

M LSA

COLLEGE OF LITERATURE, SCIENCE AND THE ARTS
Fall 2008



plan A

MAGAZINE

MLSA

COLLEGE OF LITERATURE, SCIENCE, AND THE ARTS

Fall 2008

plan B

Dr. Sanjay Gupta had intended to open a quiet practice in Michigan, but instead he became CNN's Chief Medical Correspondent. Today, global travel is part of his work as he discovers medical insights, unearths compelling stories, and offers health expertise to his thousands of viewers. It isn't what he planned, but it's everything he hoped.



You can cast your ballot, but will your vote count in the November election?

In simple speche, as we couthe, we bid Godspeed to Professor Ralph Williams

The NFL's number one pick, Jake Long, tackles his first season with the Miami Dolphins

The inventor of this didn't kick the bucket—rather he left it outside in cold weather with something tasty inside of it.

Dueling vendors at the 1904 World's Fair found a way to serve customers this cold treat.

oops!

Did I Just Invent That?

Many of the greatest inventions occurred completely by accident, and throughout this issue you'll find details on a few of them. Here are clues to a handful—the trick being, of course, to figure out what the invention is before you turn the page.

A naval engineer turned a tension spring into this plaything.

Goopey wallpaper resulted in this pliable pastime.

DEPARTMENTS

DIALOGUE

- 2 Engaging Our Students
- 3 To the Wire
- 4 Letters

COLLEGE

- 5 Alumni Dig Deep
- 6 Ruin and Recovery
- 7 Honoring Sam
- 7 Ancient City Search
- 8 LSA News

FACULTY

- 42 His Heart on His Sleeve
- 45 Faculty Books
- 46 Election Forensics
- 48 Tracking Toxins

STUDENTS

- 49 Student CEOs
- 51 Olympic Correspondent
- 52 Portrait of a Drum Major

ALUMNI

- 54 The Long Haul
- 55 A Humanitarian Hero
- 57 Life After a Layoff
- 59 The Practical Actuarial
- 62 The Prairie Queen
- 63 Thoroughly Modern Mildred
- 65 Mighty Madam President
- 67 Nurturing Democracy

CAMPUS

- 68 Illuminating the Energy Crisis
- 70 A Thief's Caprice
- 71 Campus News

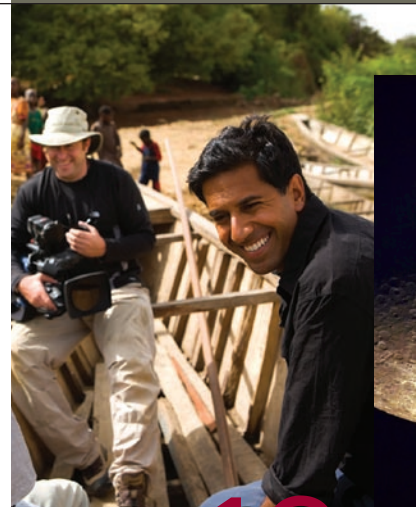
LSA PERSPECTIVES

- 72 Crystal McCrary Anthony

MAGAZINE

MLSA(contents)

FEATURES



10

Media Medicine Man

Neurosurgeon and journalist Sanjay Gupta in the exam room of his own life: how he sutured his two careers together and started practicing the health lessons he was preaching.



15

The Face of the Moon

Learned scientists didn't want to hear him. The war effort needed him. His family, and family business, called to him. Yet for 40 years, Ralph Baldwin never stopped fighting the battle that would revolutionize lunar science forever.



28

The Affairs of Small Tribes

Aaron David Miller recently interviewed three presidents, four national security advisers, and nine secretaries of state to plot the complex, tangled roadmap to peace in the Middle East. No easy answers here.



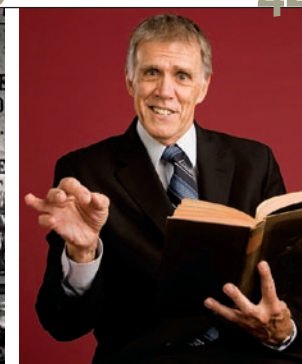
34

Out of Africa

Mugabe's reign of terror in Zimbabwe was never just a newspaper headline for Clapperton Mavhunga, but rather everyday life. Mavhunga came to Michigan to study, without fear of torture or death, what went wrong in his homeland—and why.



6



42



46



54



62



Cover photos © CNN Worldwide.
All Rights Reserved 2007



Copyright © 2008
University of Michigan
ARTICLES APPEARING IN *LSAMAGAZINE* 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/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.

Philip T. Dattilo

dean's notes



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

Engagement and Accountability in Undergraduate Education

ARE UNDERGRADUATE STUDENTS at the University of Michigan academically engaged? As the famous baseball player and manager Yogi Berra once said, “You could look it up.”

Beginning in fall 2007, *USAToday* launched a website reporting the scores on the National Survey of Student Engagement (NSSE), which is conducted annually and examines student experiences at more than 500 colleges and universities in the United States and Canada. It is thought of as the “gold standard” among academic leaders because it considers only one thing: the academic experience of undergraduate students.

The University of Michigan has voluntarily participated in the NSSE survey since 2000 in an effort to better document and measure student education and overall academic success. As *USAToday* noted when introducing the website (with a story that highlighted the University of Michigan), the NSSE survey accomplishes what many other rankings do not. “While many popular college guides focus on things like SAT scores of incoming freshmen, or a college’s party-school reputation,” the article said, “NSSE seeks to gauge the quality of an undergraduate education by looking at how actively involved students are with their studies, professors, and the campus community. Decades of research shows that the more engaged students are, the more likely they are to learn.”

The overall NSSE scores rank UM above the benchmark mean for its peer institutions across four categories. Our students report a higher level of academic challenge, more active and collaborative learning, more intense student-faculty interaction, and more enriching educational experiences.

Because the University receives more NSSE information than is printed in *USAToday*, it is possible to

see behind these general scores, which reveal that LSA students were much less likely than students at peer institutions to simply memorize facts for later repetition and much more likely to analyze, synthesize, and evaluate ideas, theories, and sources of information. LSA students read more and wrote more than their peers and they were much more likely to have performed community service work, worked on a research project with a faculty member, taken foreign language course work, and had an international experience. LSA students also spent much more time studying and on academic work than students at peer institutions.

At a time when the “accountability” of higher education is justifiably on the minds of everyone, from parents and students to members of Congress, we are very pleased by these strong ratings.

We are pleased, but not smug. In fact, over the last two years, hundreds of our faculty, undergraduate staff, and students have met with me in focus groups to discuss improvements to our undergraduate experience. On the table now are a wide range of changes, including more support for and better integration of international and civic outreach education, enrichment of the sophomore year, and more “capstone” opportunities.

After arriving on UM’s campus in 1871, Michigan President James B. Angell declared that the University would stand for the “uncommon education for the common man.” With those words, he put us on a path that, to this day, we are proud to walk.

LEARN MORE ▶ For a NSSE overview visit www.usatoday.com/news/education/2007-11-04-nsse-how-to_N.htm
For the NSSE launch story featuring the University of Michigan visit www.usatoday.com/news/education/2007-11-04-nsse-cover_N.htm



To the Wire

WHEN LSAMAGAZINE WAS REDESIGNED IN 2001, it was given its own page on the College of LSA’s website, where a smattering of its printed stories were available for downloading. The site grew over time to include all the magazine’s articles, as well as a few additional bits of online content. Recently, the magazine webpage was given an extreme makeover as part of an overhaul of the College of LSA’s website, which includes improved navigation, updated graphics, and more opportunities for interaction.

This fall, we’ve launched a totally new way to experience *LSA magazine* online: The LSA Wire. The LSA Wire is our new online supplement to the magazine. Our printed issue will still come out twice per year (April and October) but the Wire will come out between issues (January and July). The Wire is our way of telling all the wonderful stories of our faculty, students, and alumni that just won’t fit in the pages of our print edition.

The LSA Wire is available online right now at www.lsa.umich.edu/alumni/wire. There, you can read about Bravo’s *Top Chef* winner Stephanie Izard, who was the first female in the show’s history to take home the *Top Chef* title. On the LSA Wire, Izard shares recipes and her plans for the future, and she even spills a few tasty behind-the-scenes secrets from the show.

The LSA Wire also contains fun facts about treasures both on and off campus. Did you know the Bentley has an extensive collection of football programs (see image, below), tickets, and player portraits going back a half-century? Did you know bestselling author Brad Meltzer puts a University of Michigan reference in all his novels, including his recent release, *The Book of Lies*?

LSA WIRE ▶ www.lsa.umich.edu/alumni/wire

What’s more, when you see the Wire graphic (above) in the print issue of the magazine, it means you can go to the Wire site for additional content and tips. A great example from this issue is “A Thief’s Caprice” (p. 70) about former compulsive shoplifter Terrence Shulman, who now helps others who struggle with an addiction to stealing. The Wire website offers a more in-depth explanation of the differences between compulsive shoplifting, compulsive shopping, and kleptomania, and also lists websites (including Shulman’s own) where people can go for help.

You can sign up to receive an email when the LSA Wire is updated, but don’t worry, we don’t spam: You’ll get this email twice per year only, in January and July.

Happy reading—and mouse-clicking.

LARA ZIELIN, EDITOR



Courtesy of the Bentley Historical Library

(letters)



Our “Green” issue garnered more letters to the editor than any other issue in the magazine’s history. Some of you, like **Brett Feldman** (‘96), wrote to say you were delighted to see that LSA had increased its environmental initiatives:

When I was in LSA, I had to basically create my own environmental economics major with the School of Natural Resources and Environment. I interned in the University recycling office, where I started a recycling [program] at Michigan Stadium. I am extremely proud of UM’s environmental leadership and the influential alums it has fostered.

Many of you praised the *Green* issue but expressed displeasure with our “*Breaking Ground*” story:

It was great to read your Green issue of *LSAmagazine*, however, I am still laughing over your profile of an 8,000-square-foot “environmentally responsible home.” There can be no environmental justification for that size home—ever. It is unfortunate that the builders seem to think that they can “buy” their way out of their environmental footprint rather than taking a deeper look at the implications of their choices. [Your article] left them largely unchallenged.

MIKE NEWMAN (‘96, M.B.A. ’03)

After 20 years of receiving ho-hum, send-us-money messages from the University of Michigan, out of the blue I received your Spring 2008 issue. Loved it! Interesting, short articles on alumni and current research, great graphics, fun photos. Thank you and more, please.

SARA MCCUE (‘88)

Finally, **Professor Don Munro** wrote to clarify that the *Tang Junyi Visiting Scholar fund*, which we featured in our last issue, will support a short-term visiting scholar specializing in Chinese thought or doing work in Chinese moral psychology. The scholar may be located in any one of the following LSA units: Philosophy, Psychology, Asian Languages and Cultures, or the Center for Chinese Studies. The visitor’s role is flexible and one appointment is welcome within a single academic year.

Recycled materials, geothermal heating, and natural landscaping are important ideas, but look where these ideas are used—an 8,000-square-foot house in suburban sprawl. There is nothing even remotely green or sustainable about suburban sprawl—it is a waste of land and all the other resources needed to support an unsustainable lifestyle.

MARK TRINKLEIN (‘87)

Marie van Staveren (‘07) complimented our use of recycled paper in the *Green* issue, but questioned our choice of printers:

While the Michigan economy slides deeper into recession, you are printing your magazine in Wisconsin. Not only does that not make sense for the environment because your magazine now has to be shipped in from the other side of Lake Michigan, but you’re pumping thousands of dollars of Michigan money into the Wisconsin economy.

Yes and no. The magazine mailing list is large and nationwide, so it makes sense to ship the magazines from a centralized location. What’s more, our paper is manufactured right down the road from where we print. We also use heat-set web printing, which few printers in Michigan actually offer, and those that do can’t efficiently handle the size of our mailing list. Our printer bundles *LSAmagazine* with other publications and sends them to postal clearing centers, which saves gas and money—helping both our budget and the environment.

Some of you wrote to say the magazine’s overall look was hitting home, like **Sara McCue** (see pull-quote, left), while others weren’t quite as pleased with the updates: **I am not very fond of your new glitzy** magazine. I liked the old, more serious one better. Now, like the younger set used to say about the old format, “I glance through then throw it out.”

JANET PERKINS (‘63)

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

Alumni Dig Deep

GRAD GIVING MAKES A DIFFERENCE IN UM’S BUDGET

A UNIVERSITY-WIDE INVESTMENT in need-based financial aid—bolstered by gifts from University alumni and friends—is having an impact that is visible in the University’s 2008–2009 (FY09) General Fund budget, which was approved in June by the Board of Regents.

Although the FY09 budget includes a 5.6 percent tuition increase for resident and nonresident undergraduates, the raise is tempered by a 10.8 percent increase in student financial aid for undergraduates. The budget also will provide additional funds for graduate student stipends.

UM President Mary Sue Coleman’s Donor Challenge, a matching program to aid both undergraduate and graduate students, has raised more than \$60 million in endowed funds for need-based undergraduate financial aid. The College of LSA, through the support of alumni, helped raise just shy of half of the \$60 million. The Challenge for graduate student aid remains in effect until December 31, 2008, when each dollar received will be matched 1:2 by President Coleman (see p. 6).

“Alumni in the College of LSA and the University as a whole have stepped up and responded to the academy’s needs at a critical time,” says LSA Dean Terrence J. McDonald. “The economy and the state of Michigan’s dire recession could have crippled the University, but alumni gave—and continue to give—generously to help us close the gap.”

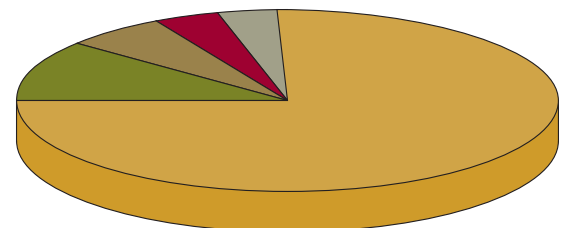
The UM budget includes first-time base funding to begin hiring 100 new faculty members, many of whom will be housed in the College of LSA. McDonald says new, outstanding faculty members are critical to keeping the University competitive. “They are the presence that maintains the caliber of our education and research,” he says.

Funds from the State of Michigan have also improved over last year. UM’s FY09 budget assumes a two percent increase over last year’s \$323 million appropriation, or \$330 million.

However, aggressive cost-containment measures will continue in the College and across the University to make the institution more efficient. “We always strive to steward our funds in the most responsible way,” McDonald says, “while still providing a world-class education.”

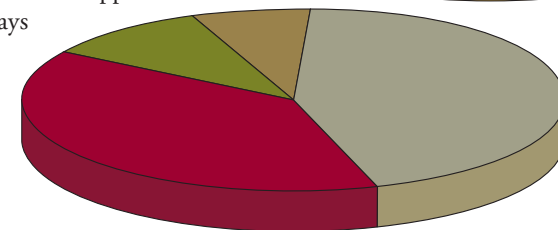
Sources All Funds

State Appropriations, Tuition, Indirect Cost Recovery, and University Transfers	\$440,604,986	75%
External Grants & Contracts	65,600,957	11%
Gifts	32,030,487	6%
Endowment Distribution	23,538,133	4%
Additional Revenue	20,980,759	4%
Total Sources	\$582,755,322	100%



Uses All Funds

Salaries and Benefits	\$250,387,739	43%
Operating Expenses and Construction	201,713,143	35%
Additions to Endowment and Other Fund Balances	70,328,823	12%
Scholarships, Fellowships, Tuition Grants	60,325,617	10%
Total Uses	\$582,755,322	100%





Ruin and Recovery

FINDING THE STRENGTH TO REBUILD AFTER DISASTER

Carter's graduate research work includes her photographs of the Lower Ninth Ward in New Orleans, Louisiana (above), which still bears the scars of Hurricane Katrina, and votives (right) in the Basilique de l'Immaculée Conception (Basilica of the Immaculate Conception) in Lourdes, France.

by Marianne George

WHEN REBECCA CARTER'S FAMILY lost their New Orleans home in Hurricane Katrina, she was struck by how the insurance company's definition of their home differed from her family's sense of loss.

A doctoral student in sociocultural anthropology, Carter began conducting interviews by phone from her Ann Arbor home about how the hurricane had affected New Orleans residents' social life and their concept of home. Drawing on her earlier research about religion, suffering, and healing in Lourdes, France, Carter eventually became interested in religious devotion and the role it was playing in local crisis and recovery.

In 2007, she began focusing her anthropological field research on New Orleans residents' devotion to two popular saints within Catholic, Voodoo, and Spiritualist communities: Our Lady of Prompt Succor, a local manifestation of the Virgin Mary; and St. Joseph.

"Studying the nature of the religious petitions that people make to these saints can tell us a lot about where people are at," she says. "Religious services often include general prayers for the recovery of the city, but the specific concerns differ based on their social and geographic conditions."

Carter was recently evacuated from her research headquarters in New Orleans when Hurricane Gustav whipped through in September. Circumstances like these, she says, show the broader

impact of her research. "In the United States we're dealing with everyday crises and conditions of vulnerability, such as poverty and violence, as well as the impact of larger disasters when they occur," Carter says. "What goes hand-in-hand with vulnerability reduction is resilience-building. This work can help us understand, from a cultural perspective, how we transition from crisis and vulnerability to resilience and sustainability."

Carter is taking compelling pictures of churches and religious artifacts and says photography is playing a large role in her work.

Carter's graduate work is supported by grants from several organizations, including the Department of Anthropology and the Center for the Education of Women. Carter says applying for grants is competitive and stressful. To make matters worse, her health insurance, which costs \$500 a month, plus her basic living expenses, are not covered by grants, she says.

At the time she was interviewed for this story, Carter was bracing for another evacuation due to Hurricane Ike. The storm ultimately bore west and did millions of dollars worth of damage to the Galveston, Texas, area. Barring another disaster, Carter hopes to begin writing her dissertation in early 2009.

The University of Michigan has launched its Graduate Student Donor Challenge to help ensure graduate students like Carter have the funding they need to conduct their groundbreaking research and also cover basic living expenses. Through the Challenge, all gifts to support graduate students will be matched 1:2 by UM President Mary Sue Coleman until \$40 million in gifts have been received or until December 31, 2008 — whichever comes first.

Rebecca Carter



Honoring Sam

On April 7, 2008, the University of Michigan lost a longtime friend and supporter, Samuel Frankel. Frankel studied at UM in the 1930s and, together with his wife, Jean ('36), transformed UM Judaic Studies from a small academic program into a leading venue of research and teaching. In their honor it was renamed the Jean and Samuel Frankel Center for Judaic Studies.

The Frankels' groundbreaking \$20 million gift to the College—the largest in LSA history—founded the Frankel Institute for Advanced Judaic Studies, the first of its kind at a public university in the United States.

To pay tribute to the memory of Sam and his enduring generosity, LSA Dean Terrence J. McDonald recently committed \$25,000 in College funds to support graduate students in Judaic studies. The funds will be matched 1:2 through President Coleman's Graduate Student Donor Challenge Program.

"I can't think of a better way to honor Jean and Sam's faithful support of the University over the years," says McDonald. "Twenty-five years ago, Judaic Studies was an academic niche, but now it's a rich field of study with broad impact in other scholarly areas. The Frankels' support was transformative, and it's a privilege to honor Sam's memory in this way."

In addition to his wife, Frankel is survived by his children Stanley ('63, M.B.A. '64), Bruce ('67), Stuart ('61), Jo Elyn, and their spouses, as well as numerous grandchildren and great-grandchildren.

(Left) Courtesy of the Frankel Center; (right) Jeffrey Becker



In Search of an Ancient City

by Rebekah K. Murray

IN 700 B.C.E., Italians would gather in Gabii's forum to conduct business, administer laws, and discuss their neighbors over in Rome, another city-state that was expanding rapidly. Eventually, Gabii was swallowed up by Rome, but remnants of its existence endure.

Nic Terrenato, a native of Rome and an LSA associate professor of classical archaeology, is preparing to lead a major excavation of Gabii that starts in the summer of 2009, in the countryside outside Rome. But first, with the help of a few graduate students, he is surveying the ground. His team is using instruments such as a magnetometer, which measures magnetic fields, to gain a sense of the city's layout.

To help in that effort, the team has a rough sketch of Gabii from the 1700s. It was made by an English arts dealer who dug in a small area of the ancient city, looking for artifacts to sell. The Englishman's unsystematic dig turned up "amazing stuff," Terrenato says, including portraits and sculptures on display in the Louvre in Paris. So the expectations for UM's dig are high, especially since the dig will be conducted in an area untouched in modern times, thus with a greater potential for ancient layers to be found intact.

Additionally, some of the artifacts may be brought back to UM to be displayed in the Kelsey Museum's new exhibit hall on central campus. Terrenato explains that since many Italian museums are bursting with artifacts, new government regulations allow approved artifacts to be loaned to American universities—with a renewable contract of 99 years.

Along with ancient artifacts, including perhaps sculptures and pottery of the same quality as those found centuries ago, Terrenato is hoping to find Gabii's ancient marketplace. It would be a unique find, Terrenato says, to see the origins of the forum, what became an essential Roman icon, from such an early period in history.

Rebekah K. Murray is the Assistant Editor of LSA magazine.



In Gabii (above left), ruins from an 11th century church honoring St. Primitivo jut from the countryside. Before excavating the site, Jeffrey Becker and Jason Farr (above) conduct core samples to explore the layers of archaeological material preserved underground.

(LSAnews)

A Pulitzer Prize-Winning Alumna



◀ *New York Times* reporter and LSA alumna Amy Harmon ('90) earned a 2008 Pulitzer Prize for explanatory reporting in her ongoing series, "The DNA Age." This series covers the ways in which genetic technology—including genetic mutations, culling embryos, and mapping genes—impacts American life. At UM, Harmon was the editor of the Opinion page of the *Michigan Daily* before graduating with a bachelor's degree in American Studies.

➡ **LSA WIRE** > www.lsa.umich.edu/alumni/wire



FEMALE FUEL

New UM psychology research suggests that the sex hormone estrogen may be for women what testosterone is for men: the fuel of power. Until recently, some researchers doubted whether women had a biologically anchored need for dominance. The study by Associate Professor of Psychology Oliver Schultheiss, who directs the Human Motivation & Affective Neuroscience Lab, and Steven Stanton, who is completing doctoral work at the lab, measured women's power needs and then assessed salivary estrogen levels both before and after they entered a one-on-one dominance contest. The researchers found that even before women got involved in the contest, higher power motivation was associated with higher levels of estrogen.

"Our findings perfectly parallel what we have observed for power motivation and testosterone in men," Schultheiss said. "In men, power motivation is associated with heightened levels of testosterone, particularly after a contest victory. In women, estrogen appears to be the critical hormone for power motivation."

ANGRY, DISTRACTED VOTERS

Angry voters tend to tune into the presidential race, but their strong emotions might actually distract them from paying attention to the facts. Vincent Hutchings, an associate political science professor at UM, and Nicholas Valentino, a professor at the University of Texas, examined how Americans' emotional state impacted their political information-seeking. The findings indicate that concern about fear-mongering in politics—which Democrats and Republicans accuse the other party of committing—may be overblown. Outrage, they say, may be more damaging than fear as a roadblock to producing informed citizens.



political information-seeking. The findings indicate that concern about fear-mongering in politics—which Democrats and Republicans accuse the other party of committing—may be overblown. Outrage, they say, may be more damaging than fear as a roadblock to producing informed citizens.



Mice and Men

Mice are stalwart stand-ins for humans in medical research, thanks to genomes that are 85 percent identical. But identical genes may behave differently in mice and men, says a study by Jianzhi Zhang, associate professor of ecology and evolutionary biology, and graduate student Ben-Yang Liao. "Everyone assumes that the deletion of the same gene in the mouse and in humans produces the same phenotype (an observable trait such as the presence or absence of a particular disease)," says Zhang. "Our results show that may not always be the case." So while the researchers say that mouse models still provide useful information, other models may need to be established for particular diseases.

The Indian Way ➤



LSA students were part of a group of 15 who recently spent four weeks in Mysore, India, to learn how education is integrated into daily life. The students' rigorous daily schedule began with an early-morning yoga lesson, then a trip to neighborhoods in Mysore, where each student was taught by a guru. The visit was at the guru's house, which is the center of learning for many families. On Fridays and Saturdays, students worked alongside physicians at the local community center and helped provide care to villagers living on the outskirts of Mysore.



INTERNATIONAL INSTITUTE
UNIVERSITY OF MICHIGAN

As the world shrinks before our eyes, the need to provide an international context for work, for research, for life seems to grow exponentially. UM's **International Institute (II)** connects the Michigan campus to the world—through its regional focus, through its comparative studies, and through its student programming.

You can become part of the II's rich intellectual discoveries, learn from some of today's leading global scholars, and discover how to support education that transcends boundaries: Subscribe today to the free, bi-annual *Journal of the International Institute*.

To be added to our *Journal* mailing list or to learn more about the *International Institute*, please call 734.763.9200 or email iimichigan@umich.edu





Media. Medicine *Man*

He trained as a neurosurgeon at UM, intending to start a quiet practice in Michigan. But plans changed for **Dr. Sanjay Gupta**. Today he's CNN's Chief Medical Correspondent, his face graces magazine and book covers, and he travels the planet to learn more about global health perspectives, which he explains to everyday folks using everyday language. Here, Gupta offers *LSAmagazine* a diagnosis of how his life's plan was altered to combine medicine and media.

by Rebekah K. Murray

On April 5, 2003, an Iraqi man stumbled into a U.S. Navy's medical unit south of Baghdad, covered in blood. He had been shot on the right side of his head. As the doctors rushed to help him, they soon learned that the man was bleeding around his brain and needed a neurosurgeon—but there were none on staff. Yet there was another person who might be able to help. He was embedded with the unit as a journalist for CNN.

Dr. Sanjay Gupta ('90, M.D. '93) told viewers about his experience that night on CNN. "As journalists, we came here to cover the story, not to *be* the story. But they came to me, asked me if I would be willing to take a look at the patient and operate on the patient. Medically and morally, I thought that was the right thing to do."

A UM-trained neurosurgeon, this was the second time Gupta was asked to perform surgery in Iraq. The first time, just two days before, a young Iraqi boy had come in with head wounds.

Gupta would perform brain surgery three more times during his two-month stay in Iraq. Some of the patients he operated on lived, like the man with the gunshot wound to the head. Others, like the young boy, did not.

Today, an unframed photograph of Gupta in Iraq sits on his desk at the CNN Center in Atlanta. "It's one of those indelible experiences," he says of his time there. It was also a time when his dual careers connected in a tangible way. And they continue to relate. "As a doctor, I take care of patients one at a time. As a journalist who is a doctor, I have the opportunity to educate masses of people every day on CNN."

It is this ability to connect medicine and media that makes Gupta the right man to lead CNN's team of medical correspondents. He hosts a weekend show called *House Call with Dr. Sanjay Gupta*, co-hosts *AccentHealth* for Turner Private Networks, contributes health news stories to CNN.com and *American Morning*, writes a column for *TIME* magazine, and more. He has also written a bestselling book, *Chasing Life*, and is about to release a second book.

Gupta's Rx

Gupta has been interested in educating the public on health care policy since he was a student at UM. Now, through his role at CNN, he can dispense medical information and advice, and share personal stories of people impacted by health concerns. He tries to come across as just a man telling health stories, a doctor in real life and on TV. He thinks of his audience as patients and tries to make that clear through a television screen.

"I imagine that I'm talking to a patient in a room," he says, "and you speak a certain way. You don't want to use a lot of medical jargon because they don't understand what you're saying. And you want to

treat the patient with a lot of compassion and a lot of care. It's the same sort of thing with the viewers. It's just that I look into a camera now and there are lots of eyes looking back, which I don't get to see."

Right now, Gupta is trying to educate his viewers on two health threats. One is obesity. "When you look at obesity, you come to find out that it could single-handedly erase or reverse all the medical advancements we've made over the last decades," Gupta says.

Health care is Gupta's other chief area of concern. "Stuff we know how to do, right now, that could prolong or save people's lives, doesn't always get done—whether it's cancer screenings or prenatal vitamins. I mean the basics. Everyone should get that, and they don't always."

Gupta could stand in front of a camera and try to explain this to viewers, but obesity is a difficult topic, he says. "It's not sexy. You can see people's eyes glazing over as you talk about it." And with the health care system, the problems and proposed solutions can be quite complex.

So Gupta tries to communicate people's personal stories. For instance, earlier this year he was part of a documentary for CNN on health care titled *Broken Government: Health Care—Critical Condition*. In that documentary, he shared the story of one couple whose twins, born at 28 weeks, struggled to live via surgeries that eventually forced the couple into bankruptcy—a scenario that should never occur, Gupta says.

"Consider this: In 2006, almost a million people filed for bankruptcy," Gupta told his viewers in that documentary. "Almost half, according to a Harvard study, were sunk in large part by medical expenses. And the sad fact is, most of those people did have health insurance."

"Should health care be that way in this country?" Gupta asked.

It's a question that Gupta has repeated for many years, reflecting a concern that originated during his days at Michigan.



CLIMATE CHANGE IS DRYING UP LAKE CHAD, ONE OF THE WORLD'S LARGEST LAKES, REPORTED GUPTA FROM CENTRAL AFRICA IN THE 2007 DOCUMENTARY, *PLANET IN PERIL*.

The Michigan Work Horse

Gupta grew up in Novi, Michigan, the son of two Ford Motor Company engineers. Immigrants from India, they taught him about hard work ("We're work horses, not show ponies," his father often said) and about lifelong learning. Gupta's father received a master's degree from UM in 1968, and, right out of high school, Gupta was accepted into Inteflex, an accelerated program that is now discontinued, through the College of LSA and UM's Medical School.

While Gupta was studying the liberal arts, he also wrote about health policy in op/eds for the *Michigan Daily* and in speeches for local Michigan politicians. He was questioning America's health care system at a time, in the late 1980s, "when people really weren't talking about health policy," he says. But Gupta was comparing the United States' system with the health care systems in other countries. He wrote a series of articles on this topic that were published in *The Economist* through a college scholars program. The articles caught

the attention of then-Arkansas Governor Bill Clinton and his wife, Hillary.

That led to a meeting with the Clintons at a prestigious conference, when Gupta was only 20 years old. "But I think they appreciated that a 20-year-old student could be so interested in health care policy," he says. A few years later, while Gupta was training to be a neurosurgeon at UM, Bill Clinton became president and Gupta applied for and received a White House Fellowship.

Through his year-long fellowship, Gupta wrote speeches for the First Lady, most of them related to health care. "It was everything from sweeping legislation, like a proposal for children's health insurance in 1997, to the need for asthma vans to educate children in urban areas about how to use their inhalers."

After his brief stint at the White House, Gupta returned to Michigan to practice neurosurgery. At UM, he had met attorney Rebecca Olson, (B.A. '92, B.S. '94), now his wife and mother of their two

young daughters, Sage and Sky, ages 3 and 21 months. At the time, he says, he and Olson thought they would make their lives in Michigan. But Gupta had met Tom Johnson, the then-CEO of CNN, while he was in Washington, D.C., and Johnson was convinced that Gupta would be a great fit at CNN. For Gupta, the idea was appealing but forced him to ponder a difficult question:

Could he educate a mass audience on health concerns and still be a practicing neurosurgeon?

America's Doctor

Gupta is proving that he can, but he is quick to add that his current life is not easy—especially when it requires 80-hour work weeks.

Along with spending time in Iraq, Gupta has traveled extensively, reporting for CNN. He was in New York City after the September 11, 2001, attacks, explaining anthrax to viewers. He has also traveled to Sri Lanka after the tsunami, to New Orleans after Hurricane Katrina, and to a chain of

islands sinking in the South Pacific.

"It's difficult, it's busy," he says. "It's not something that I really would have planned, I guess. I don't really get vacations because if you're gone from one job, then the other job needs you, and vice versa. I have two kids now, and we're expecting a third, so it's just a very busy life. But I think I've got enough energy to do it, at least a little bit longer."

His work has earned him a fan club—some applauding his merits and some just admiring his looks. Among his many

accolades, *USA Today* called him a "pop culture icon," *People* magazine named him one of the "Sexiest Men Alive" in 2003. In 2004, he was named Journalist of the Year by the Atlanta Press Club, in 2005 he contributed to CNN's Peabody Award-winning coverage of Hurricane Katrina, and in 2006 he won an Emmy Award and four National Headliner Awards.

Despite his newfound popularity,

"television is not as glamorous as you'd think," he says. "I've been to the hottest and worst spots on the planet." But it's worth it, Gupta says. And it's his job. Let politicians debate war strategy and health care coverage. In the meantime, Gupta will continue connecting medicine and media, and "introducing people to the stories of human beings who are suffering and being affected by these events now." ●

Rebekah K. Murray is the Assistant Editor of LSAmagazine.

Chasing Life

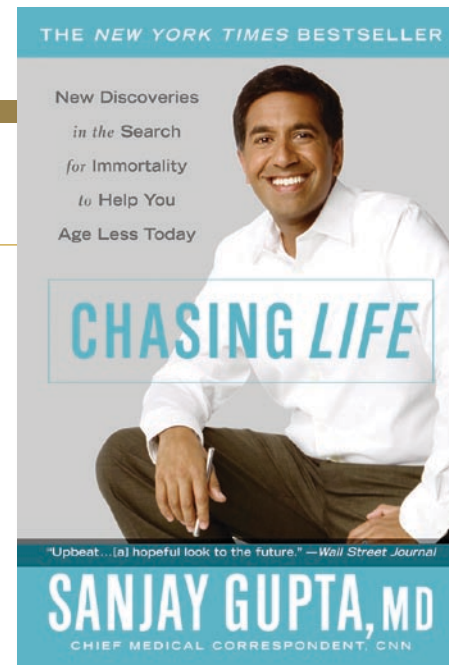
GUPTA'S QUEST FOR IMMORTALITY LED HIM TO OKINAWA ISLAND AND TO THE TOP OF THE BEST-SELLER LIST

"What is it about this place?" asked Dr. Sanjay Gupta. It was 2005 and Gupta was walking through the farmers' market on Okinawa Island in Japan. He had just met Ushi Okushima, who was selling small green oranges. She was 103 years old and had never missed a day of work. She was just one of many, ages 100 and older, who were out working, rowing boats, going to the market, and wielding machetes.

"I wanted to know their secret," Gupta says. He knew Okinawans ate a healthy diet and had an active lifestyle, but when talking to Okushima he found something more. In Japan it's called *ikigai*, or a sense of purpose.

"I wake up and I know what I want to do," Okushima told Gupta. "I know why I'm here on this earth. I know what my purpose is."

Okushima's positive attitude and sense of purpose is one of the topics Gupta discusses in his 2007 book, *Chasing Life*. "It translates into a will to live, a desire to go



on. It makes you a healthier person, both in mind and body," says Gupta.

In *Chasing Life*, readers follow Gupta on a modern-day search for immortality and along the way, discover tips for extending their active lives. Gupta's research for the book took him to Russia to interview scientists who are attempting to reverse aging with stem cell injections, to the Islands of Okinawa to talk with centenarians, and to American experts for help analyzing diet supplements, exercise routines, the obesity epidemic, and much more.

Doctor's Orders

TIPS FROM CHASING LIFE

- Eat only until you are 80 percent full.
- Eat five to seven servings of fruit and vegetables every day.
- Remember the essential vitamins you need every day.
- Go to the source, not a supplement. There is no substitute for a diet filled with fruits, vegetables, and other vitamin-rich foods.
- Exercise daily. Don't have time for a workout? Then take the stairs, park farther away, rake the leaves, or vacuum.
- Get plenty of sleep. It will help you lose weight.
- Make sure to do upper-body training now. It may add years to your life.
- Discover the unlikely elixirs. Dark chocolate, red wine, and coffee may extend life.
- Just because something is natural, it is not guaranteed to be safe.
- There is no fountain of youth. Beware of the product that says it will make you younger.
- Even if you're an old dog, learn a new trick. The more you learn, the more you protect your mind.
- Regular screening and early detection are the best ways to never hear the word "cancer" from your physician.
- Practice optimism. It can help you have a longer life.

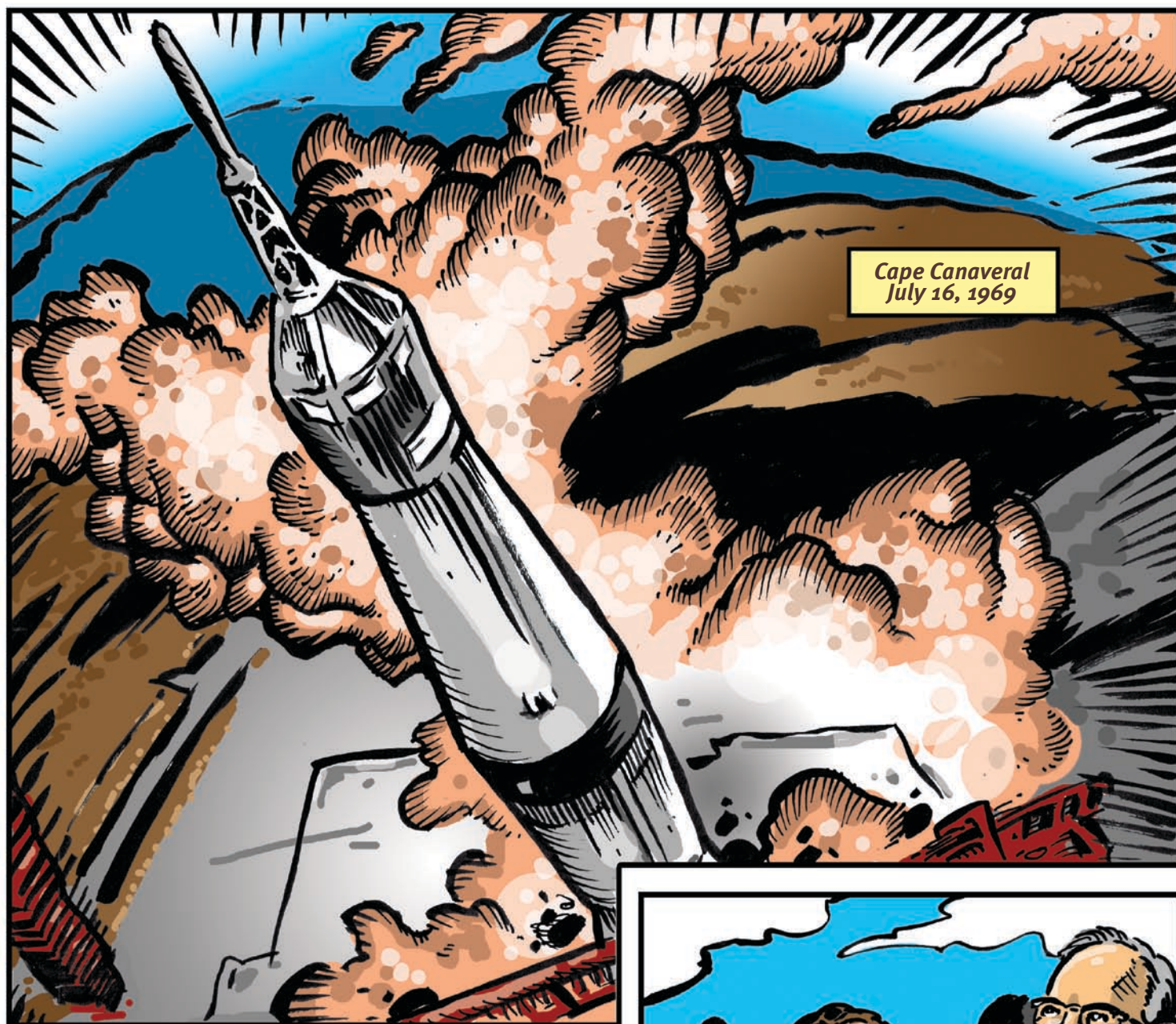
More tips and advice are available in Dr. Sanjay Gupta's book, *Chasing Life: New Discoveries in the Search for Immortality to Help You Age Less Today* (Wellness Central, copyright © 2007).

Courtesy of Grand Central Publishing



AS A YOUNG ASTRONOMER, RALPH BALDWIN DISMISSED THE MOON AS A NUISANCE THAT INTERFERED WITH OBSERVATIONS OF MORE DISTANT STARS AND GALAXIES. BUT ULTIMATELY IT WAS THE MOON THAT MADE THE BIGGEST AND MOST CONTROVERSIAL IMPACT ON RALPH'S LIFE.

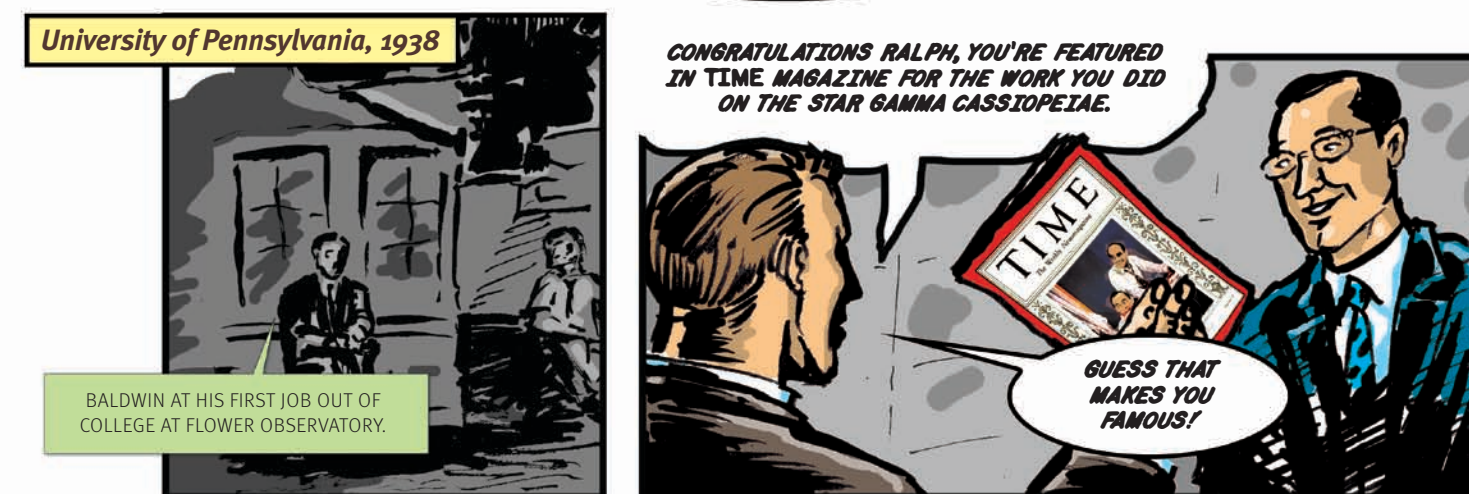
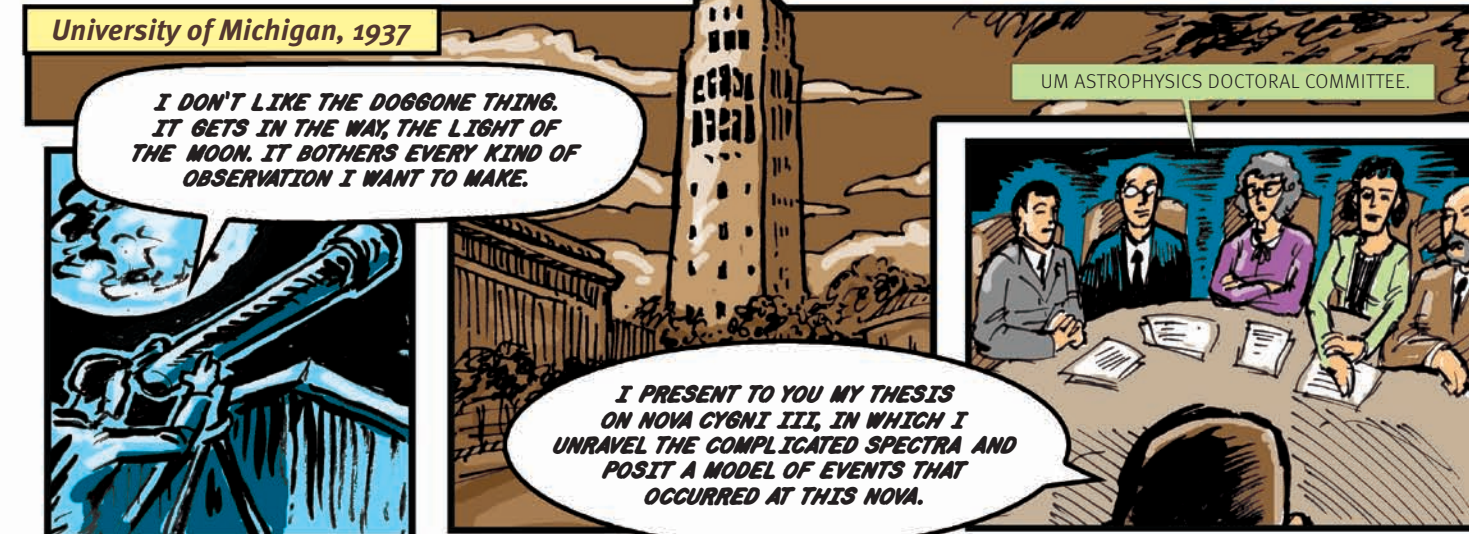
WRITTEN BY PATRICIA CLAYDON
RESEARCH BY LARA ZIELIN
ARTWORK BY TONY FERRO



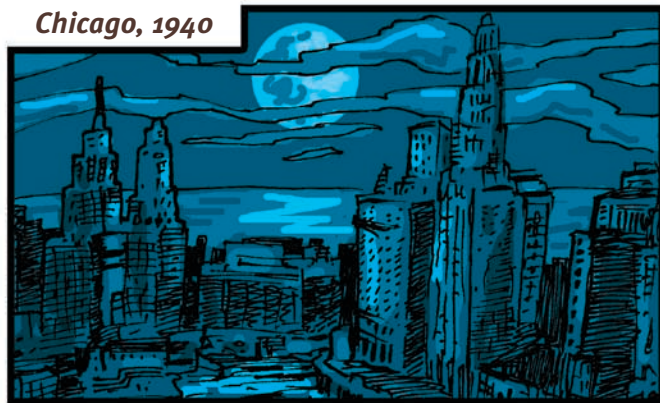
Cape Canaveral
July 16, 1969



BALDWIN CERTAINLY DIDN'T START HIS ASTRONOMY CAREER FOCUSED ON THE MOON. IN FACT, JUST THE OPPOSITE. HE WAS INTERESTED, ALONG WITH THE MAJORITY OF SKY SCIENTISTS IN THE 1930S, IN THE EXOTIC AND UNEXPLORED STARS AND GALAXIES THAT LAY FAR BEYOND THE MOON.



Chicago, 1940



FOR EXTRA MONEY TO SUPPORT HIS NEW WIFE, LOIS, AND BABY SON, DANA, BALDWIN HEADED INTO BUSTLING DOWNTOWN CHICAGO TO MOONLIGHT AT THE ADLER PLANETARIUM.



AND IT WAS THERE ONE NIGHT, WHILE PREPARING TO GIVE A LECTURE AFTER THE PROJECTION SHOW FINISHED UP...

...THAT RALPH BALDWIN DISCERNED A CURIOUS PATTERN. ONE OF THE EYES OF THE "MAN ON THE MOON" HAD DEEP GROOVES RADIATING OUT OF IT.



EIGHTEEN-BY-TWENTY-FOUR-INCH PHOTOS TAKEN AT THE MOUNT WILSON AND LICK OBSERVATORIES IN THE EARLY 1900S, THE BEST IMAGES OF THE MOON THAT EXISTED AT THAT TIME.

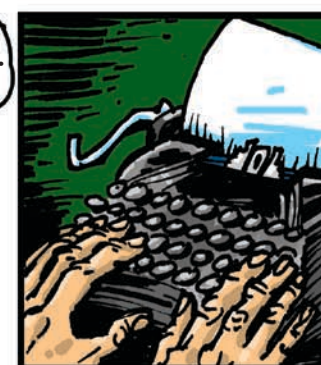
MODERN SCIENTIFIC THEORY IS WRONG!
THE MOON'S SURFACE ISN'T PITTED BY VOLCANOES. THE CRATERS MUST HAVE BEEN MADE BY EXPLOSIONS. EXPLOSIONS OF INCONCEIVABLE VIOLENCE... METEORITE IMPACTS! THE RADIAL VALLEYS CARVING OUT OF THE CENTER — THEY'RE MADE BY IMMENSE BOULDERS EJECTED FROM THE CRASH SITE.
IT'S SO SIMPLE, BUT MAKES SO MUCH SENSE. WHY DIDN'T I NOTICE THIS BEFORE?

FOR ALL THE YEARS BALDWIN HAD TRIED SO HARD TO SEE AROUND THE MOON, HE COULDN'T IGNORE THE FACTS THAT WERE NOW STARING HIM STRAIGHT IN THE FACE. ASTRONOMY WAS AT A TURNING POINT, LUNAR SCIENCE WAS COMPLETELY UPENDED. BUT UNFORTUNATELY FOR BALDWIN, HIS DISCOVERY DIDN'T SEND HIM DOWN A PATH OF FAME AND PRESTIGE. INSTEAD, HE WAS ABOUT TO SET OUT ON A FRUSTRATING JOURNEY OF CONTROVERSY AND REJECTION.

AFTER EXHAUSTIVE RESEARCH...



ONLY ONE OTHER SCIENTIST, WILLIAM HERBERT STEVENSON, HAS EVER COMMENTED ON THE GROOVES. AND HE GOT IT WRONG — HE SAYS THEY'RE PARALLEL, NOT RADIAL.



...IN 1941, BALDWIN COMMITTED HIS REVOLUTIONARY LUNAR CRATER THEORY TO PAPER.

BUT HE WAS UNSUCCESSFUL IN GETTING THE THEORY PUBLISHED ANYWHERE OTHER THAN POPULAR ASTRONOMY.



I CAN'T GET RESEARCH JOURNALS TO TAKE MY THEORY SERIOUSLY. IT'S AS IF THE MOON WERE SUBJECT ANATHEMA.

BALDWIN HAD RUN UP AGAINST A HARD WALL OF PREJUDICE SURROUNDING LUNAR SCIENCE.



THE MOON'S CRATERS WERE MADE BY VOLCANOES, JUST LIKE ON EARTH.

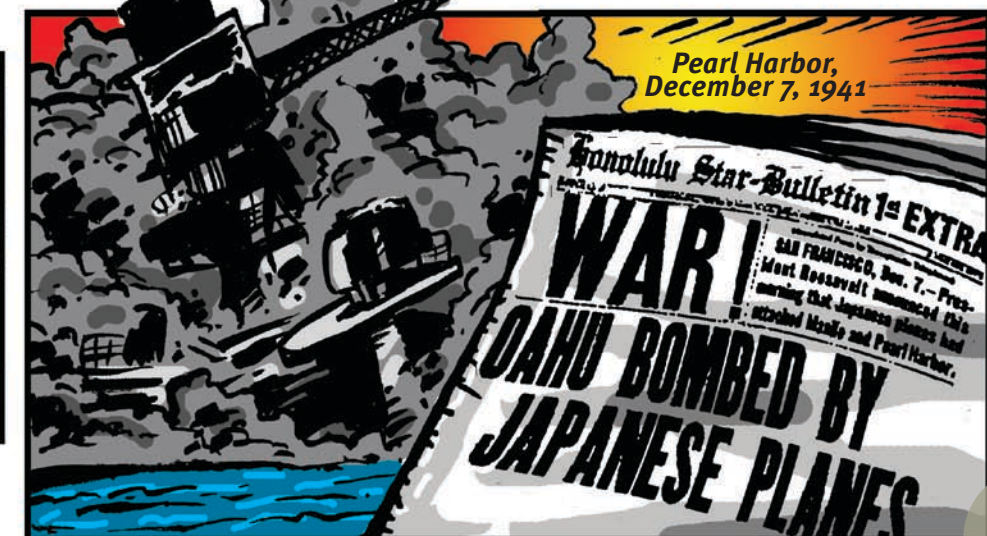
EVEN THOUGH THE ACCEPTED VOLCANIC THEORY DIDN'T EXPLAIN WHY LUNAR CRATERS DIFFER SO RADICALLY FROM ANY VOLCANIC SITES ON EARTH, SCIENTISTS HAD LONG CONSIDERED THE SUBJECT CLOSED.



RALPH BALDWIN AND HIS LUNAR CRATER THEORY WERE DEFEATED.



AT THIS POINT IN THE STORY, BALDWIN, AND THE WORLD AS A WHOLE, PAUSES FOR AN INTERRUPTION.



Pearl Harbor, December 7, 1941

WAR!
OAHU BOMBED BY JAPANESE PLANES

March 1942

IN THE MIDDLE OF WORLD WAR II, BALDWIN RECEIVES A LIFE-CHANGING PHONE CALL.



ROBLEY WILLIAMS! OF COURSE I REMEMBER YOU FROM COLLEGE.

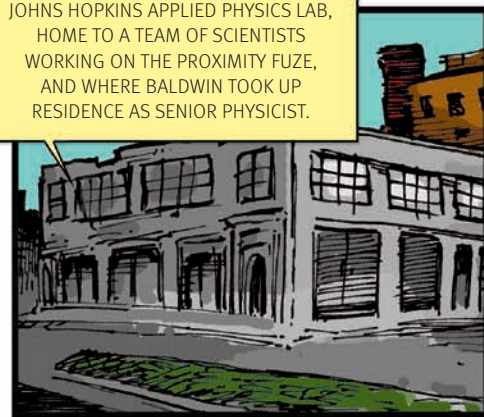
I'M CALLING FROM THE DEPARTMENT OF TERRESTRIAL MAGNETISM IN WASHINGTON, D.C. WE HAVE A JOB TO OFFER YOU.



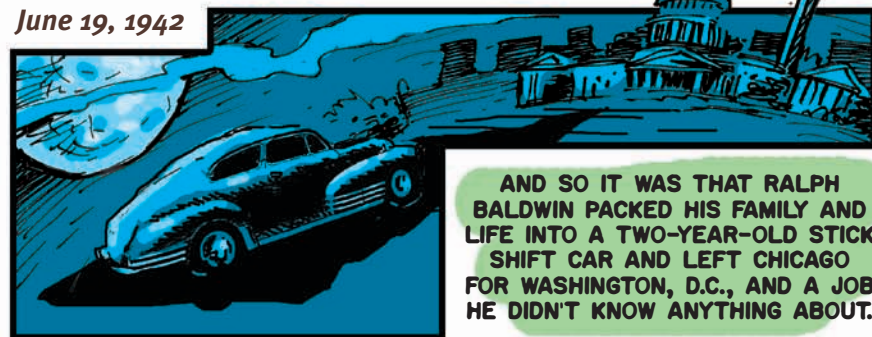
I KNOW NOTHING ABOUT MAGNETISM, ROBLEY.

NO MATTER. I CAN'T TELL YOU WHAT THE JOB IS. ALL I CAN SAY IS THAT IT'S IMPORTANT AND WILL HELP THE WAR EFFORT. ARE YOU INTERESTED?

JOHNS HOPKINS APPLIED PHYSICS LAB, HOME TO A TEAM OF SCIENTISTS WORKING ON THE PROXIMITY FUZE, AND WHERE BALDWIN TOOK UP RESIDENCE AS SENIOR PHYSICIST.



June 19, 1942



AND SO IT WAS THAT RALPH BALDWIN PACKED HIS FAMILY AND LIFE INTO A TWO-YEAR-OLD STICK SHIFT CAR AND LEFT CHICAGO FOR WASHINGTON, D.C., AND A JOB HE DIDN'T KNOW ANYTHING ABOUT.

LITTLE DID HE KNOW HE WAS ABOUT TO PLAY A HUGE PART IN BRINGING ABOUT THE END OF WORLD WAR II.

PROXIMITY RADIO (VR) FUZE: A BOMB OR ARTILLERY FUZE COMPOSED OF A TINY RADIO THAT TRANSMITS A SIGNAL TO DETERMINE LETHAL DISTANCE FOR AUTOMATIC DETONATION. FIRST USED IN COMBAT BY THE ALLIED TROOPS ON JANUARY 5, 1943.



THE NEW SHELL WITH THE FUNNY FUZE IS DEVASTATING. IT QUITE FRANKLY WON THE BATTLE OF THE BULGE FOR US.



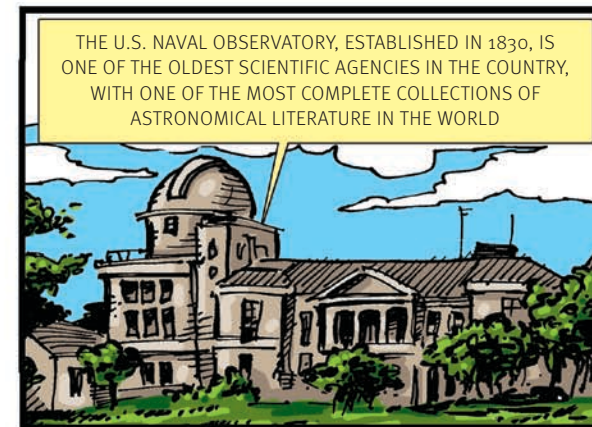
GENERAL GEORGE S. PATTON

THE PROXIMITY FUZE THAT BALDWIN HELPED DEVELOP PROVED TO BE A GODSEND AGAINST JAPANESE KAMIKAZE PLANES. BY ALMOST ALL ACCOUNTS IT SHORTENED WORLD WAR II BY AT LEAST A YEAR.

MEANWHILE, DESPITE WORKING LONG HOURS AT THE APPLIED PHYSICS LAB, BALDWIN STILL MANAGED TO FIND TIME TO RESEARCH AND FEED HIS LUNAR THEORY, WHICH BY THIS TIME COULD BE CALLED A FULL-BLOWN OBSESSION.



BOMBING RANGES AND MUNITIONS TESTING FACILITIES ACROSS AMERICAN MILITARY BASES SUPPLIED HIM WITH FRESH DATA ON HIGH-IMPACT CRATERS.



THE U.S. NAVAL OBSERVATORY, ESTABLISHED IN 1830, IS ONE OF THE OLDEST SCIENTIFIC AGENCIES IN THE COUNTRY, WITH ONE OF THE MOST COMPLETE COLLECTIONS OF ASTRONOMICAL LITERATURE IN THE WORLD

THE LIBRARIES OF THE U.S. NAVAL OBSERVATORY AND THE U.S. GEOLOGICAL SURVEY GAVE BALDWIN ACCESS TO HISTORICAL FIELD STUDIES OF EARTH'S OWN MOON-LIKE CRATERS.



AND THOUGH BALDWIN OFFICIALLY TOOK HIS LEAVE OF THE WORLD OF SCIENCE TO JOIN THE FAMILY BUSINESS IN GRAND RAPIDS, MICHIGAN...



...HIS WORK ON THE MOON WAS FAR FROM DONE. IN 1948, BALDWIN PUBLISHED *THE FACE OF THE MOON*, ITS PAGES A VERITABLE GOLDMINE OF QUANTITATIVE AND TESTABLE IMPACT THEORY. HE OUTLINED THE EXACT RELATIONSHIP BETWEEN THE DEPTH AND WIDTH OF A CRATER AND THE EXPLOSIVE ENERGY THAT CREATED IT (THE SIZE-FREQUENCY DISTRIBUTION). BALDWIN WAS HANDING THE SCIENTIFIC WORLD A RADICALLY DIFFERENT WAY TO THINK ABOUT THE MOON AND ABOUT GEOLOGY IN GENERAL.

THE IMMENSE EXPLOSION OF A METEORIC IMPACT STARTS WITH A BLINDING SPHERICAL SHOCK WAVE RADIATING UP INTO THE AIR AS WELL AS DOWN INTO THE GROUND. THE TREMENDOUS PRESSURE OF THE SHOCKWAVE PULVERIZES THE GROUND AND LAUNCHES FRACTURED PIECES OF ROCK LIKE BOMBS OUTWARD FROM THE CENTER OF IMPACT, CREATING THE GROOVES THAT HAD FIRST CAPTURED BALDWIN'S ATTENTION.

EVEN MORE IMPORTANTLY, BALDWIN DARED TO SUGGEST THAT THIS COULD—AND HAD!—HAPPENED ON EARTH. HE FURTHER SPECULATED THAT TERRESTRIAL IMPACTS HAD CAUSED MASS EXTINCTION OF SPECIES.

BALDWIN WOULDN'T BE IGNORED THIS TIME. ALTHOUGH THE ASTRONOMICAL COMMUNITY AS A WHOLE STILL WASN'T READY TO ACCEPT HIS THEORY, DISCUSSION OF THE MOON WAS REOPENED. HIS WORK EVENTUALLY CAUGHT THE ATTENTION OF TWO VERY INFLUENTIAL SCIENTISTS.



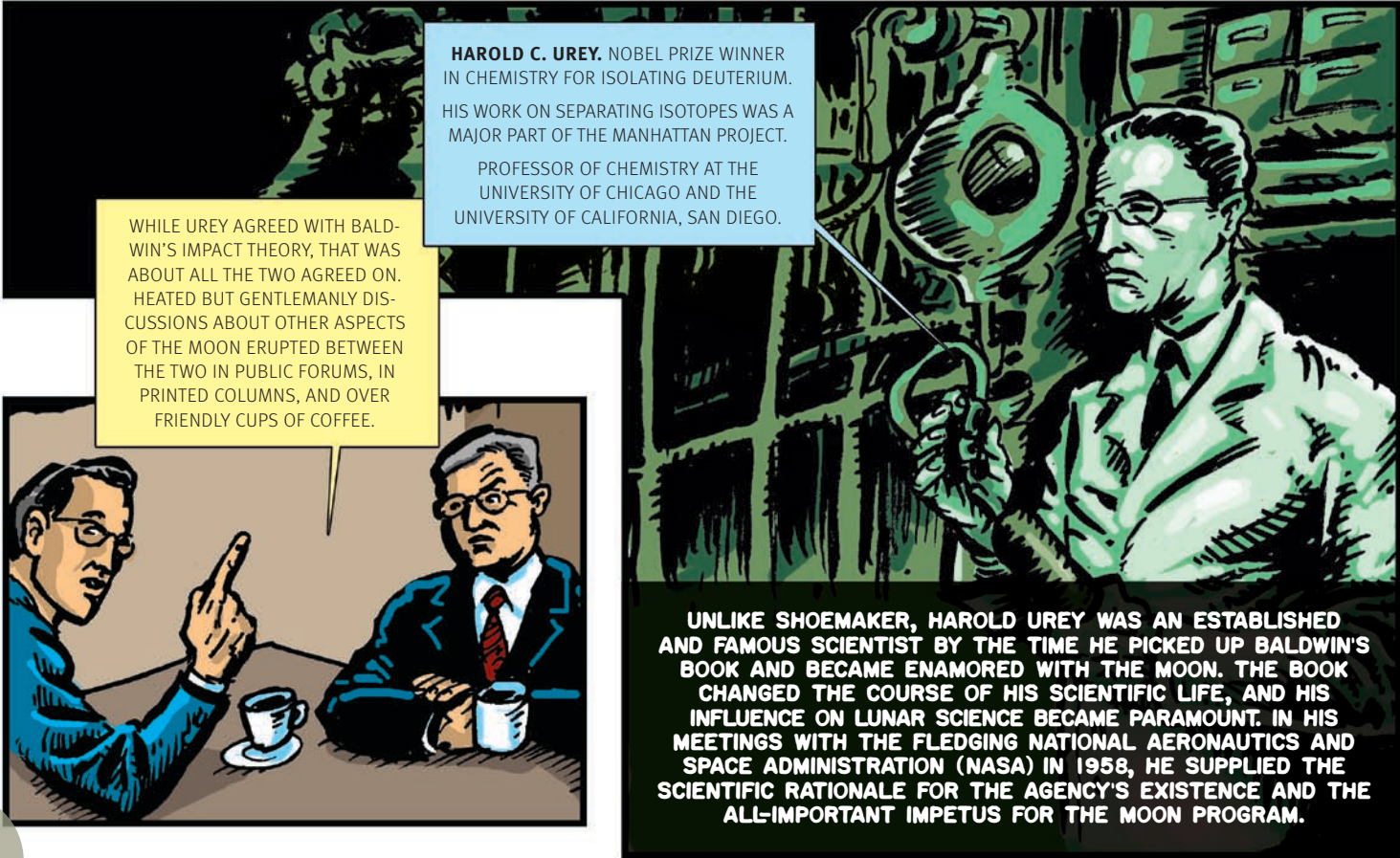
EUGENE SHOEMAKER DIDN'T DISCOVER BALDWIN'S BOOK UNTIL THE LATE 1950S WHILE HE WAS A STUDENT AT PRINCETON. FOR HIS DOCTORAL THESIS IN 1960, USING METHODS OUTLINED BY BALDWIN IN *THE FACE OF THE MOON*, SHOEMAKER PROVED BARRINGER CRATER IN ARIZONA WAS IN FACT A METEORIC CRATER. THIS WAS THE FIRST DEFINITIVE PROOF OF AN EXTRATERRESTRIAL IMPACT ON THE EARTH'S SURFACE, AND IT WAS SENSATIONAL. THE FLOODGATES FLEW OPEN. BY THE END OF THE DECADE, 47 MORE CONFIRMED IMPACT CRATERS HAD BEEN IDENTIFIED BY THE SAME METHODS.

THERE WAS NO QUESTION ANYMORE THAT METEORITES CAN AND DO FALL FROM THE SKY.



EUGENE M. SHOEMAKER. FOUNDER AND FIRST DIRECTOR OF THE U.S. GEOLOGICAL SURVEY'S ASTROGEOLOGY RESEARCH PROGRAM. ONE OF THREE SCIENTISTS WHO WORKED ON THE RANGER MISSIONS, THE FIRST UNMANNED SPACESHIPS TO GO TO THE MOON.

BARRINGER CRATER IN ARIZONA IS KNOWN TODAY AS METEOR CRATER.



HAROLD C. UREY. NOBEL PRIZE WINNER IN CHEMISTRY FOR ISOLATING DEUTERIUM. HIS WORK ON SEPARATING ISOTOPES WAS A MAJOR PART OF THE MANHATTAN PROJECT. PROFESSOR OF CHEMISTRY AT THE UNIVERSITY OF CHICAGO AND THE UNIVERSITY OF CALIFORNIA, SAN DIEGO.

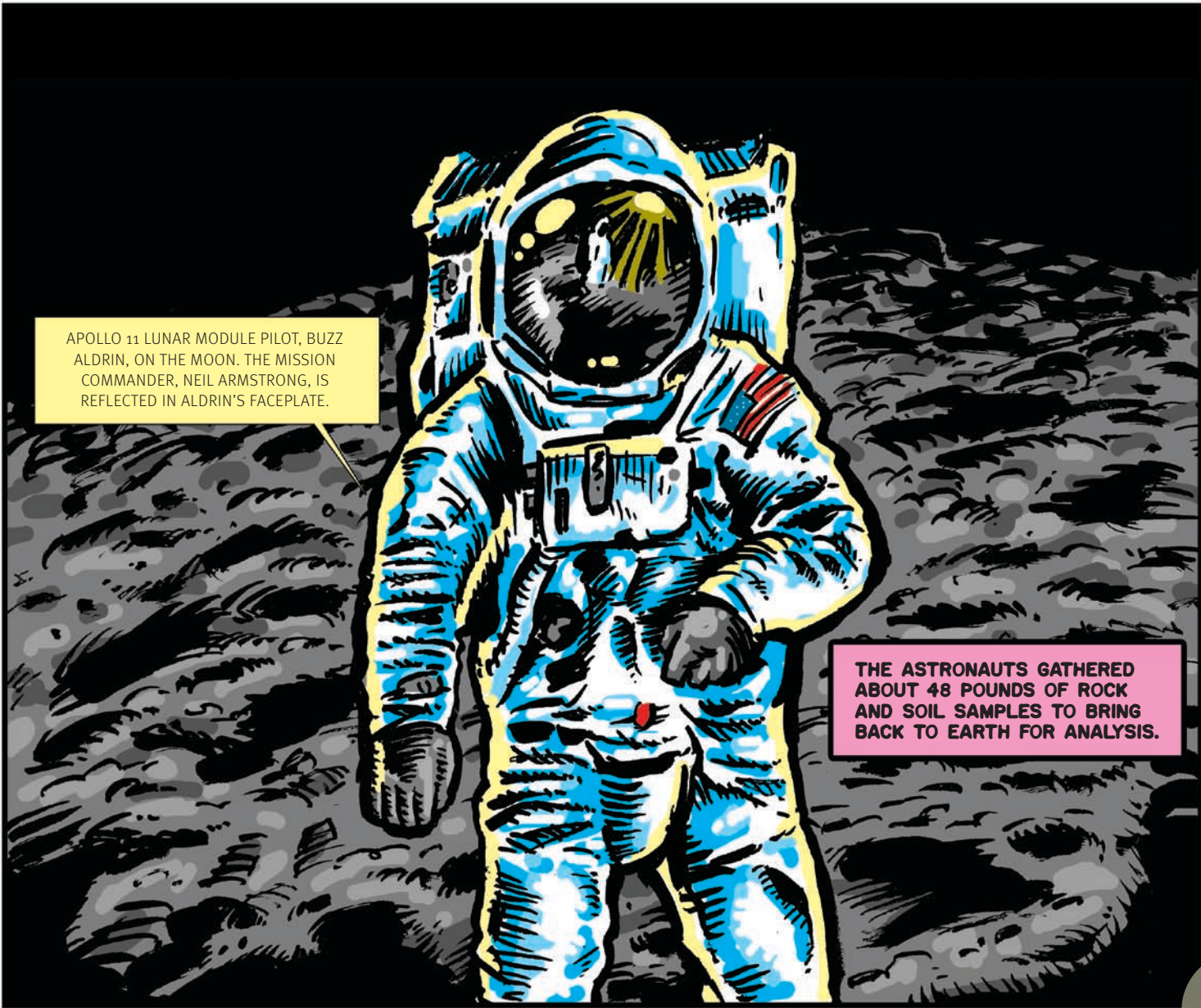
WHILE UREY AGREED WITH BALDWIN'S IMPACT THEORY, THAT WAS ABOUT ALL THE TWO AGREED ON. HEATED BUT GENTLEMANLY DISCUSSIONS ABOUT OTHER ASPECTS OF THE MOON ERUPTED BETWEEN THE TWO IN PUBLIC FORUMS, IN PRINTED COLUMNS, AND OVER FRIENDLY CUPS OF COFFEE.

UNLIKE SHOEMAKER, HAROLD UREY WAS AN ESTABLISHED AND FAMOUS SCIENTIST BY THE TIME HE PICKED UP BALDWIN'S BOOK AND BECAME ENAMORED WITH THE MOON. THE BOOK CHANGED THE COURSE OF HIS SCIENTIFIC LIFE, AND HIS INFLUENCE ON LUNAR SCIENCE BECAME PARAMOUNT. IN HIS MEETINGS WITH THE FLEDGING NATIONAL AERONAUTICS AND SPACE ADMINISTRATION (NASA) IN 1958, HE SUPPLIED THE SCIENTIFIC RATIONALE FOR THE AGENCY'S EXISTENCE AND THE ALL-IMPORTANT IMPETUS FOR THE MOON PROGRAM.

July 20, 1969 AS BALDWIN WATCHED, ALONG WITH THE REST OF AMERICA, THE FIRST HUMANS LANDED ON THE MOON. HE KNEW THEY HAD BEEN BRIEFED NOT ONLY WITH *THE FACE OF THE MOON*, BUT ALSO WITH HIS SECOND BOOK *THE MEASURE OF THE MOON*, A COMPENDIUM OF MINUTE AND PAINSTAKING MEASUREMENTS OF EVERY INCH OF THE SURFACE THE ASTRONAUTS WERE NOW STEPPING ON.

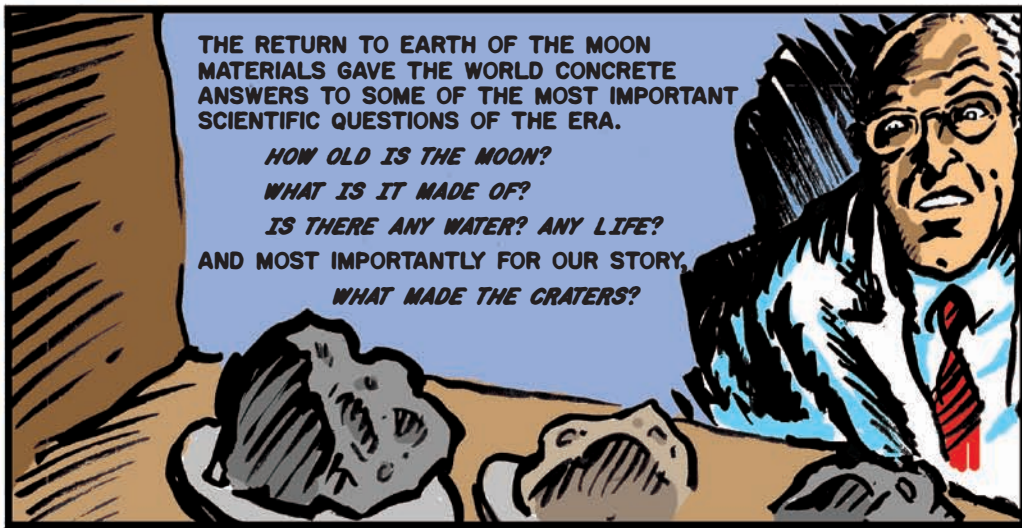


ONE GIANT LEAP FOR MANKIND —AND FOR MY RESEARCH.



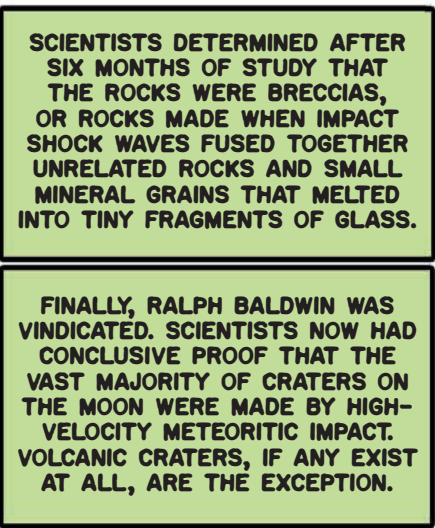
APOLLO 11 LUNAR MODULE PILOT, BUZZ ALDRIN, ON THE MOON. THE MISSION COMMANDER, NEIL ARMSTRONG, IS REFLECTED IN ALDRIN'S FACEPLATE.

THE ASTRONAUTS GATHERED ABOUT 48 POUNDS OF ROCK AND SOIL SAMPLES TO BRING BACK TO EARTH FOR ANALYSIS.



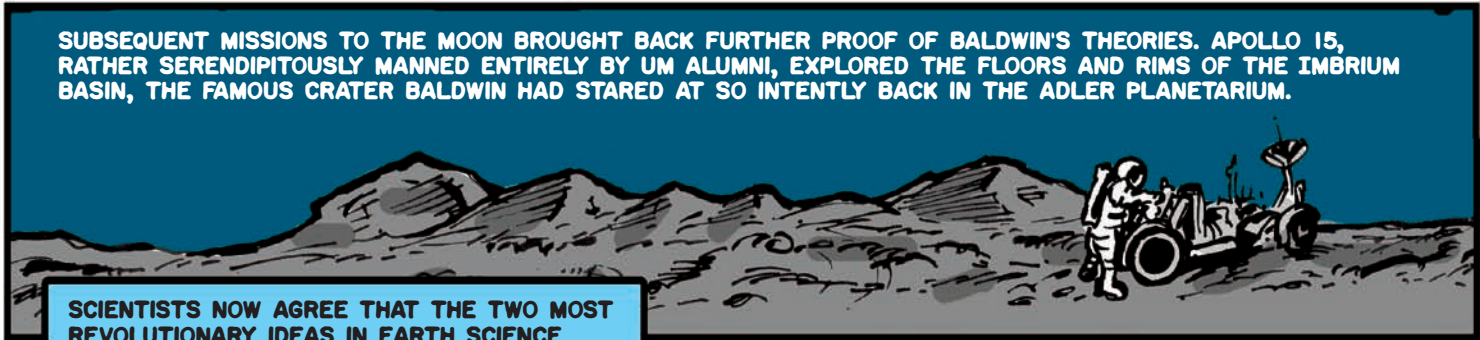
THE RETURN TO EARTH OF THE MOON MATERIALS GAVE THE WORLD CONCRETE ANSWERS TO SOME OF THE MOST IMPORTANT SCIENTIFIC QUESTIONS OF THE ERA.

HOW OLD IS THE MOON?
WHAT IS IT MADE OF?
IS THERE ANY WATER? ANY LIFE?
AND MOST IMPORTANTLY FOR OUR STORY,
WHAT MADE THE CRATERS?



SCIENTISTS DETERMINED AFTER SIX MONTHS OF STUDY THAT THE ROCKS WERE BRECCIAs, OR ROCKS MADE WHEN IMPACT SHOCK WAVES FUSED TOGETHER UNRELATED ROCKS AND SMALL MINERAL GRAINS THAT MELTED INTO TINY FRAGMENTS OF GLASS.

FINALLY, RALPH BALDWIN WAS VINDICATED. SCIENTISTS NOW HAD CONCLUSIVE PROOF THAT THE VAST MAJORITY OF CRATERS ON THE MOON WERE MADE BY HIGH-VELOCITY METEORITIC IMPACT. VOLCANIC CRATERS, IF ANY EXIST AT ALL, ARE THE EXCEPTION.



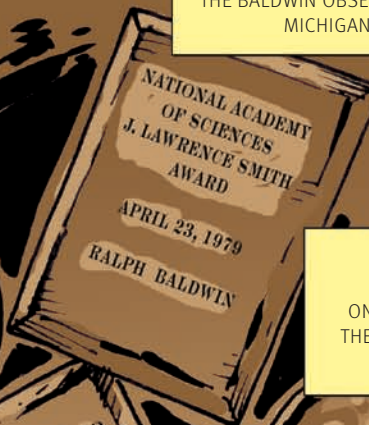
SUBSEQUENT MISSIONS TO THE MOON BROUGHT BACK FURTHER PROOF OF BALDWIN'S THEORIES. APOLLO 15, RATHER SERENDIPITOUSLY MANNED ENTIRELY BY UM ALUMNI, EXPLORED THE FLOORS AND RIMS OF THE IMBRIUM BASIN, THE FAMOUS CRATER BALDWIN HAD STARED AT SO INTENTLY BACK IN THE ADLER PLANETARIUM.

SCIENTISTS NOW AGREE THAT THE TWO MOST REVOLUTIONARY IDEAS IN EARTH SCIENCE ARE THE THEORY OF PLATE TECTONICS, AND BALDWIN'S THEORY OF IMPACT CRATERS.

FINALLY, OVER THREE DECADES AFTER HE FIRST POSED HIS THEORY, RALPH BALDWIN WAS SHOWERED WITH AWARDS AND HONORS.

THE BALDWIN OBSERVATORY AT AQUINAS COLLEGE, GRAND RAPIDS, MICHIGAN, DEDICATED ON SEPTEMBER 21, 1994.

LEONARD MEDAL OF THE METEORITICAL SOCIETY



THE BARRINGER MEDAL OF THE METEORITICAL SOCIETY

ONLY TWO INDIVIDUALS HAVE EVER WON BOTH THE LEONARD AND BARRINGER MEDALS IN THEIR LIFETIMES. BALDWIN IS ONE.

YOU ARE NOW AN HONORARY MEMBER OF THE ROYAL ASTRONOMICAL SOCIETY OF CANADA. CONGRATULATIONS.



DON E. WILHELM, THE GEOLOGIST WHO TRAINED THE ASTRONAUTS FOR APOLLO 11, DEDICATED HIS BOOK "TO RALPH WILLIAMS, WHO GOT SO MUCH SO RIGHT SO EARLY."



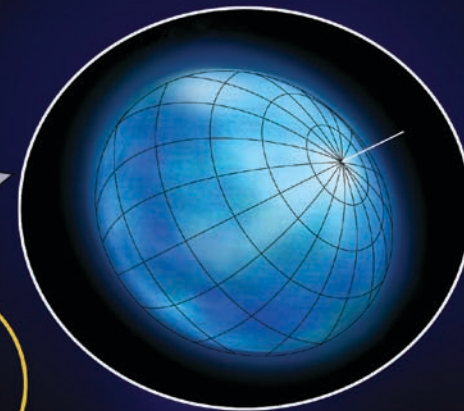
THE IMPACT IS SO OBVIOUS NOW, ISN'T IT?

This story was written using the following sources: Ralph Baldwin, *The Face of the Moon* (University of Chicago Press, 1949); Ralph Baldwin, *They Never Knew What Hit Them: The Story of the Best Kept Secret of World War II* (Reynier Press, 1999); Ralph Baldwin, *New Worlds: A Partial History of the Life and of the Scientific and Military Works of Dr. Ralph Belknap Baldwin* (Ralph Baldwin, 2007); Dana Mackenzie, *The Big Splat, or How Our Moon Came to Be* (John Wiley & Sons, Inc., 2003); Paul D. Spudis, *The Once and Future Moon* (Smithsonian Institution Press, 1996).

CHARA INTERFEROMETER: LARGEST INFRARED TELESCOPE IN THE WORLD

Size of Hubble Space Telescope compared to CHARA

A million times farther than the Sun (15 light-years)



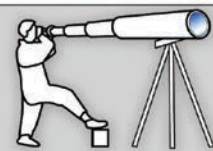
Altair

2 times as wide as the Sun (Artist's conception)



6 telescopes total
1m diameter mirror in each
Effective Mirror diameter: 250m

Mt. Wilson, CA



100 miles away

ANALOGY

2mm

Newspaper

Photographing the Stars

by Julie Sparkman

ASTRONOMY PROFESSOR JOHN MONNIER used to gaze into the sky through the lens of his childhood telescope. "It was fantastic and exciting," he says, "but I never imagined it would be my life's work."

Now, not only is Monnier gazing at stars, he's photographing them. "We have been exploring different ways of capturing high-resolution images of stars, a goal for many researchers across the world."

In 2007, Monnier, along with several graduate students and colleagues, made a scientific breakthrough on this front by merging starlight collected by four widely separate optical telescopes. This procedure, known as interferometry, produced the first-ever highly detailed image of a main sequence star. The sun and most of the stars in the night sky are main sequence stars.

"This is a real breakthrough," Monnier says. "The ability to image nearby stars opens up new avenues of research."

Exquisitely depicted in Monnier's recent photography is the sun-like hot star Altair, a million times farther from Earth than our own sun and almost

double its size. Altair is a quickly rotating luminary that spins at 638,000 miles per hour—so fast that "it spreads out like a twirling ball of pizza dough," Monnier says.

The photos of Altair are "the first images of a star that allow us to visually confirm the basic idea of gravity darkening," Monnier says of the theory that a star can spin so fast that it has a larger radius at its equator than it does at its poles. Consequently, the poles have a higher surface gravity and a greater temperature and brightness; the bloated equator, on the other hand, appears dark because it is farther from the star's fiery nuclear core.

Monnier—with graduate students Ming Zhao and Ajay Tannirkulam—has plans to image more than just stars themselves. He will continue to develop optical interferometry to observe planet formation around other stars, hoping to eventually detect Earth-like planets. The ability to view close-up photos of these planets to track biological activity would be "revolutionary," Monnier says.

And it is only the beginning. "I am anxious to see and be a part of the radical discoveries that have yet to come," he says.

Julie Sparkman is a staff member in the LSA Office of Development, Marketing and Communications.

THE UNIVERSE YOURS TO DISCOVER

Scientists estimate the universe is approximately 13.73 billion years old, give or take 120 million years. In the last hundred years (a fraction of a fraction of 13.73 billion), great progress has been made studying the universe—from the understanding that billions of galaxies exist just like our own Milky Way, to the certainty that planets orbiting around suns are commonplace.

In winter 2009, the College of LSA's theme semester *The Universe: Yours to Discover* will highlight the growth of modern astronomy and mark the 400-year anniversary of the first astronomical observation through a telescope by Galileo Galilei. The theme semester will explore the impact of astronomy in areas ranging from the humanities to the arts, and will feature multiple events open to the public.

For more information on *The Universe:*

Yours to Discover, please visit

www.lsa.umich.edu/universe.



Chris Ware/UpperCut Images/Getty Images

Zina Deretsky



the affairs *of* small tribes

by James Tobin

After years of disengagement, the Bush Administration seems bent on brokering an Israeli-Palestinian peace accord before President George W. Bush leaves office. But could such an ambitious plan do more harm than good? In his new book, *The Much Too Promised Land*, alumnus Aaron David Miller puts the Bush Administration's attitude toward the Middle East into decades of context, and plots the complex and tangled roadmap to peace in the Middle East.

(LEFT) U.S. PRESIDENT GEORGE W. BUSH AND FORMER ISRAELI PRIME MINISTER EHUD OLMERT IN ISRAEL.

In August 2004, Aaron

David Miller ('71, Ph.D. '77), a senior Middle East adviser to six American secretaries of state, brought 200 Arab and Israeli youngsters to the White House to meet the president. They were members of Seeds of Peace, a nonprofit organization that trains promising youths from regions at war to become future leaders.

George W. Bush came out on the steps of the Old Executive Office Building, grinned for a group photo, then turned to leave. When Miller asked for a word of encouragement to the kids, the president said: "Gotta go, gotta go." Then, looking back over his shoulder, he called: "Gotta implement that road map. Gotta do it."

Miller included the story in his new book, *The Much Too Promised Land:*

America's Elusive Search for Arab-Israeli Peace (Bantam, 2008), he says, not to suggest that the president doesn't care about young people. Instead, he saw the incident as a small symbol of the Bush administration's basic strategy toward the Arab-Israeli conflict—disengagement. In a conversation with Miller, Colin Powell, Bush's first secretary of state, summed up the president's thinking this way: "I don't want to do what Clinton did because it takes a lot of time. The prospects of success . . . are quite low."

Not that a U.S. president can bring peace to the Middle East all alone. Indeed, the central argument of Miller's book—half memoir, half history—is a kind of conundrum: Peace cannot be made without American power; yet Americans must realize their power in the region is distinctly limited. "For all their military and political muscle," Miller writes, "great powers aren't always so great when they get mixed up in the affairs of small tribes."

Miller speaks from long and deep experience in the Middle East. After growing up in Cleveland, where his parents were leaders in both the Jewish and secular communities, he graduated from UM with a bachelor's degree in history, then began graduate work. That's when his fascination with the region began.

Two UM history professors made large impressions. One was Richard Mitchell, an authority on Egypt's Muslim Brotherhood and a mesmerizing teller of Middle Eastern tales who, Miller writes, "pushed me out of my comfort zone into a virtual world of danger and possibility." The other was Gerald Linderman, "soft-spoken and thoughtful, possessed of the quiet confidence born only from years of practical and difficult experience." Both Mitchell and Linderman had been Foreign

Service officers. They "taught not merely from lecture notes and libraries but from recollections of their experiences and adventures abroad."

Miller decided that he wanted that same combination of study and firsthand knowledge. He persuaded the Department of History to allow him to earn a Ph.D. in two fields at once—American diplomatic and Middle East history. Then, doctorate

in hand, he went straight to work for the State Department.

He rose from an entry-level position in the Bureau of Intelligence and Research to the upper echelons of Middle East policy-makers and advisers, equally at home in Washington's Foggy Bottom and Jerusalem's Old City. He knew the leaders in Egypt, Israel, Syria, the West Bank, and Jordan. And he worked the back halls and the conference rooms where strategy was made and tactics weighed.

After a quarter-century, he left the State Department in 2003 to run the nonprofit Seeds of Peace. In 2006, he became a public policy scholar at the Woodrow Wilson International Center for Scholars. There, he took a long look back, reviewing his own experiences and interviewing dozens of policy-makers, including three presidents (Gerald Ford, Jimmy Carter, and George H.W. Bush), four national security advisors, and nine secretaries of state, from Henry Kissinger to Condoleezza Rice.

"I wrote this book," he says, "because I was tired of seeing America fail. We failed for eight years under Bill Clinton over how to make peace, and we've failed for the last eight years under George W. Bush over how to make war. The real question is, when we succeed, why? And when we don't succeed, why?"

the Four Ts

Miller concluded that two conditions were necessary for each significant step toward peace in the last 30 years. The first is a situation that creates openings for creative diplomacy—for example, a war, an insurgency, or a crisis that reshuffles the situation in the field or the leadership of the key contestants, or both. The second is an American president and secretary of state who are genuinely committed to reaching settlements, who are

shrewd enough to perceive the makings of a deal, and who are tough enough to push the antagonists further toward an agreement than they would have gone without pressure from the United States.

Miller says only three Americans since 1970 have possessed the required blend of character traits and diplomatic skills.

The first was Secretary of State Henry Kissinger, who brokered agreements in the wake of the October 1973 War (also known as the Yom Kippur War and the Ramadan War). The second was President Jimmy Carter, whom Miller called "a rock" of determination in the 1978 talks that led to a comprehensive peace settlement between Egypt and Israel. The third was James A. Baker III, "an immensely effective secretary of state," who

engineered the Madrid Conference of 1991, the first forum at which Israel, Jordan, and Syria shared a table to talk about peace.

All three had what Miller calls the essential "four Ts" of Mid-east diplomacy:

AFTER THE OCTOBER 1973 WAR, SECRETARY OF STATE HENRY KISSINGER MADE 11 TRIPS TO THE MIDDLE EAST IN LESS THAN TWO YEARS, SIGNALING THE UNITED STATES' COMMITMENT TO ACHIEVING A NEGOTIATED SETTLEMENT BETWEEN ISRAEL, EGYPT, AND SYRIA. HERE, KISSINGER (RIGHT) MEETS WITH EGYPTIAN FOREIGN MINISTER ISMAEL FAHMY (CENTER) AND HIS STAFF TO NEGOTIATE THE SECOND SINAI DISENGAGEMENT AGREEMENT BETWEEN ISRAEL AND EGYPT ON AUGUST 24, 1975 (THE FIRST DISENGAGEMENT AGREEMENT BETWEEN ISRAEL AND SYRIA WAS SIGNED IN MAY 1974). THE EGYPTIAN-ISRAELI DISENGAGEMENT AGREEMENT WAS SIGNED ON SEPTEMBER 4, 1975.

TOUGHNESS. "Even if the Israelis and Arabs want help, to actually help them requires pushing them further than they initially want to go," Miller says. "That requires an enormous amount of will and toughness."

TRUST. "When I say trust, I don't mean a kind of deeply rooted confidence, but political trust. [Kissinger, Carter, and Baker] all made it clear to the Arabs and the Israelis that they would not push them across their red lines."

TENACITY. "They all put themselves in the



David Hume Kennerly/Getty Images

(Previous page) Getty Images

middle of the mix and they didn't give up."

TIMING. "They all had an astute sense of what would be required to reach a deal. They knew how not to overengage like Bill Clinton or, as in the case of George W. Bush, disengage."

Miller's praise for Baker is particularly strong.

"If Yitzhak Rabin had not been murdered in 1995, and if Bill Clinton had not beaten George H.W. Bush in 1992, and if Baker would have come back as secretary of state, we would have had one agreement—either between Israel and Syria, or between Israel and the Palestinians. Probably the former."

But neither Kissinger nor Carter nor Baker, he says, could have broken the deadlocks of their respective eras without the upheavals that arose in the region—upheavals that had little to do with American will or wishes.

"Those three were effective brickmakers," he says, "but you can't make bricks without straw. And [Kissinger, Carter, and Baker] had the straw."

IN MARCH OF 2002, MILLER (SECOND FROM RIGHT) SERVED RETIRED MARINE GENERAL ANTHONY ZINNI (CENTER), WHO WAS THE STATE DEPARTMENT'S ENVOY TO THE MIDDLE EAST, WITH A MISSION TO ENCOURAGE TALKS BETWEEN PALESTINIANS AND ISRAELIS. HERE, ZINNI CONFERS WITH AID (FROM LEFT TO RIGHT) LIEUTENANT COLONEL DAVE HUGGINS, DOROTHY SHEA, MILLER, AND CECILE SHEA OUTSIDE THEIR OFFICE NEAR JERUSALEM'S OLD CITY.

Evaporated Hope

If Miller's highest grade goes to Baker, his lowest would likely go to President Bill Clinton, whom he blames for stumbling mismanagement of the Middle East summit that he convened near the end of his presidency.

In July 2000, Clinton brought the leaders of Israel and the Palestinian National Authority to Camp David. His agenda was massive—to settle at one stroke all four of the key issues between the disputants: the placement of borders, the status of Jerusalem, the status of Palestinian refugees, and guarantees of Israeli security.

"That was madness," Miller says. "It never could have happened. You had weak leaders and a president who had tremendous empathy and commitment but was not nearly tough enough. Carter is a rock. Clinton is not a rock. He can be angry. He can be Machiavellian. He can be manipulative. It may well be that, in negotiations, those traits are required. But they are not the primary focus of the diplomacy."



© Ricki Rosen/Corbis

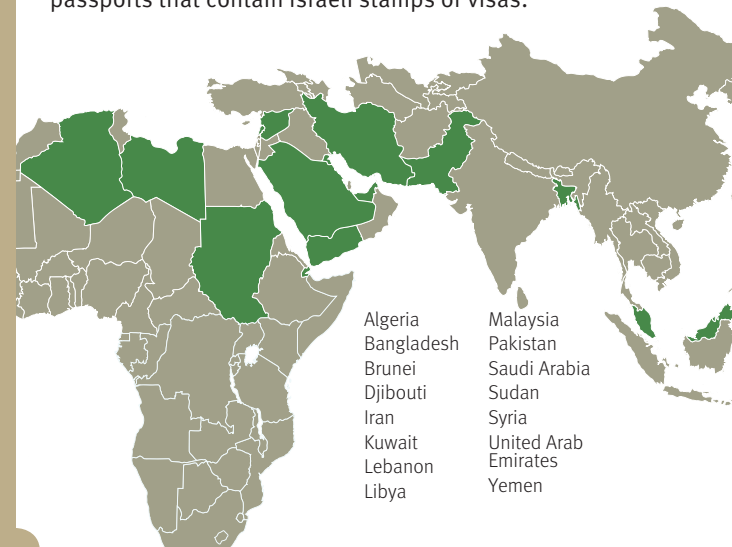
MIDDLE EAST ECONOMIES

Israel	\$!	\$28,800
Gaza Strip	\$	\$1,100
Lebanon	\$\$\$\$\$\$\$	\$10,400
Egypt	\$\$\$\$	\$5,400
Syria	\$\$\$	\$4,500

Source: The International Monetary Fund

ISRAELI TRAVEL RESTRICTIONS

Countries that reject passports from Israel and any other passports that contain Israeli stamps or visas:

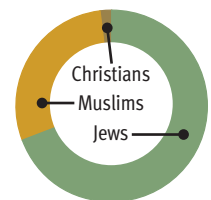
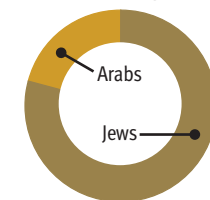
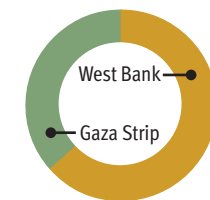


REGIONAL POPULATIONS

In 2005, there were 2,385,615 Arabs in the **West Bank** and 1,376,289 Arabs in the **Gaza Strip**.

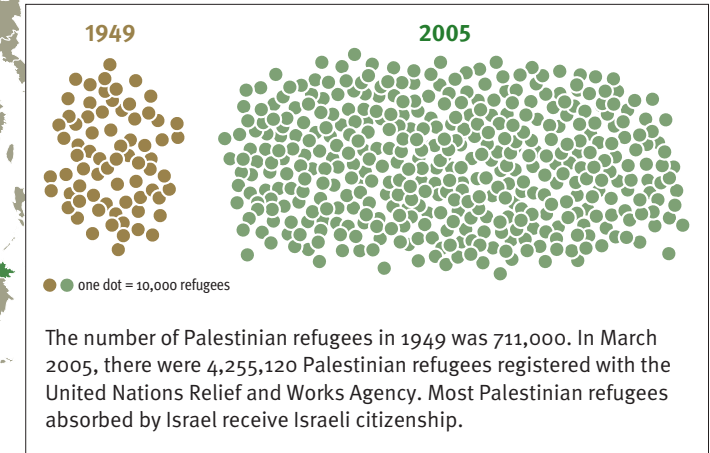
In 2006, there were 5,393,400 Jews in **Israel** and 1,413,300 Arabs. This number includes residents of the Golan Heights.

In **Jerusalem** in 2005, there were 582,700 Jews, 240,900 Muslims, and 15,700 Christians.



Source: The Israeli Central Bureau of Statistics

REFUGEE RESURGENCE



Source: The UN Conciliation Commission

"With Bill Clinton's persona—his empathy minus toughness, his willingness to allow the Israelis to dictate his strategy, and his refusal to be tough enough on Arafat—there was zero chance that we could achieve an agreement. Bill Clinton wasn't prepared to be tough, in a sustained way, with anybody. It wasn't in his nature."

The summit was fueled by hope alone, Miller says, and when the talks broke down, hope evaporated, and there was no Plan B to replace it.

Of George W. Bush's role in the Israeli-Arab imbroglio, Miller says the president has been hampered by his own impatience. "On one level, yes, he'd like to see a Palestinian state," Miller says. "On the other, is he prepared to do his part in helping to bring it about? Probably not."

As for prospects of peace as the Bush administration winds down, Miller sees promise in developments such as Egypt's effort to broker an informal accommodation between Israel and Hamas, which holds power in Gaza. The Bush administration should do all it can to nurture those kinds of efforts, Miller says, so the next president comes into office with a functioning peace process.

"If this thing looks like a mess in January 2009, trust me, the next

president will walk away," Miller says. "Or even if they pretend to manage it, it won't be serious. And we don't want that. That is not in our interest. At the same time, I do not believe that it is even imaginable that you could achieve a conflict-ending agreement in the next six months or a year."

In the meantime, Miller is planning a new book. He'll take a road trip to interview leaders of Hamas, Hezbollah, Syria, and Iran "in an effort to better understand who they are and what they want."

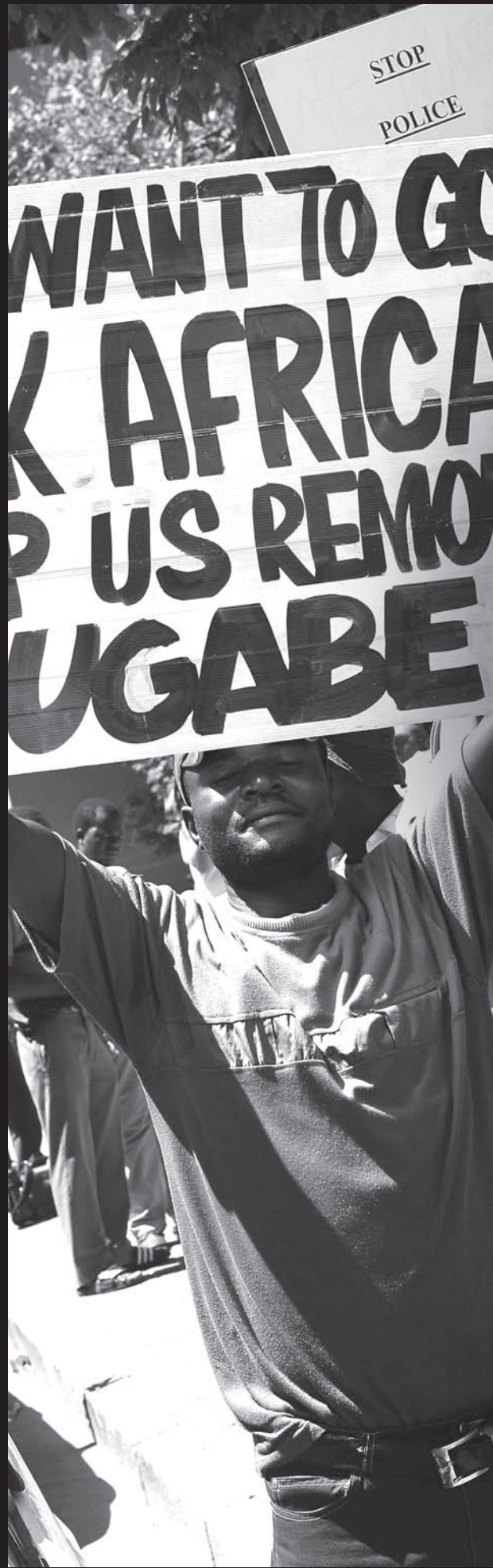
"There's never a never," Miller says. "It's never over. That's both the good news and the bad news about the Arab-Israeli issue." Peace "may not ever be possible. But the United States cannot act on that assumption. That would condemn Palestinians and Israelis to an unending future of confrontation and violence. That may well be the story. But we shouldn't give that legitimacy. There's always a chance." ●

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

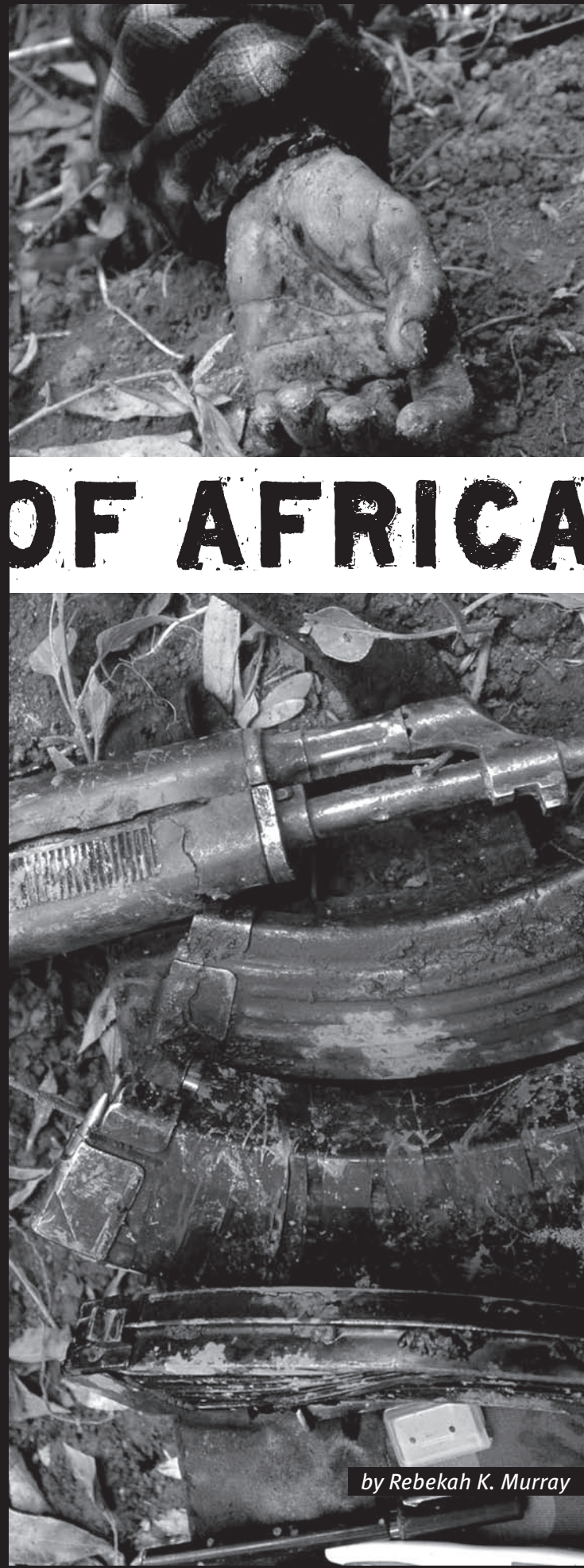
LEARN MORE > www.muchtoopromisedland.com



ONEMA
ONE VOT



WANT TO GO
K AFRICA
P US REMO
UGABE



OF AFRICA

by Rebekah K. Murray



OUT

CLAPPERTON MAVHUNGA,
a native of Zimbabwe, witnessed
firsthand the freedom—then terror—
unleashed under Robert Mugabe.
He left his homeland to pursue a
Ph.D. in history from UM, studying
the role guns, specifically the AK-47,
played in shaping his country. Here,
he shares his story and the story of
a nation that was fashioned from the
barrel of a gun.

With the guidance of the early morning sun, a Modern Express Motorways bus appears, careens down to the Nyatsime River Bridge, and then starts the steep climb to Rhodesia's Border Church Township. The passengers, including seven-year-old Clapperton Mavhunga and his mother, start to notice a peculiar smell. They reach the crest and ultimately see the cause: five bullet-ridden bodies. The corpses of the men, their denim shirts and trousers covered in blood, are slumped against five trees in the middle of a triangular intersection.

"Seeing those bodies there and that putrid smell has stuck with me to the present," says Mavhunga (Ph.D. '08), 29 years later, in an interview on UM's campus while he finished his dissertation. That moment was Mavhunga's introduction to the violence that would define his country.

The corpses belonged to guerrilla fighters. They were dead because they had clashed with the Rhodesian government's security forces. It was 1979, and war had been raging since the early 1970s. Members of African nationalist organizations were engaged in guerrilla warfare against the all-white Rhodesian regime. But now, the violence had come to a head. The nationalists demanded independence, the right to vote, and an end to segregation and the hardships forced upon the black majority.

These nationalist guerrilla warriors, or "freedom fighters," were backed by the villagers, including Mavhunga's own family. For promised land and jobs, the villagers fed the freedom fighters with their own chickens and goats. That left Mavhunga and his brothers to find other sources of protein for their family of 12.

They trapped mice and birds to eat along with the fish they'd catch in the Nyatsime River.

Finally, at the end of 1979, after more than 25,000 people had been killed in the struggle for independence, a cease-fire was implemented. The country briefly reverted back to a British colony until elections were held in 1980. Robert Mugabe's party, the Zimbabwe Africa National Union Patriotic Front (ZANU-PF), won the country's elections, and Mugabe became the prime minister of the newly formed Republic of Zimbabwe.

Zimbabwe had achieved political independence. He and his family were free, Mavhunga thought.

QUESTIONING MUGABE

But soon Mavhunga had his doubts about freedom. Life was supposed to be better now that Mugabe was in control, and in some ways, it was. Mavhunga could now live in whatever part of town he chose, as long as he could afford it. He could attend schools that were previously for whites exclusively, if he could

afford them. And as soon as he turned 18, he could vote. But there was no one to vote for except Mugabe and his functionaries.

At least Mavhunga was able to attend high school, thanks to an elder brother who paid his school fees. And he had lodging in a rental home owned by his father in Cherima Township near Marondera High School—even though his bedroom was the dilapidated kitchen. There, at least, he had a light to study by, and he was close to the paraffin stove that supplied some heat and lots of smoke.

He lived in poverty, but Mavhunga had a reason to hope he could climb out of it. He was smart. He always received top grades at his school. He knew his life could be better, and formal education was the only way to advance. "I knew if I didn't get on my own feet and work for myself, I would be nothing in this world."

High public exam scores landed

Mavhunga a spot at the competitive state-funded University of Zimbabwe. There, he was placed in a fast-track honors program to earn a bachelor's degree in history. He also met like-minded students who were questioning Mugabe's policies, which had already led to high inflation and widespread unemployment.

In the early 1990s, the university students began to protest. They were attempting to "warn the public of the state's deteriorating human rights and governance record," Mavhunga says, and their marches would end with riots that involved the police, paramilitary units, and tear gas.

Mavhunga knew that challenging Mugabe was dangerous. He started backing off his political participation. After all, he had his future—and his new fiancée—to think about. "There were worries from one of my professors that unless I toned down, I might not realize my full academic potential," he says, because student leaders were regularly occupying police detention cells.

YOUR SOUL IS OURS

By 1999, 20 years after Mugabe and his guerrilla fighters had "liberated" Zimbabwe, the people were realizing that this country—full of violence, poverty, and disease—was not the nation their friends and family members had died for. Even so, the attitude of Mugabe and his regime, perceived by Mavhunga, was, "We liberated you; therefore your soul is ours."

By this time, Mavhunga was earning a master's degree in history and international relations at the University of Witwatersrand in South Africa. From this vantage point just outside Zimbabwe, he became intrigued by the way Zimbabwe had been liberated. The guerrilla fighters had been able to wage war on the Rhodesian regime with the help of a light, inexpensive, easy-to-use, durable assault rifle, the AK-47, designed in the Soviet Union in the late 1940s. That gun was now keeping Mugabe and his forces in power. After seeing the devastation an AK-47 could

cause, Mavhunga sought to study this weapon, and to understand its place in the context of his nation's history.

"Zimbabwe as a nation was engineered, both literally and metaphorically, from the barrel of a gun," he says. "Guns liberated Zimbabwe from colonial rule, but sadly it is also guns that have been turned on civilians to suppress democratic views and to retain a government or person in power."

That's what Mavhunga attempted to teach others when he returned to the University of Zimbabwe in 2000—this time as a professor. But Mavhunga had to be careful with his lectures.

"Any history that was not 'patriotic history'—pro-ZANU-PF history—was a taboo subject," he says. "I was trying to challenge the paradigm. I was asking, 'What about human rights?' and even questioning some of the major assumptions, such as who could be a national hero in Zimbabwe." This was dangerous, he knew. "It was no longer safe to teach freedom."

The professors were also constantly on

Zimbabwe HISTORY

1923

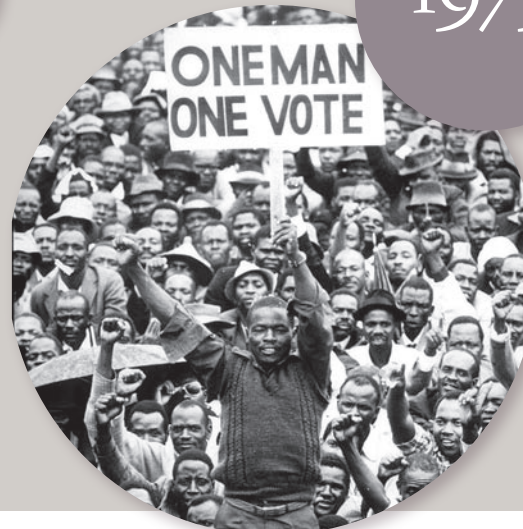
Southern Rhodesia becomes a self-governing British colony.

1965

Rhodesian Front party of Prime Minister Ian Smith declares unilateral independence from Britain to entrench white rule. U.N. embargoes fuel and other imported supplies.

1975

General mobilization of white-led troops to fight guerrilla incursions.



1979

Commonwealth of Britain and its former colonies convene peace conference in London, where all agree Britain will oversee a transition to the first all-race elections. Vote later won by Robert Mugabe's party.

1980

Mugabe becomes prime minister and first black ruler of newly renamed Zimbabwe on April 18.

1987

Mugabe signs unity agreement with rivals after campaign to subjugate minority Ndebele tribe leaves approximately 20,000 dead. Under constitutional change, he becomes president.

(Previous pages, from left to right) Paul Harris/Getty Images; David Stewart-Smith/Hulton Archive/Getty Images; Gianluigi Guercia/AP/Getty Images; © Farooq Khan/epa/Corbis; Scott Soderberg, UM Photo Services

strike, trying to demand a salary that, with the soaring rates of inflation, might at least allow them enough money to afford transportation to and from work—never mind food, clothes, and housing.

“The dream of freedom and prosperity that we had been promised by Mugabe had turned into a nightmare,” Mavhunga says. “The day I got really fed up was when I felt forced to turn my private vehicle, a Nissan, into an illegal commuter bus as the only way to supplement my income.”

Their independence had become a prison, Mavhunga says. “Under the Rhodesians we were well-fed slaves. Now, we are a hungry ‘free’ people.”

Meanwhile, Mavhunga was watching an HIV/AIDS epidemic explode around him.

“You can tell in Africa when somebody has AIDS or not,” Mavhunga says. “Their hair becomes very smooth, shiny, and begins to fall out. Their eyes become very white. The white in their eyes becomes even whiter, bloodless. People lose weight and begin to cough. You don’t need a

doctor to tell you that somebody has HIV. You just see.”

In 2001, it was estimated that almost one in four Zimbabweans had contracted HIV/AIDS. In Mavhunga’s family, two brothers and two sisters contracted the virus.

“At that point I decided that I was going to lose some of my siblings. They were lost and there was nothing I could do. I had a pathetic salary, and was struggling to make a living. But what about the kids? It was no longer about my siblings, but about their kids. If I failed, they wouldn’t have a life. I knew that I was going to have to leave this country.”

AN AFRICAN DREAM

“My heart will always be in Zimbabwe,” Mavhunga says, but in 2003, he chose the University of Michigan as the place to continue his research on guns and on mobile technology that has shaped society and the formation of nations. The articles that he’s published and the book that is emerging

from his research will have a major impact, predicts his adviser, Associate Professor of History Gabrielle Hecht. “It’s a very powerful story,” she says, “one that challenges elite political discourse on African nationalist struggles.”

Mavhunga’s wife and young daughter were able to join him in Ann Arbor in 2005. They are not named in this story due to Mavhunga’s concerns that he has been labeled a political dissident by Zimbabwe’s current regime, and that his family could be harmed as a result.

Their new life in Michigan, thousands of miles away from family and home country, has not been easy. “Half my family died since I’ve been in the United States,” Mavhunga says, speaking of his brothers and sisters with AIDS and some of their children who contracted the disease. “I could have very well quit my program.”

But his adviser and professors didn’t let him. “It’s to a point where my adviser is no longer just an adviser but a mother. My department is no longer just an



IN THE HIGHFIELDS AREA OF HARARE, ZIMBABWE, GRANDMOTHER MBUYA NANINI CARES FOR 11 CHILDREN ORPHANED BY HIV/AIDS. IT IS ESTIMATED THAT 1.3 MILLION ZIMBABWEANS ARE LIVING WITH HIV, AND THAT THE VIRUS AFFECTS MORE THAN 30 MILLION PEOPLE GLOBALLY.

(Opposite page) Tom Stoddart Archive/Reportage/Getty Images

Zimbabwe HISTORY

1997

Amid allegations of burgeoning corruption, Mugabe orders unbudgeted pensions for independence war veterans, causing panic in financial markets and crashing the Zimbabwe dollar.

1999

Movement for Democratic Change founded as biggest challenger to Mugabe’s rule since independence.

2000

In first ballot-box defeat, Mugabe loses constitutional referendum to entrench presidential powers. Often-violent seizures of thousands of white-owned farms begin.

2002

Mugabe wins presidential vote; independent election monitors say it was rigged.

2003

Ruling party passes sweeping security laws and media curbs.

2005

Ruling party wins parliamentary vote amid alleged massive rigging.

2007

Opposition leader Morgan Tsvangirai hospitalized after police declare an opposition-led prayer meeting illegal and brutally disperse opposition supporters. Mugabe declares police have the right to “bash” his opponents. Regional African leaders appoint South African President Thabo Mbeki to mediate.

2008

April 2: Official election returns show Mugabe’s ZANU-PF party has lost its parliamentary majority. Tsvangirai wins first round of presidential poll by clear margin, but Mugabe refuses to admit defeat. A runoff election is expected.

June 22: Tsvangirai, unwilling to ask his supporters to risk their lives on his behalf, withdraws his bid for the presidency and pleads with the international community to intervene in what he calls a “violent sham” of an election.

June 29: Mugabe is sworn in for a sixth term as president moments after election officials declare he had won the runoff election.

September 15: Mugabe and Tsvangirai sign a power-sharing agreement that allows Mugabe to remain the president and Tsvangirai to become the prime minister. Tsvangirai says his priorities are getting food to hungry Zimbabweans and lifting restrictions on the media.

Timeline courtesy of CBS/Associated Press

intellectual college but a family of human beings. They made sure I kept my focus at a time when I could have lost my mind."

With the completion of his dissertation this past summer, Mavhunga earned a Ph.D. in history and a graduate certificate in science, technology, and society. With offers from several top universities, Mavhunga chose to accept a faculty position offered by the Massachusetts Institute of Technology (MIT). He and his family, which now

includes an eight-month-old son, reside in Cambridge, Massachusetts. Mavhunga started teaching this fall.

"I think my physical presence here in America can change a lot," he says, since here, he's free to teach and write about the history of Zimbabwe that he personally experienced. "For my heart and its presence to be felt in Africa, I have to make my contribution from here. One day, when there are smiling faces, I will go back."

By that time, Mavhunga is convinced

that true freedom will have encompassed Zimbabwe. "The era of 'freedom at gun-point' will one day give way," he says. "The old worship of violence and the AK-47 must give way to a new Pan-Africanism that seeks to free the mind. It's a new revolution that cannot be stopped." ●

Rebekah K. Murray is the Assistant Editor of LSAmagazine.

Sources for this article include: "History of Zimbabwe," HistoryWorld.net, 2008; "Zimbabwe," The Columbia Electronic Encyclopedia (Columbia University Press, 2003); "Zimbabwe," Encyclopedia Britannica Online, 2008.



Vincent Duffy

Africa Alliances

Last spring, UM President Mary Sue Coleman led a delegation to South Africa and Ghana to extend existing collaborations with several universities and to forge new relationships.

Coleman and the delegation discussed initiatives that will be incorporated into UM's newly established African Studies Center. The center is hosting programs and events, conducting outreach, and serving as the focal point for more than 120 UM faculty members involved in Africa-related scholarship. The new center is affiliated with UM's 38-year-old Center for Afroamerican and African Studies, considered one of the foremost centers for Afroamerican and African studies in the world.

Along with the center's establishment, the UM African Exchange Scholars Program will bring approximately 10 visiting faculty, students, and scholars from African universities to UM each year.

"Never before have we had so much to learn from other nations," Coleman says. "Our students know this perhaps better than anyone, and they look to the university to take advantage of its global connections to expose them to a broad, international perspective."

UM Professor Ray Silverman (left) and UM President Mary Sue Coleman (center) with traditional Techiman leaders in Accra, Ghana.

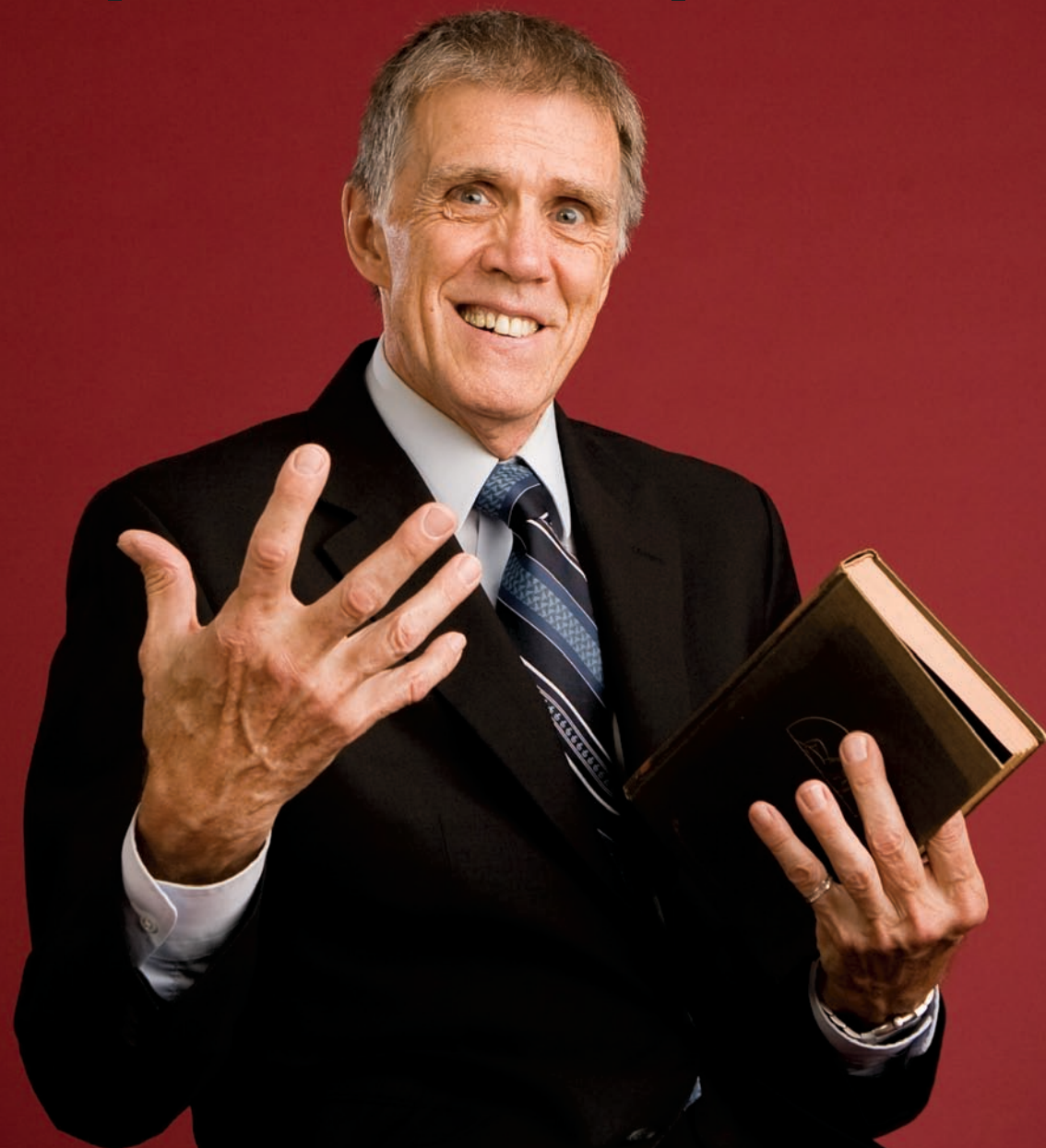


As the world shrinks before our eyes, the need to provide an international context for work, for research, for life seems to grow exponentially. UM's **International Institute (II)** connects the Michigan campus to the world — through its regional focus, through its comparative studies, and through its student programming.

You can become part of the II's rich intellectual discoveries, learn from some of today's leading global scholars, and discover how to support education that transcends boundaries: Subscribe today to the free, bi-annual *Journal of the International Institute*.

To be added to our *Journal* mailing list or to learn more about the International Institute, please call 734.763.9200 or email iimichigan@umich.edu





His Heart on His Sleeve

> PROFESSOR **RALPH WILLIAMS**
REFLECTS ON LO THESE MANY
YEARS IN LSA

by Sheryl James

IT'S ALWAYS AN ADVENTURE when Ralph Williams sallies forth into one of his—well, it's hard to call

it a lecture. Nor would “performance” be the right word, because performance has a selfish bent to it, as if an instructor wants to show off, rather than share the literature, and Williams is not about that. No, Williams is about Chaucer—the wife of Bath!—and about Shakespeare—“To sleep, perchance to dream.” And to truly acquaint students with these authors and these characters, Williams must

somehow toe that fine line between lecture and performance, because is it Williams’ fault Chaucer and Shakespeare drew such vivid characters? Characters which must be made real? As though they thought and talked and walked?

Williams is doing that right now, in his English literature class, From Beowulf to Milton. If you happened to be standing out in the hall, you would be drawn into the classroom by the booming voice, the pauses, the Gaelic-sounding Middle English rippling off of his tongue. He speaks here of the *General Prologue of The Canterbury Tales*:

“In Chaucer, April is the month when, in all of nature, liquids start flowing again. Things start moving all about. Birds sing in the trees and make melody all night, with open eyes—and remember from last day that making melody is having sex. So the birds are having love in the trees and at this time, when all nature is in motion, and liquids are flowing in the world, and liquids and roots and thrusting things, then, that wonderful line we ended last day, you know what he’s thinking: Humans, too, want sex: ‘Thanne longen folk to goon on pilgrimage.’”

Williams adds, “You’ll soon get used to Middle English,” before going on to paint the world of Chaucer, of saints and sluts and so forth. Every so often, he pauses to ask, in a Shakespearian actor’s tongue, “Is that making sense to you? Are you following, yea or nay?” Meanwhile, as all of this unfolds, students’ faces slowly mutate from discomfort, to curiosity, to mesmerization.

Which brings us back to this problem of description: Is Williams giving a lecture or performance or something else altogether?

Williams later muses over this. “One uses everything one has, and to me, one feels with the mind and one thinks with the body as well. It doesn’t make that separation. While I’m never the point of my classroom, one tries to use whatever one is and whatever one has so that students can gain access to the material in ways that cut across mind, body, emotions, intellect, literature, and the life lived. If one is successful, [students will say], ‘you touched on something that’s part of my life.’

“What they sense is the bounce, if you will, of the text off the whole lived experience, somehow. And

if I’m doing what I should, they’re able to feel the genuineness of the literature I’m interpreting, the genuineness of my engagement, my offering there to them, in terms of their own life experience.”

Well, that’s the answer. His teaching is definitely a Williamsian creation, which then brings up another question: Can a professor after lo these many years of teaching these characters, this olde world, become a bit like the characters themselves, yea or nay?

Yea.

This story of what Chaucer might have described as “the lively literature professor” will conclude, in a sense, when he retires after winter term 2009. Williams’ long career holds many decorations, including top teaching awards, and many letters from students expressing his impact on their lives.

He is very humble, so he will never say, for instance, that his classes are packed, every term, and that he is so well-regarded a scholar, especially in Shakespeare, that he has something of a following in the Ann Arbor community, says Ken Fischer, president of the University Musical Society, which hosts UM’s exclusive partnership with the Royal Shakespeare Company.

Williams is a dedicated member; in fact, his expertise and passion helped cement the partnership a few years ago. His public lectures, held in conjunction with the Royal Shakespeare Company’s performances, are as packed as his courses, Fischer says. “He’s kind of a star.”

Nevertheless, Williams will leave this unclaimed stardom and his small office, a living organism of hardback books, (plus those Moses, Shakespeare, and Jesus action figures), and the enormous, incredible university to which he owes so much, he says.

“I want to salute the University of Michigan and what it has done in my life,” he says.

Williams’ story began, literally, with his 1941 birth in, believe it or not, the city of London—

Can a professor
after lo these
many years of
teaching these
characters, this
olde world, become
a bit like the
characters them-
selves, yea or
nay? **Yea.**

Ontario—and his childhood in St. Mary's, located just 12 miles from, believe it or not, Stratford. It was during his youth that the town established its now famous Shakespearian Theatre (Williams was a devoted attendee by age 14).

He was the youngest of five children, very bright and homely—or at least that's what he was told, he says. One day when he was about 12, quite tall and gangly, as he has since remained, his mother said to him, "We've been looking at you, lad, and we've come to a decision: You'd best be useful in life because you're certainly no ornament."

When he relates this story, Williams roars. But it seems he took the advice. Always a brilliant student, he sailed through all schools, a sponge soaking up knowledge. On his way to becoming a specialist in Medieval and Renaissance Literature, Literary Theory, Biblical Studies, and more, he learned 15 languages. He has been at the University of Michigan since 1970.

He believes he has been most "useful" in teaching. His true affection for his students radiates in the classroom. "I love every hair on their heads," he says. In fact, says Williams, love is one of his

"I don't have time to do other than wear my heart on my sleeve. For me, love either is, or ought to be, at the pivot of things."

life's literary themes, if you will.

"I don't have time to do other than wear my heart on my sleeve," he says. "For me, love either is, or ought to be, at the pivot of things."

Is that a line from Shakespeare? Nay, Williams.

Nevertheless, Williams says, it's time to take his leave of LSA. A

man so steeped in the greatest of literature cannot fail to see the bigger picture here. Yes, people have urged him to stay—a compliment. But, he protests, "There's a generation coming on with their abilities. If I hold onto my post, they can't have a post, not this one. It's a sort of recognition of one's place in time, and affirming their place in time."

Like those Chaucer characters who set off for Canterbury, Williams is on his way. He will miss teaching very much, he says, but—well, you know: "All the world's a stage," right?

"The world is such an enormously exciting place," he says, "that I can't conceive of being bored by it or not challenged by it."

Sheryl James is a freelance writer and Pulitzer Prize-winning journalist in Brighton, Michigan.

FACULTY Books

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.

Being in Pictures: An Intimate Photo Memoir (University of Michigan Press, 2008) by Joanne Leonard, the Diane M. Kirkpatrick and Griselda Pollock Distinguished University Professor of Art and Women's Studies. This book interweaves Leonard's remarkable photography and collage work with a warm, compelling account of the artist's life and creative processes.

Beyond the World Bank Agenda: An Institutional Approach to Development (University of Chicago Press, 2008) by Howard Stein, professor of

Afroamerican and African studies. Stein proposes an alternative vision of institutional development with applications to finance, state formation, and health care.

Enlightenment Orpheus: The Power of Music in Other Worlds (Oxford University Press, 2008) by Vanessa Agnew, associate professor of Germanic languages and literatures. Agnew takes a new and radically interdisciplinary approach to the question of the power of music—its aesthetic and historical interpretations and political uses.

Exiles on Main Street: Jewish American Writers and American Literary Culture (Indiana University Press, 2008) by Julian Levinson, the Samuel Shetzer Endowed Professor in Jewish American Studies and associate professor of English language and literature. Levinson explores the ways in which exposure to American literary culture led American Jewish writers to a new understanding of themselves.

FAT RIGHTS

Should it be illegal to discriminate against fat people? Some fat Americans are filing lawsuits saying just that. But before "fatness" joins race, gender, and disability on the list of protected traits, there are implications that must be considered, says Assistant Professor of Women's Studies and Political Science Anna Kirkland.

excerpt

Consider the following common arguments.

Bonnie Cook, a victorious plaintiff in a fat discrimination lawsuit:

"I guess all I can say is that people shouldn't judge others because of how they look. What's important is whether or not they can do the job." An attorney for a 420-pound man who did not get a job at McDonald's as a cook argued that "[t]he only thing that should matter to McDonald's was how he cooks, not how he looks."

The logic of personhood working here is what I call functional individualism: a person should be judged by her ability to perform, not by her appearance. This functional individualist logic ignores some traits—above, it's proposed that fatness ("how he looks") be ignored—but only if they are understood to be disconnected from the individual's merit ("how he cooks"). Plaintiffs use this logic when filing antidiscrimination cases. Their goal is

to convince judges and juries that they were unfairly disadvantaged because their difference should not have made a difference, and they articulate their claims in terms of functional individualism. The critical features of functional individualism for us to watch are its ability to thwart unjust assessments of many people, but also its tendency to collapse when someone really does function differently from the norm as well as its uselessness when the norm itself should be interrogated.

Functionalist logic works best when there is a clear description of a task, like typing a certain number of words per minute. But filling many positions involves filling a social role, not just performing a set of movements. Customer preferences in employment law are often the site of legal disputes, for example: shall a company be required to define the job in a functional individualist way without any social meanings of appearance, or shall the company be allowed to hew to social norms, including employee appearance, that result in some people not being hired just because of the way they look? It seems stunningly obvious to talk about functional capacity when parsing job discrimination, but what's fascinating is how quickly this logic—to which we all turn so readily—reaches its limit.

This excerpt was edited and compiled by Anna Kirkland from pages 7–10 of the introduction to *Fat Rights: Dilemmas of Difference and Personhood*. Copyright © 2008 by New York University. Reprinted by permission of NYU Press.

When naval engineer Richard James watched a tension spring fall on the ground, he was intrigued by its playful bounciness. *By 1948, the Slinky was introduced to toy stores and quickly became a top-selling item.*



< accidental >
INVENTIONS

Inserting the wrong resistor into a machine used for heart sounds created a shocking vibration. Wilson Greatbatch compared this reaction to that of the human heart and, *not long thereafter, the world's first implantable cardiac pacemaker went into production.*

Election Forensics



A UM researcher sifts through clues left at polling stations to determine the truth behind contested elections. His work might just take center stage in November.

by Lara Zielin

THE ELECTION WAS IN TURMOIL. The Democratic nominee had won the popular vote, but the electoral vote proved harder to tally. Especially in Florida. An Electoral Commission was appointed to devise a solution. After 16 weeks of heated debate, the Commission put the Republican nominee into the White House, a controversial decision that left a large segment of the United States' population crying foul.

This describes the 1876 presidential election between Democrat Samuel J. Tilden and Republican Rutherford B. Hayes, though the Bush/Gore election in 2000 makes the scenario seem eerily familiar. Presidential elections have never been perfect, but the 2000 election, coupled with problems in 2004 with polling stations in Ohio during the Bush/Kerry election, have renewed concerns about the fallibility and manipulability of the voting system in the United States. As Americans get ready for the polls in November, who is to say their votes will be tabulated correctly, and the true winner will ascend to the White House?

Enter Political Science Professor Walter R. Mebane, Jr, whose research on elections has led him to coin a new academic niche: election forensics. Like the TV shows where forensic scientists meticulously

sift through clues to determine the details of a crime, Mebane collects data surrounding elections and runs that data through complex mathematical formulas to determine where anomalies occurred, and why.

Take, for example, the 2000 election and the much-disputed Florida votes. In Palm Beach County, Mebane and five other researchers looked closely at the butterfly ballot (see sidebar), a voting medium that caused so much confusion that “thousands of voters complained that they had difficulty understanding [it]” (Mebane et al, December, 2001). Many voters in Palm Beach stated they wanted to vote for Gore but, because of the structure of the butterfly ballot, wound up voting for Pat Buchanan instead. The Republican party argued Buchanan had strong support in Palm Beach; the voters argued they’d been duped. Mebane and his colleagues wanted to know for certain one way or the other.

Mebane’s solution was to look for anomalies in the data. “It’s like a fingerprint left at the crime scene,” he says “because it’s like a signature. Only in this case it’s a signature with information instead of human cells.” Mebane tested whether Democratic voters mistakenly voted for Buchanan through multiple methods and concluded that Palm Beach county had an “anomalous excess” of votes for Buchanan—in other words, the heavily Democratic and politically liberal county was filled with people who truly meant to vote for Gore but, because of the ballot structure, voted for Buchanan instead. Mebane says there were about 2,000 of them. Since Bush had a 537-vote victory in the state, Mebane has concluded that Gore should have won, and he penned a paper in 2004 with the definitive title, “The Wrong Man is President!”

So whose fault is that, and what can be done about it?

While Mebane believes that the 1876 election between Tilden and Hayes was definitively plagued by widespread, documented fraud, he won’t go as far as to say the 2000 election fits the same bill. Sure, the United States put the wrong guy in the White House, but “people voted for Buchanan by accident,” he says. “They intended to vote for Gore, but they made a mistake, and the quality of the election administration was so poor, voters were never given a chance to correct their ballots, even when they had an idea they were wrong.”

Mebane has considered the role of fraud carefully

because in Florida in 2000, voting problems disproportionately affected blacks and Democrats, which raised more than a few eyebrows. Additionally, in 2004, after the voting debacle in Ohio—where voting machines lost votes, insufficient polling equipment created crowded conditions, and long lines deterred voters from casting ballots—the language surrounding the election mayhem had changed. “The word ‘accidents’ was replaced by the word ‘fraud,’” says Mebane.

It was an interesting language shift, but it wasn’t one Mebane could address directly since election forensics can’t reveal motives.

“At a crime scene, you can find hair and blood samples that lead you to determine a certain person committed the crime,” says Mebane. “But the hair and blood can’t tell you why. In the same vein, with statistics we can find patterns in the data that suggest a certain outcome is wrong, or that votes were miscalculated, but we can’t tell you if it was deliberate fraud or simply human error.”

In 2007, Mebane presented a paper at the American Association for the Advancement of Science conference in San Francisco, California, and said the goal of developing indisputable election methods is difficult for three reasons. First, because elections for high offices will almost always be closely contested; second, because in close elections, emotions run high and neutral mitigation may be scarce; and third, because voting is largely anonymous, so there’s no way to trace a ballot back to a voter to determine how they meant to vote in the case of a dispute.

But all is not lost. “There are bills before Congress right now that are aimed at getting better results in elections,” says Mebane. “And I’m not the only guy working on this. There are computer scientists, statisticians, other political scientists, lawyers, all working on how to make the election process better.”

Lara Zielin is Editor of LSAmagazine.

LSA WIRE > www.lsa.umich.edu/alumni/wire



Ballot Bumbles

In 2004, according to the federal commission charged with implementing election reforms, as many as one million ballots were spoiled by faulty voting equipment—roughly one for every 100 votes cast.

Source: “A Summary of the 2004 Election Day Survey: How We Voted, People, Ballots & Polling Places,” A Report to the American People by the United States Election Assistance Commission,” September 2005, p. 10.

In 2004, almost half of the 6 million American voters living abroad never received their ballots, or received them too late to vote, after the Pentagon unaccountably shut down a state-of-the-art website used to file overseas registrations.

Source: Jennifer Joan Lee, “Pentagon Blocks Site for Voters Outside U.S.,” *International Herald Tribune*, September 20, 2004.

In Ohio alone, at least 357,000 voters—an overwhelming majority of them Democratic—were prevented from casting ballots or did not have their votes counted.

Source: “Ohio’s Missing Votes,” *Rolling Stone*, June 2006. www.rollingstone.com/photos/gallery/10467024/

One in every four Ohio citizens who registered to vote in 2004 showed up at the polls only to discover that they were not listed on the rolls.

Source: <http://ag.g.akamai.net/7/9/8082/v005/www.democrats.org/pdfs/ohvireport/fullreport.pdf>

In 2004, Representative John Conyers (D-Michigan), the ranking Democrat on the House Judiciary Committee, along with the committee’s minority staff, held public hearings in Ohio, looking into more than 50,000 complaints from voters.

Source: *Preserving Democracy: What Went Wrong in Ohio*, Status Report of the House Judiciary Committee Democratic Staff, January 5, 2005.

I
in
100



I
in
4



Tracking Toxins

> **UM researcher Joel Blum looks to pinpoint the source of toxic mercury as it works its way up the food chain.**

by Sally Pobjewski

HE'S FOUND MERCURY IN ICE CRYSTALS from remote areas in northern Alaska. He's compared mercury in burbot fish from Lake Michigan to mercury in perch and pickerel from New England lakes. He's sampled mucky Mississippi River Delta sediments and deep ocean water from the Gulf of Mexico. Everywhere Professor Joel Blum and his students go, they find more mercury.

The Environmental Protection Agency estimates that between 4,800 and 8,300 tons of mercury are released into the environment each year, mostly in emissions from solid waste incinerators and coal-burning power plants. Once mercury enters the atmosphere, it morphs into different chemical forms that cycle through air, soil, and water. One form, called methylmercury, is a potent nerve toxin that builds up in fish and shellfish, as well as birds, animals, and people who eat contaminated fish. In large doses, methylmercury can damage the nervous system and affect reproduction and brain development.

The good news is that "most mercury in the environment is not particularly toxic," says Blum, LSA's John D. MacArthur Professor of Geological Sciences. "Only about one percent of the mercury out there gets passed through the food web."

But that one percent has a big impact.

According to Blum, bacteria living in anoxic (oxygen-depleted) lakes or ocean sediments transform non-toxic forms of mercury into toxic methylmercury in a chemical process called methylation.

"After mercury is methylated by these bacteria, it's consumed by algae or zooplankton in the water," Blum says. "Zooplankton are eaten by small fish, which are eaten by bigger fish. The mercury gets concentrated at every step, which is why some fish have high mercury levels and some don't. Top predator fish like pike, tuna, or swordfish have extremely high levels of mercury, simply because of the length of the food chain, not because they live in more polluted areas. The fish we are most concerned about are the big, old fish that live a long time and eat a lot of other fish."

Scientists can measure the amount of mercury in a fish, but they had no way of knowing where that mercury came from, what happened to it along the way, or how to pinpoint the source of toxic methylmercury that was contaminating the food chain.

Now, after years of research, Blum believes he and his research colleagues have found a way to change all that. They have developed a new technique that uses advanced mass spectrometry technology to essentially "fingerprint" different sources of mercury pollution and track them as they move around the environment.

"It has enormous ramifications for legislation on mercury emissions, because now for the first time, we can identify the source of mercury coming into the food chain at a specific location," Blum says. "This will help us make informed decisions about clean-up and regulatory strategy."

Sally Pobjewski is a freelance writer living near Chelsea, Michigan.

STUDENTS



menus," Matt Lerner, now 21, recalls. The incident sparked the idea of creating an online menu guide.

The dream of success has Jonathan Carender, 20, an engineering major from Dexter, Michigan, answering business-related emails on Friday nights, when his classmates are at parties. "Being able to retire at age 30 is a good motivator. Hell, I might retire before my dad does," he says.

These students are part of a growing phenomenon of undergraduates finding the self-confidence and creativity to start their own businesses. "Entrepreneurship is spreading like the flu," says Thomas Zurbuchen, head of the Center for Entrepreneurship in the College of Engineering, "in part because UM is encouraging it, and in part because the market is demanding it." Zurbuchen says the number of student CEOs attending organizational meetings has quadrupled in the last year, drawing more than 400 students. "It's intense when they pack the room. These are the

Student CEOs

> **Why climb the corporate ladder when you can build the whole business? Just ask these UM students who are choosing to start—and run—their own companies.**

by Kevin Brown

As LSA first-year students, Matt Lerner and Nick Farinella created an online menu guide for the Ann Arbor campus, Eatblue.com.

BLAME AN UPENDED SODA CAN for the launch of Eatblue.com, founded by two 18-year-old first-year LSA students. "One night a soda spilled that was sitting on top of the fridge and destroyed all our



Between classes, UM students Jonathan Carender and Dylan Imre run Frontier Markets, LLC, a sales forecasting service.

kids who are going to start the businesses that help us dig out of this flagging economy.”

EASY ENOUGH FOR A BUCKEYE

After the spilled pop incident, Lerner, a pre-law major and business minor from New York City, started researching how an online menu service could be established on the UM campus. He and his Eatblue.com co-founder Nick Farinella, a political science major from Chicago, eventually signed on with YNOT, an online company that has set up menu guides at 20 colleges, including Penn State and Indiana University.

On their homepage, “Eatblue” is presented in blue block letters, set against a photo of the Michigan Stadium gridiron. “So easy a Buckeye could use it,” reads a message in the upper right portion of the screen.

Users can click on Wolverine paw icons linked to delivery, take-out, dine-in, catering, and more. There are 30 restaurants on the site where customers can place online orders and 200 restaurant menus.



The business makes money by charging yearly advertising fees.

Lerner admits to devoting more time to the business than he anticipated, averaging about two hours per day. “When we first got started, we thought we’d be rolling in mountains of cash, having put in almost no work at all,” Lerner says. “We came back down to reality. It was a good lesson.”

Now, knowing they’re providing a service for students matters almost as much as the cash. “What’s great is when a student sees us handing out our promo stuff and lights up with a huge smile, saying, ‘Oh my god, I use your site all the time, I love it so much!’” Lerner says. “That really makes our day, every time.”

GETTING THE BUSINESS OFF THE GROUND

“I’ve always wanted to start my own company,” says Carender, who, along with Dylan Imre, an LSA archaeology and anthropology student, recently founded a sales forecasting service. They built the company on a successful 1990s model adopted by Hewlett-Packard and others.

Their business, Frontier Markets, LLC, seeks to

join a growing list of prediction market firms that sell their sales forecasting services to companies trying to effectively anticipate future markets.

“The way we do that is by asking employees from the business what sales goals they should be able to hit,” Carender says. “If GM was our client, we’d ask everyone from assembly workers to a person in HR what they think.” To entice employees to participate, Frontier Markets rewards them with cash prizes and gifts. It can be a profitable business. “By the time I am 26, I want to have made my first million,” Carender says. “And by the time I’m 30, I want to achieve financial freedom.”

On the way to that first million, he is learning what it will take to get there. “Owning your own business is a lot of work. And business is weird sometimes, like when my business adviser insisted we bring cookies to our first meeting with an important client, so we ended up being late to the meeting, because we were trying to buy cookies. Nevertheless, after listening to the pitch, she asked us to send them a proposal. They must have been good cookies.”

Along the way he’s received valuable advice from UM experts like Zurbuchen and collaborators in the student organization MPowered. He says the organization provided essential industry contacts to get his business off the ground—and keep it there.

“The University of Michigan has put their money where their mouth is,” says Zurbuchen of the campus resources available to students. “We have a wealth of resources and activities available, all of which are building an entrepreneurial ecosystem at the University of Michigan.”

All the help means students such as Carender and Imre will be better poised for success when it’s time to face the real world. “Ideally, when I graduate, I hope to have the business financially stable, so I will have the financial resources to continue to grow it,” Carender says. “I think this is definitely attainable.”

Kevin Brown is the Associate Editor for the University Record.

Helen Zhang



UM’s Olympic Correspondent

LSA senior **Helen Zhang** was one of nine UM students chosen to intern with NBC at the 2008 Summer Olympic Games in Beijing. Here, snippets from her journal give a behind-the-scenes look at Olympic life.

by Helen Zhang

AUGUST 8, 2008

The opening ceremony fell right within the frame of my shift, 2:30 P.M. to 11:30 P.M. Surprisingly, it wasn’t as busy a night as everyone had anticipated, at least in the executive office where I worked, doing everything from translating to designing banners to buying gifts to photocopying to getting coffee. I spent most of the evening glued to the many TVs in the room, watching the ceremony with Tom Brokaw and Brian Williams in the next room. It was almost better than attending the real thing. After work, I dashed outside the International Broadcast Center to join the crowds gathered on restaurant tabletops, catching the last of the fireworks show.

AUGUST 17, 2008

Definitely one of the busiest days yet. As I walked to the office, I passed Michael Phelps and a gaggle of photographers in the hallway. He and his

family were in the studio doing interviews all afternoon. Earlier this week, USA gymnasts Nastia Liukin and Shawn Johnson came by for the same reason. Many of the athletes came into the executive office to see Dick Ebersol, the NBC Sports Chairman. Sometimes I helped take care of them by getting them snacks and making sure they were comfortable. It’s a little surreal to see these athletes live on set, then watch the same interviews being broadcast on TV.

AUGUST 22, 2008

It’s been all about closing ceremony rehearsals and packing lately. More boxes of office supplies go out every day, yet we still manage to keep the office running. The Olympics is a portable operation, made possible by a massive collaborative effort. It amazes me to think that this will all happen again in 18 months for the Vancouver Winter Olympics. I know that I can never view the Games from the same perspective again after learning how broadcast television—as well as a major event like the Olympics—actually operates.

Helen Zhang (above, in Beijing’s Olympic Village) is an English and neuroscience major who was born in China and raised in the United States. Her Olympic internship was funded, in part, by UM’s Alumni Association and facilitated her on-the-ground view of sites like Beijing’s National Stadium, (left) called “The Bird’s Nest.”





Portrait of a Drum Major

A PEEK AT DAILY LIFE FOR
CODY MARTIN, WHO
LEADS UM'S 364-PERSON
MARCHING BAND

by Caitlin Brody

CODY MARTIN IS A MUSIC LOVER, but you won't hear Eminem blasting from his bedroom speakers anytime soon. Instead, Martin turns to the classics—

Rachmaninov, Bach, and Mozart. It's what the 20-year-old listens to most often when he is not leading the University of Michigan's 364-person Marching Band.

"People think that classical music is boring," says Martin, who has spiked hair and a round, open face. "But if you've ever played an instrument, you realize that the nuance and storyline of the music is the complete opposite of boring—it's phenomenal."

Martin's love for classical music surfaced when the Texas native attended a Dallas Symphony concert as a kid, and to this day he still describes dressing up and going to a classical concert as a thrill. Most juniors in college aren't excited about such adult activities, but Martin has a rare kind of maturity.

It's what enables him to lead the University of Michigan's Marching Band as Drum Major. In this role, Martin holds the highest student position in the band, which is in its 111th year.

His freshman year, Martin started out playing the mellophone horn—an instrument like a French horn but louder, so it can be heard on the field. By his sophomore year, he was a rank leader in the band. And in 2008, the aerospace engineering major was finally able to wear the coveted uniform of the Drum Major—a white suit, black boots, and a soaring hat.

Most UM fans only know Martin as the baton twirler who runs across the field in advance of the band at the pre-game and halftime shows. But Martin has other responsibilities, many of them off the field, such as working with the reserve block—the 100 band members who don't make it onto the field each week. "They work very hard and need to know they are still in the band," he says.

Through a "challenge" system, reserve block members have an opportunity to prove themselves against active band members in order to have playing time on the field. Band members can be challenged if they are not marching well or not taking band seriously. Martin says this type of competition among members is what makes the band so strong. "I was challenged almost every week freshman year. If you challenge me because I'm not doing my job, I'll practice and show you that I can."

Martin isn't immune to challenges himself; they just take a different form, such as memorizing the names of all 364 band members. Cody used a makeshift chart to help him do it. "It was easy. I studied the faces just like I would study for an exam," he says.

Martin Vloet, UM Photo Services

THE FRISBEE

Martin Vloet, UM Photo Services

It's also up to Martin to keep the band's tension under control, which can flare over anything—from how the band members march into the stadium, to the music that will be played. "I don't care if a band member doesn't like the music, because someone in the stands is going to like it. As long as the band realizes that the show is for the audience, the problems will fix themselves." If Martin does have to step in and resolve conflict, he relies on controlled mediation, but other times he has to raise his voice. And that's when his native twang sneaks in. "When I'm angry or emotional, the Southern accent will come out."

He also facilitates rehearsals five days a week, but on game days it is Martin who runs the show. "Pre-game is my show, and halftime is the band's show," he says.

Martin's pre-game routine consists of a goalpost toss, the Present, where he runs onto the M of the field, and the strut. During his strut, Martin races straight-legged across the field, while the band plays "The Victors."

"It's as if I'm being pushed across the field by the sound of the band playing our fight song," he says. Martin's pre-game show also includes a crowd favorite, the backbend. It took Martin one year to perfect. "It takes an immense amount of strength to hold yourself up six inches off the ground," he says.

Many of Martin's on-field activities are rife with superstition, especially the goalpost toss, in which Martin throws his baton backwards through the goalpost, and has to catch it. If he doesn't catch it, the Wolverines are supposedly doomed and will



Cody Martin (opposite page) leads the band onto the field during a halftime performance and (left) executes the backbend, a pre-game show tradition.

lose the game. "I don't pay much attention to it," Martin says, but admits the pressure can get to him. "The only time I've been mentioned in a lot of fan sites is when I drop the baton. That's frustrating because last season I caught it for seven out of the eight games we played, and they only talk about the one I dropped."

Martin was so determined to perfect this skill that he injured himself to prove it. "I gave myself a black eye and jammed a bunch of my fingers," he says with a laugh. But bruises and swollen fingers won't result in complaints. Martin relishes every moment of his 20 hours of practice each week, which includes full band rehearsals at Elbel Field, as well as time spent alone on the field of the Big House. "No matter how badly my day has gone, all I have to do is come to Elbel Field and nothing else matters. We have our own little world here and everyone loves it."

Caitlin Brody is a former LSA magazine intern.

The Frisbee Baking Company of Bridgeport, Connecticut, baked delectable pies, many of which were consumed by hungry college students. *The students would then use the empty tins to play Frisbee, the name embossed on the bottom of each pan.*



< accidental >
INVENTIONS

A wallpaper cleaner gone wrong resulted in one of America's most pliable pastimes: Play-Doh. Joseph and Noah McVicker are credited for this invention and their company still keeps the recipe all to themselves.

PLAY-DOH

A Humanitarian Hero

by Marianne George

Although he met him only once in the bunkered waiting room of the Sarajevo airport during the Bosnian war in 1994, Fred Cuny (right) made a lasting impression on Robert Donia ('76).

Cuny, a civil engineer and internationally acclaimed disaster relief specialist from Texas, was deeply immersed in the humanitarian crisis in Bosnia. Donia, a research associate with UM's Center for Russian and East European Studies, was working as a wartime historian of Bosnia-Herzegovina and attempting to re-establish links with scholars in Sarajevo.

Donia has since written numerous books about the area, but after his chance meeting he never lost an appreciation of Cuny's tireless efforts to relieve suffering and civil rights abuses in Biafra, Guatemala, Ethiopia, Iraq, Somalia, and Bosnia with practical acts such as building roads, improving drainage systems, and fortifying houses against earthquakes.

Cuny's proudest achievement was the design and installation of a water filtration system in besieged Sarajevo, made of huge modules that could be unloaded from a United Nations transport plane in a matter of minutes to avoid Serbian sniper fire. He installed the filtration system in three protected locations, including a tunnel just above the river running through the city. The system produced filtered river water to the city's 250,000 residents, helping to sustain them through some of the greatest deprivation and heaviest shelling of the war.

Unfortunately, Cuny was killed in 1995 in Chechnya while trying to arrange medical aid and the evacuation of 40,000 victims of the war between Russia and the Chechens.

"He was a big Texan with a soft voice, who was both an idealist and a pragmatist," Donia says. "Of all the people I have encountered, Fred best embodied the values of human rights and international humanitarianism."

To honor Cuny's legacy, Donia and his wife, Jane Ritter, donated \$2.5 million to establish the Fred Cuny Professorship in the History of Human Rights in LSA's Department of History.

"Fred's legacy brings to life the dangers and dilemmas faced by the human rights movement, and we hope his example will inspire others, as it has us, for generations to come," Donia says. "He is an inspiration, whether someone is approaching the study of human rights from law, political science, or history."



"It's definitely a lot of pressure to be a first pick. Every year, people are going to watch you to see if you lived up to expectations."

That resilience has served him well in his time at UM. And it surely appealed to the Miami Dolphins, who chose the one-time superhero and two-time All American as the first overall pick in the NFL draft in April.

Long shares that prestigious distinction with just two other UM graduates — Tom Harmon, chosen by the Chicago Bears in 1941, and Elmer Madar, chosen by the Miami Seahawks (part of the short-lived All-America Football Conference) in 1947. Being part of the elite group of first-draft picks carries a heavy burden, though it is one that doesn't intimidate Long any more than the dozens of defensive lineman he has stared down. He wants to prove that in the world of No. 1 picks, he is the caliber of Peyton Manning or Hall of Fame offensive tackle Ron Yary.

"It's definitely a lot of pressure to be a first pick. Every year, people are going to watch you to see if you lived up to expectations," Long says. "But I like being under pressure. I want to show everyone that the Dolphins were right to choose me with their No. 1 pick."

Long is excited about the prospect of playing for the Dolphins — and not just because the tropical weather is a distinct change after a lifetime in Michigan. He sees a turnaround in the team's future, and he expects to be a key part of that success. After a dismal 1–15 season, the Dolphins are hoping the six-seven, 313-pound offensive tackle can help breathe new life into the once-great franchise.

He may have the chance to do that along with a player he knows well: quarterback Chad Henne, whom Long protected from sacks for the past four years and who was chosen in the second round by the Dolphins. In the long tradition of Michiganders moving to Florida, the team has another

The Long Haul

> **Jake Long**, the first pick in the NFL draft last April, says his UM training has helped prepare him for the high expectations he'll face as an offensive tackle for the Miami Dolphins. Pressure? What pressure?

by Katie Vloet

A FEW YEARS BEFORE Jake Long turned out to be the biggest Big Man on Campus, before he became the \$7.75-million-dollar man and an instant celebrity in the sports world, he already was playing the role of superhero.

It was his sophomore year at UM, 2004, and the Detroit Pistons had just won the NBA championship. A fire, possibly started by neighbors celebrating with bottle rockets, engulfed his house on Oakland Avenue. Always quick on his feet in spite of his size, Long leapt out of bed and took the only possible route out of the house, diving through the window of his second-floor room and onto a cot that sat atop a friend's Ford Bronco.

He was treated at the UM Hospital, where his airways were cleaned of black tar, where he fell into a drug-induced sleep for three days, where family members prayed at his bedside.

Just three weeks later, he returned to the practice field.

In 2007, UM gained nearly 1,200 rushing yards behind Jake Long, a fifth-year senior and two-time All American.

Martin Vloet, UM Photo Services

Courtesy of Bob Donia



Past Picks

While only three Wolverines have been chosen first in the NFL and AAFC drafts, here's a look at who's made the top five since 1941.

- **TOM HARMON**
Chicago Bears
No. 1 overall, 1941
- **BOB WESTFALL**
Detroit Lions
No. 5, 1942
- **ELROY HIRSCH**
Cleveland Rams
No. 5, 1945
- **ELMER MADAR**
Miami Seahawks
No. 1, 1947
- **RON KRAMER**
Green Bay Packers
No. 4, 1957
- **TOM MACK**
Los Angeles Rams
No. 2, 1966
- **BILL YEARBY**
New York Jets
No. 5, 1966
- **DESMOND HOWARD**
Washington Redskins
No. 4, 1992
- **CHARLES WOODSON**
Oakland Raiders
No. 4, 1998
- **BRAYLON EDWARDS**
Cleveland Browns
No. 3, 2005

ICE CREAM CONES



When an ice cream vendor ran out of serving dishes at the 1904 World's Fair in St. Louis, Missouri, a con- tender, whose booth was not doing well, provided wafer-thin waffles as the remedy. *Ice cream cones went into production later that year.*

In his efforts to produce home-made soda pop, Frank Epperson left his mixture outside with a wooden stirring stick still in the bucket. *The crisp night air caused the mixture to freeze and the popsicle was born.*

POPSICLES

Courtesy of the Miami Dolphins

Jake Long in pre-season practice with the Miami Dolphins.

prominent UM connection as well: The team's half-owner is Stephen M. Ross (UM '62), an alumnus and the namesake of Michigan's School of Business.

As a Dolphin, Long will face some intense scrutiny. The team's Executive Vice President of Football Operations is Bill Parcells, one of the most intense, hardest-to-please coaches in the history of the NFL. And Tony Sparano—a straight-talker who is said to communicate well with players—will expect a lot from his team as he takes on his first head-coaching job in the pros.

Long isn't worried. The training he received at Michigan makes him well-prepared for the NFL, he believes. While his education in the classroom was important to him, Long is also quick to point out that he learned a lot more than football from his coaches at UM, including former Head Coach Lloyd Carr and offensive line coach Andy Moeller.

"They don't only teach you about football. Those two taught me how to grow up and be a man," Long says.

His football achievements are not Long's entire

legacy at UM. Off the field, he could be seen as a champion to stay-in-school proponents. Though he could have been a first-round pick in last year's draft, he stayed through his final year of eligibility so he could complete his degree in general studies. The move led the *Michigan Daily* to name him one of its "Students of the year" in 2007.

"Everyone has to consider their own situation," he says. "But I feel this is a success story that can be used. People can say, look what happens when you come back for your senior year, it can work out better."

Even though he has graduated, Long says Michigan hasn't seen the last of him. In the tradition of players such as Brian Griese and Steve Hutchinson, who headline an annual golf outing to raise funds for UM's C.S. Mott Children's Hospital, Long plans to do his part to repay UM in the future. He doesn't yet know what kinds of activities that may include, but he vows to give back to the place that gave him his start on the national stage.

"I grew up a Michigan fan. I love everything that Michigan stands for," he says. "I'll definitely find a way to be involved."

Katie Vloet is a media coordinator with UM Medical School Communications.



Life After a Layoff



Is a University of Michigan degree enough to shield graduates from tough economic times? Maybe not. Three graduates talk about their struggle to survive—financially, mentally, and emotionally—after losing their jobs.

by Doug McInnis

IN THE PERIOD BETWEEN Christine Alcser's first bout of joblessness and the second—a span of just 14 months—the U.S. economy unraveled. Easy credit and cheap oil vanished, and Americans were blanketed with grim economic statistics. But Alcser didn't see statistics when she walked into her local suburban Detroit unemployment office in March 2008, to sign up for benefits a second time.

"There were people in line five to 10 deep waiting to use computers so they could apply online for jobs," says Alcser ('91). "There was no smiling. They looked sad and depressed. I honestly think

people were quite desperate."

She knew from her first round of unemployment, which had lasted a year, what they could expect. "It wasn't so bad in the beginning," she recalls. "Then came desperation. I reached the point where I started feeling worthless. I would say, my God, I've applied for 100 jobs in one week, and two weeks later, I haven't gotten a single response."

Economic downturns can strike any group, but this one may have hit an unusual number of college and university graduates, especially those in the battered Midwest, where many University of Michigan alumni live. As a result, many of the University's graduates find themselves in places they never thought they would be—unemployment lines, for instance, or working at jobs that fall far below their educational levels.

"I felt like I had nothing to offer," Alcser says. "There was a time when I literally sat in a chair and cried. I started asking if I was ever going to get a job. It's really hard not to give up. There were times when all of the sudden you would realize that a day has gone by and all you've done is watch TV for eight hours. That's an easy trap to fall into."

The desperation is especially high in Michigan, which has the nation's highest unemployment rate. In many states, the rising price of oil has



Are You inCircle?

ATTENTION JOB SEEKERS: NETWORK WITH UM'S ONLINE COMMUNITY

Meet future co-workers and potential employers through inCircle, an online directory and networking community that contains all University of Michigan alumni and students. InCircle offers the basic functions of an online directory, plus the ability to create your own personal network, just like Facebook or MySpace.

UM's Alumni Association offers the following five tips on finding a job through inCircle:

- First, update your profile. Add your résumé, degrees from other institutions, and your photo if you wish. The more information you supply, the greater your opportunities for networking. Don't forget to include how you are willing to help fellow Wolverines in the "About Me" section of your profile.
- If you are targeting a specific company, you can do a search for that company name. Then, search the results to see if anyone in your network works at that company and, if so, simply contact them directly. If an alum who is not in your network works there, you can still contact that person, introduce yourself as a fellow UM alum, and ask for advice or insight on the company.
- Not sure what company you want to work for? Send a message out to your network with information about the type of job you're looking for.
- Look for alumni who have indicated they would be willing to talk to others about career information and use them as a resource.
- Join groups by geography, industry, or other interest parameters. Start a group if you see a need or a niche and use that group as a vehicle for developing relationships.

LEARN MORE Visit inCircle: http://alumni.umich.edu/online-services/in_circle.php

Christine Alcser applied for hundreds of jobs and struggled with feelings of hopelessness before finally securing a full-time job at UM's Alumni Association.



Robert Ramey

only crimped family incomes. In Michigan, it brought on a meltdown of the domestic automobile industry, which can no longer sell its most profitable vehicles: gas-guzzling trucks and SUVs. As automotive layoffs mounted, jobless workers began to lose their homes, accelerating the collapse of the real estate industry.

"Nationally, the country has been losing jobs for five months; in Michigan we've been losing them for eight years," says Joan Crary, an assistant research scientist in the Department of Economics. "We've seen sharper downturns in Michigan in recent decades, but we haven't seen anything this long since the Great Depression.

"Obviously, the elephant in the room is automobile manufacturing. For the state as a whole, we've lost one out of every 10 jobs. For manufacturing, we've lost one out of every three. And in the auto sector, it's nearly one out of every two."

If past experience holds, Michigan will create a

new economy—eventually. "One area where we've seen consistent job growth in is health care services," says Crary, adding, "things eventually correct themselves. Home prices will fall low enough that people will start buying. Builders will start building again. The credit markets will straighten out. Eventually, the auto companies will have a product mix that meets the needs of Americans."

In the meantime, workers often find themselves tossed about like cards in a deck that is constantly being reshuffled. The UM Alumni Association has taken note of this and has increased its programming to help out-of-work Wolverines. "We got feedback saying this was what [alumni] wanted," says Lisa Mangigian ('86), the Alumni Association's Career Services Manager. "The economy is getting rougher."

In March of this year, the Alumni Association hosted a job fair in Detroit. The event also included career counseling. "We couldn't handle all the people who wanted counseling," Mangigian recalls. "So we brought in volunteers, and even then we couldn't see them all. The overflow had to be helped later."

One of those who did get help was the newly unemployed Alcser, who sat down at Mangigian's table. Mangigian was impressed by Alcser's credentials, which included fluency in three foreign languages, and suggested she leave her résumé in case the Alumni Association had a job opening. As it happened, a job opened in the office that coordinates alumni tours. Alcser was back at work.

BEYOND BANK STATEMENTS

Job loss also means more than just the absence of a paycheck. "Unemployment produces a cascade of negative events," says Richard Price, a research professor at Michigan's Institute for Social Research, who studies the impact of unemployment. "You lose a lot of things. You lose a reliable stream of income, and a sense of self-worth and self-esteem. It disrupts your family life. Bills come due that you can't pay. You may lose your health coverage. You may not be able to make car and house payments.

"Many people don't know how to engage in a job search, especially if they have had a secure job for a long time. We're emerging from an era when job security was the assumption and the rule, and we're entering an era when multiple jobs and even multiple

{ alumni profile }

The Practical Actuarial

by Rebekah K. Murray

When Curtis Huntington ('64, M.B.A. '65) started teaching Mathematics 422 in the mid-1990s, he wanted to title the course, "How to Avoid Being Poor."

That, he thought, would attract more students. The course title was never changed, but avoiding financial harm is a simple way for Huntington to describe the work of an actuary.

"I can't make you wealthy," he says, "but I can help you survive financial catastrophes."

That's been Huntington's life work: He managed financial risk for 30 years as an actuary at Boston's New England Mutual Life Insurance Company. Today, he's UM's Actuarial Program Director, and he teaches students to manage financial risks using probability, statistics, and risk theory. Through his efforts, more and more students are learning what an actuary is, and if they might want to become one.

Huntington has been able to attract students to actuary work through a scholarship that he helps fund. Named after his mother, the Margaret S. Huntington Actuarial Scholarship Fund awards 10 first-year mathematics students \$1,000 each. But as part of their scholarship application, students must answer questions about the profession. The students learn that the profession is consistently ranked as one of the top five jobs in the Jobs Rated Almanac, and that the starting salary for graduates with a degree in actuarial mathematics was \$53,754 in 2007, according to the U.S. Bureau of Labor Statistics.

That, Huntington says, gets their attention.

As a UM student, Huntington was mentored by an actuary, Professor Cecil J. Nesbitt, whose picture hangs in East Hall. After retiring, Huntington took on Nesbitt's former role. He's teaching—just for the fun of it—about a profession that he says betters society and gives him the financial means to generously help others.

He hopes to pass on that philosophy. "I tell my students they need to give back," he says. "They can keep the first million they earn, but the second million they should give to the University."

"Yeah right, Professor," his students say. "I'll make two million?"

Then they look at Huntington's serious face. "It sounds unattainable right away," he says. "But I know what the salaries are." And by telling his students to give back now, "maybe they'll remember when they get there."





Job Loss 101

Richard Price, who studies the effects of unemployment, offers up five tips for survival when you're out of work.

- Stabilize your current situation by taking a stepping-stone job. "It brings in income and may lead to a full-time job," says Price. "But if you take a stepping-stone job, don't stop searching."
- Determine your marketable skills. Everyone has skills, though they may not realize it, Price says. "Years ago, I talked to an auto worker who lost his job. He said, 'I don't have any marketable skills. I just put the left rear tire on Nash Ramblers.' I asked, 'What are your hobbies?' He said, 'I'm the accountant for the Boy Scouts of Southeastern Michigan.'" Bingo.
- Use your personal network to identify job leads. "Your brother-in-law may have better leads than the classified ads."
- Get interviews wherever you can. For example, visit potential employers and ask if they would take 20 minutes to tell you what it's like to work there. "Do not ask for a job," Price says. "You just want to get a foot in the door, and while you're there, they may ask you about yourself."
- Develop a Plan B to deal with setbacks. "Do not give up when you get a 'no,'" says Price. "When many people get turned down, they quit. You have to inoculate yourself against setbacks. We teach people how to have a Plan B because it increases their resilience."

careers are going to be the rule."

That model has been a problem for one alumnus who has an M.B.A. from UM and an undergraduate degree from Harvard. "Joe," who agreed to an interview provided his name did not appear, currently works a sales-floor job with a big-box retailer in suburban Detroit. He has been there two and a half years, job hunting when he's off the clock.

In a previous existence, Joe worked in banking, as a business consultant to some of the country's largest corporations, and he headed his own general contracting business for more than a dozen years. Ironically, his undoing was the boom that preceded the bust. In 2004, times were so good in Michigan that he found it increasingly difficult to find workers for his contracting service, which repaired homes damaged by fire and water. So he sold the business and plunged into the job market.

As he began his job search, he sensed that the economy had begun to slow. "But you never

Software architect Jim Rodgers started his own company, Longview Ideas, after he was laid off for the third time.



expected it would tank like it has in Michigan," he recalls. "When we sold the business, I naively thought I could get something. Now, I find myself high and dry."

Family ties keep him in Michigan, tethered to an anemic job market. When he picks up the newspaper, the once thick help-wanted section of Detroit's dailies has shriveled to a single page. "The jobs are not there—regardless of your qualifications," Joe says.

The failing economy has, in turn, dampened the appetite of Detroiters for big-ticket purchases, and that has made his situation worse. Part of his compensation is based on commissions, and he could make a lot more money if customers bought the most expensive items in his store. They rarely do so. "The mood in Michigan is not good. Most of the people I deal with are scared. They are holding back on purchases. They are buying necessities instead of moving upscale. It used to be that they would buy what was nicest. Now, they say, 'What's the least I can pay to get by?'"

On rare occasions, though, he hits the jackpot. He recently scored a \$450 commission on a \$3,000 item. "But you don't sell \$3,000 products every day," he says. "When that happens, it's like the chestnut that the blind pig found."

Joe continues to look for a job commensurate with his qualifications. Last year, he got just one interview. So the grind goes on, and he makes ends meet by cutting expenses. "We don't have cable TV. We watch where we drive because of the price of gas. When I replaced the car, I ended up with a small subcompact. I've got a Ford Focus—used. From 1973 to 2004, all I drove was a Volvo. If we go out to eat once a month, that's a lot. Before it was three or four times a week." Still, he has fared better than many workers who have slipped down the economic food chain; he will be able to keep his suburban house.

"It's probably only in retrospect that I will appreciate this," he says. "I'm probably learning things that are not immediately apparent. This has caused me to explore a different lifestyle. I look into my closet and see all the three-piece suits and tailored shirts that I rarely have on any more. It's a different world, an eye-opening world."

BECOMING YOUR OWN BOSS

When there are no jobs, unemployed workers

sometimes create their own. In 2005, Jim Rodgers ('85) opted for self-employment after losing three jobs in five years—one to low-wage competition from China, and two when employers slashed payrolls. "When I got laid off for the third time," he says, "it didn't take long to decide to start my own company."

Rodgers works in software development, providing contract services to high-tech and manufacturing companies through his firm, Longview Ideas. Most of his time is now spent at Menlo Innovations, a custom software company in Ann Arbor.

As long as Rodgers finds companies willing to hire his firm, he has work. By contrast, Rodgers' father and grandfathers had stable employment at Chrysler.

But the security of that world, in which industries offered lifetime employment, had begun to fade by 1981, the year Rodgers graduated from high school. Chrysler was fighting to stay afloat amid a deep economic slump and rising competition from foreign automakers. "I don't know what kind of world you're graduating into," his father told him. "It's completely different from what I knew. I don't know what advice to give you."

By then, the economy had begun a transformation from one based on industrial production to one based on information. It proved to be a wrenching change, much like a previous transformation—the Industrial Revolution—which sent millions of workers from farm to factory. Rodgers has accepted the change, and the fact that he must live by his skills. "As long as I can add value to the companies I contract with, there will be opportunities," he says.

Someday, Rodgers expects a third great transformation, as the information economy gives way to something else. But he can only speculate as to what it might be. "I wouldn't be surprised if we went to a very different type of manufacturing or of agriculture. Or maybe the next thing is an economy that isn't based on carbon, whatever that looks like.

"The economy won't wither and die," he says. "It will change. As that happens, I don't think you have to be clairvoyant to survive. But I do think you have to be adaptable, not stuck in the past."

“We’re emerging from an era when job security was the assumption and the rule, and we’re entering an era when multiple jobs and even multiple careers are going to be the rule.”

Doug McInnis is a freelance writer based in Casper, Wyoming. A veteran of the financially troubled newspaper business, he has had firsthand experience with joblessness.



The Prairie Queen

AUTHOR **JENNIFER WORICK** MAKES PEACE WITH HER PAST BY CRAFTING PIONEER PROJECTS

by Lara Zielin

JENNIFER WORICK ('90) GREW UP ON A FARM in Sodus, Michigan, planting potatoes, picking asparagus, helping her grandmother make pies, and playing in the barn with her brothers. But by the time she arrived at the University of Michigan to study English and communications, she was ready to discard her country roots.

"I wanted to reinvent myself at UM," says Worick. "I worked to lose the flat Midwestern accent. I

pretended I had money. When my college boyfriend's roommate was surprised to hear I was from Michigan and not the East Coast, I felt vindicated."

The feeling was short-lived, however. After graduation, when Worick headed out to Washington, D.C., for an editorial job in publishing, she found that the credit card debt she'd racked up in college and the lifestyle she'd lived had left her unfulfilled. When she looked around her small D.C. apartment, she says she was "drawn to sentimental things." She began pulling out objects from her past, no longer hiding them. "I began eating off my great grandmother's plates and I started using my grandmother's old rag rugs and quilts," she says.

It was the first of many small awakenings that would eventually lead to Worick wholly embracing her upbringing, her history, and her family. And in the process, she started learning a new set of skills—knitting, cooking, jewelry-making, and more. "I learned that doing more simple things with my hands could help take me out of my head. You are more restful when you can distance yourself from your mental work of the day."

These skills are on display in Worick's new book, *The Prairie Girl's Guide to Life*, which contains 50 projects that, according to the book jacket, allow readers to "reconnect with the rich legacy of women [through] fabulous pioneer crafts." The book covers everything from steeping the perfect pot of tea, to

Her dad explained
how to milk a
cow; her uncle
helped her with the
section on whittling;
her mom taught her
to can bread-and-
butter pickles; and
her brother helped
her learn to pan
for gold.

Courtesy of Dennis Rodgers

{ alumni profile }

Thoroughly Modern Mildred

by Marianne George

Mildred Sommer ('28) never forgot the four years she spent at UM.

She kept her diploma with her—at her home in Cleveland Heights, and then at the nursing home where she lived before passing away last year at the age of 100. After her death, relatives sorted through her belongings and found an invitation to her June 18, 1928 graduation ceremony on Ferry Field, along with pictures of Sommer, a proud Phi Beta Kappa graduate, in her cap and gown.

In honor of her days at UM, Sommer decided to leave \$5.2 million, the majority of her estate, to fund LSA fellowships for graduate students.

"She thought of UM as an excellent place of learning," says her cousin Dennis Rodgers. "At Michigan, she excelled in academics and had a good social life. She obviously really liked her days at UM."

After graduating in 1928, Sommer returned to her home in Cleveland Heights, and continued learning. She earned a bachelor's degree in library science from Western Reserve University in 1936, now known as Case Western Reserve University. She worked at the university as a librarian for more than 30 years.

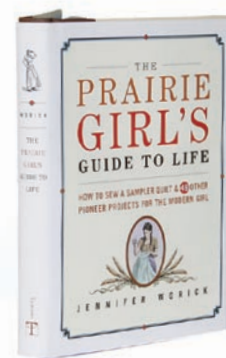
During those years, especially the 1930s-50s, Sommer and her mother traveled abroad extensively. They also enjoyed entertaining in their home and hosting tea parties. An only child, Sommer continued to live in her family's Cleveland Heights home with her father, Al, a successful businessman, and her mother, Zoe.

"They were a remarkable family," Rodgers recalls. "Mid was as smart as a tack and had a dry wit that didn't stop. She was definitely a modern woman."

Sommer was also a shrewd investor. She studied the stock market closely and invested her inheritance wisely. She also lived simply and spent little on herself. She decided before her death to leave most of her estate to UM, says her attorney James Bright.

"She was very appreciative of the education she received," he says.





Author Jennifer Worick (bottom right) infuses her prairie girl projects with a pinch of present-day flair. Below, an excerpt from her book explains how to play the game of jacks.

predicting the weather, to making soap.

Each how-to is given personal flair through the short memoirs that Worick uses to start each chapter. The beginning of the chapter on making rock candy, for example, begins:

My family vacations often consisted of five people and as many suitcases crammed into a station wagon driving down old highways next to train tracks. My dad is a hard-core train enthusiast. I was not so enthused.

Worick leaned on her family heavily when creating many of the *Prairie Girl* how-tos. Her dad explained how to milk a cow; her uncle helped her with the section on whittling; her mom taught her to can bread-and-butter pickles; and her brother helped her learn to pan for gold. She acknowledges that the book is a big nod to her family's collective history and skills, but she adds that she hopes that the book can be a vehicle for other people to appreciate their own histories and families as well.

"People are moving away from their biological families more and more," Worick says, "but

wherever they go, they still want to have groups they can belong to and create an affinity with. There are whole communities of people who are doing projects like this, who are trying to create satisfying and meaningful objects instead of just buying stuff that's mass-produced. They don't want to just learn the skill—they want to learn about the other people doing the same thing."

Worick hopes to fold this notion into a future book. "I'm working right now on a book that will help readers connect with their families—how to get wonderful stories out of your grandma, or ask your mom about the crush she had on a boy in high school, for example—through engaging interviews and the many social media outlets online."

Worick won't be returning to farm-life in Michigan anytime soon—she's much too fond of her urban lifestyle in Seattle at present—but she says she'll continue cultivating her roots in her creative efforts. "It's taken me a long time," she says, "but I've come around to not just owning my past but appreciating it."

Lara Zielin is Editor of LSA magazine.



Courtesy of Jennifer Worick

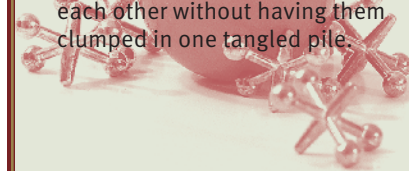
The Prairie Girl's Guide to Learning to Play Jacks

WHAT YOU WILL NEED:

Set of jacks (at least 10 jacks and a small ball)
Flat surface, such as a sidewalk or table

With all of the jacks in your hand, shake them and throw them lightly onto a flat surface. If playing on the floor or sidewalk, sit. If you use a table, it's better to stand. Your goal when dispersing the jacks is to get them near each other without having them clumped in one tangled pile.

To play, toss the ball into the air, pick up one jack in the same hand, and catch the ball before it bounces, again doing it with the same hand. Now, repeat the process, this time picking up two jacks. Continue in this manner, picking up one additional jack each time, until you have picked up all the jacks or you fail to gather the correct amount of jacks or catch the ball. When you miss, let the other player(s) take a turn and try to best your score.



Mighty Madam President



A new documentary film follows seven young women—one of them a UM student—who could one day become commander in chief.

by Lara Zielin

Lexie Mitter is one of seven young women featured in Amy Sewell's new documentary, *What's Your Point, Honey?* Mitter graduated from UM in 2008 and is currently attending law school at New York University.

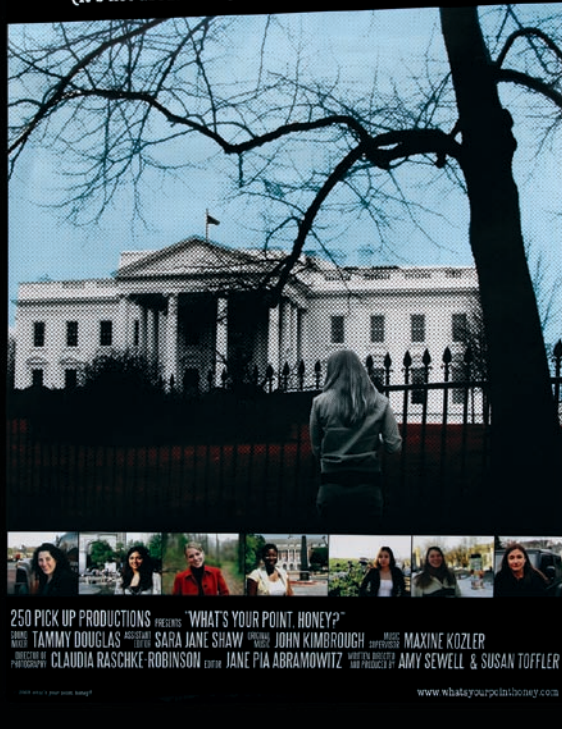
JUST DAYS BEFORE AMY (OTTENS) SEWELL ('85) showed up in Bloomfield Hills, Michigan, to promote her documentary, *What's Your Point, Honey?*, Hillary Clinton withdrew her bid for the U.S. presidency and officially endorsed Barack Obama. It might not have mattered except that Sewell's

film follows seven girls in their early 20s who have their sights set on the White House. Clinton's failed bid underscored one little boy's telling quip in the film, when asked if he thought a woman could ever be president: "It might just be like a miracle or something."

Sewell—whose Oscar-nominated documentary *Mad Hot Ballroom* was the second-highest grossing documentary in 2005, behind *March of the Penguins*—says she was passionate about creating a film in which young women talked about their futures. "Little boys can be whatever they want to be because men are out there doing everything," explains

what's your point, honey?

(it's not about one...)



Census, white women still earn \$0.23 cents less per dollar than men, black women earn \$0.33 less, and hispanic women earn \$0.43 less.

Sewell, “but little girls don’t have the same luxury because women aren’t out there doing everything yet. It’s hard to aspire to become what you can’t see.”

With Nancy Pelosi as House Speaker and Justice Ruth Bader Ginsberg sitting on the Supreme Court, some might wonder why Sewell and her creative partner, Susan Toffler, are so adamant about putting a face on the future of women’s leadership, but Sewell points out that many challenges remain.

For example, the film notes that women comprise 51 percent of the U.S. population, but only 16 percent of Congress. Additionally, according to the 2001 U.S.

The film’s title is taken from a Jim Borgman cartoon showing Hillary Clinton pointing to a globe highlighted with countries that have been led by women, while Uncle Sam shrugs, “What’s your point, Honey?”

“Nobody is really talking about these problems that haven’t been solved,” says Sewell. “Yet we didn’t want to make a film that just ranted and raved about what was wrong. We wanted to give hope and show where women are going, not where women are.”

So where did Sewell and Toffler find the next generation of women leaders for their film? *Cosmogirl!* magazine, of course.

In 2002, *Cosmogirl!* partnered with the White House Project—a nonprofit group that works to advance women into leadership positions, up to and including the presidency—to launch “Project 2024.” The project’s aim is to help a woman ascend to the White House by the year 2024, and *Cosmogirl!* believed there was a solid chance a candidate existed among its 10 million subscribers.

Cosmogirl! solicits essays annually asking young women to write about where they see themselves in 2024, and the winners are given internships in a variety of political capacities throughout New York City. The seven young women *Cosmogirl!* chose in 2006 were the seven Sewell profiled in her documentary.

Lexie Mitter (’08) was a University of Michigan sophomore when she saw the *Cosmogirl!* contest and entered. “I wrote about my future life as a



Producer Amy Sewell at the 2005 premiere of *Mad Hot Ballroom* in Los Angeles, California.

public service attorney,” Mitter says, “helping people who were victims of a crime and needed representation.”

Mitter’s resulting internship through *Cosmogirl!* was in the office of New York Attorney General Eliot Spitzer, a man now infamous for his sexual escapades while Governor of New York. But you won’t hear Mitter speak ill of him. “I really admired him,” she says, “I thought he did a great job as Attorney General.”

While such a gift for diplomacy would come in handy in political office, Mitter is headed for law school at New York University this fall, with the goal of working for an aid organization in a public-service position. “My internship set me up and helped me think about a role like that,” she says.

As for Sewell and Toffler, they are logging miles by car and plane taking *Honey* directly to independent theaters, selling DVDs at makeshift tables in lobbies, and building grassroots enthusiasm for their work. They have, so far, shrugged off distribution from Hollywood. “In a traditional theater, we would never make the numbers we need to make to be profitable. So we’re just going to take it directly to the people.”

It’s a plan they intend to incorporate into the future, as they continue to make movies about subjects that are important to them. “We’ve stopped thinking about what Hollywood wants,” says Sewell. “We’re focused on filming what we’re passionate about and making a difference with our work.”

Lara Zielin is Editor of LSA magazine.

{ alumni profile }

Nurturing Democracy

by Marianne George

On a steamy day in August, when many people would be soaking up the last days of summer, Ron Weiser (UM ’66) is on the campaign trail with Senator John McCain in Michigan.

A national co-chair for McCain, Weiser has a personal commitment to electing McCain as the next president.

In 2002, when Weiser was U.S. Ambassador to Slovakia, McCain, then chairman of the Senate Armed Services Committee, made a visit there.

“He spent a day in the country and stemmed problems I was having bolstering voter turnout for a critical election,” Weiser says. “He earned my loyalty.”

Building relationships that can make a difference is what drives Weiser. When he became ambassador to Slovakia in November 2001, he saw what a difference he could make in the emerging democracy.

It was a role that required dramatic adjustments, including giving up his posts as chairman and CEO of McKinley Associates and numerous public service activities. He moved to Slovakia with his wife, Eileen (UM ’75), and young son, Daniel, and was accompanied by bodyguards and received a death threat.

But the rewards of the new challenge, Weiser says, included witnessing the efforts of the nation’s young people and civil society to nurture the emerging democracy.

“There’s no such thing as relationships between countries,” Weiser says. “There are relationships between people in countries.”

His experiences convinced him that studying the role of civil society in countries attempting to achieve freedom is vital to understanding how democracies are born.

To further this research, Weiser and his wife have donated \$10 million to the International Institute in LSA to advance interdisciplinary study of and public engagement with Europe and Eurasia.

The gift will establish the Ronald and Eileen Weiser Center for Europe and Eurasia (WCEE) and includes funding to support the Ronald and Eileen Weiser Professor, who will become director of the WCEE, as well as funding for graduate fellowships. With matching funds from the University President’s Donor Challenge Fund, the Weiser gift will total \$11.5 million.



An annoyed chef sliced paper-thin potatoes and over-fried them with fury in an attempt to get even with an unruly guest. *To the chef’s surprise, the customer loved the potato “chips” and so did everyone else.*



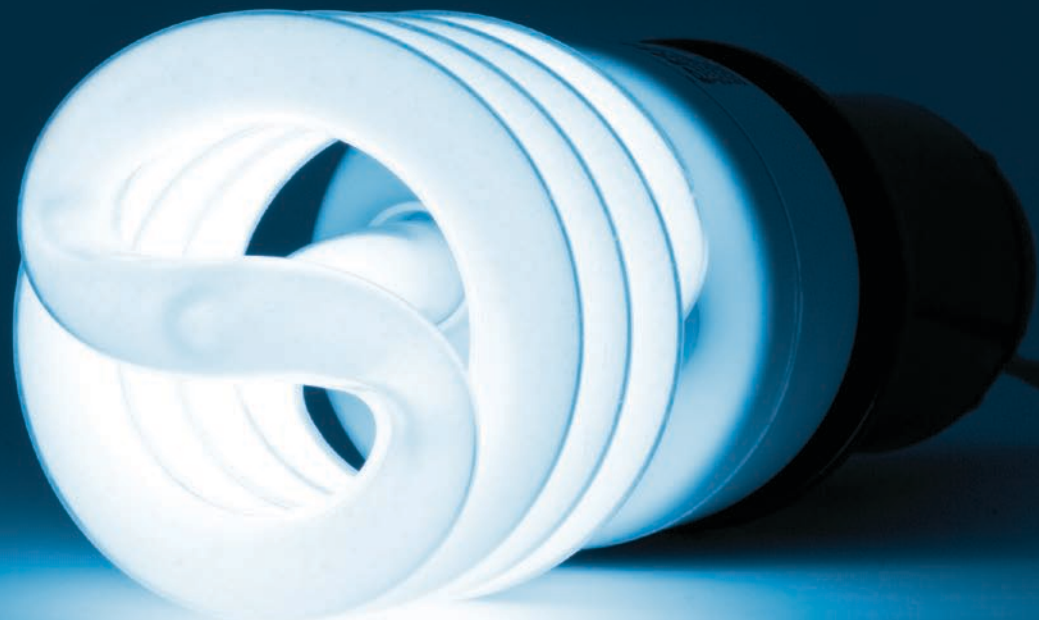
< accidental >
INVENTIONS

oops!

When a cook in China mixed together charcoal, sulfur, and saltpeter it burned excessively. *And then when the mixture was compressing into a bamboo tube, fireworks were lit into existence.*



CAMPUS



Illuminating the Energy Crisis



LSA researchers know it will take more than inventions and technology to save us from the energy crisis—it will take people modifying their behaviors in big ways. But how? And when?

by Maryanne George

UM researchers Irv Salmeen (opposite page, left) and Carl Simon (right) are glowing about energy solutions that work not just in the laboratory, but in people's everyday lives as well.

WHEN CARL SIMON THINKS about the energy crisis, he sees his 94-year-old father weeping in his darkened apartment in LaGrange, Illinois, on Father's Day.

"His power went out and he dropped his flashlight and broke it," Simon recalls. "His phone didn't work because it was electric and I couldn't get to him. Dad was lost. His dependence on energy was really crashing home for him."

Simon, the Director of LSA's Center for the Study of Complex Systems (CSCS), believes that understanding behaviors and attitudes toward energy is crucial to solving the energy crisis. "Energy solutions must extend beyond the laboratory and must take into account the ways people live, feel, think, and make choices," says Simon.

Simon and Irv Salmeen, a CSCS researcher and biophysicist who worked at Ford Motor Company for 36 years, are launching an academic initiative to understand human behavior in relation to energy policy and choices.

"Why do we have an energy problem, why do people do what they do?" Salmeen asks. "Why are we the highest energy-using country?"

These are questions that will be explored this fall when Salmeen and Simon, with CSCS and the LSA student government, lead the LSA 2008 theme semester, "Energy Futures: Society, Innovation and Technology." Through coursework, research, and public-outreach events, the theme semester will feature internationally renowned scholars who will

examine the cultural, historical, and social aspects of energy policy.

The theme semester will underscore the urgency of the energy crisis. "We have an attitude that energy is free and shortages are off in the future," says Salmeen, "but recent power outages, idled SUV plants, and rising gas prices are a wake-up call." The United States could reduce its energy demand significantly without lifestyle changes if Americans would drive higher-mileage cars, construct energy efficient buildings, and insulate pipes, he says.

Hybrid cars, for example, comprise only two percent of the car market, even though they offer large-scale benefits that go beyond great gas mileage. "The technology is there," Simon says, "but it's not being used. Why?"

Simon and Salmeen want to answer that question—and others.

"We want to understand what motivates people to behave the way they do," Simon says. "We are facing a number of crises in security, food supply, and health, and many of these crises are tied to energy."

"We have low standards for public education about energy," Salmeen adds. "That needs to change."

The theme semester is a strong step in the right direction. In addition to sparking energy research among social scientists, Salmeen and Simon hope the theme semester will make students more aware of societal attitudes about energy. A writing contest entitled "Where Were You When the Lights Went Out?" is asking students to write fiction, nonfiction, poetry, or drama about ex-

"We want to understand what motivates people to behave the way they do. We are facing a number of crises in security, food supply, and health, and many of these crises are tied to energy."

periences with energy failures.

And such failures, Simon says, may only become more commonplace. "Unless there are some drastic innovations, we are going to run out of energy."

The power outage experienced by Simon's father, who was born in 1914 when people depended less on electricity, is a metaphor for how society's dependence and attitudes towards energy have changed over time.

"When my dad was young, coal was the key energy source," Simon says. "His family had a car before they had full-scale electricity. Americans now see energy pervade every aspect of human life, and when we lose control over energy it can be devastating."

Devastating, but not hopeless. "Our goal is to ask how we can examine and change human behaviors," Simon says.

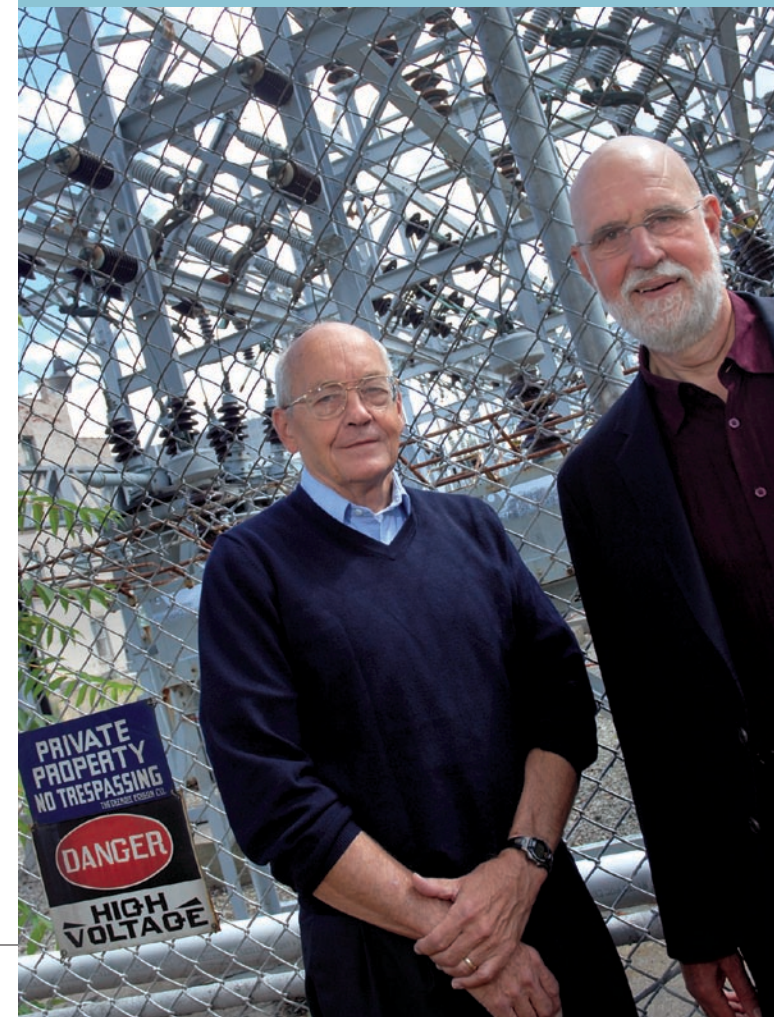
"We want to understand how to motivate people to look beyond their own immediate needs and consider what will benefit society."

Maryanne George is the Public Information Specialist for the College of LSA.

LEARN MORE > For more information on the Energy Futures Theme Semester, please visit www.lsa.umich.edu/energyfutures/index.html



ENERGY FUTURES
SOCIETY, INNOVATION & TECHNOLOGY



Robert Ramey



A Thief's Caprice

FORMER COMPULSIVE SHOPLIFTER **TERRENCE SHULMAN** NOW HELPS REHABILITATE OTHERS WHO STEAL

by Kristy Demas

TERRENCE SHULMAN ('87) ONCE STOLE art supplies from a store run by a disabled man in a wheelchair. He also stole magazines, food items, books, and cassette tapes.

"Stealing was something I had battled as a young adult, but it really came to a head when I was in law school," says Shulman, who lifted things when life became stressful or felt unmanageable. "I was dealing with the pressures of school, family stress and, underlying it all, feelings of anger. I lashed out the only way I knew how."

Today, Shulman talks openly about his compulsive stealing, having received treatment for it. "I finally told my parents what was going on and they were very understanding and got me help," he says. Through psychotherapy treatment, Shulman learned that he wasn't stealing because he was a bad person, but rather because of emotional issues. "Typically, this behavior is a cry for help. I needed

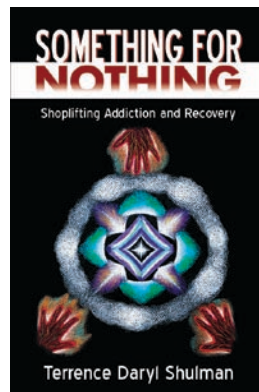
help dealing with my resentment over my own father's alcoholism, as well as other stressors in my life."

Shulman now reaches out to others through the Shulman Center for Compulsive Theft and Spending, which he founded in Franklin, Michigan, in 1992. He runs the center, seeing dozens of patients each week, all while still practicing as an attorney. He's also published three books on compulsive behaviors, and leads seminars on the topic once a year.

"My compulsion to shoplift turned into a compulsion to work," he says, acknowledging that people with compulsive tendencies often attempt to substitute one behavior for another that might be seen as more socially acceptable.

And as for that disabled man that he stole from all those years ago? "I did go back in the 1990s to confess and offer to make amends to him," says Shulman. "He forgave me."

Kristy Demas is a writer with LSA Development, Marketing and Communications.



Shulman (below) has written several books to help people recover from spending and stealing addictions.



Five Tips to Combat Compulsive Behavior

- Use a diagnostic screening tool such as one found via www.shoplifter-sanonymous.com to assess the behavior you feel might be compulsive;
- Confide in a trusted family member or friend;
- Research support groups that address your concern like Kleptomaniacs and Shoplifters Anonymous;
- Seek Professional help. Talking to a professional can help find the root of anger, which helps to diminish the compulsions. In some instances, medication can be helpful;
- Recognize you're not alone.

LSA WIRE > www.lsa.umich.edu/alumni/wire

(Bottom) courtesy of Terrence Shulman

(campusnews)

A Culture of Learning



UM has opened a new Center for Educational Outreach and Academic Success. The new center is charged with strengthening partnerships between the University and K-12 school systems and communities in the state of Michigan.

"We will work on additional strategies to help Michigan youth understand their hopes and aspirations can be realized through higher education. We want them to envision themselves as college students, and to help Michigan parents guide their children toward this possibility," says William Collins, the center's new director. "Learning should be rewarding in and of itself, but we have to recognize that some communities need help developing and fostering a culture of learning."



FDA-APPROVED MEDICINE FOR CHILDREN?

Medicines prescribed by a health care provider for children are safe and approved by the U.S. Food and Drug Administration (FDA), right? That's what parents think. According to UM's C.S. Mott Children's Hospital, 83 percent of parents polled believe that the last medication prescribed for their child was FDA-approved. So it may be surprising to learn that less than one-third of prescription medicines available for kids have formal FDA approval for use in children. Not all medicines that are FDA-approved for adults are safe and effective for children to use since the dose of medicine, how fast the medicine is processed in the body, and side effects of the medicine can be different for children than for adults. This issue continues to grow as more and more children take prescription medicines for an increasing number of chronic medical conditions, including asthma, high blood pressure, and attention deficit hyperactivity disorder.

Happiness is Rising

People in most countries around the world are happier these days, according to newly released data from the World Values Survey based at UM's Institute for Social Research. Data from representative national surveys, conducted from 1981 to 2007, show the happiness index rose in an overwhelming majority of nations studied. The 2007 surveys also provide a ranking of 97 nations containing 90 percent of the world's population. The results indicate that Denmark is the happiest nation in the world and Zimbabwe the unhappiest. The United States ranks 16th on the list, immediately after New Zealand.



EXERCISE AND HUNGER

Exercise does not suppress appetite in obese women as it does in lean women, according to a new study. "This [lack of appetite suppression] may promote greater food intake after exercise in obese women," says Katarina Borer, a UM researcher in the Division of Kinesiology, and lead author of the study. "This information will help therapists and physicians understand the limitations of exercise in appetite control for weight loss in obese people."

Husbands and Housework



Having a husband creates an extra seven hours a week of housework for women, according to a UM study of a nationally representative sample of U.S. families. For men, the picture is very different: A wife saves men from about an hour of housework a week. The findings are part of a detailed study of housework trends, based on 2005 time-diary data from the federally funded Panel Study of Income Dynamics, conducted since 1968 at UM's Institute for Social Research.

crystal mccrary

After graduating from LSA with a dual major in English and communications, Crystal McCrary Anthony ('91) attended law school and practiced law in New York City. But it was a love of words and entertainment that became McCrary's passion, prompting her to leave a cushy salary and abundant job security to pursue her creative dreams. Since then, she's built a name for herself in the entertainment industry in a variety of capacities—from writing to producing to directing. McCrary talked with *LSA magazine* while running errands in Manhattan with her two children, Cole, age eight, and Ella, age six, and shared her thoughts on transitioning from the life she thought she'd have to the life she wanted to have.

After you got your degrees, you were practicing entertainment law in New York, but then at age 26 you quit to make your own creative dreams a reality. What was the tipping point for you?

It was almost torture representing folks who were using their creative talents to write books, produce movies, and create works of art, when that was what I wanted to do. Even still, being on the business-side of things showed me a road map for success—I saw that it was possible to make a living doing what I loved. That was all the encouragement I needed.

Not long thereafter, you collaborated with Rita Ewing, the ex-wife of Hall of Fame basketball player Patrick Ewing, to write your first novel, *Homecourt Advantage*, which follows the wives and girlfriends of NBA stars. At the time, you were married to NBA player Greg Anthony. While the book is fiction, would it be fair to say that you were writing about real-life issues?

First let me say that this is not an autobiographical book. The NBA is just the backdrop for the novel, but the issues are real. What may seem like a fairy-tale existence can be, in reality, fraught with anxiety, insecurity, crazy travel schedules, jealousy, and pressure to perform. Sure, these women live luxurious lives, but that luxury can come with a steep price.

***Homecourt Advantage* became a *New York Times* bestseller and so did your second novel, *Gotham Diaries*. How did you translate your success as an attorney into success as a writer so seamlessly?**

LSA gave me my foundation for writing and expressing myself creatively. A liberal arts background allowed me the flexibility to direct my talents and strengths in different ways, and still pay the bills. I guess I jumped into my career change more quickly than most folks, but it was something I had to do.

How did your family feel about you dropping your career as a lawyer to write and produce?

I will be honest. My family was concerned with my decision. They questioned me on how I would make a living, pay the bills, and get health insurance. I grew up in Detroit and many in my family attended the University of Michigan. My aunt just retired from the Law School. My family background is filled with lawyers and they're used to having a stable and professional career. So for me to make such an abrupt change, they were understandably concerned. I had to reassure them that I knew what I was doing and that I had a plan.



What advice could you give to other aspiring writers or those making a career change?

I would caution them to get their ducks in a row before making such a life-altering decision. Despite how it looks on paper, I did not quit my job until I knew I was covered in many different ways. I had saved enough money to live on so I could write and still eat. I made sure I had health insurance. You have to have your safety nets in place before you can make a big move. Even if you aren't a prolific writer, join a guild. If you're making films, get involved with a trade association—anything to take advantage of those networking opportunities and, more importantly, to gain access to group medical policies.

What's on the horizon for you, project-wise?

Well, in the immediate future, I have a few films in pre-production. One is based on the 1929 Harlequin romance novel *Passing*, by Nella Larson. I am also adapting *Homecourt Advantage* into a film. For these movies, I still rely on what I learned in the screenwriting class I took at Michigan. I also am working on some other reality TV shows and a larger four-part series, *Inside Black Culture*, which will run on BET during Black History Month.

For your reality television series *Real Life Divas*, you've interviewed singer Chaka Khan, actress Veronica Webb, supermodel Iman, and *Essence* editor Susan Taylor, among others. What did you learn from speaking with them?

The show basically pays tribute to outstanding African American women who have impacted the country artistically, socially, and politically, and each episode is like a little jewel. I've learned something valuable about life, success, hard work, and humility from each of these outstanding people. This fall our parallel show, *Leading Men*, began airing on BET and it showcases prominent black men. For that show, I've profiled such greats as actor Terrence Howard and musician Wyclef Jean.

When co-authors Crystal McCrary Anthony and Tonya Lewis Lee released their novel *Gotham Diaries* in 2004, they celebrated with many well-known New Yorkers. Above, left to right, are the Reverend Al Sharpton, Anthony, Lee, and writer/artist Touré. Anthony is also on the advisory board of Jumpstart, and last year she attended a reading campaign kickoff celebration (right).



Jumpstart is an organization focused on promoting early childhood literacy, and you're extremely involved with them. Is that because of your work as a writer?

What I do for a living inspires me to some extent, but the time I spent substitute teaching in elementary schools in Detroit really motivated me to get involved. And of course, my own children inspire me to help other children as well. They are my most important job.

With your wealth of work, contacts, and experience, are there still things out there you'd love to do, but haven't?

Well, this may sound crazy, but I would love, love, love to do a lounge act. In a small, intimate place, like a piano bar, where I could sing songs by artists like Minnie Riperton. Now that would be a great experience.

LSA reporting by Kristy Demas.

Top: Nunez/WireImage; (right) Djamilla Rosa Cochran/WireImage/Getty Images


M UNIVERSITY OF MICHIGAN
College of Literature, Science, and the Arts
Suite 5000
500 South State Street
Ann Arbor, MI 48109-1382

Nonprofit
U.S. Postage
PAID
University of
Michigan



LSA WIRE

Tap into the LSA Wire — *LSAmagazine's* new online supplement — and read about UM graduate and **Top Chef winner Stephanie Izard**. She shares cooking stories, recipes from her winning dishes, insights from the show, and more. Trip the Wire today at www.lsa.umich.edu/alumni/wire.

 **LSA WIRE** > www.lsa.umich.edu/alumni/wire