and threw them away—they were boring and hard to read and of uninspired format and colors. Nice job—keep it up.

JANET ROBSON ('62)

Thanks for the article by Gail Flynn on the John

F. Kennedy visit to the UM campus in 1960. It was my freshman year and I wandered down the hall from West Quad to the lobby of the Union while the crowd was waiting. John F. Kennedy did appear and, while walking toward the front door, passed by where I was standing. I reached out and shook Kennedy's hand and said, "Good morning, Mr. President." He looked at me with a smile and said, "Not yet."

I will always remember that moment.

JIM PENAR ('64)

The magazine looks wonderful. The increased number of entry points makes it inviting and increases the tempo, so instead of putting it down to read later, I am forced to read little tidbits every time I pick it up.

KAREN POPE ('66)

Let us know what you think!

We welcome your thoughts, opinions, and ideas regarding *LSAmagazine*. Letters may be published in the magazine and/or on our website, but we cannot print or personally respond to all letters received. Letters may be edited for length or clarity. Opinions expressed in "LSA Letters" do not necessarily reflect those of *LSAmagazine*, the College, or the University of Michigan. All correspondence should be sent to: Editor, *LSAmagazine*, Suite 5000, 500 South State Street, Ann Arbor, MI 48109-1382. You can also email us at lsamagazine@umich.edu. Please include your name, address, and graduation year.

COLLEGE

Doing More with Less

BUDGET BELT-TIGHTENING CONTINUES ACROSS CAMPUS

FOR THE SIXTH CONSECUTIVE YEAR, the Michigan Legislature has reduced UM's appropriation, either in base or as part of a mid-year recession. Last year at this time, UM received \$326 million for FY 2007, which was later reduced by \$5.6 million, leaving UM with \$320 million—the same amount being given now, for FY 2008. And there's still the chance the state could take away some of that \$320 million.

The current state appropriations were included in the \$1.35 billion 2007–2008 General Fund budget for the Ann Arbor campus presented to the University of Michigan Regents in July.

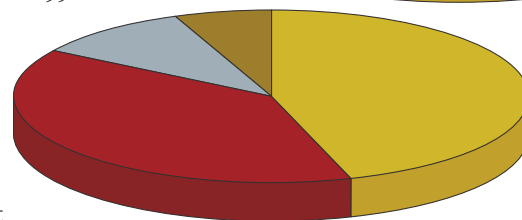
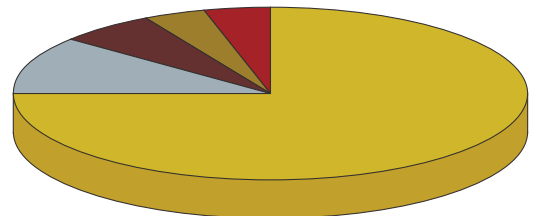
The FY 2008 budget reflects a tuition increase of 7.4 percent for both resident and nonresident undergraduates, and a five percent increase for most graduate programs. In an effort to offset these costs, UM will increase centrally funded financial aid at a higher rate than its tuition increase. The FY 2008 budget calls for an overall increase of more than \$8.1 million in centrally awarded financial aid, an 8.95 percent increase over FY 2007, for a total of more than \$99 million. This includes a nearly \$6.4 million, or 11.5 percent, increase in financial aid earmarked for undergraduates.

The College of LSA continues to diligently steward its funds, which has staved the need for across-the-board cuts. Faculty recruitment and retention remains high, meaning the best and brightest minds are still teaching on campus. Additionally, the number of scholarships awarded in the College rose 10.5 percent this year. The College has also been able to fund-raise successfully during the Michigan Difference Campaign, raising more than 97 percent of its \$300 million goal. Yet, still more needs to be done.

“Alumni support is crucial for our investment in the future,” says LSA Dean Terrence J. McDonald. “With Michigan’s uncertain financial circumstances, it is imperative that LSA graduates help when the state cannot. With assistance from our alumni, we will continue to provide an unparalleled education for our students.”

Sources *University General Fund*

State Appropriations, Tuition, Indirect Cost Recovery and University Transfers	399,768,485	75%
External Grants & Contracts	60,640,404	11%
Gifts	30,538,528	6%
Endowment Distribution	20,743,691	4%
Additional Revenue	19,667,298	4%
Total Sources	531,358,406	100%



Uses *Instructional and Research*

Salaries and Benefits	238,177,582	45%
Operating Expenses and Construction	204,264,832	39%
Scholarships, Fellowships, Tuition Grants	55,160,923	10%
Additions to Endowment and Other Fund Balances	33,755,069	6%
Total Uses	531,358,406	100%

150 Years of the Impossible

As the **LSA Department of Chemistry** celebrates its 150th anniversary, we take a look at the people who now, and throughout the years, have always searched for ways to do what everyone else says cannot be done.

The original chemistry building (right), built in 1857, was the first chemical laboratory at a state university. The one-story, 3,000 sq. ft. building was both a laboratory and a classroom. Construction was continuous as the chemistry building, shown above in 1874, was added to seven times between 1856 and 1901. Eventually destroyed by an arson fire in 1980, some bricks from the original building remain and have been set into a bench on the Diag near the northeastern corner of the Hatcher Graduate Library.

by Davi Napoleon

IN 1856, UM PRESIDENT HENRY TAPPAN appealed to the University Regents to erect a chemical laboratory. By the time it opened, the three rooms, equipped with 26 lab tables, cost nearly \$6,000, and the innovative facility was the first chemistry building at any public university in the country.

Studying in that facility was Moses Gomberg (UM: 1886–1936), a Russian immigrant who came to UM as a chemistry student in 1886, earned his Ph.D., and stayed on to become an assistant professor of chemistry in 1899. In 1900, he made a discovery that surprised other scientists.

The others said it couldn't be done: Everyone knew, after all, that organic molecules contain an even number of electrons. The notion that they could have an odd number challenged all prevailing thinking at the start of the 20th century. So when Gomberg confirmed the existence of free radicals, skeptics spoke out against his findings.

It took another 100 years before the American Chemical Society named the discovery of organic free radicals at UM a National Historic Chemical Landmark. During the century separating Gomberg's discovery and this recognition, scientists applied Gomberg's research to a variety of questions from how diseases develop to how to produce plastics.

Gomberg was just one of many UM scientists

who produced ground-breaking research.

Robert Parry (UM: 1946–1969), for example, performed synthetic work and structural studies in several areas of chemistry, helping the department develop an approach that brought together different academic areas to create new patterns of research.

Werner Bachmann (UM: 1929–1951) studied at UM and then stayed on to teach. "He developed a practical method to manufacture an explosive called RDX, a nasty compound that was very important in the war effort," says Professor Emeritus Robert Kuczkowski. "He also synthesized equilenin, the first synthesis of a naturally occurring hormone. He was a very distinguished chemist whose students called him 'The Chief.'"

Kasimir Fajans (UM: 1936–1957) and Lawrence Brockway (UM: 1938–1978) contributed to our understanding of radioactivity and molecular structure. "Brockway was one of the first students of Linus Pauling at Cal Tech and a leader in the field of structural chemistry," Kuczkowski recalls.

Two of Brockway's students, Jerome Karle (M.S. '42, Ph.D. '44) and Isabella Karle ('41, M.S. '42, Ph.D. '44), did work on X-ray diffraction methods—essentially beaming lasers through various crystals to help determine the structure of atoms—that earned him the 1985 Nobel Prize in Chemistry and her the National Medal of Science in 1995.

Professors at UM have also edited the *Journal of the American Chemical Society*, moving it to Michigan in 1970 after years at the University of Rochester. Another ACS chemistry journal, *Inorganic Chemistry*, was launched here in 1962.

Davi Napoleon ('66, M.A. '68, Ph.D. '88) is a freelance journalist based in Ann Arbor.

Anna Mapp and the Holy Grail of Chemistry Today

by Karl Leif Bates

The cellular machinery that turns a stretch of DNA into a protein is a convoluted, Rube Goldberg-like process involving dozens of oddly shaped molecular actors, some of whom still lack names. And it's all too tiny to see.

"It's a mess. It's a bloody mess. But that's what makes it so interesting," says Associate Professor of Chemistry and Medicinal Chemistry Anna Mapp, whose career so far has been dedicated to finding ways to flip the on-off switch of this process.

This protein-manufacturing machinery is where scientists will find disease at its earliest stages. Many ailments are created by the cell cranking out too many proteins, as in inflammatory diseases, or too few, as in Type I diabetes. Finding the on-off switch would be a boon to both.

The nucleus of the cell, where all this action occurs, is a veritable black box and one of the hottest frontiers in science right now. The genes that hold all the instructions for protein-making, and the actual recipes, have at least been identified by the Human Genome Project. The diseases at the other end of the scale are familiar foes medicine has been grappling with for generations. Between these extremes lies the cellular realm where genes become proteins, and proteins become machines, and the machines operate the cell. Anywhere along the way miscues can create disease.

One would expect to find a biologist engaged in this sort of question, but Mapp brings her skills as a synthetic chemist to the task, plus a passion for figuring out some incredibly difficult intricacies. "To a chemist, a cell is huge!" she says.

Mapp's team has been working on making synthetic molecules that step into the earliest stages of gene transcription, the process whereby the raw genetic code of DNA is translated into a template for making a new protein.

Controlling transcription is crucial for a cell's normal functioning and its ability to respond to changes in its environment. Flaws in the system are at the root of cancer, diabetes, and a host of other conditions.

The holy grail of Mapp's work would be a synthetic molecule that controls transcription in diseased cells, while leaving normal cells alone. "That's still a long way off," she says, but without seeming the least bit deterred.

Karl Leif Bates is a writer specializing in science communications.

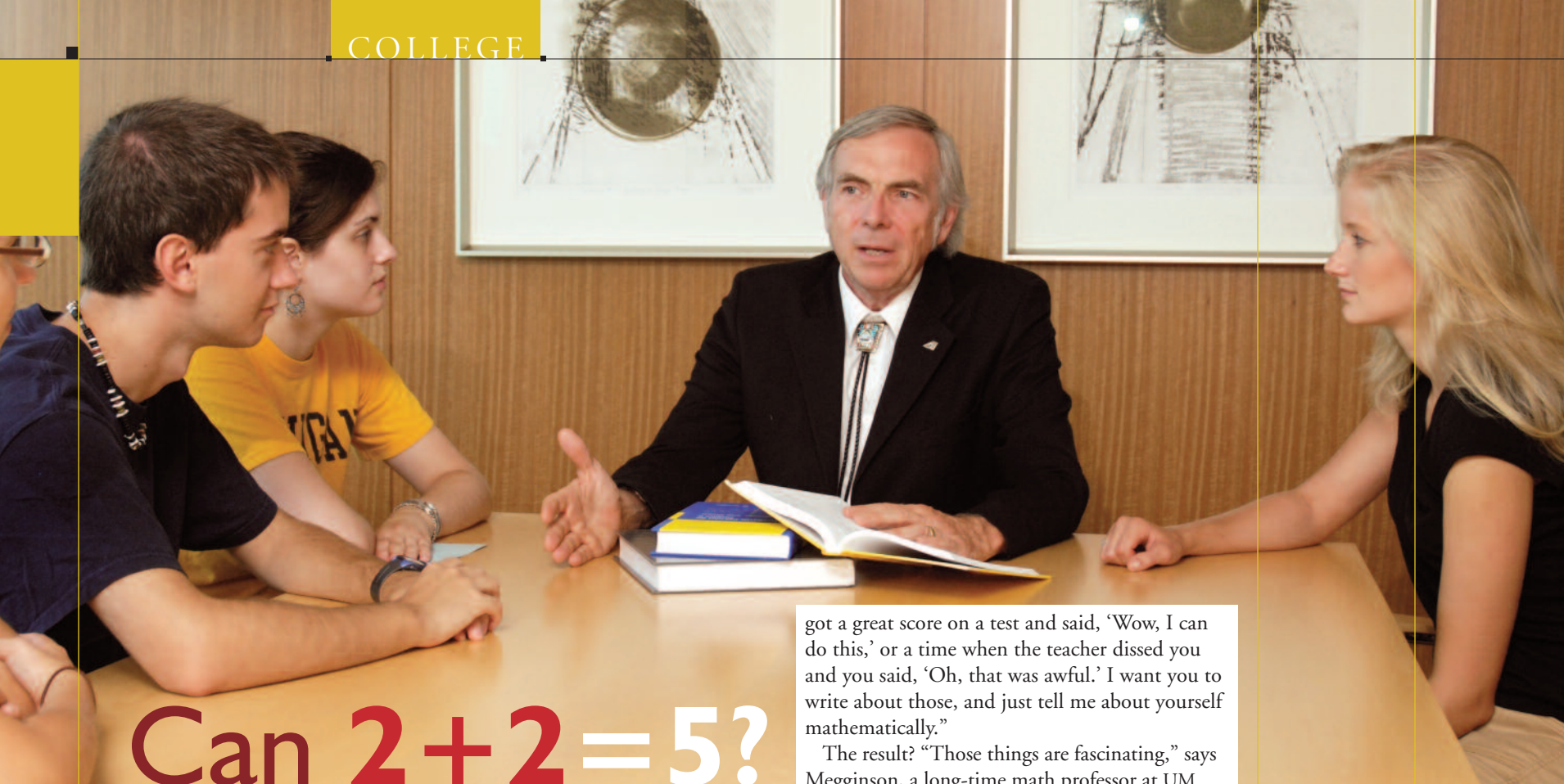
Anna Mapp checks on experiments in the Chemistry Building lab where she conducts her research.



Courtesy of the Bentley Historical Library

(Bottom right) Adam Matzgen





Can $2 + 2 = 5$?

> ASSOCIATE DEAN **BOB MEGGINSON** SAYS THE RIGHT ANSWER IS LESS IMPORTANT THAN YOU THINK.

by Sheryl James

WHEN BOB MEGGINSON taught pre-calculus, he surprised his students with a most unusual first assignment. They were to write their “automathbiography.” Say what?

He did not invent the concept, but Megginson is its biggest fan. This is how he explained the assignment to his students:

“Somewhere in your life, you’ve had a good experience in math, and somewhere in your life, you’ve had a bad experience. There was a time when you

“Okay, sure, two-plus-two equals four, that’s true. But that doesn’t mean you can’t explore and try things. The answers might not be right, but that’s how we learn.”

got a great score on a test and said, ‘Wow, I can do this,’ or a time when the teacher dissed you and you said, ‘Oh, that was awful.’ I want you to write about those, and just tell me about yourself mathematically.”

The result? “Those things are fascinating,” says Megginson, a long-time math professor at UM and now Associate Dean for Undergraduate and Graduate Education. “Almost always, when a student says, ‘I love math,’ you find a great teacher. And when they say, ‘I hate math,’ you find a bad experience. It’s not the subject, it’s how the person has had to interact with it.”

When students receive a simple dismissal—“Wrong”—math anxiety and hatred can begin. “Okay, sure, two-plus-two equals four, that’s true,” Megginson says. “But that doesn’t mean you can’t explore and try things. The answers might not be right, but that’s how we learn.”

Things such as automathbiographies and an appreciation of how two-plus-two could, in one student’s mind, equal five are perfect examples of why Megginson is leading the chorus to reform all things math. It is a mission many see as crucial if the United States is to remain globally competitive. “Math has been called the queen and servant of the sciences,” Megginson says. “It plays a central role in the sciences and engineering. Those are areas where we have to do well. People can’t predict what impact the math we’re doing right now will have 30 years from now. We don’t even know what math we’ll need 30 years from now.”

For too long, Megginson believes, math instruction has been thoroughly uninspiring. Part of the problem is that many teachers are “forced into

(Left) LSA students (from left to right) Keith Reisinger, Tracey Rosen, and Rachel Lauderdale talk numbers with Bob Megginson (second from right).

service,” Megginson says, and are unenthusiastic. Megginson’s world of math is creative. It is fluid, fun, full of secrets and solutions. And it is full of new discoveries made by dedicated, passionate mathematicians—like Megginson.

To create more of these enthusiastic mathematicians, we must inspire students and reform math education, he believes. Megginson has been involved, in fact, in two initiatives that may help achieve those goals.

The first is the Algebra Project. Last year, Megginson invited Robert Moses, whom Megginson describes as a “legendary civil rights leader and mathematics leader,” to speak at UM. Moses’ appearance sparked interest in an outreach project to local school districts. The mission, Megginson says, “is to help with the mathematical education of pre-college students” in area high schools.

The other effort is the brainchild of Nick Collins, Director of UM’s Comprehensive Studies Program, and will allow undergraduate students and staff to participate in teacher development in Detroit Public Schools (see sidebar). The goal is to establish a “very strong pre-calculus program, which should be the full equivalent of what we do here with pre-calculus,” Megginson explains.

SHATTERING THE STEREOTYPE

Megginson grew up in a small town in Illinois. He earned a B.S. in physics, an M.A. in statistics, and a Ph.D. in mathematics, all from the University of Illinois at Urbana-Champaign between 1969 and 1984. He began teaching at UM in 1992.

A six-foot-four, narrowly framed man, Megginson shatters the mathematician stereotype. He seems always to be talking, smiling, or both. He’s gregarious. He sees great excitement in wrong answers, even when they are his own wrong answers. He sings opera. He climbs mountains.

He’s also one of “shockingly few” Native Americans with a Ph.D., especially in his field. He says despite a prevailing myth that Native Americans are not good in math, it was his unschooled Native American grandfather who loved math and intrigued his grandson with math riddles.

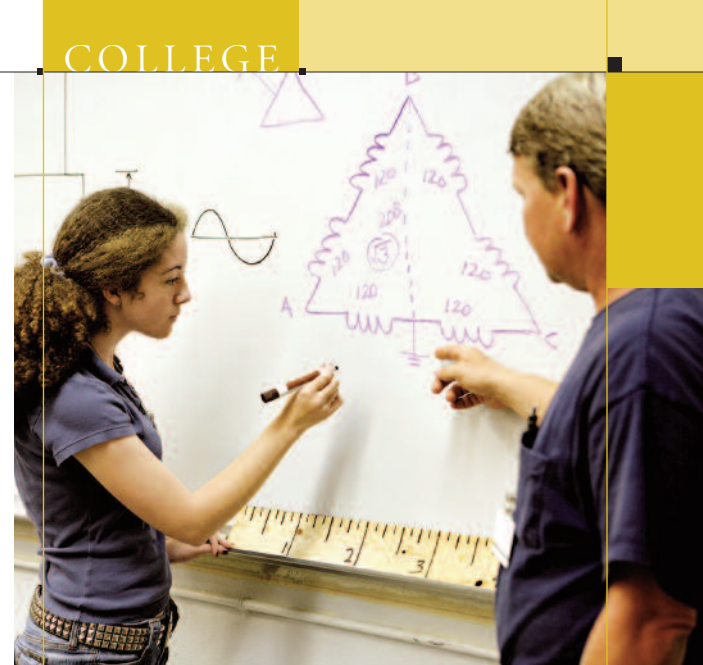
Megginson’s work on reservations in North Dakota has inspired him to try to eradicate that myth. It also sensitized him to the low presence of other minorities in math circles. The opposite needs to happen, he says.

“Most of the mathematicians in this country are white males. And it’s fine that the profession continues to attract them. But why don’t a corresponding number of African-American women become mathematicians? Or African-American males? These are segments of our population we cannot disregard. They must have the same opportunities as everybody else... to become part of the technological work force that we need to compete in the 21st century.”

If and when this future materializes, we suddenly will no longer be competing with the rest of the world at all, Megginson believes. We will be able to cooperate with them. Thus the equation: Parity plus diversity equals global cooperation.

Now *that’s* creative.

Sheryl James is a freelance writer from Brighton, Michigan.



Math Connections

“Math is the gateway course for the 21st century,” says Nick Collins, Director of LSA’s Comprehensive Studies Program and the co-creator of an innovative teaching program, the Michigan Calculus Achievement Program, which enables high school students to improve their knowledge, skills, and insights about college math. “At the core of the program are two goals,” Collins explains. “One, to increase high school teachers’ insight into how to prepare students for math at the college level, and two, to increase students’ knowledge about what they can expect in math at the college level.”

The program equips and trains teachers at Martin Luther King Jr. High School in Detroit, giving them the tools they need to prepare their students for college math. “We also help students make the connection between what they’re studying now and careers they might want to pursue later,” says Collins.

Collins, who developed the program with LSA Associate Dean Bob Megginson and math professor Nkem-Amin Khumbah, hopes to expand the program to other school districts in the future.



Associate Dean for Undergraduate and Graduate Education, Bob Megginson.

(LSAnews)

Harlem Sixth Graders Tour Campus



Thirty-four socioeconomically disadvantaged sixth graders from Leadership Village Academy, a Harlem charter school, were given a UM preview this past summer when they visited campus sites such as Angell Hall, the Diag, the Life Sciences Institute, and Michigan Stadium. The UM visit was funded by Fred Wilpon ('58), a member of the charter school's board of directors and chairman of the New York Mets. Wilpon recently donated \$12 million to UM, including \$3 million to LSA for need-based scholarships.

Social Gaming?

A recent study of nearly 1,500 teens nationwide shows game players and non-game players spent the same amount of time socializing with parents and friends. For boy and girl gamers, the more time they spent playing video games with their friends on the weekends, the more time they spent in other activities with friends as well, says Hope Cummings, a graduate student in LSA's Department of Communication Studies. But while video games did not negatively affect teens' social interaction, the same could not be said for school-related activities. Compared to non-gamers, kids who played video games spent 30 percent less time reading and 34 percent less time doing homework.

A Mammoth DISCOVERY

Daniel Fisher, curator of paleontology at LSA's Museum of Paleontology, has spent his life studying mammoths and mastodons. Now, he knows what they really looked like. He recently returned from Siberia, where he spent a week as part of a six-member international team that examined the frozen, nearly intact remains of a four-month-old female woolly mammoth. Researchers will be able to determine such things as the animal's health, variations in local air temperature during its lifetime, and when mammoths matured and reproduced.



HISTORIC PUMAS

New bronze puma statues are now perched in front of the Ruthven Museums Building, home of LSA's Exhibit Museum of Natural History on Central Campus. Weathering had caused the original terrazzo sculptures, which date from 1940, to crack and crumble. Funding by a donation from Jagdish C. and Saroj Janveja replaced the original pumas with more durable bronze casts. This past spring's return of the pumas coincided with the opening of an exhibit on the work of museum artist Carleton Angell, the pumas' sculptor.

BACTERIA AND ALZHEIMER'S

The discovery came by chance, but LSA scientists are making the most of it: When LSA microbiologist Matthew Chapman and co-workers found that bacteria create and use a type of fiber common in neurodegenerative diseases like Alzheimer's, they discovered a potential treatment that turns conventional wisdom on its head. Instead of trying to block fiber formations in order to prevent diseases, LSA scientists are looking at forcing the formation of fibers in ways that skip toxic intermediate steps.

breaking the waves

Manipulating light waves, or electromagnetic radiation, has led to many technologies — from cameras to lasers to medical imaging machines that can see inside the human body. LSA scientists have now developed a way to make a lens-like device that focuses electromagnetic waves down to the tiniest of points.

The breakthrough opens the door to the next generation of technology, says LSA Professor of Physics Roberto Merlin. The discovery holds promise for applications in data storage, non-contact sensing, imaging, and nanolithography.





CUM'S CHINA NOW THEME YEAR
TACKLES THE PROMISES AND
CHALLENGES OF THE WORLD'S
RISING SUPERPOWER]

ENTER THE DRAGON

*Swift jade-green dragons, birds with
plumage gold, / I harnessed to the
whirlwind, and behold, / At day-
break from the land of plane-
trees grey, / I came to paradise
ere close of day. I wished within
the sacred grove to rest, / But now
the sun was sinking in the west; The
driver of the sun I bade to stay, /
Ere with the setting rays we haste away. /
The way was long, and wrapped in
gloom did seem, / As I urged on to
seek my vanished dream.*

—Excerpt from "The Lament" by Qu Yuan

BY SHERYL JAMES

NEARLY 2,500 YEARS AGO,

Qu Yuan, one of China's most famous poets, wrote "The Lament" while living along the Yangtze River, scholars believe. Qu Yuan had fought for justice and unity in his beloved nation, beset by warring factions and complex social problems, until he was exiled. His most famous poem mixes truth, myth, and legend and features the poet's anguished soul riding upon dragons and serpents. When Qu Yuan committed suicide by throwing himself in the river, his admirers tried to save him. Dragon boat races have marked this event ever since.

UM joined that ancient tradition by kicking off its 2007–08 theme year, "ChinaNow: A Contemporary Exploration," with a Dragon Boat Race and Festival this past September. The mixture of pathos, poetry, and pageantry of the dragon boat tradition is an especially fitting start for an array of activities as diverse as China itself.

WHY CHINA? WHY NOW?

The focus on China is appropriate, first, because of "UM's longstanding relationship with China," says LSA Dean Terrence J. McDonald. "UM President James Angell was the ambassador to China during the [President Grover] Cleveland years in the 1880s. So we historically have had links with China."

Those links helped spark the creation of UM's Center for Chinese Studies, considered one of the best in the country. The Center's faculty, in fact, conceived of and is largely overseeing the theme-year activities.

"China is now a major economic and political power reaching far and wide into the world," says Jen Zhu, UM's Coordinator of China Programs and a member of the theme-year planning committee. "It is on pace to overtake Germany this year as the world's third-largest economy, behind the United States and Japan. At the same time, China is meeting pressing internal challenges such as energy, the environment, and public health. How China addresses these and other problems will affect not only Chinese citizens but also the world."

China is also working to advance academically. "The Chinese are very interested in American public universities as a way of modeling themselves," says McDonald.

To that end, UM is working hard to forge relationships with China. In 2005, UM President Mary Sue Coleman visited China to formalize UM's partnership with three universities there and, this past June, Dean McDonald took his first trip to China to visit the faculty and students enjoying those partnerships.

"The experiences that our faculty and students are having in China are quite remarkable," says McDonald, "and I found the country to be extremely intriguing, kind of an emerging economic giant, but with some challenges itself, socially. There is a tremendous interest in higher education, which is great for the future of our relationship."

CHINA SHAKES THE WORLD

The mega-emergence of China in the 21st century outweighs any historical time pegs for the theme-year selection. Mystical ancient dragon myths evaporate in the face of the momentous changes occurring throughout China, and, unavoidably, the rest of the globe. This China has been captured in another work featured in the theme year, *China Shakes the World: A Titan's Rise and Troubled Future—and the Challenge for America*, by James Kynge. The award-winning book, a bestseller, was selected for the summer reading program for 1,500 first-year undergraduate students, who read, discussed, and otherwise dissected it.

"... The world must learn to contend with a new, convulsive force," writes Kynge of the nation he has covered as Beijing bureau chief for the *Financial Times*. "... Will the Western world be able to accommodate the manifestations of the extreme strengths and profound weaknesses that are emanating from the vastly different presence in its midst?"

The answer to that question will define much of the course of the 21st century."

Kynge, who visited the

A view of downtown Shanghai taken by Lisa Weir ('06). Smog, more than clouds, obscures the sun. For more of Weir's photos, please see p. 18.

(Previous page) ChinaFotoPress/Getty Images; (this page) Lisa Weir

UM campus in September, explores every facet of what he calls China's "supercharged emergence," including population, trade, technology, social, political, and environmental issues.

For instance, he compares the city of Chongqing's explosive growth to that of Chicago in the 1800s, when it was dubbed the "city of the century." It was known as the fastest-growing city on earth, Kynge writes, its social ills and pollution of the livestock abattoirs notwithstanding. It took 50 years "until 1900, to increase its population by 1.7 million people," the book states. "Chongqing is growing at eight times that speed."

"I am delighted that UM has decided to make my book recommended reading for first-year students," Kynge says. "... China is such a huge place, so driven with contradictions, so difficult to encompass with a single overarching theory that any work on this subject is partial and fragmentary." His book "represents only a small, imperfect piece of the bigger picture," he says, "but if it stimulates interest among readers—whether they be students experiencing an early introduction or seasoned experts—then I am happy."

One explicit demonstration of the contradictions: The book, which has received good reviews from Taiwanese and Chinese experts, is not yet available in China; officials have demanded the deletion of too many sections, Kynge says.

TIMELY TOPICS

"I can't think of a more appropriate theme year."

This comes from one of UM's most distinguished and experienced experts on China, Kenneth Lieberthal. He is an Arthur F. Thurnau Professor of Political Science in LSA and distinguished fellow at the William Davidson Institute. He served on the National Security Council during the Clinton Administration, speaks Chinese, and visits China frequently.

Lieberthal, who usually teaches the course China's Evolution Under Communism, is teaching a political science senior seminar this fall and a Ph.D. seminar in Asian security issues winter term. Both courses allow him to help students explore how China's growth is affecting international issues.

"If there were three things to say about China, it would be: One, that China has achieved a sustained

rate of growth that is unprecedented in human history; second, the speed, scope, and depth of change in Chinese society is by far the greatest in the world today—they are simultaneously pursuing urbanization, privatization, mechanization, and globalization. No country has ever sought to do that before. The scope of it is almost incomprehensible. Thirdly, China's successes pose enormous problems for the United States and many others. But those pale in comparison to the kinds of problems that would be posed if China were to fail badly."

Failure in its monumental environmental challenges would bring perhaps the most serious repercussions, Lieberthal says. China and the United States represent the world's two biggest producers of greenhouse gasses, he says. "The biggest issue is whether we can cooperate on energy efficiency and climate change. They are not ignoring it, but they are doing some things fairly well and other things disastrously bad." The same holds true with the United States, he says.

"If the United States and China can't cooperate on making [the environment] a higher priority... and learning best practices from one another, the game is lost on this issue. So the stakes here are very high."

The College of LSA, in conjunction with the Center for Chinese Studies, has organized theme-year activities in broad categories and has recognized the importance of the environment by calling one group of activities ChinaGreen. The UM School of Natural Resources and Environment, and the China Data Cen-

“EVERY UM STUDENT will soon be working in a global community, of which China is a part. The theme year enhances their ability to take part in this GLOBAL ENVIRONMENT.”

—JAMES LEE, DIRECTOR OF THE CENTER FOR CHINESE STUDIES

ter, are addressing China's environmental problems in a symposium.

China's economy is probably the most often cited in ordinary conversation, and one expert, Albert Park, who has taught at UM and is now at the University of Cambridge in England, says the standard of living for most Chinese citizens, urban and rural, has risen. He also says that when it comes to so-called competition economically, the United States can either engage the Chinese, alienate them with short-sighted import policies, or ignore them—which appears all but impossible anymore.

"The United States needs to think about ways to engage China for mutual benefit," he says. "China is the largest recipient of foreign direct investment in the world. From an economic standpoint, we must ask how China's growth can benefit American workers."

A GLOBAL UNIVERSITY

All of this reinforces the growing reality of globalism—of global cooperation and global citizens. "The ChinaNow theme year reflects the continuing expansion within LSA—and at UM more broadly—of activities and programs with an international focus," says Mark Tessler, Vice Provost for International Affairs and Director of the International Institute. "There are similar developments with respect to Korea, Africa, Eastern Europe, India, and many other countries

and world regions.”

Marjorie Horton, Assistant Dean for Undergraduate Education, says studying China is a “phenomenal choice because for some time we have been keenly motivated to prepare our students to be global citizens.” Activities are organized around different themes on campus, “and everyone can find something very pertinent that can introduce students to China.”

Zhu agrees, adding, “While not every student will end up working in China or engaging in international affairs, having knowledge of China will help any student be productive and engaged in our increasingly interconnected world. Students should try to understand China’s complex realities and the implications for the United States as well as the international system.”

As such, China will be a nearly ubiquitous theme for undergraduates. “We take undergraduate education seriously,” says James Lee, the Frederick G. L. Huetwell Professor of Chinese History and Director of the Center for Chinese Studies, “and so we’re doing a variety of things to pull in the undergraduate population, such as working with student government and other student organizations to push the international side of education. Globalization is a fact, and every UM student will soon be working in a global community, of which China is a part. The theme year enhances their ability to function, to live, to take part in this global environment.”

For evidence of UM’s part in the global community, McDonald points to an exchange of undergraduate chemistry students between UM and Peking University in Beijing, one of UM’s partners. Four Chinese students studied here this past summer; three UM students studied in Beijing.

“It was just really heartwarming to see how excited the Chinese faculty and administrators were about this chemistry program,” says McDonald. “It’s definitely a way to build a bond between countries.”

By the way, McDonald adds, “people in China who heard about the dragon boat races thought it was just great.”

So, what does a dragon boat look like, anyway? Most are long and narrow, with a small dragon head and tail. They bear a drum and teams of paddlers, who row to the drumbeat. They draw a lot of attention, but the point is, they are not as intimidating as their name suggests.

That may be the common drumbeat as UM celebrates and builds upon a long, fruitful relationship with China—and perhaps contributes to stronger bonds and safer outcomes. Qu Yuan likely would bless the effort:

*The past I probed, the future so to scan,
And found these rules that guide the life of man:
A man unjust in deed who would engage?
Whom should men take as guide except the sage?
In mortal dangers death I have defied,
Yet could look back, and cast regret aside.* ❖

Sheryl James is a freelance writer in Brighton, Michigan.



EXPERIENCE *ChinaNow*

At the September launch of the theme year, *ChinaNow: A Contemporary Exploration*, students from various College departments competed in dragon boat races. A drum and gong procession, made up of musicians from the UM Percussion Ensemble, took place on the banks of the Huron River. Only days before, *China Shakes the World* author James Kynge hosted a book signing and reception at the Power Center.

Events connected to the theme year will continue well into 2008. “The activities the China Center and others have planned will engage students, faculty, and the community, and will help us all understand the place of China in the contemporary world,” says Assistant Dean for Undergraduate Education Evans Young. “Why China? Why now? Join us to find out.”

Here are some activities open to the public during UM’s theme year, and more information can be found online at www.lsa.umich.edu/chinanow.

XU BING EXHIBIT, UM ARTIST-IN-RESIDENCE.

Thursday, November 8, 2007, at the Michigan Theater. Xu Bing is known for his pseudo-characters made of elements of Chinese characters, which form words that can be read in English.

CELLIST YO-YO MA. Saturday, November 10, 2007, at 8 P.M. in Hill Auditorium.

PHOTOGRAPHY EXHIBIT “INGE MORATH & ARTHUR MILLER: CHINA.” January 12 to March 23, 2008, at UM’s Museum of Art (UMMA) and other sites, featuring the creative partnership between photographer Inge Morath and her husband, playwright Arthur Miller.

PIANIST YUJA WANG. January 20, 2008, Hill Auditorium.

MASTER PIPA PLAYER WU MAN. February 10, 2008, Hill Auditorium.

PIANIST LANG LANG. April 2, 2008, Hill Auditorium.

SUNRISE TO MOONRISE FINAL EVENT. June 2008. This will close out the theme year and will include an array of cultural events in collaboration with the Ann Arbor Summer Festival’s “global parties” theme. There will be a Tai Chi demonstration at the Arboretum, a tour at Matthaei Botanical Gardens, the UM

Additional public events include:

CHINA THROUGH A GLOBAL LENS. This is a weekly distinguished speaker series that will bring in guests to address political, cultural, economic, societal, and governmental topics related to China’s globalization.

CHINESE DOCUMENTARY FILM SERIES. Michigan Theater.

MONTHLY PUBLIC LECTURE SERIES. Rackham Auditorium. This will highlight the work of faculty associates at UM’s Center for Chinese Studies, and UMMA’s Chinese art collection. ❖

(Left) Photos by Inge Morath, from the upcoming “Inge Morath & Arthur Miller: China” exhibit at UMMA.

From top to bottom: 6:30 A.M., Chang An Avenue, Beijing; “Peak Flying from Afar” near the Ling Yin Temple, Hangzhou; Hotel Lobby, Datong; Interior, Double Bridge Commune, Beijing; Workshop, May 7th Cadre School, Nanniwan.

(Bottom, left to right) Wu Man, Lang Lang, and Yo-Yo Ma.





Dispatches from Shanghai

While living in Shanghai and traveling throughout China, Lisa Weir has captured images of a contradictory country. (Clockwise from top left) Nanjing West Road, a pedestrian street

in central Shanghai; bamboo rafts on the Li River; Yao minority women in traditional clothing at the Long Ji (Dragon Backbone) rice terraces; a man with two hands sells calligraphy on

the street in southern Shanghai; rush hour on the central subway line in Shanghai; seasonal snacks at a market in Hong Kong during the Chinese New Year.

(Opposite page, left to right) the Bronze Buddha on Lantau Island, Hong Kong; a trolley en-route to Happy Valley, Hong Kong; traditional mountain homes in the Long Ji hills.



After graduation, Lisa Weir ('06) postponed applying to law school to travel abroad and teach English in China. She gives us an on-the-ground look at Shanghai, a city full of contradictions and changes — a reflection of China itself.

by Lisa Weir

Guangling Yi road, the back street adjacent to my apartment, is overflowing with the chirp and clatter of middle-class Shanghai. Scores of uniformed primary school students flood the skinny street, spending their few precious renminbi on treats after a long school day. Korean students from the university where I teach drive their mopeds up on the sidewalks, their girlfriends clinging to their backs. Women mill about in quilted pajamas. Passersby clog traffic as they peruse pushcarts piled with hand-painted dishware and fresh flowers.

This is real Shanghai. The hub of downtown glitters with Mercedes hood ornaments and Fendi bag buckles; my neighborhood twinkles with the clink of the garbage man's cowbell and the squeak of ancient bicycle brakes. These are strikingly different landscapes, symptomatic of the contradictions within the city. It is a city in limbo; a city caught between the shimmer of the future and the soul of the past.

China's duality is evident every day in my job teaching English at Shanghai University of Finance and Economics. Here, my students receive educational opportunities their parents never dreamed of. Lee, for instance, is the son of a successful entrepreneur with a middle school education. In a recent email, Lee explained to me that people like his dad "who were born in the 1960s had not many opportunities to go to schools because of their poor life and the cultural revolution." This is a reference to China's Mao-led socialist movement that attempted to equalize society by, in part, sending educated people into the country to work as farmers. In contrast to his dad's middle-school education, Lee has just finished an application to transfer to Cambridge University in England.

Lee is an emblem of the new China. Lee asked me not to tell his classmates about his application. I have found that even my most exceptional students are wary to stand out, even for superior achievements. Despite the westernization seeping into Chinese culture, Chinese philosophy is still anchored to the principals of collectivism. Confucianism

and Daoism, the linchpins of Chinese thought, encourage conformity and teach that the individual is insignificant.

As an American who has been taught to cherish individuality, I learned this the hard way on my first day of teaching. When I prompted my class to participate in discussion, their eyes shifted downward in unison; they hid without moving. Frustrated, I explained that I expected them to be vocal in this spoken English class. On the second day, Aldaris, a bright international business student from Ningbo, waited for me. "I think," he explained, "that we are nervous to talk alone."

Days when I'm not teaching, I'll take the subway around the city, sometimes to meet a friend, other times just to explore. From certain vantage points on the train, you can see shiny Shanghai. Massive silver towers leer over the life below, gleaming surfaces that appear as if they condemn the traditional ways. The new developments remain mostly empty, glimmering skeletons to fool eager eyes. Shanghai is the land of vacant lobbies, of a new era still waiting to be realized. It is a city that has not yet grown into itself. To an outsider, Shanghai seems like a teenager getting accustomed to new long limbs and strange sensations; the innards of the city are boiling with confusion.

Disfigured beggars sprawl in front of luxury hotels, humbling even the most prestigious address. From the train, I see a construction lot as long as the Big House. A month ago, it was blocks of homes and in a few months it will likely be another empty apartment building. In an adjacent lot, laundry dries in the pane-less windows of clay-roofed homes scheduled for demolition. In the street, crowds swarm fruit carts stacked high with deep green winter melons and palmellos bigger than soccer balls. Elderly women in cotton coveralls carry plastic bags laden with freshwater fish, still gasping for breath, slated to be tonight's dinner. New model sedans with tinted windows cruise by soundlessly.

On the subway, I sit next to a woman whose hands are tipped with gaudy acrylic nails, fierce purple talons that contrast with the sweet pink ruffles of her dress. She rapidly sends text messages on a bejeweled cell phone that looks like it must have cost more than my iPod. Most Shanghai dwellers think the subway is too expensive and opt to take the bus, which is a fraction of the 75 cents that it costs me to get downtown this evening. The subway therefore provides me with a limited picture of Shanghai's wealthier residents. Those who can afford to go by train are a part of China's *nouveau riche*, who seem to observe from their more lofty carriage the distant lives below.

They are an emblem of new China. ☐

Lisa Weir majored in English in the College of LSA and moved to Shanghai after graduation. She spent a year teaching English and history at Shanghai University of Finance and Economics and is now working as a coordinator for New York University's study abroad program in Shanghai.





The Road TO CHINA

When Paul Liu ('83) and Grace Lee ('84) met in 1982 outside UM's Frieze Building, they connected over their mutual interests in the arts, business, politics—and especially China. After 20 years of marriage and the launch of successful businesses in China, the spark is still there.

by Rebekah Murray

When Paul and Grace were studying Chinese literature and Chinese history together at UM, they were analyzing, what seemed to them at the time, their parents' country.

Born to Chinese immigrants, Grace grew up in a small town in New York, Paul in Ann Arbor. Both families were involved in activities within their Chinese-American communities. "My parents always wanted us to learn to speak Chinese," Grace says, "but we kids more or less rebelled and never learned much Chinese growing up."

It was after high school that both Paul and Grace separately immersed themselves in Chinese culture and each studied in China. But Paul says UM was the place to be.

(Above) A fashion retailer located within Three On The Bund; (bottom left) Paul Liu in the Shanghai Gallery of Art; (bottom right) Grace Lee with her company's hand-painted china.

"LSA was able to take our latent interest in China and deepen it by helping us analyze and understand what was going on in the country," Paul says. "Our academic grounding still influences us today and helps us understand what has happened in China,

especially in the last 30 years."

It's an education Paul and Grace are especially grateful for, now that they're some of Shanghai's most successful business owners.

Paul is involved in historic renovation projects in Shanghai. For seven years, he was the Executive Director and Chief Financial Officer of Three On The Bund, what he refers to as "a center for lifestyle, arts, and culture." Located in a seven-floor, 13,000 square-meter building on the Shanghai waterfront, the historically preserved building, built in 1916, houses four unique restaurants, fashion retailers, and a day spa—all centered around an atrium anchored by the Shanghai Gallery of Art. Paul has now founded his own company and is involved in another historic renovation in Shanghai's Hongkou District. Through these projects, Paul is revitalizing what is already a very cosmopolitan city.

But China is, if nothing else, a place of contradictions.

Grace sees a much different side of China in her work. In 1995, she founded Asianera Limited, a manufacturer of hand-painted fine china. She works with many young artists, some of whom live in the smaller cities and more rural

areas, like the Hebei province where Asianera Limited sponsors an elementary school. There, Grace still sees the traditionalism that is slowly disappearing from larger cities.

"I find it fascinating," she says. "The younger generation is given a great deal of independence, but when it comes to the things that matter most—whom they should marry and what work they should be involved in and what company to work for—those decisions are very much dictated by their parents. It's a more traditional Chinese value that parents know best."

[CHINA'S PULL]

In some ways, becoming successful entrepreneurs in a developing country was a natural progression after Paul and Grace left UM, but they didn't always have such creative jobs.

After graduating with a bachelor's degree in political science and Chinese studies, Paul obtained a graduate degree from Johns Hopkins University's School of Advanced International Studies and launched a career in corporate finance at JP Morgan in New York City. Grace took her liberal arts degree in political science and Chinese studies, complemented by many art history courses, and started her first career working in New York City for IBM's Sales and Marketing Division.

Starting at IBM was a great beginning, Grace says. "Even though my current line of business has nothing to do with computers, I was able to take a lot away with me regarding sales and marketing techniques, product development, understanding of markets, as well as concepts regarding corporate culture."

In 1990, Paul was transferred to Hong Kong with Union Bank of Switzerland, yet even while living there, Grace says there was a tremendous pull towards China. "Here we were, living in the underside of China, not really in there, and China was developing so rapidly. I had a desire to play a

small part in the development of China and hopefully to gradually make more of an impact."

Eventually, Paul was given the opportunity to be involved in the historical preservation project that became Three On The Bund and in 1999, the couple

moved their home to China. Today, businesses like Three On The Bund and Asianera Limited reflect some of the many changes in Chinese society.

"Three On The Bund could not have been successful 10 years before or even 5 years before," Paul says. "China wasn't ready then."

Now, Paul sees changes in individual priorities as well as the country's entire underlying economic structure. "There is still an ideological overlay," he says, "but in reality, most people are doing their own thing."

For Grace, physical and structural changes in the country have made it easier to create and sell hand-painted fine china. From a small workshop, Asianera Limited has grown to employ more than 200 people and now exports its products all over the world. "The infrastructure has been built up so well over the last 10 years, it has made running Asianera Limited much more efficient," she says.

[STUDYING CHINA'S FUTURE]

UM students today analyze a completely different China than the one Paul and Grace studied in the late 1970s and early '80s. "Now, the private sector has taken over a major section of the economy, and exposure to the outside world through trade, travel, and the Internet has dramatically changed people's expectations and outlooks," Paul says.

That's particularly evident when it comes to China's youth. "The objectives of young people in China now are really not that different than those in the United States," Paul says. "It's that drive to improve oneself and make a better life that's driving China's growth and dynamism going forward."

It's a future Paul and Grace are eager to watch. While there are some things they miss about the United States—"an English newspaper on your doorstep," Paul says, or "a crystal blue sky free of pollution"—there's the excitement of living in the midst of so much change.

"Our assumption, living here and working here, is that China's continuing transformation is just beginning," Paul says. "I think it's going to be tremendous. It's going to impact so many different fields—social, political, cultural, economic—and the world will change as a result." ❖

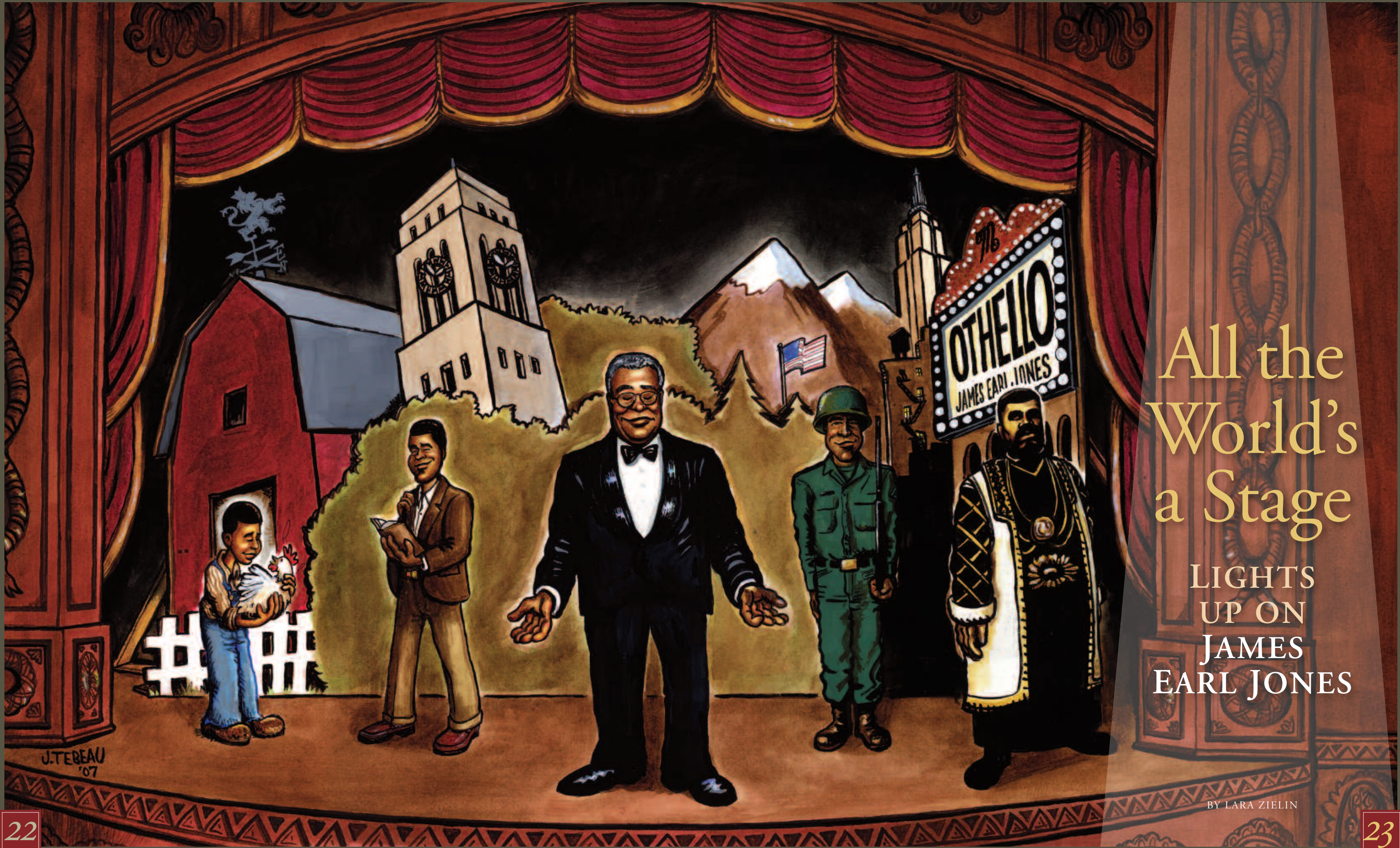
Rebekah Murray is the Assistant Editor of LSAmagazine.

- > At the end of the 18th century, China accounted for one-third of the world's population and **half of its wealth**.
- > Imperial China's achievements include the **INVENTION OF PAPER, THE COMPASS, AND GUNPOWDER**.
- > Less than **10 percent of high school graduates** in China are admitted to a university.
- > China manufactures **MORE THAN 70 PERCENT** of the world's toys.
- > In 2002, **60 percent of all Internet spam** originated in China.
- > More than **200 million people in China study English**. English is a compulsory subject for all Chinese primary school students.
- > China's three most popular surnames—Li, Wang, and Zhang—are shared by 270 million Chinese, **NEARLY EQUAL TO THE ENTIRE POPULATION OF THE UNITED STATES**.

Source: China Now magazine: www.chinanowmag.com

(Top) © AFP/Getty Images; (bottom) courtesy of Paul and Grace Liu





All the World's a Stage

LIGHTS
UP ON
JAMES
EARL JONES

BY LARA ZIELIN



“I’m devoid of a sense of humor,” says James Earl Jones (’53), “but there are some things, when I reflect on them, that are as funny as hell.”

Funny and ironic, too, such as the time in 1949 when, as a student at the University of Michigan, he and other members of the Reserve Officer Training Corps (ROTC) were given unloaded rifles and asked to serve as members of the honor guard for the Shah of Iran, Mohammad Reza Pahlavi, during a controversial campus visit. The Shah was receiving an honorary degree and “there was great protest among the student body,” says Jones, in large part because the Shah succumbed to pressure from the CIA to remove Iran’s elected Prime Minister, Mohammed Mosaddeq, from office. “Students threw eggs at the honor guard,” says Jones. “Here we were, guarding this man with our unloaded rifles. Funny as hell?”

Despite his self-ascribed lack of humor, (his assistant will argue that his sense of humor isn’t absent, it’s just *different*), Jones smiles often enough. It’s a movement that goes beyond his mouth and involves his whole face. And though he doesn’t exactly *smile* when recalling his days in the ROTC, he’s certainly fond of them. “I always felt like a soldier,” says Jones, adding, “I was a good soldier, I think. And I always lived a kind of soldier’s life, being a farm kid. We grew up with firearms and weapons and were totally familiar with them.”

Yes, that’s right: a farm kid. The man who would grow up to command the stage as Othello; who would infuse boxing with interracial adversity as Jack Jefferson in *The Great White Hope*; who would fly the plane carrying the bomb as Lt. Lothar Zogg in *Dr. Strangelove*—this man once took the exam for his Regents Alumni Scholarship with, as he says, “manure on my boots.”

It was the animals on the 40-acre farm in Dublin, Michigan, where Jones lived with his grandparents, that received most of his attention because it was easiest to communicate with them. “I talked to the animals at home—you had to, to work with them on the farm.” But it was harder to communicate with people because, in his youth, the voice of Darth Vader, the iron fist of the Galactic Empire; of Mufasa, the great lion king; of CNN and more, once stuttered so badly he was nearly mute. “I could basically communicate with the family, but the minute a stranger came to the house I could not introduce myself, I was that impaired,” Jones says.

With the help of a high school English teacher,

(Left) As an undergraduate, James Earl Jones performed in a production of *The Birds* on UM’s campus. (Opposite page) Jones on stage in *The Great White Hope*.

(Previous page) Illustration by John Tebeau; (left) courtesy of the Bentley Historical Library; (opposite page) Central Press/Springer/Hulton Archive/Getty Images

Donald Crouch, Jones began to function despite the impairment. Crouch encouraged him to read poetry and drama aloud, which Jones found he could accomplish without stuttering. “Most stutterers don’t have a problem with poetry if they read it a few times, or with song, or with drama,” he says, “especially if it is good drama. The better the drama is, the more it achieves a rhythm, even an unconscious one.”

Crouch continued to encourage Jones academically, and eventually Jones applied and was admitted to the University of Michigan.

“I was not a good student and did not have good study habits,” says Jones. “Maybe it was a classic case of a farm boy who had gone to a high school with a graduating class of 17. I was a frog jumping from a very small pond into a very big ocean. The plunge never stopped. I never hit bottom, I never rose to the top.”

Part of the problem may have been the heavy load of science classes that Jones was taking as a pre-med student. “Since I loved all my science classes in high school, I didn’t understand why science stymied me at UM. My sophomore year, I enrolled in a senior anatomy class with the idea that if I could pass that class, I’d continue [with pre-med]. The professor came across as cold and deadly. I failed. I bailed out of the pre-med program and chose theater as my new major.”

But the transfer didn’t lighten his load. He still had the obligation of paying his way through college.

He managed to hang on to his Regents Alumni Scholarship, and “the ROTC was a way to get an extra stipend, and that always helped. I was also a janitor in the Lydia Mendelssohn Theatre, so I was working back stage and on stage.

“I also did nude modeling for art classes,” Jones says, laughing. “I was in much better shape back in those days.”

But the jobs didn’t end there. “I delivered the *Detroit Free Press* every Sunday to West Quad, where I also had some kind of guard position. And I ran the switchboard.”

Eventually, Jones says he sought academic help for his suffering report card.

“There was a time when I had to admit the fact that I wasn’t a good student and I didn’t have good study habits, and I availed myself to the psychologist on campus to assess what my problems were. The advice they gave me was to study harder. They didn’t say cut down on my extra work load, because I couldn’t. There was no point in telling



“Most stutterers don’t have a problem with poetry if they read it a few times, or with song, or with drama, especially if it is good drama. The better the drama is, the more it achieves a rhythm, even an unconscious one.”

me that. There was no other way I could get through.”

When asked if he ever thought about leaving UM because of the hurdles, Jones’ face darkens. “I don’t even know why that’s a question. As long as I could hack it and hang onto my scholarship, as long as I could hold down my jobs on campus and pay my way, why leave? What was the alternative? Go to another school? Why should I do that?”

While the school psychologist wasn’t much help, Jones did find allies on campus, whom he now calls “heroes.”

“Claribel Baird Halstead was a legend. She is a legend. I say *is* because she’s still alive in me and her training is alive in me.”

Claribel was involved in many of the productions at the Lydia Mendelssohn Theatre, one of which, *Deep are the Roots*, starred Jones as a G.I. returning home to the south after World War II. “I’d learned to wear the uniform quite well by then. I was in my element. All the while Claribel mentored us and advised us on makeup, on acting—all kinds of things.”

Claribel’s husband, drama professor William Halstead, also had an impact on Jones. “He was tall, and he reminded me most of Donald Crouch. He was grey-haired, dignified, very handsome.”

The list goes on.

“I took an art appreciation course and the teacher had us experiment. Water colors was the first, I remember. He came by the table and said, ‘You seem to be going at it like [William] Blake. If anyone has told you that, don’t let that make you embarrassed. If you think in those kinds of images, continue.’ It was a bit like Donald Crouch would have encouraged me toward poetry. Very supportive, very encouraging.”

Professor Karl Litzenberg taught Shakespeare and proposed a creative solution to Jones’ failure to complete some exams: “He encouraged me just to come to class and read Shakespeare out loud. He said, ‘if you do enough of that I’ll give you a passing grade.’”

But Jones wouldn’t take him up on the offer. “I was going into the Army and I thought to Korea, so I shrugged off all my exams.”

But there was more to it than that: Jones wanted to do it right or not do it at all.

“I was a square kid, square in all kinds of ways—ethically, morally. So when the idea of taking a shortcut for a passing grade came up, I didn’t like it.

“Two years later, after I was out of the Army, I went back and covered everything with correspondence courses in order to get my degree.”

Of his behavior and conservative sensibilities Jones admits, “I was kind of a case, you know?” and there were others on campus at the same time who seemed to have thought the same thing.

Roger Wilkins (’53, J.D. ’56), a civil rights leader, history professor, journalist, and UM graduate, wrote a book titled *A Man’s Life: An Autobiography* (Ox Bow Press, 1991) and in it he describes his fellow classmate Jones:

I wanted to be a journalist, a strange pursuit for us then. But my choice of profession was no stranger than that of ... the stiff loner from the West Quad who was going to be an actor. We all knew he was crazy, partly because he never mixed with anybody and partly because everybody knew there were no decent acting jobs for Negroes anyway. Even after we had seen him in a few campus plays, we still thought he was crazy. His name was James Earl Jones.

This passage is quoted in Jones’ book *Voices and Silences* (Limelight Editions, 2004) as the preface to chapter five, called “Loner.”

It may have been his grandmother’s influence that caused Jones to be, to some degree, such an independent thinker and an outsider.

“My grandmother was an out-and-out racist who taught us children every racist concept she understood. Her point was, ‘I’m giving you some armor

against what you will confront when you get out there.’ Well, I went to school with Finnish kids, Polish kids, Native Americans, so I had to figure out at a very young age—six or seven years old—that somebody was wrong and I had to do thinking for myself. I became, to the best of my ability, an independent thinker, much more like my grandfather, who, unlike my grandmother, was a very fair and balanced human being.”

But it was Jones’ grandmother who stood by him when he went into the theater. After Jones finished his service in the Army (the Korean War ended and he was never called overseas), he returned to Michigan for an annual apprenticeship at a theater in Manistee. “She was there in the front row. She was the most supportive person in my life when I chose to enter the theater because, for her, theater was not an elite cultural form. Theater for her was drama, and she knew drama. In Mississippi she had witnessed murder, rape, lynchings, storms, hurricanes, and floods. She knew drama.”

After Manistee, Jones headed out to New York, where he lived for a while with his father, actor Robert Earl Jones.

“I give my father half credit for my becoming an actor,” says Jones, who had emotional ups and downs in his relationships with both biological parents.

His father was not only black, but blacklisted at the height of the McCarthy “witch hunt period.” As a result, Jones’ father was denied work in film and television.

“I wouldn’t say it was in honor of my father that I became an actor, but almost in spite of him. He once said, ‘if you do this work, you have to do it not because you want to be rich but because you love it.’ So he gave me enough warning. But I had nothing else I wanted to do better.”

Today, Jones is still working and staying busy. He lends his famous voice to documentaries and animation, to audio books, to CNN, and he still loves to do commercials, especially with Verizon.

“Call me a flack if you want to, but I’ve had a great time with that company.”

Besides being an active actor, he’s also an active audience, especially regarding shows like *Deadwood*, which ended its run much too early for Jones, and the *Sopranos*—right up until the popular HBO series ended in a controversial haze last June.

“Stories shouldn’t give closure,” he says. “It’s an odd phrase, closure. A good story never begins and never ends. It just sort of happens to you and you witness it.”

And then you wonder if he’s talking about the *Sopranos* or something else. ❖

Lara Zielin is editor of LSAmagazine.



James EARL JONES

HAS APPEARED IN MORE THAN 200 FILMS, TELEVISION SHOWS, AND THEATER PRODUCTIONS.

HERE ARE A FEW GEMS FROM HIS SPARKLING CAREER:

1964: Flew the plane as Lt. Lothar Zogg in the film *Dr. Strangelove or: How I Learned to Stop Worrying and Love the Bomb*.

1968: Played Jack Jefferson on stage in *The Great White Hope* and earned a Tony Award for the performance. In 1970, he repeated his performance in the film version and was nominated for an Academy Award for Best Actor.

1977: Lent his famous voice to the menacing character of Darth Vader in *Star Wars IV: A New Hope*, and in subsequent *Star Wars* films.

1981–1982: Received critical acclaim for his performance on-stage as the title role in *Othello*, opposite Christopher Plummer’s Iago.

1982: Died by the sword as Thulsa Doom (the Serpent King) in the film *Conan the Barbarian*.

1988: Donned the mantle of leadership again as King Jaffe Joffer in the film *Coming to America*.

1989: Played reclusive, grumpy writer Terence Mann in the film *Field of Dreams*.

1990: Wore a uniform as Admiral James Greer in the film *The Hunt for Red October*; played the same role again in *Patriot Games* (1992) and *Clear and Present Danger* (1994).

1991: Won an Emmy for Outstanding Lead Actor in 1991 for his role as Gabriel Bird in the drama *Gabriel’s Fire*.

1994: Voiced the mighty Mufasa in Disney’s film *The Lion King*.

1995: Played the Reverend Stephen Kumalo in the remake of *Cry, the Beloved Country*.

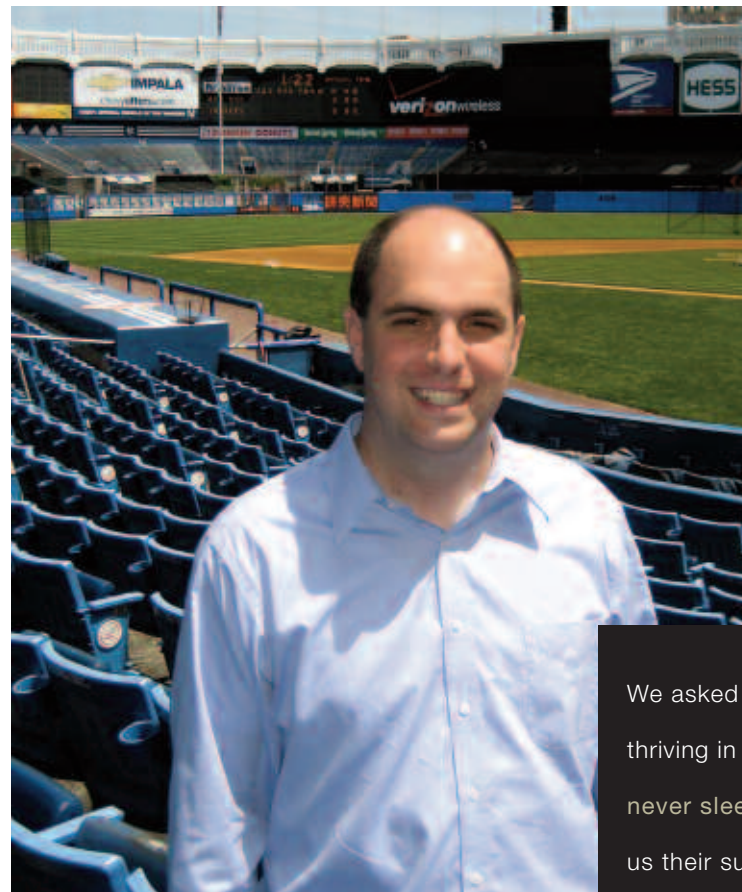
2004: Nominated for an Emmy for Outstanding Actor in a Guest Series as Will Cleveland in *Everwood*.

2005: Played Norman Thayer, Jr., on Broadway in *On Golden Pond*, which received critical acclaim.

if I can make it there...



John Lamb/Stone/Getty Images



We asked four alums thriving in the city that never sleeps to tell us their success stories and to offer up some advice on making it there, making it anywhere.



BY LARA ZIELIN

It's a hot, bright Tuesday

and Yankee Stadium looks like a rippling mirage in the heat. I sweat as I walk around the entire thing to the back, where employees such as Craig Cartmell ('97), senior manager of promotions and special events for the New York Yankees, work everyday.

He shows me around, and as we walk down a tunnel past security personnel, his demeanor is almost reverent, as if we're walking on sacred ground. And for Cartmell, maybe we are since, as a life-long Yankee fan, "this is the holy grail of jobs," he says. Later, as we're seated in an air-conditioned diner down the street, his face looks like that of an eight-year-old kid, he's that excited to talk about his work. He tells me about watching a 2003 Yankees game in which Aaron Boone hit a home run to send the team to the World Series, and how, as Cartmell and the crowd exploded with jubilation, he thought, "Holy crap, I'm getting paid to do this."

Cartmell's not the only LSA grad who loves what he does in New York City: Lara Englehardt Metz ('00), Adaora Udoji ('90), and Todd Rosenbluth ('97) are three other graduates who have found a way to make it in a city hard-packed with people and competition.

But the road to success for all of them has been a winding one, and at times an uphill trek.

In 1997, Cartmell was on-track to graduate premed from UM until, as he says, "I realized I hated science." He wound up graduating with a history degree and remembers thinking, "what can I do with this?"

He went back to his home state of New Jersey and started looking for employment—anywhere. He wound up living with his parents and working at a Warner Brothers store in the mall. "It was rough," he says. "I had friends who were working in investment banking and here I was with a degree selling ties with Bugs Bunny on them."

From a clean-lined, well-appointed office on Madison Avenue, Lara Englehardt Metz can relate. Today

she's a registered dietitian at KKG Body Fuel, Inc., with a calendar full of clients—some pregnant, some diabetic, some obese—who need help managing their diets. But after graduation, Englehardt Metz was working at World Packaging Corp. selling breath mints and candy. At the time, though she was grateful for the job at a company started by two UM alums, Englehardt Metz says, "I wanted a career where I could help people in a hands-on way and make a difference."

Todd Rosenbluth had a similar experience. Today, he conducts equity research for Standard & Poor's from an office with a breathtaking view of the East River and the Brooklyn Bridge, but after graduation he was a glorified telemarketer making cold calls to sell stocks. And Adaora Udoji, a Court TV correspondent and journalist who has covered international stories for CNN, ABC, and *Good Morning America*, once made copies and fetched coffee during an on-campus internship after graduation.

The point? Even today's hip, young, successful grads in the Big Apple didn't always know what they wanted to do, and they worked some tough jobs in the process of finding out. And while their UM education gave them all a great start, their diploma didn't come with instructions. "You have to uncover what you're passionate about, and that's not always an easy thing," explains Udoji.

"You might go to hell and back in the journey, but in the end it's all worth it."

In telling their success stories, distinct themes emerged among each of these grads. And they're worth a closer look, whether you're a seasoned pro at your job or a newbie grad just out of Ann Arbor.

"I had friends who were working in investment banking and here I was with a degree selling ties with Bugs Bunny on them. It was rough."

Craig Cartmell: Get more education

After graduation, while working at the mall, living at home, and wondering what to do with his life, Craig Cartmell started thinking about what he loved. The answer was sports, but Cartmell knew that to get into sports marketing or sports management, he needed a business background.

"I started doing research into sports marketing, and where I could get that kind of degree," says Cartmell, who eventually decided to enroll in a mas-

ter's program from Seton Hall University, located just outside of New York City.

While Cartmell learned, he worked. "I quit the mall and started an internship

with the Somerset Patriots, a minor league team in New Jersey. They paid me seven dollars an hour to sell season tickets and merchandise." The salary was low and the work was grueling, but Cartmell gained experience and eventually showed the team he had the qualities they wanted in an employee: The Somerset Patriots hired him full-time. "I still had to help the grounds crew pull the tarp on the field when it rained," says Cartmell, "but at least I was working in sports."

A few years later, a friend of a friend helped land his resume on the desk of the right person at the New York Yankees, and by early 2002, Cartmell was working for his favorite team, full time. By this time he had earned his master's degree as well. "My passion became my business," he says, "and if I had to do it all over again, I wouldn't do it differently."

Cartmell's success in the industry surprises no one as much as himself. "Growing up, I thought I would be a doctor or a lawyer. But my advice to anyone trying to find their path is to do what you're going to enjoy. There are always more doors open than you think."

Lara Englehardt Metz: Take risks and get internships

Even as an undergraduate, Lara Englehardt Metz loved to cook. "At UM, I was always cooking with a group of friends. I've always loved reading recipes and modifying them. I used to look forward to Monday mornings when Martha Stewart would send out her recipes of the week—I just couldn't wait."

When it was time to graduate, Englehardt Metz wasn't exactly sure what to do next. She'd had a host of internships during her undergraduate years—everything from working on Capitol Hill for a senator to working for designer Cynthia Rowley—but nothing seemed to fit exactly. And none of it was related to cooking—or nutrition.

"Because I'd had so many internships, I knew what I *didn't* want to do," Englehardt Metz says, "and that's as important as knowing what you do want to do." Englehardt Metz soon realized she wanted to pursue a career in nutrition, and decided obtaining a master's was the way to go. The only obstacle in her way was a litany of hard science courses. As a

"You have to uncover what you're passionate about, and that's not always an easy thing. You might go to hell and back in the journey, but in the end it's all worth it."

general studies major with a wealth of art history and anthropology courses under her belt, Englehardt Metz was intimidated by classes like organic chemistry. But she didn't let that stop her from enrolling in New York University and completing the degree. "I had to take the classes I was always afraid of as an undergrad," says Englehardt Metz. "But I took a chance. I was scared, but I did it."

Englehardt Metz has been with KKG Body Fuel for two years now, and she appreciates the range of experiences she had that led her to this position. "I try to tell other people, you don't have to know what you want to do—you might think you want to be a doctor, but be sure that along the way you take an art history class, too."

Adaora Udoji: Find a mentor

Adaora Udoji will make time for you—it's just that she might have to squeeze you in between another interview (where *she'll* be asking the questions) and, say, the recent criminal trial of Phil Spector.

Udoji is a recognizable face—she's logged hours of air-time in her varied career as a television journalist—but at UM, Udoji at times felt unrecognizable. "It could be a real pain trying to figure out how to make a big place like UM small and how to become more than a number. I got really good at figuring out how things work, how to make the system work for me."

Udoji also worked in the literal sense: 10 hours a week for former UM Vice President Walter Harrison—a job that started out as simply a way to make some extra cash and help pay for school. But Vice President Harrison—or "Walt," as Udoji now knows him—was, she says, "indicative of UM. As busy as he was, he took some time for me, to get to know me, to help me figure out what to do in life."

That something turned out to be journalism,

> Think you could cut it in the Big Apple?

A NUMBER OF THINGS COULD MAKE A DIFFERENCE:

Number of New Yorkers according to the last census: 8,008,278
Number of city buses: 4,489

Number of licensed medallion taxis: 12,778
Number of trips the Staten Island Ferry makes per day: 104

Number of eating establishments: 18,696
Number of visitors to the city in 2006: 44 million
Number of subway routes: 28

Number of subway riders per year: 1.4 billion
Total number of acres in Central Park: 843
Length of Manhattan's widest point: 2.3 miles

Average number of feature films shot in the city annually: more than 250
Number of airports serving the city: 3

Source: www.nycvisit.com

(Previous page, clockwise from top left) Craig Cartmell, Lara Englehardt Metz, Todd Rosenbluth, Adaora Udoji.

though Udoji never planned it that way. “If you would have told me that I would become a journalist, I would have told you that you were completely insane.”

After graduation but before Udoji started law school in 1991, Walt helped her secure internships in Ann Arbor at WUOM radio and at the Ross School of Business, working in communications. Three years later, after graduation from law school, Udoji checked in with Walt again. “He told me he had a cousin at ABC who needed off-air reporters to help cover the O.J. Simpson trial. I thought, this is so cool, they pay you to read a newspaper?”

From there, Udoji immersed herself in the field, eventually covering news such as the 1996 presidential election, the 2000 Concorde jet crash in Gonesse, France, and the Iraq war.

When Court TV came calling, Udoji was ready. “When you’re as curious as I am, everything is fascinating. It’s interesting every day. Court TV covers so much ground—criminal trials to Supreme Court decisions. It’s the original reality television.”

Still today, Udoji cites Walt’s influence in her life and encourages people to “find their own Walt. If someone offers to help you, take them up on it. There’s no guarantee it’s going to work, but there’s no guarantee it won’t work, either. People are usually happy to share their experiences.”

And of finding a different path than the one on which you originally started out?

“I tell young people all the time, be careful of boxing yourself in. Sometimes plan B is better than plan A, you just don’t know it.”

Todd Rosenbluth: Don’t just take the first job you’re offered and plug into the UM network

Todd Rosenbluth just got a promotion at work.

These days, things are coming up roses for the general studies graduate, but that hasn’t always been the case.

“I graduated without a clear path,” he says.

Because of a finance internship he did while an undergraduate at UM he “had a good understanding of the stock market,” he says, “but because I didn’t have a business or finance degree, sometimes I had a hard time getting interviews.”

So he took the first job he was offered: a financial adviser for a large investment company or, as Rosenbluth calls it, “a glorified stock broker.”

It was harder than he expected.

“It was so stressful. I had to cold-call potential clients and convince them of my financial expertise. It was hard enough to convince *me* of my financial expertise. I worked there for one year and then they let me go. I’m not a salesman.”

And then Rosenbluth had a realization. He liked research, liked advising clients, and eventually saw himself as someone who could provide stock research and recommendations to investors—but he didn’t have the credentials to actually get a job doing that type of work. “So I knew I had to take a step backward so I could go forward,” he explains, which amounted to a data entry job in a related field. “Slowly, I began to move up the food chain,” he says, “and along the way I had to take a couple more jobs that weren’t a perfect fit. I knew, though, that the jobs could get me closer to my goal.”

Along the way, Rosenbluth got hooked into the UM network in New York City. “I found the UM club through watching football games,” he says. He and his then-girlfriend, Miki (’97), who is now his wife, attended events together and became members of the Board of Directors. “It became cultural, a way to make friends,” says Rosenbluth. Currently Rosenbluth serves as the club’s president, helping more than 2,000 alumni keep in contact with each other. “UM alumni truly help each other out. But you need to get to know people. There are always new faces who want career advice but then never come to an event again. The real value of the network comes from sticking around.”

The alumni network was there six years ago to help Rosenbluth celebrate when he landed a financial advising role at Standard & Poor’s. He still works there today, and now he has an M.B.A. under his belt as well.

“I’ve had to fight a little bit to get where I am today,” says Rosenbluth, “but it’s helped me be more confident and to appreciate that this is a good setting, a good fit for me.”

His next obstacle? Convert the guy in the cubicle next door: “He’s an Ohio State fan,” says Rosenbluth, grinning like he just might try. □

Lara Zielin is Editor of LSAmagazine.

UM grads in the Big Apple looking for ways to network should consider the University of Michigan Entertainment Coalition, which offers a range of activities including the Michigan Media dinner series. The series features speakers from mass media, book publishing, television and more, with the goal of bringing together UM alumni in the media industry. The idea is to unite alums with an interest in media, whether from the business or creative side, to help advance their careers. For more information about the Michigan Media dinner series or more generally about the Entertainment Coalition, please visit www.um-ec.org.

FACULTY



whole world opened to me.”

In that world, she took an extraordinary intellectual journey. It led to graduate school at Emory and the University of Minnesota, then to archives where she uncovered the linked lives of a Native American man and an African-American woman, both long dead; and finally to her study of that couple in *Ties That Bind: The Story of an Afro-Cherokee Family in Slavery and Freedom* (California, 2005), recently awarded the Frederick Jackson Turner Award from the Organization of American Historians, the Lora Romero Distinguished First Book Award from the American Studies Association, and the prestigious Hiatt Prize in the Humanities from the Dallas Institute of Humanities and Culture. Even though the book is a success, Miles acknowledges that the path to producing her scholarship was a difficult and complicated one.

REALITY CONFOUNDING THE IDEAL

At Harvard, Miles says, “I was doing African-American studies, and I was really passionate about that.” Her knowledge of Native Americans consisted of only “a little history and a lot of mythology,” including the image, long cherished by many African Americans, of black slaves who “ran away to the Indians.”

To Miles, now a recently promoted associate professor of American Culture and Afroamerican and African Studies, that image symbolized the will to self-liberation and solidarity between two oppressed peoples. But as she and Joseph Gone headed toward marriage, she found reality confounding the ideal.

“We learned that our families—both families of color—were not very well-equipped to relate with

Ties That Bind

➤ TIYA MILES CONFRONTS MISCONCEPTIONS IN HER WORK AND LIFE

by James Tobin

TIYA MILES WAS AN UNDERGRADUATE at Harvard in the early 1990s when she met the man who would become her husband. He was a Montanan named Joseph Gone, a Native American of the Gros Ventre tribe, neighbors of the Assiniboine and the Blackfeet. As their relationship grew, she says, “A

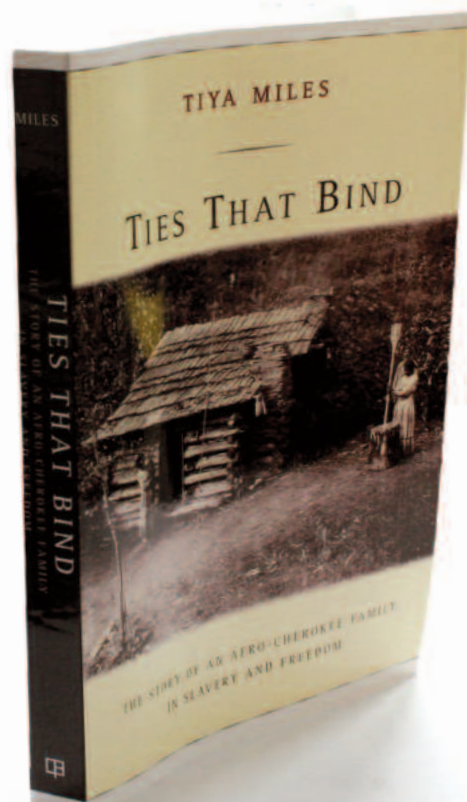
one another,” she says. “I had a fantasy that people of color would have a natural affinity and support each other. We learned in a very personal way that that was not necessarily the case. There were all kinds of misconceptions and even a sense of comparison about who was treated worse. I was disillusioned to learn this. But it made me feel committed to try to do something to combat all the misinformation and the negative emotion that came with it.” Perhaps, she thought, she could find historical precedents for Afro-Indian unity.

In graduate school, reading widely about Afro-Indian relations in early America, Miles spied a footnote about a Cherokee warrior-soldier named Shoe Boots and the African-American mother of his children—the first Cherokee-black relationship to be recognized as a marriage by the Cherokee Nation.

“I thought, ‘Aha, this is going to be that revolutionary story I’m looking for,’” she says.

She collected all the surviving evidence of Shoe Boots’ family. It revealed the complexity of race relations in antebellum America in a way few historians have glimpsed before. But it was not the inspirational story Miles had hoped to find.

The woman named Doll—“a tall, strong-made woman,” according to another slave—was not Shoe Boots’ wife but his slave. He had acquired her in the late 1790s when she was a teenager. She bore five of his children and lived with him for some 30 years. But he never released her from enslavement. At one point, in fact, he gave her and one of their children to another slaveowner. After Shoe Boots’ death in 1829, Doll made a claim for his U.S. veterans’ benefits—he had fought the Creek Indians with Andrew Jackson—and she testified that they had been married “in the Cherokee way.” Denied at first, she finally won her claim. When her last owner died, Doll, by then an



old woman, was declared free, and she lived into the Civil War.

It pained Miles to confront evidence that some Native Americans, rather than rejecting the racism of white Americans, seemed to have adopted it.

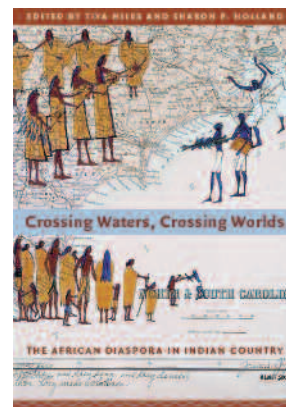
“I’m sure many researchers who do this kind of work—social history—read their documents and feel distraught,” she says. “It’s awful, it’s horrible, you wish the history hadn’t happened. But there it is.”

Still, within the larger picture of a society driven by race, she found moments when “people recognized each other as human beings and were willing to stand up to these incredible systems that were bearing down on them, and it’s important for us to know that people could and did do that.” And if she could not forgive Shoe Boots, she says she came to a deeper understanding of the influence of social context on human relationships.

“I found a story that was mainly about people who were in desperate circumstances and tried to survive, and who, in those circumstances, did awful things to one another,” she says. “Putting this story, this family, into the context of U.S. colonization of native

people and American slavery helped me to understand how people, no matter what race, can turn against each other. They were just trying to survive in a situation that was deeply inhumane. I do hold Shoe Boots accountable. But he was a citizen of a nation that was caught up in a horrible moment.”

Miles continues to explore the world of Cherokees and black slaves. Her latest research deals with a Cherokee named Chief James Vann who owned a plantation and black slaves in northern Georgia. She and Joseph Gone, an LSA assistant professor of psychology and American Culture, are the parents of twin girls.



As an editor of this book, Miles contributed to scholarship about Afro-Indian relations in early America.

*James Tobin (*78) is an associate professor of journalism at Miami University in Oxford, Ohio. He is the author of Ernie Pyle's War and To Conquer the Air: The Wright Brothers and the Great Race for Flight.*



Documentary Dilemma



WHAT'S FAIR?
WHAT'S BALANCED?

by Laura Bailey

MICHAEL MOORE'S DOCUMENTARY *Sicko* generated much debate and controversy when it was released this past summer. *Sicko* also gave Moore's critics, who often argue that his films distort reality, another round of ammunition.

We asked Terri Sarris, who teaches media production in LSA's Department of Screen Arts and Cultures, about documentarians using film to tell not just the story, but *their* story. Is such storytelling ethical? Should we hold documentaries to a higher standard than we do newsprint, television, or even other films?

In Moore's case, critics dismiss his work as propagandizing serious issues to further his own agenda. But, Sarris says, *all* documentarians distort reality—it's the natural fallout of making choices during the filmmaking process. Every detail chosen by the filmmaker—from lighting, to camera angles, to the cuts

on the editing room floor, even the narrator's tone of voice—shapes the film and its message.

"Films have always manipulated reality in some ways," Sarris says. "Even the films that call themselves documentaries."

No documentary should be taken as absolute truth or fact, Sarris says. The savvy viewer should realize that all media—documentary, news, fiction film—represent the maker's choices and has bias, point-of-view, and often an agenda.

"The label 'documentary' may lead some viewers to expect fairness or balance in the treatment or coverage of the subject," says Sarris, "but even these terms may represent impossibilities. Some expect documentaries to present both sides of an issue when there may in fact be many sides to an issue and covering every nuance of a subject may be impossible. In addition, even in documentaries that strive for objectivity, documentarians use the same techniques that theatrical filmmakers use to meet the needs of the film, and such shaping begins in pre-production."

Strategic editing can sculpt players into villains or heroes to create conflict, says Sarris. Shooting up from a low angle empowers a subject, shooting down diminishes a person.

The same techniques are used in broadcast journalism, commercial television, even reality TV.

For instance, one technique of Moore's is to pose hypothetical questions and answer them in the next scene through editing. In *Sicko*, Moore wonders aloud where forgotten heroes go for health care. In the next scenes, Moore and his band of ailing September 11 volunteers are filmed in a boat chugging purposefully across the water asking the Coast Guard the way to Guantanamo Bay.

Some may call that approach going overboard, Sarris says, others might feel that Moore and other documentarians don't push far or hard enough.

"It's a subjective call as to what goes too far," she says. "What is a creative treatment, what is a deliberate deception, what is a lie? Those are terms that are hard to define and maybe have differing definitions depending on whom you ask. In writing this article, you are doing what a filmmaker does—making choices as to what to leave in, what to ask, what to take out. As a journalist, you must think of the exact same issues all the time."

Laura Bailey is a senior public relations representative with UM's News Service and the School of Public Health.

Wales of a Tale

➤ In *The Welsh Girl*, a wartime romance, LSA's Peter Ho Davies, associate professor of English Language and Literature, writes about nationalism, loyalty, and honor in this, his first novel.

EXCERPT FROM CHAPTER ONE

It's a close June night in the Welsh hills, taut with the threat of thunder, and the radios of the village cough with static. The Quarryman's Arms, with the tallest aerial for miles around, is a scrum of bodies, all waiting to hear Churchill's broadcast.

There's a flurry of shouted orders leading up to the news at six. Esther, behind the lounge bar, pulls pint after pint, leaning back against the pumps so that the beer froths in the glass. At five to six by the scarred grandfather clock in the corner, her boss, Jack Jones, calls across for Esther to "warm 'er up." She tops off the pint she's pouring, steps back from the counter and up onto the pop crate beneath the till. She has to stretch for the knob on the wireless, one foot lift-

ing off the crate. Behind her, over the calls for service, she hears a few low whistles before the machine clicks into life, first with a scratchy hum, then a whistle of its own, finally, as if from afar, the signature tune of the program. The dial lights up like a sunset, and the noise around her subsides at once. Turning, the girl looks down into the crowd of faces staring up at the glowing radio, and it seems to her for a moment as if she has stilled them.

The men—soldiers, mostly,—sip their beers slowly during the broadcast. She looks from face to face, but they're all gazing off, concentrating on the prime minister's shuffling growl. The only ones to catch her eye are Harry Hitch, who's mouthing something—"me usual"—and Colin, who winks broadly from across the room.

Colin's one of the sappers with the Pioneer Corps building the base near the old holiday camp in the valley. They've been bringing some much needed business to the Arms for the last month, and for the last fortnight Esther and Colin have been sweethearts. Tonight she's agreed to slip off with him after

work, a date that seems destined now. She says the English word in her mind, "sweethearts," likes the way it sounds. She listens to Churchill, the voice of England, imagines him whispering it gravely, swallows a smile. She concentrates on the speech, thinks of the men on the beaches, and feels herself fill with emotion for her soldier like a slow-pouring glass of Guinness. There's a thickening in her throat, a brimming pressure behind her eyes. It's gratitude she feels, mixed with pride and hope, and she trusts that together this blend amounts to love.

The broadcast ends and the noise builds again in the pub. It's not quite a cheer—the speech has been sternly cautious—but there's a sense of excitement kept just in check and a kind of relief, as if a long-held breath can finally be released. All spring the whispered talk has been about an invasion, and now it's here, D-Day, the beginning of the end. The suspected secret the whole country has silently shared for months can be talked about openly at last. . . . Esther steps up on the crate once more and turns the radio dial through the catarrhal interference until it picks up faint dance music, Joe Loss and His Orpheans, from the Savoy in London. She hears something like applause and, looking round, sees with delight that it's literally a clapping of backs.

The crowd in the lounge is three deep and thirsty, . . . and she pulls pints until her arm aches, and froth fills the air like blossom. But when she turns to ring up the orders, she sees the public bar is emptying out. It's shearing season, after all. Invasion or no, farmers have to be up early. . . .

Pretty soon the pub is down to just soldiers and die-hards, the Welsh voices behind her wafting over with the smell of pipe tobacco. . . . Their talk for once isn't politics. This is a nationalist village, passionately so. It's what holds the place together, like a cracked and glued china teapot. The great quarry strike, all of forty-five years ago, almost broke

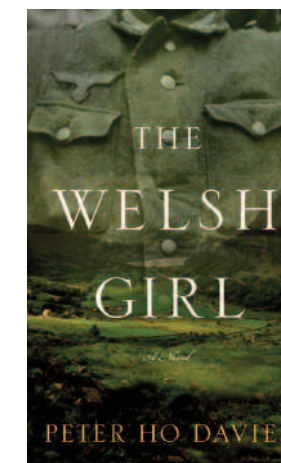
the town, and it's taken something shared to stick back together the families of men who returned to work and those who stayed out. The village would have died if not for the resurgence of Plaid Cymru, the Party of Wales, reminding them of what they had in common, their Celtic race, reminding them of their common enemy, the English.

She tells herself that most of the locals are as filled with excitement as she is, even if they're reluctant to admit it. She yearns to be British, tonight of all nights. She's proud of her Welshness, of course, in the same half-conscious way she's shyly proud of her looks, but she's impatient with all the history. Some part of her knows that nationalism is part and parcel of provincialism. She has her own dreams of escape, modest ones mostly—of a spell in service in Liverpool like her mother before her—and occasionally more thrilling ones, fueled by the pictures she sees at the Gaumont in Penygroes.

This corner of North Wales feels such a long way from the center of life, from London or Liverpool or, heavens, America. But nationalism, she senses, is a way of putting it back in the center, of saying that what's here is important enough. And this really is what Esther wants, what she dimly suspects they all want. To be important, to be the center of attention. Which is why she's so excited as she moves through the crowd collecting empties, stacking them up, glass on teetering glass, by the presence of the soldiers, by the arrival of the BBC Light Program a few years ago, by the museum treasures that are stored in the old

quarry workings, even by the school-age evacuees. They're refugees from the Blitz, most of them, but she doesn't care. If she can't see the world, she'll settle for the world coming to her.

. . . But soon now, she thinks, setting her stack of glasses down just before it topples, they might all leave—the soldiers, the evacuees, the BBC—and suddenly she can hardly bear the thought of it. Of being left behind.



Excerpted from *The Welsh Girl* by Peter Ho Davies, published by Houghton Mifflin Company in February. Copyright © 2007 by Peter Ho Davies. Reprinted by permission of Houghton Mifflin Company. All rights reserved.

(Opposite page) The rugged but beautiful landscape where *The Welsh Girl* is set.

(This page) Peter Ho Davies recently served as the Zell Director of the M.F.A. Program in the College of LSA. The son of a Welsh father and Chinese mother, Ho Davies has written two short-story collections and was named one of Granta's Best Young British Novelists in 2003. *The Welsh Girl* was long-listed for the prestigious Man Booker Prize.



(Bottom) Bering Photography; (right) courtesy of Houghton Mifflin Company

Faculty Awards

Every year, faculty in the College of LSA receive awards and their achievements are recognized throughout UM, the nation, and the world. “An outstanding faculty is the foundation of all we do for our undergraduate and graduate students,” says LSA Dean Terrence J. McDonald, “these awards acknowledge that—but they are just a fraction of the many awards recently received by our faculty.”

AMERICAN ASSOCIATION FOR ADVANCEMENT OF SCIENCE

Carol Fierke
Chemistry

Robert Griess
Mathematics

Arthur Lupia
Political Science

Samuel Mukasa
Geological Sciences

Ben A. Van Der Pluijm
Geological Sciences

ARTHUR F. THURNAU PROFESSOR

Anne Curzan
English

David Gerdes
Physics

Andrew Shryock
Anthropology

THE CLASS OF 1923 MEMORIAL TEACHING AWARD

Kristen Moore
Mathematics

Mika Lavaque-Manty
Political Science

COLLEGIATE PROFESSOR

Juan Cole
History

Sergey Fomin
Mathematics

Deborah E. Goldberg
Ecology and Evolutionary Biology

Sharon Herbert
Classical Studies

Conrad Kottak
Anthropology

Robert K. Lazarsfeld
Mathematics

Pamela Raymond
Molecular, Cellular, and Developmental Biology

Norbert Schwarz
Psychology

George Tsebelis
Political Science

Alan M. Wald
English,
American Culture

DISTINGUISHED FACULTY ACHIEVEMENT

Laurence Goldstein
English

Joyce Marcus
Anthropology

DISTINGUISHED UNIVERSITY PROFESSOR

Stephen Darwall
Philosophy

Henry Wright
Anthropology

Yu Xie
Sociology

FACULTY RECOGNITION AWARD

Scott Page
Political Science,
Economics

Brenda Volling
Psychology

FULBRIGHT SCHOLAR

Ruth Behar
Anthropology,
Women's Studies

Nancy R. Hunt
History

Jennifer Robertson
Anthropology

GOLDEN APPLE AWARD FOR EXCELLENT TEACHING

Andrei Markovits
Political Science,
German

GUGGENHEIM FELLOWSHIPS

E. Garcia Santo-Tomás
Romance Languages

Arthur Lupia
Political Science

Roberto Merlin
Physics

Piotr Michalowski
Near Eastern Studies

HAROLD R. JOHNSON DIVERSITY SERVICE AWARD

Frieda Ekotto
Romance Languages

Bruce Frier
Classical Studies

HENRY RUSSEL AWARD

Anne Curzan
English

JOHN H. D'ARMS FACULTY AWARD

Celeste Brusati
History of Art,
Women's Studies

Gillian Feeley-Harnik
Anthropology

Donald Lopez
Asian Languages and
Cultures

LOMONOSOV GOLD MEDAL

Rodney Ewing
Geological Sciences

LSA DISTINGUISHED SENIOR FACULTY LECTURER

Carl Simon
Complex Systems,
Economics,
Mathematics

LSA EXCELLENCE IN EDUCATION AWARD

Brad Bushman
Communication Studies,
Psychology

Derek B. Collins
Classical Studies

Joshua Miller
English

Ian N. Proops
Philosophy

Ctirad Uher
Physics

LSA IMES & MOORE FACULTY AWARD

Homer Neal
Physics

LSA MATTHEWS UNDERCLASS TEACHING AWARD

Despina Margomenou
Classical Studies

LSA RUTH SINCLAIR MEMORIAL AWARD

Susan Gass
Academic Advising Center

NATIONAL ACADEMY OF SCIENCES

James S. House
Sociology,
Survey Research Center

NATIONAL MEDAL OF SCIENCE

Hyman Bass
Mathematics,
Education

RACKHAM DISTINGUISHED GRADUATE MENTOR AWARD

Michael Woodroffe
Statistics

REGENTS' AWARD FOR DISTINGUISHED PUBLIC SERVICE

Anne Ruggles Gere
English,
Education

UNIVERSITY UNDERGRADUATE TEACHING AWARD

Allen Hicken
Political Science

FACULTYBooks

LSA faculty publish some of the most topical, timely, and engaging books on the market today. We invite you to explore some recent titles by these renowned scholars, and we'll continue bringing you more faculty publications in future issues of *LSAmagazine*.

College Knowledge: 101 Tips (University of Michigan Press, 2005) by David Schoem, Faculty Director of the Michigan Community Scholars Program. Based on 25 years of experience as a professor, dean, and vice-president, Schoem gives tips about academics, social growth, finances, and more for students heading off to college.

The Difference: How the Power of Diversity Creates Better Groups, Firms, Schools, and Societies (Princeton University Press, 2007) by Professor of Complex Systems, Political Science, and Eco-

nomics Scott E. Page. Page's research shows that progress and innovation may depend less on lone thinkers with enormous IQs than on diverse people working together.

Faith in the City: Preaching Radical Social Change in Detroit (University of Michigan Press, 2007) by Angela Denise Dillard, an associate professor of Afroamerican and African Studies. Dillard discusses how the worlds of politics and faith merged over the decades for many of Detroit's African Americans—and how that convergence provided the community with a powerful voice and identity.

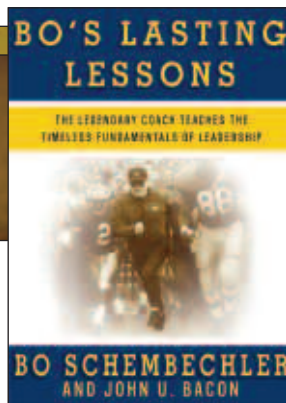
Trinity of Passion: The Literary Left and the Antifascist Crusade (University of North Carolina Press, 2007) by Alan M. Wald, a professor of English and American culture. In his second of three volumes, Wald tracks the political and personal lives of several generations of U.S. left-wing writers during the Spanish Civil War and World War II.

BO'S LASTING LESSONS

THE LEGENDARY COACH TEACHES THE TIMELESS FUNDAMENTALS OF LEADERSHIP

John U. Bacon ('86, M.A. '94), an award-winning sports writer and LSA lecturer in the Program in American Culture, needed five years to convince UM's renowned football coach Bo Schembechler to write a book on leadership. Bacon co-authored the book, finishing almost two years of interviews just a month before Bo passed away last year.

You need to know what to do from the day you become a leader to the day you step down. How to pick the right mentors, and how to lay down your laws when it's your turn at the top. How to hire your people—and fire them, when you have to. How to train them, motivate them, and mold them into a team. How to get them to execute what you want, perfectly, every time. How to handle conflicts and crises



excerpt

Hey. I'm just a football coach. I'm not going to try to tell you how your industry works. But I know how to do the things everyone needs to know if they're going to be successful. I don't care if you're running a Fortune 500 company or a Girl Scout troop. You

and troublemakers and guys who just aren't getting it. How to handle sudden setbacks, and crushing pressure, and constant criticism. How to keep outsiders from meddling with your program and insiders from undermining it. How to handle failure—and how to handle success. Even when to call it quits, and how to do it right.

And trust me: there's a right way and a wrong way to do all these things.

I can tell you this: the fundamental values that worked for me coaching football work everywhere else, too—in business, in medicine, in law, in education. I know because I've seen my players succeed in all those fields, using the same principles they learned playing on our team. And these principles never change. They are the key to success, real success, and that's what this book is about.

I'll be honest. My body isn't worth a damn any more, and all my records will be broken one day. I know this—but it doesn't bother me, because these values will outlast everything else I've done.

I'm 77 now, and it's time I told you what I've learned.

Excerpted from *BO'S LASTING LESSONS: The Legendary Coach Teaches the Timeless Fundamentals of Leadership* by Bo Schembechler and John U. Bacon. Copyright © 2007 by the Estate of Glenn E. Schembechler, Jr. Reprinted by permission of Grand Central Publishing, New York, NY. All rights reserved.

Art in Dark Places

by Rebekah Murray

➤ EVERY SUNDAY AFTERNOON, Rachael Hudak ('06) and Jaime Nelson ('07) travel from Ann Arbor to the Cooper Street Correctional Facility in Jackson, Michigan. The recent graduates meet with eight prisoners and each person shares a short story, essay, or poem written that week. It's a creative writing workshop hosted by UM's Prison Creative Arts Project (PCAP), and Hudak and Nelson are just two of about 50 PCAP members who, along with 25 UM students, are facilitating more than 30 workshops this fall—in theater, art, film, creative writing, or poetry—within prisons, juvenile facilities, and urban high schools.

Since Buzz Alexander, an Arthur F. Thurnau Professor of English Language and Literature, founded the project 17 years ago, more than 1,300 UM students have elected to take courses

connected with PCAP. The courses, offered through LSA and the School of Art and Design, teach students how to help form a creative space in places typically devoid of them.

When beginning a PCAP course with Alexander, students find out just a bit of what they're in for in the upcoming semester. "I ask them to believe in people, even when the evidence isn't there," Alexander says. "I tell them we're going to work together, but it's going to be hard and painful."

It can be hard for UM students to see youth in urban high schools drop out of school, as that may mean they'll end up in prison. UM students holding workshops in a juvenile facility might hear of a suicide. In the prisons, students may see the reality of economic and social injustices.

Yet as hard as this may be, "we're going to deal

with all of this in class," Alexander says. He tells students, "You have no idea how much you'll grow through all these challenges."

Geetha Iyer ('07) admits she felt a little awkward, at first, around ninth grade students at Detroit's Cooley High School. Last year, she and fellow PCAP teammate Sarah Carswell ('07) held two theater workshops at the school. Iyer and Carswell encouraged the students to just tell their stories—not read scripts or memorize lines. The students used everyday language and created a play about issues they face. No issue was off-limits. The topics in just two plays performed this past May included alcoholism, sexual abuse, family break-ups, rehabilitation, reconciliation, dating, teen pregnancy, and abortion.

"It's a part of their lives," Iyer says. "These are

things they are struggling with."

For Iyer, the reward for a year of working with students wasn't a polished final performance but the chance to just listen. "It was being there so we could talk about things that matter," she says.

Iyer has also led poetry and art workshops in prisons and was a member of PCAP's 12th annual art show committee. She continues to be involved with PCAP, currently serving on its executive committee.

WITNESSING PRISON ART

While most of PCAP's work takes place inside urban high schools, juvenile facilities, or prisons, once a year about 4,000 members of the community have a chance to be a part of PCAP through the Annual Exhibition of Art by Michigan Prisoners.

“To survive, prisoners have to create meaning, whether it’s through religion, philosophy, personal relationships, or art.”

Curated by Alexander and Janie Paul, Associate Professor of Art in the School of Art and Design, the exhibition contains artwork by more than 200 artists collected from 42 Michigan prisons and displayed for two weeks at the Duderstadt Center Gallery on North Campus.

People are often surprised by what they find at the art show.

“Visitors expect ‘prison art,’ depressing images and poor quality, and are stunned by a room full of color and an immense range of talent and accomplishment,” Alexander wrote almost three years ago after the 10th annual show.

“Often, people come to the show thinking about how every artist featured in the gallery has committed a crime. At the same time, these artists have created complex, beautiful, intricate art that confronts and questions them. The art challenges us to think about who the people are that are incarcerated and how we’ve learned to think of them,” says Hudak, who, after graduating from UM, became one of only two full-time PCAP staff members.

During the two-week art exhibition, PCAP hosts special events and speakers to talk about issues surrounding incarceration. After the event, each prison receives a video of the artwork and individual artists are given comments from guests and press clippings about the show.

“The art show provides a way for people who are really isolated to become validated and grow in their artwork,” says Paul.

But more than just creating art, Paul says the art exhibit and PCAP workshops can give incarcerated people a sense of purpose. “In the prisons, life is geared toward meaninglessness,” she says. “To survive, prisoners have to create meaning, whether it’s through

religion, philosophy, personal relationships, or art.”

Paul knows it works. “I get letters from people saying, ‘This is what’s keeping me alive, this is what I’m living for.’”

Art can be what some former prisoners are living for as well. Through the PCAP Linkage Project, formerly incarcerated artists, writers, actors, musicians, and dancers can continue to develop their work with the help of community mentors.

Art can also help develop character and help give former inmates the drive to succeed. Gary Green, now a quality control inspector for a Michigan auto parts manufacturer, says the nine months he attended PCAP’s creative writing workshop at Cooper Street Correctional Facility directly contributed to his accomplishments outside prison.

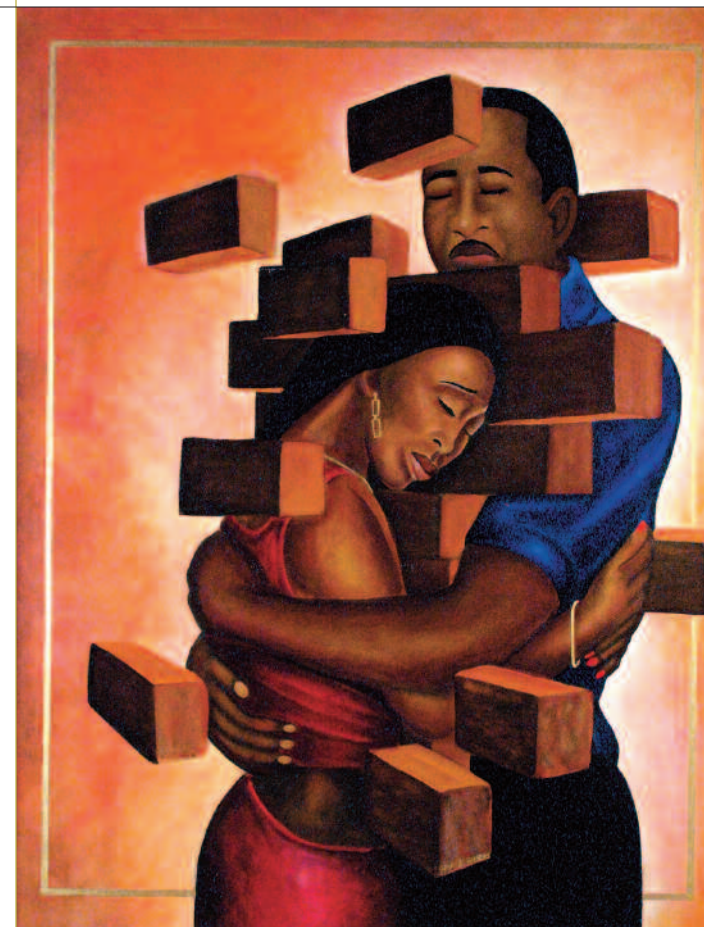
“I am more assertive and expressive now,” he says. “Rachael and Jaime challenged me in writing. I had to really dig and think to be able to put on paper what otherwise was too painful to talk about. Before, I’d run from the pain to other things like drugs and alcohol. These feelings had been locked away for years but by putting them on paper, I was able to get them out, to confront these issues.”

Being a part of this kind of transformation has a lasting effect on UM’s PCAP community. Former PCAP participants have left UM to become lawyers, activists, and teachers in urban schools. Some, like LSA senior Abbey Marshak, have interned with advocacy organizations and say they “just want to make the world a little bit better.”

And that’s what unites current and former PCAP members. “It’s an experience we can’t forget,” says Hudak. “PCAP creates a connection that extends beyond Ann Arbor and beyond graduating.”

Rebekah Murray is the Assistant Editor of LSA magazine.

Through PCAP, alumni Jaime Nelson (left) and Rachael Hudak (right) facilitate a creative writing workshop at a prison in Jackson, Michigan.



A Stranger with a Rope ...

by George Hall

*Prison is like a pool of deep water,
at first so clear that you can easily see the surface
and grasp the reaching hands of family and loved ones
holding you, keeping you from sinking.
But years pass, and grips tire and loosen,
one by one finally letting go until all are gone,
and you begin to slowly sink, deeper and deeper,
into the murky depths that have become your world,
and the light above slowly fades into pieces
of imperfect memory until, finally, all that remains of hope
is an unclear vision of a stranger far above somewhere with a rope...
and the prayer that she will throw it.*

The 13th Annual Exhibition of Art by Michigan Prisoners will be held March 25–April 9, 2008, at UM’s Duderstadt Center Gallery. The 2nd Annual Linkage Exhibition of Art, featuring work by formerly incarcerated artists and their mentors, will be held from November 9–December 19, 2007 at Focus Hope in Detroit.

Artwork by Michigan prisoners (clockwise from top left) “The Love Between a Father and Daughter,” by Keith Burns, “Nature in Prison,” by F. Mumford, and “Locals,” by Bryan Picken.





A Path Through Prison

An inmate once herself, **Mary Glover** now assists formerly incarcerated youth and adults.

by Rebekah Murray

WATCHING MARY HEINEN GLOVER ('92) in her Angell Hall office, one would never guess why she is exceptionally qualified to work with UM's Prison Creative Arts Project (PCAP). It's not entirely because of her paralegal certification, two bachelor's degrees, completion of advanced coursework, or the UM Hopwood Award she won.

Rather, it's because she's *been* there.

It was because of inmates Mary Glover and Joyce Dixon that LSA's Buzz Alexander came to the Coldwater, Michigan, Florence Crane Women's Facility and started doing theater workshops. But even before that, Glover was working to improve prison

conditions for women and inadvertently paved the way for PCAP.

It started on August 18, 1976. That's when 21-year-old Glover entered the Detroit House of Corrections faced with life in prison. She doesn't like to talk about the circumstances that put her there. To put it simply, she says she stole money at a gas station to pay rent and after she fled, her then-husband produced a pistol and a shooting took place in an altercation with three men.

"The remorse was overwhelming," Glover says. "They offered me a plea to second degree murder—which didn't require an intent to kill—and I pled guilty."

Prison was worse than anything she could have imagined. "It's an assault on your humanity," Glover says—of the conditions, the treatment, and of course the mental and emotional torture that comes with guilt and exile.

In September 1976, Glover attended law classes that attorney Judith Magid offered at the prison. The women told Magid of all the benefits male prisoners received, such as access to the courts and opportunities for wages, college degrees, trade apprenticeships, paralegal and job training, and minimum security camps. If the State of Michigan had a line item in their budget for male prisoners, couldn't they add one for female prisoners?

Magid said, "Here's the deal. We can file a civil rights action in the federal court, but first, we need to name plaintiffs."

Glover was the only one who volunteered. She remembers thinking, what do I have to lose? "I felt like I had already lost my life."

In 1979, after a 10-day trial, U.S. District Court Judge John Feikens ruled in favor of the women in *Glover v. Johnson*¹. "This case has been a landmark ruling for decades," Glover explains, "as it was the first in the United States to establish a constitutional right to court access and to parity in educational and vocational programming for women prisoners."

Still, even with the improvements that came because of the advocacy of the women prisoners and their counsel—the first interim order was for shower curtains—Glover vividly remembers the horror of imprisonment. Especially the fear and the sickness—as when the flu struck and, due to overcrowding, Glover and the 157 other women living in a gym had

to share one sink, two toilets, and no toilet paper.

Yet because of the court case, Glover had a creative outlet in education. Even while behind bars, she became a certified paralegal in 1981 and in 1992 earned a UM bachelor's degree in religion. "I kept working towards my goals, my educational pursuits as a way to maintain my sanity and my sense of self," she says.

On August 14, 2002, after serving 26 and a half years in prison and just before her 50th birthday, Glover was released on parole. Despite her elation, she found re-entering society wasn't easy. "I came home and found my mom dying and my dad with Alzheimer's," she says. "I had to relearn everything—how to drive, social rules, new technology, how to cook, care for myself, even acceptable behavior on a job. I had to get to know my family again."

Last year, Glover took the opportunity to join PCAP once again—this time as the Administrative Coordinator for the Linkage and Portfolio Projects.

Now, she helps formerly incarcerated youth and adults through re-entry challenges, and she links them with a community mentor to help the artists continue their craft.

She also works with PCAP's youth programs in four juvenile facilities coordinating the Portfolio Project and giving youth an impressive item to show a parole board, judge, or prospective employer.

Glover hopes PCAP's efforts are helping young adults avoid the mistakes she made at their age.

"We don't want them to end up in prison," she says. "We want the students in the juvenile facilities to see themselves as something other than screw-ups. We want to help them with their identity and character."

And that, Glover says, is worth it all.

Glover hopes PCAP's efforts are helping young adults avoid the mistakes she made at their age.

Rebekah Murray is the Assistant Editor of LSA magazine.

¹ *Glover v. Johnson*, 478 F.Supp. 1075 (E.D. Mich. 1979)

TAKE
YOUR
SEAT

and Be a Part of
Michigan History Forever

Make a gift of \$1,000 to the LSA Fund and receive an assigned seat, a deed of sponsorship, recognition on the Donor Wall, and a timeless legacy.

Contact the LSA Fund office at 734.615.6630 for more information on how you can become an Angell Hall seat sponsor.



Students, Graduates, and Debt

➤ As the cost of education rises throughout the nation, students and parents struggle to control debt.

by Gail Flynn

STUDIES SHOW AN OVERWHELMING majority of parents plan to pay for their children's education. Yet as costs climb, many are not able to save enough. Dara Duguay ('84), director of Citigroup's Office of Financial Education and author of *Please Send Money: A Financial Survival Guide for Young Adults on their Own*, says, "The Institute for Higher Education Policy found that parents saved, on average, a total of \$9,956 by the time their child was ready to enter college, yet at most public schools, this will barely cover the cost of one year."

Families have increasingly put their hopes in scholarships and grants, but state and federal funding for student aid has not increased at the rate of costs, although this year UM will increase institutionally funded need-based aid for students by 11.5 percent. UM has traditionally increased need-based aid at a higher rate than tuition increases.

"Students come to UM with high expectations for receiving scholarship support," says Margaret Rodriguez, Senior Associate Director of Financial Aid at UM. "They have excellent grades, outstanding accomplishments, and may have been offered money by other institutions. But because of the high caliber of students that UM attracts, the competition for scholarship money is intense."

A national survey found that 92 percent of financial aid administrators at public and private universities say parents overestimate the amount of grant money their children will receive. As education costs outstrip family savings, students and their parents often turn to loans.

Today nearly two-thirds of students at four-year universities have multiple loans, compared with fewer than half of graduating seniors in 1993, according to the Project on Student Debt. Also, the average loan debt has more than doubled, from \$9,250 to \$19,200—a 58 percent increase after inflation. For those who take out loans, the average debt for a Michigan student graduating with a bachelor's degree is \$23,500.

Students are taking on higher levels of debt to

meet the gap between money they receive and their Expected Family Contribution (EFC) as calculated by the Free Application for Federal Student Aid (FAFSA) that families must complete to qualify for any financial aid or grants, including federal loans such as Stafford or Perkins.

In 1992, Congress responded to the rising cost of education by passing the Reauthorization of the Education Act, which raised the amount of money that students could borrow under the student loan program. Unsubsidized loans were made available to dependent students for the first time, which resulted in more loans to students from higher-income families.¹

Also, the number of private loans has been growing steadily. Whereas federal loans have a fixed interest rate, many private loans have high variable rates with no cap on the upper limit, as well as repayment penalties and less flexible repayment options. "What's troubling about private loans," says Rodriguez, "is that more and more we're seeing tiered rates depending upon the credit rating of the student borrower and parent co-signer. Lenders are advertising 'Interest rates as low as X,' but only 10 to 15 percent of borrowers get that great rate. Most are offered a rate higher than advertised but, by the time they find out, they often choose to take that rate rather than get a better one elsewhere. Also, private lenders who work with universities usually require the school to sign off on loans to determine the cost of attending the institution and what other aid the student will receive, and then offer only the amount that the student needs. Many direct-to-consumer lenders don't communicate with schools and consequently offer loans that are not in the best interests of the student."

The Project on Student Debt warns that even though students today are graduating with greater debt than in the past, current low interest rates have enabled monthly payments to remain low. As interest rates rise, young adults will be increasingly squeezed by growing student loan payments, in addition to bills for car loans, mortgages, and credit cards.

Parents also have been taking on more debt to

“Money is the most taboo subject in our society,” says Duguay, “and parents and children don’t talk about it.”

pay for higher education. A study by LSA Associate Professor of Economics Robert F. Schoeni found that 34 percent of young adults receive financial assistance from their parents. "While parents are more able than in the past to provide assistance," says Schoeni, "some are overextending themselves."

Increasingly, parents are dipping into savings and delaying retirement or taking out home equity loans. Many young adults have chosen to add a home equity loan to their mortgage to consolidate school loan payments, make their interest tax deductible, and extend their repayment term to ease their debt burdens. Although home equity loans are preferable to other private loan options, there may be problems on the horizon.

According to LSA Professor of Economics Frank Stafford, home equity is masking massive debt in our society. "Although it may not be unusual for someone in his or her 20s to have limited wealth," he explains, "now we are seeing many people in the 35- to 45-year-old range who have no real assets. On the positive side, home ownership is high, but people mortgage large portions of their home's value through non-collateral debt."

Today, because technology makes extensive personal information readily accessible to creditors, lending decisions are often based on borrowing history, education, employment history, and other factors rather than on collateral assets.

"The problem with non-collateral loans," says Stafford, "is that if you have borrowed 98 percent of the value of your house, you have no equity. When property values drop, you could be left holding a \$150,000 debt for a house that is only worth \$125,000. This type of excessive borrowing contributed to the Depression, when people walked away from homes that they couldn't sell for enough to pay off their loans. The federal government subsidizes this non-collateral borrowing by making interest payments tax deductible, thereby encouraging borrowing. When people borrow at these levels, they have fewer resources



Costly College

- Across the nation, the cost of a college education has risen steadily over the past 30 years—more than twice the rate of overall inflation.
- Tuition and fees at public four-year universities had the largest five-year increase on record—35 percent, after adjusting for inflation, according to a 2001–06 study by The College Board.
- State funding for higher education has consistently been reduced. At UM, state support for the General Fund has dropped from 78 percent in 1960 to 24 percent today, while the tuition contribution has risen from 20 percent to 62 percent of the budget.
- Michigan is seeing an average tuition increase of 11.3 percent across the state. UM tuition and fees for a first year in-state undergraduate are approximately \$10,447.

Sources: The Project on Student Debt; *USA Today*, July 26, 2007; *The University Record*, July 23, 2007.

¹ "Student Debt: Bigger and Bigger," briefing for the Center for Economic Policy and Research

Surviving Debt



Financial sense from alumna and author Dara Duguay ('84), currently the director of Citigroup's Office of Financial Education and formerly the Executive Director of Jump\$tart Coalition for Personal Financial Literacy and Director of Education at the Consumer Counseling Service.

- Write a budget down on paper so you can see where your money is going and can address the problem. When one thing stands out as a major cost, you need to make lifestyle choices and downsize.
- If your mortgage or rent is more than 50 percent of your income, you need to downsize. Also, do you really need a car with large payments?
- Never keep more than two credit cards, and don't use specialty store cards.
- Keep the low credit limit that comes with your credit card to help you keep tabs on your debt level.
- If you consolidate your debt to make it manageable, cut up your credit cards so you don't run up more debt.

To students and parents of college students, Duguay recommends:

- Set a college budget;
- File a FAFSA, even if you don't think you'll qualify for government financial aid;
- Utilize all scholarship, grant, work study resources, and federal loans before borrowing from private lenders;
- Borrow only what you'll need for tuition, room and board, and books; and
- If you must take out a private loan, shop around for the best deal.

"People don't want to think about their debt and, when they do, they radically under guess the amount," says Duguay. "When everything is added up, whatever people guess, their debt is usually double. They think they owe less than they do because they don't want to know how much they have spent. Roughly 50 percent of the population doesn't contribute to their company's 401K plan because they need their entire paycheck for bills. Working through a budget is healthy shock treatment."

for their children's education, for retirement, and ultimately to leave as inheritance, so overall individual wealth goes down. The bottom line is that people in the United States consistently spend more than they make."

Duguay agrees. "We live in a consumer culture with a personal savings rate of negative one percent, which means for every \$1 earned, we spend \$1.22. This

“The bottom line is that people in the United States consistently spend more than they make.”

is the lowest personal savings rate since 1933. By taking out home equity loans to pay off student loans, credit card debts, and, basically, to use their house as a personal lender, people are getting into deep financial trouble as home values drop and adjustable rates go up. We are seeing one out of every 200 homeowners in foreclosure proceedings, often because they have resisted making the hard choices."

So what is the best way to pay for college and have a secure financial future?

First, all of the experts agree that people need to become better educated about financial planning. Sixteen states, but not Michigan, have mandated a class in financial education for every high school student before graduation.

"Money is the most taboo subject in our society," says Duguay, "and parents and children don't talk about it. Often parents don't understand budget decision-making and the difference between wants and needs, so they don't make it clear to their children."

Rodriguez recommends that every family file a FAFSA, whether they think they will qualify for aid or not. "They should use all scholarship, grant, and work study resources available first and then take the maximum amount of federal student and parent loans before borrowing from private lenders," she says. "Students often think it is easier to take out a private student loan because they don't have to supply the financial information required by FAFSA, but end up with higher interest rates and more debt to repay."

Another caution is that students borrow more than they need, without thinking about repayment. "Students often take the maximum amount they are offered," says Duguay, "more than they need for tuition, room and board, or books. They see it as necessary to pay for spring break trips, entertainment, and other extras that are part of college life. That's a mistake; it isn't extra money. Parents need to do a budget with their children at the beginning of each year, before they accept loan money, to see how much they really need."

When students do take private loans, they should shop around, ask questions, and look for the "catch" to special offers. They should find out how much their monthly payments would be after they graduate. "When new graduates get their first job, furnish their apartment, and buy a car, they sometimes forget about loan payments that begin a few months after graduation," says Duguay. "They are surprised that monthly payments can be significant, much more than they can afford on an entry-level salary."

Gail Flynn is the Development Communications Manager for the College of LSA.

Fostering Funds

RANDALL KAPLAN AND HIS WIFE, LARA, ARE MAKING A UM EDUCATION POSSIBLE FOR KIDS RAISED IN FOSTER CARE

AS JULIA EDER APPROACHED her 86th birthday, her grandson Randall Kaplan ('90) decided to produce a video montage of her life. In the process, Kaplan discovered something he never knew: One of his grandmother's greatest regrets was not attending college, something she could not pursue after being raised in foster care.

"My grandmother is a brilliant woman," Kaplan says. "She was a straight-A student but because she lacked the financial means, she unfortunately never had the ability to pursue a collegiate degree."

Moved by the revelation, Kaplan and his wife, Lara, decided to create an academic scholarship designed specifically for foster care students. They contacted LSA about establishing the Julia Eder Dean's Scholarship, which would provide a full-tuition, all-expenses-paid scholarship for a foster care student. Unfortunately, there was a hitch: Because students with foster care experiences don't indicate this background on their UM applications, it was impossible to determine who might be eligible for the funds.

Not to be dissuaded, Kaplan contacted the two leading foster care governing bodies in Michigan and told them of his scholarship idea. After dozens of initial phone calls and emails, Kaplan convinced these organizations to send out more than 3,000 letters to foster care homes encouraging all qualified

“It's an incredible thing to have the opportunity to permanently change someone's life for the better.”

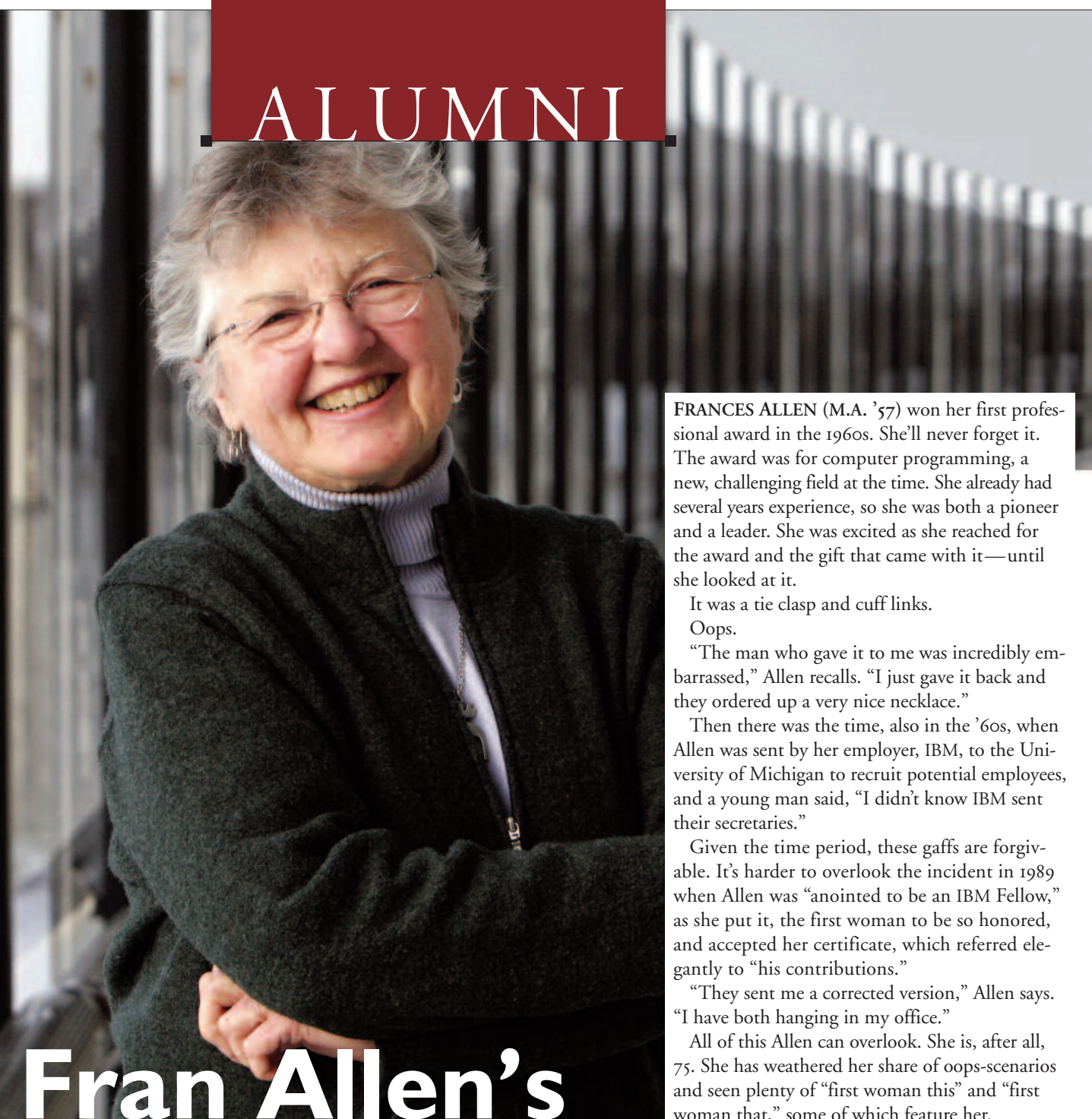
high school seniors to apply. A few months later, the scholarship had its first recipient—a young woman who had been abandoned at birth, had been physically and emotionally abused and, at one point during high school, had been homeless and living in a car. Despite these obstacles, she'd managed to maintain a 3.7 GPA and gain admittance to UM.

By the time the details of the scholarship had been worked out, Kaplan's grandmother was slated to turn 87. For her 87th birthday, Kaplan flew from Los Angeles to Detroit to surprise her with not only the scholarship but a dinner at which she met the scholarship's first recipient.

"My grandmother told me that was the greatest moment of her life," says Kaplan. "And now that we've had such success with the first scholarship, we've decided to create a second, permanent one."

The endowed Randall and Lara Kaplan Scholarship will help gifted students in need. "It's an incredible thing," says Kaplan, "to have the opportunity to permanently change someone's life for the better. It's not just that person's life that will change, but future generations will also benefit. We are very fortunate to be able to help change the lives of so many talented students with need."





Fran Allen's Hard Drive

> AN LSA ALUMNA PROCESSES HER SUCCESSES IN A MALE-DOMINATED FIELD
by Sheryl James

FRANCES ALLEN (M.A. '57) won her first professional award in the 1960s. She'll never forget it. The award was for computer programming, a new, challenging field at the time. She already had several years experience, so she was both a pioneer and a leader. She was excited as she reached for the award and the gift that came with it—until she looked at it.

It was a tie clasp and cuff links. Oops. "The man who gave it to me was incredibly embarrassed," Allen recalls. "I just gave it back and they ordered up a very nice necklace." Then there was the time, also in the '60s, when Allen was sent by her employer, IBM, to the University of Michigan to recruit potential employees, and a young man said, "I didn't know IBM sent their secretaries."

Given the time period, these gaffs are forgivable. It's harder to overlook the incident in 1989 when Allen was "anointed to be an IBM Fellow," as she put it, the first woman to be so honored, and accepted her certificate, which referred elegantly to "his contributions."

"They sent me a corrected version," Allen says. "I have both hanging in my office." All of this Allen can overlook. She is, after all, 75. She has weathered her share of oops-scenarios and seen plenty of "first woman this" and "first woman that," some of which feature her.

More importantly, she has reached the mountain-top in her field. In June, she received the 2006 Turing Award from the Association of Computing Machinery (ACM), the Academy Award of computer science honors. Nominated for the award by her peers without her knowledge, the Turing recognized her pioneering work in the theory and practice that enabled the use of high-performance computers.

What is much more difficult for Allen to overlook is the dearth of women today, some 40 years

after she received those cuff links, entering the field of computer science. "I believe it's our fault," she says. "We haven't made it sound very interesting." Computer science, Allen says, "has a reputation of being very geeky—geeky guys sitting around screens all day. They see no excitement, yet it's extremely exciting."

In the early days of computer science, Allen rubbed shoulders with lots of women who entered the field from diverse directions and unlikely origins. Allen was no exception. She was born in 1932 and grew up on a small farm in Peru, a tiny community in upstate New York. She attended a one-room school and, later, a one-building school that housed all grades. She was valedictorian of her 1950 graduating class of 27, and yes, she was good at math and science—and every other subject.

In 1954, she earned a bachelor's degree in mathematics from Albany State Teachers College and returned to Peru to teach. She needed a master's degree for full certification so, "I decided to go to UM because it was the cheapest place I could find to get a master's degree in mathematics," which she earned in 1957.

By chance, she took one of only two courses in computers. When IBM sent recruiters to UM looking for bright, young, computer-trained employees, that

Allen was sent by her employer to the University of Michigan to recruit potential employees, and a young man said, "I didn't know IBM sent their secretaries."

one course qualified Allen. She took a job as a programmer and has been at the same company basically studying the same subject area ever since. She retired in 2002 but is still active as IBM Fellow Emerita at the T.J. Watson Research Center in Yorktown Heights, New York.

It takes something of a translation to describe Allen's work. This is her cocktail party version: "It's really providing the

bridge between the person who wants to use a computer and the computer." For instance, in weather prediction, "I say the scientists who predict weather need very powerful computers in order to get it right and quickly—because sometimes you need to do that quickly, as in the case of tornadoes. I provide a tool for that."

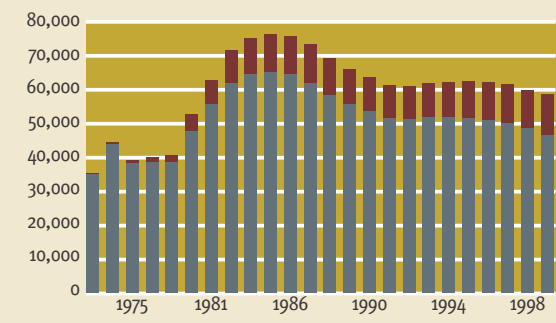
Now, she wants to provide tools to get women into her field. She recently attended a symposium on women in science at Harvard University, and tries to visit as many universities as possible to get across the message that computer science is an exciting destination. Fifty years may sound like a long time, but the field, she says, is still so young.

"When I talk with people at schools, I always say, 'This is what has been created in the last 50 or 60 years. We just got the pieces together. This is just the beginning.'"

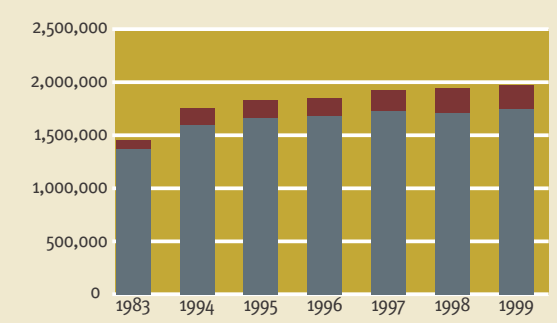
Sheryl James is a freelance writer from Brighton, Michigan.

Back to the Drafting Table: Women Comprise Only a Fraction of the Engineering Field

EARNED BACHELOR'S DEGREES IN ENGINEERING:



NUMBER OF EMPLOYED ENGINEERS BY GENDER:



Source: Society of Women Engineers website: www.swe.org

Source: Society of Women Engineers website: www.swe.org

Noble in Character, Courageous in Deed

2007 HUMANITARIAN SERVICE AWARD
WINNERS NAMED

The LSA Humanitarian Service Award was established this year to recognize altruistic alumni who promote greater understanding in our world. This year's recipients of the 2007 Humanitarian Service Awards are: **Lori Wood Knapp ('82)**; **Jack Hood Vaughn ('43, M.A. '47)**; and **Joan Hyman Tisch ('48)**.

LORI WOOD KNAPP

Lori Wood Knapp of Rockford, Michigan, is the founder and president of Warm Hearts Foundation, an organization dedicated to "providing a loving hand to lift those less fortunate out of poverty and into self-sufficiency by providing clean water sources, safe shelter, nourishment, and educational opportunities." Knapp's work with her husband Mike, in partnership with dedicated local volunteers in Kenya and Malawi, has brought safe, reliable water to 89 villages and more than 250,000 people in Eastern Africa. She also opened an orphanage and safe house. In Malawi alone, Knapp's foundation has built The School of Hope, and has drilled 156 wells. No longer do the villages have problems with water-borne diseases, and women and children do not spend all day walking to find water. In addition to improved health, villagers are now able to grow crops to feed their families.

Knapp also helped build a primary and a secondary school in one of the poorest areas of Nairobi, Kenya. The schools have an enrollment of more than 1,300 students, none of whom would be able to attend school in the city because they are either orphaned or destitute, and cannot afford the fees, uniforms, books, or supplies. Each classroom has more than 90 students, and Knapp's latest goal is to build more classrooms to reduce class size. On the outskirts of Nairobi, construction was completed in December 2006 for a new Warm Hearts orphanage.

Knapp's sister, Lisa Wood Vreede ('81), says, "Lori believes the path to change lies in providing education and opportunity to the children of the world. Through providing safe water, she has brought the opportunity for health and nourishment. Through

safety and education she has brought hope of a better future. The actions of Lori and her partners in Africa are making a difference for hundreds of thousands of people today. These people will make a difference for others tomorrow."

JACK HOOD VAUGHN

Jack Hood Vaughn of Tucson, Arizona, served in every overseas agency of the U.S. government: the U.S. Information Service, USAID, the State Department, and the Peace Corps. As the second Director of the Peace Corps, Vaughn oversaw the largest contingent of volunteers serving in the most countries in the agency's history, a fact that should make every graduate proud since the Peace Corps was established on the steps of the Union by John F. Kennedy in 1960. Vaughn worked in Bolivia, Costa Rica, Panama, Guatemala, Mali, Mauritania, Senegal, Guinea, Haiti, Iran, and Colombia, and he went on to serve as an ambassador to Colombia and Panama. In the private sector, Vaughn was the first International Director of *Sesame Street*, Dean of International Studies at Florida International University, and served on boards at several Central American universities. Vaughn also worked to promote women's reproductive rights as the President of Planned Parenthood. Each accomplishment is impressive in itself but collectively they are awe-inspiring, especially for a man who began his career as the head boxing coach at UM.

Vaughn's wife, Margaret Vaughn, says, "Jack has always been extremely proud of his Michigan ties. . . . It was at Michigan that his interest in foreign languages was developed and thrived.

"Jack has often described his years as a Michigan Fiji fraternity member, especially the day all the brothers descended on the recruiting station in Ann Arbor to join the Marines during World War II. After the armistice, he was sent to China, where he taught English when his Marine Corps duties allowed. After the war, he returned to Michigan to get his M.A. in Spanish. His Michigan education and proficiency in foreign languages were crucial to his career in international affairs."

Vaughn continues to advocate for women, the environment, and the Peace Corps. He remains a prolific writer and speaker.

JOAN H. TISCH

Joan H. Tisch of New York, New York, is a philanthropist and active volunteer who has helped educational, civic, arts, and health organizations in her hometown of New York City as well as across the country. LSA graduates are most familiar with her generosity when they reflect on their studies that took place in Tisch Hall, built with the gift she and her late husband, New York Giants co-owner and Loews Corporation Chairman Bob Tisch, gave to the College in 1996. In addition to the tremendous generosity she has shown the University of Michigan, Tisch has also supported other educational institutions including NYU's Tisch School of the Arts and Tisch Hospital, and Duke University's Preston Robert Tisch Brain Tumor Research Center.

LSA alumni in New York likely will have walked the Tisch Galleries at the Metropolitan Museum of Art, or benefited from her work as a trustee at the Museum of Modern Art. Residents in the city will also have experienced her support at the 92nd Street YMCA or through Citymeals-on-Wheels, where she volunteers.

Howard Bragman ('78), of Los Angeles, California nominated Tisch for this award because of the aforementioned contributions to society, as well as her work to support AIDS-related charities. Bragman wrote that Tisch's volunteer work and support of the Gay Men's Health Crisis were pivotal to the organization's growth as one of the world's most comprehensive providers of information for men, women, and children affected by AIDS.

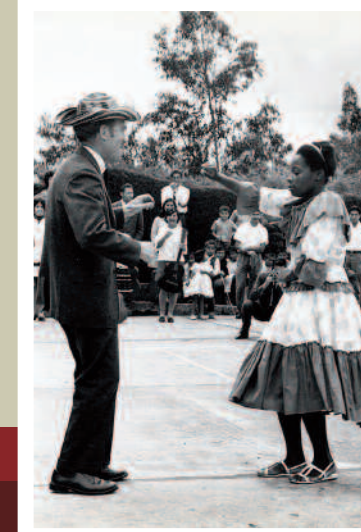
Tisch's volunteerism and generosity are far-reaching and have helped to feed the hungry, to preserve and enhance our exposure to the arts, to educate those thirsty for knowledge, and to heal the sick. Tisch is worthy of recognition and symbolic of how LSA alumni make a difference.

THE AWARDS

The LSA Alumni Humanitarian Service Awards are presented annually to living alumni of the University of Michigan College of Literature, Science, and the Arts, whose lives embody the Michigan Difference. The award recognizes noble character and citizenship and celebrates service to humanity that promotes greater understanding.



(Clockwise from top) Lori Wood Knapp in Malawi, working to bring clean water and education to the people there; Jack Hood Vaughn meets natives in Micronesia through the Peace Corps; Vaughn dances the cumbia in Colombia, circa 1970, as the U.S. Ambassador to Colombia; Joan H. Tisch (second from left) with family members (left to right) Jamie Tisch, Carolyn Tisch, Laurie Tisch, and Emily Tisch at The Museum of Modern Art's 38th Annual Party in the Garden, where Joan Tisch was honored for her philanthropic work; Lori Wood Knapp at a school that the Warm Hearts Foundation helped build in Kenya.



Compiled by Jeanine Ger-
rafo Smith, LSA's Director
of External Relations and
Annual Giving, who also
coordinated the LSA Hu-
manitarian Service Award.

Black and white photos courtesy of Jack Hood Vaughn; Africa photos courtesy of Lori Wood Knapp; Joan Tisch MOMA image by Brian Agostini/Getty Images



Newcombe Clark's Sticking Around. > Should You?

by Rebekah Murray

AFTER GRADUATING FROM UM with bachelor's degrees in Japanese ('04) and Mechanical Engineering (ENG '04), Newcombe Clark felt he could have gone anywhere. Many of his friends left the state. Yet he chose to stay in Michigan, despite the economic hardships that have emerged in recent years.

Now, Clark hopes to inspire other young UM graduates to make the same decision to stick around. As an art enthusiast and one of the owners of a local commercial real estate firm, Clark wants fellow alumni to see the advantages of staying in the state, especially the vibrant art and philanthropic community in Ann Arbor.

"A community like Ann Arbor is a great place to start your professional life," he says. "The ability to advance professionally is so much more accelerated in Michigan, where there is easy access to decision-makers such as the mayor, presidents of local universities, and local CEOs. We're all in this together."

It's a collective spirit that's resulted from constant news of layoffs, the struggling auto industry, and the State budget deficit. But Clark believes Michigan is just in a period of transition.

"There's always another side to the story," he says. "You hear how companies like Delphi have laid off thousands of workers, but those layoffs have created thousands of potential entrepreneurs. We're not opposed to hard work. Our state has been defined by innovation and hard work."

So, Clark has gone to work to improve his community. Through his day job at Bluestone Realty Advisors, Clark is working to bring the right commercial companies to Ann Arbor—and provide jobs for area residents. When he's not at work, he's serving on the board of a local charity, the UM Museum of Art, or the Ann Arbor Area Chamber of Commerce. He also hosts local art exhibits at the three-story downtown apartment he shares with another UM graduate.

The results, including Ann Arbor's continual development, give him hope.

"There are always construction cranes here," he says. "Ann Arbor and the University of Michigan continue to put up great buildings and offer great programs. That's a direct result of the success of our alumni,"—a base he hopes to tap for Michigan's future.

Rebekah Murray is the Assistant Editor of LSA magazine.

Who Else is Sticking Around?

FROM THE UM CLASSES OF 2001–2005:



BACCALAUREATE
GRADUATES



IN-STATE
GRADUATES



OUT-OF-STATE
STUDENTS



INTERNATIONAL
STUDENTS



Source: A July 2006 study by Elaine Fielding, UM's Office of Budget and Planning, and Albert Anderson retired from UM's Population Studies Center.

TOP THREE OCCUPATIONS OF GRADUATES WHO STAYED IN MICHIGAN (1995–2000):

Males:

Mechanical Engineers
Elementary and Middle
School Teachers
Managers

Females:

Elementary and Middle
School Teachers
Registered Nurses
Accountants and Auditors

Source: Data from 2000, 5% Public Use Microdata Sample



Worldly Studies

TWO GRADS HELP MAKE EXPERIENCES ABROAD PART OF AN LSA EDUCATION

by Julie Sparkman and Lara Zielin

BEVERLY HAMILTON

After graduating with an LSA political science degree, Beverly Lannquist Hamilton ('68) entered the work force, putting in long hours as an investment manager and trying to save up enough money to travel overseas—a trip she had planned since she was 12 years old.

Hamilton, who had never been abroad before, finally embarked on her hard-earned trip in 1969. "Visiting Europe was a lifelong goal," she says, adding that she executed the trip on a "shoestring budget."

The different faces, ways of living, and economic values abroad were an eye-opener for Hamilton, who later pondered what more she might have been able to learn if the opportunity to travel had presented itself while she was still a student at UM.

"It was a life-changing event that every UM student should be able to explore," she says. "Our world is becoming more and more integrated every day, so we need to learn as much about other cultures as we possibly can."

To help students do just that, Hamilton has donated more than \$300,000 to LSA's Office of International Programs (OIP), which will help fund over 40 class-related international visits. Many students might not have thought studying abroad possible, but courses that integrate travel into the curriculum provide a way.

"This gift enables us to enrich UM courses by adding on an international component in a way that is relatively affordable to all students," says OIP Director Carol Dickerman.

Hamilton always wanted to assist other students with their academic careers because she had financial help while attending UM.

"I am pleased to see an increasing focus on global education at Michigan," says Hamilton, "and I am pleased to help continue making those changes possible."

AMY ROSE SILVERMAN

In Amy Rose Silverman's ('89) collection of photos is an image in which she's standing in East Germany, next to the Berlin Wall. "It was 1988, in the midst of the Cold War," Silverman explains. "As an undergrad experiencing this, I was incredibly changed. You become aware of what you have, as an American citizen, and it makes you different. You realize how different it is in other places."

While Silverman often had the chance to travel abroad—with her family initially and later as an undergrad—many of her friends at UM didn't. "I was very fortunate," she says, "but I knew others who weren't able to travel."

That's part of the reason why Silverman now helps fund global opportunities for undergraduates. "For our students to be competitive in today's environment, there has to be a global component [to their education]," she says. "Commerce is global, technology is global, and unless students are trained in that context, we can't produce great leaders and thinkers."

Silverman supports LSA's Global Strategic Fund, which offers a number of programs. "A student could go abroad for a class, a job, an internship," she says. The point, though, is always to fund someone who otherwise might not have the opportunity to travel overseas.

"No matter what you're studying at UM, if you go abroad and see what you learned at UM in another country—it's incredible. To be able to help give that opportunity is very wonderful, very gratifying."

Julie Sparkman is a staff member in LSA Development, Marketing, and Communications. Lara Zielin is Editor of LSAmagazine.



Through the Office of International Programs, LSA students are able to study internationally with experiences that include (left to right, top row): checking the potential well water level in Chiapas, Mexico; making pottery at a ceramic museum in Nagoya, Japan; visiting Japan's Nagoya Castle; and touring the great square, called the Zocalo, in Mexico City.

(Right, top) Beverly Hamilton and husband Lyman in the Dubai Desert Preserve during a recent trip abroad.

(Right, bottom) Amy Rose Silverman at the Notre Dame Cathedral in Paris, 1998.

EQUITY GROUP INVESTMENTS



—explains why he is known as “the grave dancer.”

How does he do it? And—of equal importance to a man who, along with his wife, Helen, has given Michigan millions to help develop the next generation, from entrepreneurs to poets—can it be taught?

“Number one,” Zell says, “I give speeches on that. Number two, everybody has asked about that since the beginning of time. And number three, no one knows the answer.”

What he knows they need, however, is what he needed—the opportunity to try—and that’s what he’s sought to provide.

IT STARTED ON DIVISION STREET

Zell himself seemed to have the entrepreneurial knack at a young age. When he was just a 12-year-old boy living in Chicago’s Highland Park, he had to take the train each day into the city for Hebrew school. En route, he noticed the newsstands doing brisk business with the very first issue of a magazine called *Playboy*. Sensing an opportunity, Zell bought up all the copies he could, at 50 cents each, then sold them to his friends back home for three dollars a piece, turning a tidy 500-percent profit.

In the mid-1960s, when Zell was a UM law student, a friend told him his landlord planned to knock down his house on Division, near Hoover, and the one next to it to build a 15-unit apartment complex. Instead of bemoaning the changes, Zell

wanted in, and soon convinced the owner to let him and another friend, Cody Engle (’63, J.D. ’66), manage the building in exchange for free housing. It worked—thus beginning Zell’s career in real estate.

Zell had no doubts that his gambit would be successful. “I don’t think there was ever a time I had any doubt that I could do what I set out to do.”

IGNORING THE CROWD

Zell still felt compelled to “test his limits” and return to Chicago to see if he could make it in the big city. He quickly decided that practicing law was too regimented for him, and dived into business, starting a firm with Bob Lurie (UM ’64, M.S. ’66).

They made their names—and their fortunes—by viewing risk differently than their competition did. Contrary to their public image, they were not riverboat gamblers throwing their money around with reckless abandon. Rather, they invested in companies and industries that merely seemed excessively risky because others simply didn’t recognize the underlying situation.

“One thing I know for sure: The assessment of opportunity is an art. There have been many examples in my career where the information was available to everybody. But why was I able to see that opportunity—and the rest of the world didn’t—I don’t know. And by the way, the rest of the world didn’t see it until long after we were up and running.”

Example: Barges. In 1979, the federal government passed an investment tax relief to encourage the construction of barges with a 25-year lifespan. “Well, as you might expect,” Zell explains, “this resulted in too many 25-year barges being built, glutting the market. So for the next 25 years the business was just horrible. But we figured that 1979 plus 25 was 2004, when that huge glut of barges was going to be taken out of commission. So if you could get control of that industry before that original supply finally shrank, you’d do pretty well. So we got into the business when everyone else was getting out, and when 2004 came around, we were looking pretty good.”

DON’T LOOK BACK

Of course, if you take as many chances as Zell has, no matter how calculated they may be, you’re going to lose some. But it turns out there’s an art to losing money, too. “I have always focused on quantifying the potential downside of an investment. I have lots

of examples where I lost money, but I have very few examples where I suffered a surprising loss. If you

“My head does not do a 180-degree turn; therefore I do not look back. The ability to throw away mistakes, instead of making them worse, is very, very relevant to our success.”

would ask my staff to size up Sam’s attitude in a nutshell, they’d probably say, ‘No surprises.’”

Regret, worry, and drudgery are not part of the Zell lexicon.

“In one of my first interviews, for the *Wall Street Journal*, I said, ‘If it ain’t fun, we’re not going to do it.’ And the next day the office boys came to work wearing t-shirts saying, ‘If it ain’t fun, we’re not gonna do it.’ I loved it!”

Sam Zell has not only amassed a fortune—which he has generously shared with UM, including the recently endowed Samuel Zell Professorship in the Economics of Risk—he’s had a ball doing it.

“When I graduated from Michigan in 1963, I looked at the world as this great opportunity, and I set out to discover how I could make the most of it. So if I were to give any advice to Michigan students today, I’d tell them, whether you’re studying microbiology or economics or poetry, jump in!”

The water’s warm.

John U. Bacon (’86, M.A. ’94) is an award-winning sports writer and a lecturer in the Program in American Culture in the College of LSA.

During a recent on-campus visit, Zell spoke with aspiring entrepreneurs.



The Grave Dancer

> SAM ZELL DIGS UP OPPORTUNITIES THAT OTHERS DON’T

by John U. Bacon

NO RISK, NO REWARD.

It’s a cliché for a reason, conveniently ignoring the fact that if it’s risky, there’s a good chance you’ll fail and lose whatever you invested in the bargain.

So it begs the question: What risks should we avoid, and which should we snap up?

Probably no one in American business has answered that question better than Sam Zell (’63, J.D. ’66), an alumnus who has amassed millions by looking at the same data everyone else has, and seeing what others don’t. He has invested in everything from radio stations to sports franchises to newspapers to cruise ships. His practice of bypassing the blue chips for undervalued opportunities—often times businesses on their backs, even in bankruptcy

Sam Zell co-founded Equity Group Investments in 1968. Now, the Chicago-based firm controls a multi-billion dollar mix of private, public, domestic, and foreign businesses.

David Jenkins, reprinted with permission from *The Dividend*

Steve Kuzmar, reprinted with permission from *The Dividend*

[GIFT STORIES]

LSA | MAKING THE MICHIGAN DIFFERENCE



The College has received many generous gifts to the Michigan Difference Campaign. Each gift carries its own story. Here are a few recent ones.



(Left) Louis Evans holds his grandson, David.

(Right) David Evans on UM's campus.

Historical Ties

by Lara Zielin

LOUIS EVANS, a Russian immigrant, put himself through Yale University and Yale Law School by carrying steamer trunks up six flights of dormitory stairs for New Haven's wealthier families.

After graduation, Louis applied his ambition and work ethic to reorganize railroads in New England, to serve as General Council to the War Frauds Commission of the U.S. Congress during World War II, to become a financial reorganization specialist in complex business transactions, and to become a leading light of the Connecticut Bar.

He also became an expert at reading companies' financial statements and investing, a skill he passed along to his grandson.

That grandson is UM alumnus David Evans ('85), who together with his wife Joan ('87) recently

contributed \$1.5 million to the University to establish the Louis Evans Professorship in the Department of History.

As Chairman and Chief Investment Officer of Leoville Holdings, LLC, a \$1 billion global manager of private equity assets, David Evans is among the best in his field.

But it wasn't just an ability to read the numbers that helped launch David's career. It was also his grandfather's love of history, which David and Joan Evans share, and which they honor with their gift.

"Grandpa Lou was a voracious reader of history—of ancient Rome and Greece, all the way to World War II," says David. "He had a great mind for solving tough problems, and he often used the past to figure out a solution for the present. He always told me you could learn a great deal from the past."

David takes that lesson to work, every day. "I think to be a really solid investor, history is critical. You have to understand economic panic and crises, you have to look at the great economic powers throughout time, and, like any good historian, you don't take things as they seem; nothing is ever black or white."

David's training in history and economics as part of his course of studies in the College of LSA crystallized these lessons. His liberal arts degree, he says, "made me test things, be critical, and be intellectually curious."

The Evans' \$1.5 million gift will be added to by the University of Michigan's Presidential Donor Challenge for a total of \$2 million. The gift will ensure that an outstanding historian will have the resources he or she needs to pursue ambitious research. In addition, David and Joan Evans also made a leadership gift of \$1 million to the Mott Children's Hospital at UM, to establish the Autism Center at the new hospital.

For David, there is no better way to honor his grandfather than this gift to the University. "Grandpa Lou was my hero," David says of the man who made his own breakfast the morning of his passing. "He was a great human being, a great thinker, and it was important to him to give back to his community. He was well known for helping others who were less fortunate, and he would be very proud of this."

Lara Zielin is Editor of LSA magazine.

(Left) Courtesy of David Evans; (right) Martin Vioet of UM Photo Services

LSA | MAKING THE MICHIGAN DIFFERENCE



[GIFT STORIES]



Visionary Leadership

by Gail Flynn

THE NEW CEO OF JETBLUE AIRWAYS, David Barger, knows a thing or two about management and leadership.

"There is a big difference between management—the ability to get something done—and leadership—the vision for how something should be done," Barger says. "Leadership is front-line connectivity. It's about being plugged in to the customer, the culture, the government, and being visionary."

Barger's recent gift of \$4.5 million to endow the Barger Leadership Institute in LSA's Organizational Studies Program showcases his commitment to visionary leadership. His gift will fund leadership-

learning experiences for undergraduates through international fellowships, internships in organizations that have a global reach, and research that examines organizations and leadership worldwide.

A portion of the gift, \$1.5 million, will be matched with an additional \$500,000 from the UM President's Donor Challenge to endow a professorship in Organizational Studies. Remaining funds will establish a Visiting Leader Program to bring newsworthy leaders from business, government, and philanthropy to campus to engage undergraduates in active leadership experiences that address real-world organizational challenges.

"What's exciting to me about this program," says Barger, "is that it is directed at undergraduates. Leadership usually is wrapped into a program well down the career path in graduate school. The Institute will give undergraduates the ability to grab onto leadership concepts early. They will have experience painting the picture."

Barger is certainly the right man to spearhead the program. From the time he was young, he had a vision for his career, which never faltered. The son of a flight attendant and an airline pilot, Barger says he "never wanted to do anything else except work for an airline." He studied economics and political science at UM and put those lessons into good use in 1981 when he went to work for New York Air during the turbulence of government deregulation. He later went to Continental Airlines and in 1998, he joined David Neeleman to start JetBlue Airways.

"We are tremendously grateful for this transformational \$4.5 million gift to Organizational Studies," says LSA Dean Terrence J. McDonald. "The Barger Leadership Institute will prepare undergraduates early in their academic experience to become the strategic leaders of tomorrow in an increasingly global, technologically driven, and innovation-hungry society."

Barger is a dedicated supporter of the Organizational Studies Program, providing a \$2 million gift in 2005 to establish the Barger Family Professorship and \$75,000 to create the JetBlue Airways London School of Economics Summer Program.

Gail Flynn is the Development Communications Manager for the College of LSA.

David Barger gives two thumbs up to supporting student leadership opportunities.

Courtesy of David Barger



The College has received many generous gifts to the Michigan Difference Campaign. Each gift carries its own story. Here are a few recent ones.



(Left) Elder Sang-Yong Nam (bottom row, fourth from right), celebrates his gift to LSA with his wife, children, and grandchildren as well as UM Vice President for Development Jerry May (bottom row, right), Associate Dean for Social Sciences Meredith Jung-En Woo (bottom row, second from right), and LSA Dean Terrence J. McDonald (bottom row, third from right).

(Right) Susan Smith at her home in Ann Arbor.

Propelling Korean Studies

ELDER SANG-YONG NAM (UM '66), President and CEO of Nam Building Management Company in Ann Arbor, has a lifelong mission to build recognition and respect for the history and culture of his homeland.

"When I came to the University of Michigan as a graduate student in 1964, I found 760,000 books on Asia in the library. Most were about China and Japan—less than 100 were about Korea," says Elder Nam. "In the University Museum of Art, there were 1,400 items in the Chinese collection and 1,300 in the Japanese, but only 45 in the Korean collection. The UM Center for Chinese Studies and the Center for Japanese Studies were highly regarded, but Korean language and culture were not studied at all. I wanted to correct this disparity and upgrade the status of my country in the intellectual landscape of Asian studies."

Elder Nam has overcome many obstacles in his life, so he was ready to take on this challenge. As a high school student during the Korean War, he witnessed his father's abduction, which left him and his older brother to provide for their six siblings. Eventually he graduated with a degree in Architectural Engineering from Seoul National University, and then worked for the United States Operations Mission to Korea, which eventually led him to Michigan.

Nam's recent gift of \$2.3 million to the Korean Studies Program, combined with his earlier gifts of \$500,000 and \$1.5 million, will provide the resources to upgrade the Program to a Center for Korean Studies in the College of LSA and propel it to national prominence.



Parlaying Success

SUSAN SMITH GRADUATED from the University of Michigan in 1963 with a B.S. in math and \$75 to her name. Having majored in actuarial science, she went to work for Towers Perrin in Philadelphia as a "support staff person."

She worked her way up in the organization, eventually becoming an actuarial and benefits consultant, principal, assistant to the chief actuary, and then a vice president.

Now, she is giving \$1.5 million to UM to establish the Susan Meredith Smith Professorship in Actuarial Science in the Department of Mathematics to help other students achieve the financial success she attained.

"I wanted to give something back to the College that prepared me for the career that enabled me to parlay my \$75 into the financial assets to make this gift possible," Smith says.

The Actuarial Science program in the College is the oldest in the nation and prepares students to enter a field that the *Wall Street Journal* ranks as one of today's best career choices in terms of job security and lucrative salaries.

Although she had originally planned to fund the professorship through a bequest gift, when Smith learned that the UM President's Donor Challenge would match her \$1.5 million gift with an additional \$500,000, she decided the opportunity was too good to miss. "I decided if I was going to do it, I should do it now," she says. "I come from a long line of UM graduates, and I wanted to do something good for Michigan."

(Left) Martin Vloet of UM Photo Services; (right) courtesy of Susan Smith



A Bright IDEA

ONE-THIRD OF U.S. fourth and eighth graders and less than 20 percent of 12th graders reached proficiency in math and science in 2005, according to the National Science Foundation. The National Commission on Mathematics and Science Teaching found that 60 percent of all new jobs will require skills possessed by only 20 percent of the population.

Robert Horwitz ('74) and Catherine Redlich ('73) have responded to this crisis in math and science education with a \$2.5 million gift to the Instructional Development & Education Assessment (IDEA) Institute, to launch LSA and the School of Education (SOE) on an innovative joint venture to bring together faculty and students from science, math, and education to design, implement, and assess new teaching methods and materials to advance learning in science and math—from kindergarten through graduate school.

"Cathy and I have a deep interest in making math and science curriculums more engaging and accessible to young people," says Horwitz, "with the dual goal of encouraging more students to major in these areas once they reach college, and to attract more math and science teachers. The United States is on the brink of losing its international competitiveness due to a lack of these skills in the workforce."

The IDEA Institute will enable undergraduates in LSA and SOE to work with faculty on research and teaching teams, will bring distinguished lecturers to campus, and will sponsor annual regional workshops to provide opportunities for UM faculty and K-12 teachers to discuss new ways of thinking and teaching.

(Left) Courtesy of Robert Horwitz and Catherine Redlich; (right) M. Jane Gibson



A Keen(e) Theater

LSA'S RESIDENTIAL COLLEGE (RC) is 40 years old this year and has reason to celebrate.

Kenneth Keene (M.A. '48), a retired senior vice president of the benefits consulting group Johnson & Higgins (now Marsh & McLennan), and his wife, Janet, have given LSA a gift of \$1 million to renovate the auditorium that was "retrofitted" into the East Quadrangle Residence Hall in 1967, when the RC living-learning community was established. The updated facility will be named The Keene Theater, in recognition of their generosity.

The renovations to the auditorium will include updating the Kennedy-era lighting system and lighting control booth, as well as installing state-of-the-art projection and sound equipment. Upgrades will make the front entrance more accessible, and will address the cramped backstage area. New seating, carpeting, curtains, and other interior remodeling will complete the theater's much-needed facelift.

Keene, who earned a master's in actuarial science, supports the RC because he believes his liberal arts education was essential to his success. "No matter how technical your profession may be, you deal with a wide spectrum of people," he says. "I have worked with bright people who have been trained with such a narrow professional focus that they can't see the broader picture. The liberal arts prepared me to anticipate and respond to a wide variety of people and environments."

(This page, left) Robert Horwitz and Catherine Redlich.

(This page, right) Janet and Kenneth Keene.

All four gift stories by Gail Flynn, the Development Communications Manager for the College of LSA.

Running on Empty

by Sally Pobojewski

ONE THING YOU CAN SAY about Americans: We love to drive. Whether it's a car, pickup truck, SUV, or minivan, the ability to go whenever and wherever we want is part of the American way of life.

In 2005, there were more than 231 million cars and light trucks registered in the United States—nearly one for every man, woman, and child in the country.

All those cars and trucks are sucking up much of the country's dwindling and increasingly expensive petroleum supply. They burn billions of gallons of gasoline every year and account for about one-third of the carbon dioxide and other greenhouse gases that contribute to air pollution and global warming.

For environmental and economic reasons, experts agree we need to break our national addiction to oil. But what's the alternative?

UM researchers in the College of Engineering and the Michigan Memorial Phoenix Energy Institute are working to develop new fuel technologies and to improve the reliability and performance of alternative fuels like ethanol and hydrogen.

UM experts caution that the transition from fossil fuels to cleaner, renewable sources of energy won't be easy and won't be cheap.

"I would characterize this as one of those grand challenges we face [as a society]," says Levi Thompson, the Richard E. Balzhiser Collegiate Professor of Chemical Engineering. "If we are serious about developing a sustainable energy infrastructure, we need to put adequate resources on the table. It's going to cost us. But in the long term, we'll be better off than just continuing along the path we're on now."

THE TROUBLE WITH ETHANOL

In 2005, Congress passed the U.S. Energy Policy Act, which required that 7.5 billion gallons of the nation's transportation fuel must come, by 2012, from renewable biofuels like ethanol or biodiesel.

Responding to generous tax breaks and subsidies included in the legislation, Midwest agribusinesses, politicians, and corn farmers immediately jumped on the ethanol bandwagon to produce nearly five billion gallons of corn-based ethanol in 2006. New plants in development could nearly double ethanol production by 2008.

Made from cooked, fermented corn kernels, ethanol is blended with gasoline to increase the oxygen content of the fuel, which makes it burn cleaner with lower greenhouse gas emissions. Blending 10 percent ethanol with gasoline, a formulation called E10, allows Midwest fuel suppliers to meet federal fuel economy requirements and

take advantage of generous federal and state subsidies for ethanol. About 1,200 gas stations nationwide are selling a blend of 85 percent ethanol and 15 percent gasoline, called E85, to customers with flex-fuel vehicles that can run on both types of fuel.

Production of corn-based ethanol is now a lucrative part of the Midwest economy. Corn prices have sky-rocketed and farmers are planting more and more corn to meet the growing demand. On the surface, it seems that ethanol could be the solution to our transportation fuel crisis.

But Soren Anderson, a UM Ph.D. candidate in the Department of Economics who studies the economics of ethanol, has his doubts. Anderson acknowledges many of ethanol's potential benefits, but he says that all the money being made from corn-based ethanol is blinding people to some major disadvantages.

"The ethanol market depends on support from government regulations and federal and state subsidies," Anderson says. "The policies we have now primarily benefit ethanol producers and corn farmers. If these government supports weren't in place, ethanol wouldn't be as profitable and there would be a significant decrease in its use."

One problem is that ethanol has lower energy content than gasoline, which translates into about 25 percent lower fuel economy for E85. So, E85 has to sell for much less than gasoline before consumers will buy it. (When small amounts of ethanol are blended with gasoline, the effects on fuel economy are minimal.)

Ethanol's higher alcohol

"The policies we have now primarily benefit ethanol producers and corn farmers. If these government supports weren't in place, ethanol wouldn't be as profitable and there would be a significant decrease in its use."

content corrodes fuel tanks and pumps, so gas stations selling E85 are paying thousands of dollars to install specialized equipment. Flex-fuel vehicles that can burn ethanol must be manufactured with corrosion-resistant material lining the inside of the fuel tank and fuel lines.

Studies indicate that ethanol benefits the environment by reducing petroleum consumption and greenhouse gas emissions, but Anderson says these studies don't take into account the negative environmental impact of growing more corn—which requires lots of water, pesticides, and fertilizer—and the effect on food prices when corn is used to make ethanol, instead of feeding livestock and people.

Ethanol's real contribution as a viable alternative fuel could come in the future, when scientists figure out how to make it from corn stalks, grasses, plant waste, or even municipal garbage. According to a U.S. Department of Energy study, this type of fuel, called cellulosic ethanol, has the potential to replace 30 percent of the petroleum used for transportation today.

Breaking down cellulose from plant fibers is much more difficult than breaking down starch from corn kernels, however. So far, no one has found the secret to producing large quantities of cellulosic ethanol, although scientists at many companies and universities, including UM's College of Engineering, are working on the problem.

HYDROGEN AND FUEL CELLS

If Levi Thompson were a gambling man, he'd place his bet on hydrogen. Thompson

(Top) Corn grows in Lena, Illinois, near Adkins Energy, a corn-to-ethanol facility that processes approximately 15 million bushels of corn annually. An average bushel of corn produces 2.7 gallons of ethanol. Currently, the United States produces 3.3 billion gallons of ethanol per year. By 2012, estimated annual production will exceed five billion gallons.

(Right) Ph.D. student Soren Anderson at an Ann Arbor gas station where E85 is available.

Scott Olson/Staff/Getty Images

Robert Ramey

directs the Hydrogen Energy Technology Laboratory in the UM College of Engineering, where researchers are studying how to produce hydrogen and harness its energy in devices like fuel cells to power automobiles.

Hydrogen is never found in the environment by itself. It's always part of another material like methane, natural gas, or water. So Thompson says the first challenge is separating the hydrogen from whatever it's attached to. The second challenge is finding ways to store it. Hydrogen is a light gas that will diffuse and leak out of tanks used to store gasoline.

Researchers in Thompson's lab are also working on extracting hydrogen from existing biofuels, like ethanol and biodiesel. The project Thompson finds most "scientifically interesting," however, is one that uses the energy in sunlight to split water molecules into hydrogen and oxygen.

"The challenge is that the process is not very efficient, so we're working to develop new materials to dramatically enhance the efficiency," he says.

Once hydrogen is produced, fuel cells convert the chemical energy in hydrogen into electrical energy to power an electric engine in a vehicle. Fuel cell technology has come a long way, but Thompson says they still aren't durable enough to power a car for the equivalent of 100,000 miles.

"Their performance tends to degrade over time," Thompson explains. "You start out going 250 miles on one fill. Then it drops to 200 miles, then 150. After a certain point, it's not acceptable to the consumer."

In addition to their lack of durability, fuel cells are cur-

“If we are serious about developing a sustainable energy infrastructure, we need to put adequate resources on the table. It's going to cost us. But in the long term, we'll be better off than just continuing along the path we're on now.”



rently much too expensive for consumer use. "Right now, if you wanted to buy a fuel cell, we're looking at \$5,000 a kilowatt," Thompson says. "You need something like 50 to 100 kilowatts to power just the power train of an automobile. That's two orders of magnitude more than what you'd be willing to pay for the car."

Researchers in Thompson's laboratory are using the same advanced micromachining and photolithography techniques used to manufacture microchips for cell phones and computers to try and develop low-cost, more durable fuel cell components.

Thompson believes research to develop hydrogen as an alternative fuel deserves more support from the federal government. He says only about \$1 billion in federal research and development funds have been invested in hydrogen fuel cell technology—much less than federal funding agencies have invested in infrastructure and R&D for ethanol.

"The government should invest in the riskiest technologies," Thompson says. "Ethanol is not a high-risk area. Industry already seems committed and there's potential for mass-market commercialization. The government is where you make bets that have the potential to be transformative. Hydrogen deserves a significant bet. It's the ultimate energy carrier."

WHAT DO CONSUMERS REALLY WANT?

At a forum on alternative fuel cars held on UM's campus in June, David E. Cole, Chair of the Center for Automotive Research, a former professor

in UM's Department of Mechanical Engineering, and a research scientist in UM's Transportation Research Institute, emphasized that the future of alternative fuel vehicles will be determined by market economics and customer demand.

Consumers say they want fuel economy with lower greenhouse gas emissions, but the fastest-growing segment of the new vehicle automotive market are the crossover vehicles that are hybrids between a car and an SUV. While they are considerably more fuel-efficient than SUVs, they still use more gasoline than passenger cars.

Are Americans ready to pay higher prices for cars and trucks that cost more because of advanced power trains and more expensive light-weight materials? Will they buy vehicles that can run on alternative biofuels?

Cole and other forum participants agreed that a variety of vehicle power trains—including hybrids, diesels, and advanced spark-ignition systems—will be available to consumers in the near future. Diesel-powered vehicles will use diesel fuels that can be based on petroleum or biomaterials. Most gasoline-powered cars will also run on a mix of biofuels, such as E85.

"The most efficient systems are going to be hybrids where, if I'm accelerating, I use one type of power supply. If I'm cruising, I use another. If I'm idling, I use a different power supply," says Thompson. "We need to bring all these technologies into one system to have the greatest efficiency."

For the long term, automotive manufacturers are investing billions of dollars to develop experimental plug-in and fuel cell hybrids, like the Sequel, GM's hydrogen fuel cell-powered SUV, which can go 300 miles on one tank of hydrogen. But if consumers won't buy them, auto manufacturers won't make them.

"We don't have enough knowledge now to pick winners," Cole said at the forum. "Government incentives will be required to encourage private investment to develop a variety of sustainable technologies."

One key to success, according to Cole, will be higher prices for gasoline.

"The federal government needs to put a floor under gasoline prices," he says, "because if petroleum prices drop, private investment in alternative fuel technologies will stop."

Sally Pobjewski is a freelance science writer who lives near Chelsea, Michigan.



Want to get better gas mileage?

TRY THE FOLLOWING:

- Stay within the speed limit. The faster you drive, the more fuel you use.
- Use overdrive gears. Your car's engine speed decreases when you use overdrive—reducing both fuel consumption and engine wear.
- Use cruise control to maintain a constant speed.
- Anticipate driving situations to avoid unnecessary braking and acceleration, and improve your fuel economy by 5 to 10 percent. In city driving, nearly 50 percent of the energy needed to power your car goes to acceleration.
- Avoid unnecessary idling—it wastes fuel, costs you money, and pollutes the air.
- Combine errands. Several short trips taken from a cold start can use twice as much fuel as one trip covering the same distance when the engine is warm.
- Remove excess weight from the trunk—an extra 100 pounds in the trunk reduces a typical car's fuel economy by one to two percent.

Sources for this story include: The U.S. Federal Highway Administration manual, Highway Statistics; the U.S. Census Bureau population estimate for 2004; "Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2005," a report by the Environmental Protection Agency; Farrell et al., "Ethanol Can Contribute to Energy and Environmental Goals," *Science*, Vol. 311, p. 506, January 27, 2006; the Renewable Fuels Association (www.ethanolrfa.org/industry/statistics/#A); "From Biomass to Biofuels" by the National Renewable Energy Laboratory.

(Left) Levi Thompson in his lab where he conducts fuel cell research.

Source: U.S. Environmental Protection Agency; www.ftc.gov/bcp/edu/pubs/consumer/autos/auto10.shtm



Highest Honors

As a mathematician for more than 40 years, **Hyman Bass** has researched and developed numerous mathematical theories. He has also worked to improve math and science education. In recognition of his achievements, Bass was recently awarded the National Medal of Science, the nation's highest science honor.

by *Maryanne George*

YEARS AGO, Hyman Bass—LSA's Roger Lyndon Collegiate Professor of Mathematics and a professor of mathematics education in the School of Education—realized elementary school teachers needed better mathematical understanding to teach students basic math skills and concepts.

He says a report by the U.S. Department of Education in the early 1980s, titled *A Nation at Risk*, documented the poor state of math and science education. The globalization of the world's economy created a crisis that demanded that the nation overhaul how these critical subjects were taught.

"It was a revolutionary call," Bass says. "We had always provided good math and science education to a select group of students. But now, we had to

provide that level of education for all students, and there was no precedent for doing this. We had no effective models."

Bass took this deficiency personally. "The math teachers were products of university mathematics departments and if they had a poor understanding of math, we [university professors] had a responsibility for this and could work to improve things."

Bass chaired the Mathematical Sciences Education Board at the National Research Council, a group of scientists, educators, and business people who develop policy studies for improving math education.

But finding solutions wasn't easy.

"The problems were difficult and complex and intellectually challenging," he says, "but it was different from my work as a scholar and mathematician. At first I didn't see a way to use my mathematical skills until I met Deborah Ball, now Dean of UM's School of Education, who was brought in as a consultant to the board. She had been a classroom teacher for many years, and she had a grounded and analytical view of the problem. She believed that you must understand the way children think and how math is taught to improve the state of math education. She was my bridge to the classroom."

Ball enlisted Bass to examine the day-to-day mathematical work that teachers do. With a mathematical eye, Bass reviewed extensive footage of in-class teaching. He found that teachers need to learn methods often absent in academic math courses, such as how to (mathematically) diagnose student errors, how to evaluate correct solutions obtained by non-standard means, and how to visually represent mathematical concepts.

In recognition of his work, including his collaboration with Ball's research groups as well as his creation of algebraic K-theory, (a branch of algebra inspired by topology), Bass was presented the National Medal of Science by President George W. Bush at a July 27, 2007 White House ceremony.

"I was especially pleased that educational research was recognized by the citation. Both aspects of my work, math research and math education, very rarely get up on that stage," Bass says, seated among stacks of books in his office at the School of Education. "UM is privileged to have a superb Mathematics Department and an outstanding School of Education. I am very happy to be working here."

Maryanne George is the public information specialist for the College of LSA.

(campusnews)

New Pigskin Practice Facility



◀ A new football building will be built adjacent to Schembechler Hall along State Street just south of Yost Ice Arena, after the schematic design was approved in July by the UM Board of Regents. The new building, approximately 104,000 gross square feet, will be built on an existing outdoor practice field and is expected to include a full-size football field, lobby, restrooms, and storage space. Athletics resources and gifts will fund the \$26.1 million project, to be completed in the fall of 2009.

Dads Influence Daughters' Interest in Math

It figures: Dads have a major impact on the degree of interest their daughters develop in math. That's one of the findings of a long-term UM study that has traced the sources of the continuing gender gap in math and science performance. According to the study, parents provided more math-supportive environments for their sons than for their daughters, including buying more math and science toys for the boys. As a result, girls' interest in math decreased as their fathers' gender stereotypes increased.



ISLAM EXHIBITION ON TOUR

A new project supported by UM's Islamic Studies Initiative, "Building Islam in Detroit: Foundations, Forms, Futures," is about to begin a world tour. The multimedia exhibition, produced by a team of seven UM students and faculty, explores the history of Detroit's Muslim communities through photography, oral and archival history, and an architectural study of more than 50 of the city's mosques. The tour will begin at Harvard University in late 2007 and then head to the Middle East and Africa.



freedom isn't always healthy for men

Economic freedom could be bad for your health if you're a man caught in the fervor of competing for status, wealth, and power. A new UM study examined mortality patterns in 14 Eastern European countries before, during, and after the transition from centrally planned to market economies in the 1990s. Researchers found that the difference in mortality rates between men and women increased greatly during the transition to a market economy and remained relatively higher afterwards. The findings give us insight into the kind of social and economic policies that may be good for our health, says Daniel Kruger, a research scientist in the School of Public Health.

A Safety Coating for Bridges

A new "skin" for bridges, buildings, and airplanes could be a sixth sense for inspectors looking for cracks and corrosion that could lead to a catastrophic failure like the recent Minneapolis bridge collapse. Researchers at UM's College of Engineering developed a coating that could be painted or sprayed on structures to sense their stability over time. It would allow inspectors to check for damage without physically examining a structure.



HAPPINESS AND KIDS?

Are mothers happier than childless women later in life? A new study examining nearly 6,000 women says it's not so much whether you have children as when you have them.

Researchers analyzed data on women ages 51-61. They found that "early" mothers (before age 19) were the least satisfied and most depressed of all four groups, while "delayed" or "late mothers" (age 25 and older) were the most satisfied with their lives and the happiest. All other things being equal, the childless women were about as satisfied and happy with their lives as the "on-time" (ages 19-24) mothers. Yet what is even more important, says UM sociologist Amy Pienta, "is whether or not a woman has a husband, a significant other, or close social relationships in her life as she ages."



The United States is arguably the richest country in the world. But who owns the wealth? In this **LSA Perspective**, **IRASEMA GARZA** ('79, J.D. '83), the National Political Director of Working America AFL-CIO, argues that while the rich are getting richer, working class Americans are left holding the (very empty) bag and that this dangerous trend threatens to erode the foundations of U.S. democracy.

Waging

The plight of America's working class

a Living

by Irasema Garza

IN EARLY MAY 2007, the Dow industrials ended at a record high on Wall Street. Around the same time, the U.S. Department of Labor reported lower unemployment, and the U.S. Department of Commerce reported a growth in the gross domestic product (GDP).

Meanwhile, experts tell us that, during the past 20 years, the United States has experienced “phenomenal growth” and that, from 1984 to 2003, the GDP has grown by 77 percent.¹

If so much is right about the economy, shouldn't that translate to U.S. workers having great jobs with great pay?

Sadly, it doesn't.

THE INCOME GAP

The old adage “the rich are getting richer” has never been more true in the United States than it is today. In 2005, the average corporate CEO earned 262 times what the average worker earned, compared to 35 times more in 1980, according to a report by the Economic Policy Institute. The flipside is that the working class and middle America—those who make between \$20,000 and \$40,000 per year—are working harder and longer hours than ever before



but for less pay. A typical middle class family with children, for example, works 10 hours per week more than they did in 1979.

What's more, the median household income in the United States dropped by almost three percent since 2001. In Michigan, a state that has seen its manufacturing base erode, the decrease in median household income was dramatic: it dropped 11 percent from \$51,591 in 2001 to \$45,933 in 2005.²

People of varying political persuasions will differ on why the wealthiest tenth of one percent of Americans reaped astronomical economic gains: a 181 percent increase between 1979 and 2001. This compared to a 2.8 percent increase during the same period for the working poor and a 23.4 percent increase for middle Americans.³

Republicans might say the Democrats are too focused on social programs that help only a few targeted groups; Democrats might say the Republicans give tax cuts that only benefit the wealthy. But while Washington pundits debate the details and economists flesh out the numbers, what is certain is that many American workers are no longer able to earn wages that afford them a middle class standard of living, even though the economy generates more than \$13 trillion a year in income.

The other certainty is that in the context of globalization and increased trade, the economic policies of the past 30 years have failed working people.

Courtesy of Irasema Garza



Scott Olson/Staff/Getty Images

Half of all U.S. manufacturing is now located in foreign countries. These were industries that gave rise to a solid middle class in the United States in the years following World War II.

In the last half century, American workers, unlike their European or Latin American counterparts, were unlikely to protest in the streets when jobs were threatened or commodity prices increased. Even today, with record high gas prices, worker layoffs, tax cuts to the top one percent of the wealthiest Americans, an unpopular war, and political scandals and corruption, the majority of Americans still want to believe in the American Dream.

But the dream is fading.

LOSING FAITH

A 2006 Case Foundation study found that Americans have lost faith in political and civic institutions because they feel their efforts do not much matter. Americans feel that their political leaders are out of touch and do not understand the realities of average people's lives. This is evidenced in low voting turnout rates, which have been decreasing since 1960, with only a few minor exceptions. On average, only 45 percent of Americans voted in presidential and Congressional elections between 1991 and 2000.

Additionally, because working people are working longer hours, they have less time to spend with family and less time to do volunteer and charitable work. The 2006 Civic Health Index found that Americans' level of community participation—meaning Americans' willingness to join organizations—and levels of

social trust are on the decline. Americans spend 35 percent less time visiting family and friends than 30 years ago. Also, Americans eat dinner together only two-thirds as often as they did a generation ago.

In a March 2007 visit to Latin America, President George W. Bush argued that “social justice”—alleviating poverty and providing medical care, among other needs—is a key factor for maintaining a democracy. Abroad, our government certainly puts its money where its mouth is: The U.S. State Department earmarks millions of dollars a year in promoting civil society in the Middle East, and organizations from the World Bank to George Soros' Open Society Institute view such funding as a priority.

Yet, in our own country, the vast economic inequality, global competition and outsourcing, stagnant wages, low paying jobs, longer work days, lack of access to health care, lack of civic engagement, and plain political apathy are ills that are slowly suffocating the American Dream.

As such, our political leaders have a responsibility to redefine priorities and act swiftly. Americans need jobs with better wages, universal health care, better balance of work and family, affordable housing, and more connected communities. They also need to believe that their elected representatives serve and advocate on behalf of average Americans. If the United States is to remain a world economic power and the strongest democracy in the world, working and middle class Americans have to believe in—and have to be able to realize—the American Dream.

Auto workers change shifts at a Chrysler assembly plant in Belvidere, Illinois, where the Dodge Caliber and several Jeep vehicles are built.

Irasema Garza has been a strong advocate of employment opportunities for working people. In 1993, she joined the Clinton Administration as the Secretary of the National Administrative Office Bureau of International Labor Affairs (1993–1999) and was later confirmed by the U.S. Senate as the 14th Director of the Women's Bureau, U.S. Department of Labor (1999–2001).

¹ The Motley Fool, May 16, 2007. “Searching for 40,000% Returns” by John Reeves.

² U.S. Census Bureau: Median Household Income by State, 1984–2005.

³ “The State of Working America” published by the Economic Policy Institute.