

Michigan Today The University of Michigan News & Information Services 412 Maynard Street Ann Arbor, MI 48109-1399



Kathy, Jim, Anne and Susan Duderstadt

A Chat With Jim & Anne Duderstadt

President James J. Duderstadt and the University's first lady, Anne M. Duderstadt, share with *Michigan Today's* readers some of their thoughts as the president prepares to step down from the University's helm next June 30 after nearly eight years in office. The interview with John Woodford took place in the President's Office.

Michigan Today: Some say Michigan has been fortunate to have as president in this era of scientific and technological revolution a nuclear engineer who knows the nuts and bolts and the broad implications of these developments. Do you see any special link between your area of academic expertise and the upgrading of the University's facilities?

Jim Duderstadt: No, not really. Michigan has had other scienceoriented leaders long before me. President Tappan built much that made U-M first in science in his day, and Presidents Ruthven and Little did, too. But it's at least as important to be savvy in economics and politics as in science. The prime criterion, however, is someone with fundamental academic values, with a vision of our society at large and of the place of higher education within that society.

MT: Many people around campus are saying that they've never seen you and Anne so relaxed. Is this perception correct?

JD: It's not so much that we're relaxed. We're exhausted. We're usually up at 4 in the morning, when we may exercise a bit or head to the job to start working before 5. And I'll probably be on the job full time right up to June 30. It's hard to leave campus even for a few days. That's why I always take my electronic-mail pager when I am off campus. I'm looking forward to cutting that electronic umbilical cord.

Anne Duderstadt: I'm hoping to get back to exercising every day when we're out of the presidency—and to cooking good meals again. I used to quilt and read a lot more and cook for the fun of it. I'll also return to being more involved in the University's intellectual life and in the life of the community. I'll have time to go to concerts and read more books.

JD: June 30 is the edge of a precipice that we haven't looked down yet.

Preserving the Observatory

Plans have been launched for the restoration of the second oldest building on campus. The Detroit Observatory, built in 1854, was so named because the University's first President, Henry P. Tappan, wished to recognize the contributions of the major donors from Detroit who provided the funds for the Observatory. Only the U-M President's House (1840) predates it, but that structure has been extensively modified.

The Detroit Observatory, at East Ann and Observatory Streets, was one of the most important early American scientific laboratories, and as such is the most important physical legacy of the U-M's early scientific preeminence. Today, it is the most significant mid-19th-century observatory in America in its unaltered form, with its original instruments still intact and operational.

Restoration of the University's historic Detroit Observatory was approved by the Regents at their November meeting. A total of \$2.9 million is needed for the project. The University will provide \$1.4 million for the restoration of the existing structure, creation of a small museum, restoration of the historic telescopes, and compliance with Americans with Disabilities Act requirements for access.



Whitesell and Duderstadt in front of the 1854 meridian circle and transit telescope, made by Pistor & Martins of Berlin.

MT: You have focused an array of programs on increasing the participation of women in science, medicine and engineering. And your two daughters are in the forefront of this generation's young women going into those fields. Did you steer them toward their careers?

JD (laughs): I'm not an influence over either one of them at all. I told my older daughter, Susan, don't go to Yale, where I went, but she did. The younger one, Kathy, went to Harvard and majored in English Lit, which I thought was great. But then she went to eastern Hungary in the Peace Corps, to a town that was badly polluted by chemical industries. She got concerned that mankind would destroy the planet. That made her decide to go into the University's Global Change program when she got back to Ann Arbor. The faculty there convinced her she'd be most effective if she became a scientist, so now she's in the College of Engineering.

Susan is in her pediatrics residency at Northwestern, but her ultimate interest is in public health. Both of them would like to be in ideological swat teams in their fields. They're driven by where they think they'll have an impact.

MT: What has led you to push so hard for the Women's Agenda, which is increasing women's pres-

ence in the faculty, top administrative positions and other areas of University life?

JD: Sure I pushed—but I was a marionette, with Anne pulling the strings. Seriously, I'd been on the Education and Human Resources Committee of the National Science Board, and I saw that our nation was at risk if it did not use the talents of all its people. I learned about the facets of the culture of the engineering and medical schools that hold women back through my daughters.

AD: Women have always had to struggle in every facet of their lives.

JD: That's right, and the nation cannot move forward and prosper if it marginalizes a large number of talented people. That's why I've also pushed hard for opportunities for members of minority groups through the Michigan Agenda.

I think I empathize with marginalized people. I went to Yale from a small town, and Yale was dominated by prep school people. I felt I was the only one there who didn't belong. In a way I was there through a sort of affirmative action—they needed some farm boys.

I knew that a lot of people who had talent were being marginalized, and I wanted to do something about it. I doubted Michigan could really change as fast as it did, though. I thought we had bureaucratized too much of the affirmative action programs in the 1970s to really make them effective. Fortunately, I was too pessimistic.

MT: Did your views affect your concept of the role of a university's first lady?

JD: Yes. Anne works as hard as I do, but people don't believe it. Even some women don't. Most private universities now compensate the spouse of their president. Anne works as an institutional development officer but accepts no compensation from the University. But she has done that job plus the job of being first lady of the university, so that's two jobs.

MT: You two grew up together in Carrolton, Missouri. What sort of town is it? Do you go back there often?

JD: We were in Kansas City not long ago, so we went back to Carrolton for the first time in about a year and a half. My parents are still there, and Anne's mother is still there. We've known each other pretty much all our lives, although Anne went to the Catholic grade school and I went to the public one. Then we both went to the same high school. It's pretty traumatic to go back. It's sort of a stereotype of what's happened to small rural communities across the nation. Some areas look like a car junk yard. Family farms are bankrupted. It's on the Missouri

A fund-raising campaign is under way to attract \$1.5 million in contributions to provide an endowment that will fund a part-time docent/curator/building manager position and provide for the future maintenance of the structure.

Responsibility for managing the building rests with the Office of the Vice President for Research (OVPR). Research Vice President Homer A. Neal has appointed an Observatory Advisory Group and named Patricia S. (Sandy) Whitesell of OVPR to chair it and coordinate the restoration of the building. The members are Anne M. Duderstadt, institutional advancement officer; Robert Warner, professor of history, University Historian, former director of the National Archive and former dean of the School of Information and Library Studies; Patrick Seitzer, assistant professor of astronomy; and William J. Hennessey, director of the Museum of Art.

Quinn Evans Architects of Ann Arbor was named architect for the project.

"The building will serve as a focal point for the history of science at the University and the scientific contributions U-M researchers made to the modern world," Whitesell says. "There is a large community with fond feelings for the building. To some, it symbolizes the University's early history and U-M's

dedication to scientific research initiated by President Tappan, while others have a personal connection to the old building they came to know when they were students on campus. We wish to preserve the building so that future generations can benefit."

Advisory Group members Anne Duderstadt and Whitesell, with various assistants, have cleared the Observatory of accumulated collections of historical medical artifacts that were being warehoused in the building. They prepared a handsome meeting room and historical photographic displays to facilitate tours and special meetings that would take place prior to the onset of the restoration work. Whitesell is undertaking historical research on the building, its telescopes, and the scientific activities that have taken place at the Observatory.

"For historical interest," Duderstadt says, "we left on the walls of basement storage rooms some graffiti written and drawn by students who apparently used the area during the 1970s."

"Many universities have historic observatories on their grounds, but what makes Michigan's observatory unique is its unaltered state," notes Whitesell. "The dome and shutters still operate manually with ropes and cables, in contrast to other observatories that have been converted to power operation."

"Two wings were attached to the original building," Duderstadt notes. "The last wing was demolished in 1976. Some planners wanted to raze the original building, too, but the Ann Arbor Historical Commission and Prof. Emerita Hazel "Doc" Losh led the opposition to that action." The building had already been placed in the National Register of Historic Places in 1973, but had been little used, a condition that will now change markedly with its impending restoration.

Tappan and the Regents

Arriving on campus in 1852, theologianphilospher Henry Philip Tappan applied the Prussian educational model he admired to launch the University on a progressive course of achieving excellence in science and the humanities. Political and personality difficulties with some of the Regents led to his removal in 1863

Tappan left for Europe that year, and eventually settled in Switzerland where he lived until his death in 1881. In 1875, however, U-M Regents officially expressed their regret to Tappan. They withdrew "any censure, expressed or implied" contained in the resolution that had dismissed him. They took note of the "great work done by him in organizing"



The Detroit Observatory

and constructing this institution of learning upon the basis from which its present prosperity has grown" and said his "eminent services" had earned the gratitude "of the University and the People of the State of Michigan."—TW.

For further information, or to make a donation, contact Dr. Patricia S. Whitesell, Office of the Vice President for Research, 4056 Fleming Building, Ann Arbor, MI 48109-1340, telephone: (313) 936-3933 E-mail: whitesel@umich.edu

A Chat With the Duderstadts

River, so a lot of it has been under water recently. When we go there, we wonder sometimes if our own warm memories of the place are just nostalgic.

MT: It's said, Anne, that you're especially popular with the players, coaches and staff on the Wolverine athletic squads.

AD: I love sports. We always hold a big event for the players and coaches of all the team sports. We're somewhat of the mom and pop of the athletic department. We go to volleyball, field hockey and a lot of events that aren't in the limelight.

JD: Anne is cursed by having a January 2 birthday. You know what that means. You get ignored; everyone's

recovering. But when she turned the big five-oh, the football team gave her the game ball after they beat the University of Washington in the Rose Bowl. That shows their feeling for her more than anyone can put

'June 30 is the in words. edge of a

MT: You're not only a former college football player, but someone who has played a key role in efforts to reorganize intercollegiate athletics. Do you plan to continue your activities in that area?

JD: I'm preparing a paper on intercollegiate athletics with a lot of radical suggestions. I hope to release it after I'm out of office. The kind of changes we've seen in college athletics, such as more gender equity, will accelerate. The NCAA will probably have to reorganize to give the major schools, those in Di-

vision I, more control of their destiny, or it could break apart. The key issue is student welfare, and TV is the key dilemma. It's turned college athletics into public entertainment, with all the trappings of big time show business. The schools have lost control, and the only way to regain it is to drive the media out of the temple.

MT: How did you go about learning how to do your job?

JD: Fifteen years ago I was just an honest professor doing my best to teach and conduct research. Then Billy Frye [then U-M provost and now provost of Emory University-Ed.] called and asked me to be dean of engineering. Until then I had not managed anyone. I'd never even had a secretary reporting to me. The rest of the College of Engineering didn't even know who I was, except that I'd been complaining about how the college was stuck in the 1950s as we were approaching the '80s.
Well, Charles Vest [now president of MIT], Dan Atkins

[dean of U-M's School of Information and Library Studies] and I

led a revolution, and as they say, the curse of doing that is that if you're successful, you can be challenged to put up or shut up. All of a sudden I had 300 faculty, 6,000 students and a \$100 million budget. I hadn't thought about how to manage or lead, and just about my first day in office, I got a memo that I had to let two people go. I learned the hard way. I was fortunate to have a great team with Chuck and Dan, so we learned together. It was a natural transition from dean to provost, which is the toughest job in the academic world.

In this job I learned state relations under a master-Keith Molin [then director of state relations, now special assistant to the director of athletics I just followed him around Lansing.

Anyway, my experience convinced me that you can't learn how to be an academic leader any other way than

MT: What has been the most fulfilling development project you've worked on, Anne?

AD: The project to save the Observatory and its original scientific equipment. President Henry Tappan built it in 1854. It's the only observatory like it still in its original state. The telescopes even have their original lenses. Now the building is used mainly to store scientific equipment. I cleaned it and scrubbed it by hand. [See accompanying ar-

JD: What Anne really has is a tremendous sense of design, an eye for beauty. She oversaw the renovation of the Inglis House and the President's House. When ITV journalist and alumnus/ Mike Wallace was on campus recently, he was admiring the Inglis House. After he learned Anne had redone it, he told me, "She ought to come to New York and start designing apartments."

AD: I really enjoy fund raising, too, and plan to continue concentrating on fund raising for the Observatory project so we can preserve it as a museum. We need \$1 million to restore the building and another \$1.5 million for an endowment. To fund raise, you basically have to sell the University, and that part is not really hard to do.

JD: People have a deep respect and affection for this institution. The alumni love it more than the faculty. Michigan is a very self-critical place, and that's good to the extent that it makes you strong. But people at Michigan should appreciate just how fine an institution this really is. The grass is not only not greener in the other backyards, sometimes it's artificial!

MT: Do you plan to stay in Ann Arbor after you leave the presidency?

JD: The University is a big part of us and always will be. I've been approached about other jobs from time to time, but this is the best university in the world to be at. There is nothing in comparison with the University of Michigan anywhere. We'll stay and be part of it in whatever way we can.

AD (deadpan at first): He was asked to leave the university twice though-by our daughters. Both wanted to go to school here, but they didn't want to be here if their parents were here.

MT: You've said, Jim, that you hope to return to the classroom after your sabbatical year of 1996-97.

JD: I'm looking forward to it. One of the things about my job now is you rarely have any significant length of

time to concentrate on anything. If I have 15 minutes to think about something, that's rare. That's the opposite of my intellectual training in nuclear engineering. My brain is chopped up into sound bites, whereas I used to write almost a couple of books a year.

AD: And without a computer.

MT: How close to completion are the final major construction projects undertaken during your presi-

JD: We need about \$80 million to finish renovation of the Frieze Building, LS&A and Mason and Haven halls. When I leave I will have turned over a university in mint condition. I don't think any of us knew that we'd be rebuilding the entire campus on the scale that we have. I didn't think we had a prayer to rebuild on the scale we have. Initially, almost all of our plans were backburneredevery project. But then slowly but surely, things happened: interest rates changed, we raised money privately, got strong state support, and we put it all together. I know that the remaining projects bother some folk, but in the end it will pay wonderful benefits for future generations.

MT: Do you have any hobbies you plan to pursue?

JD: I don't know what my avocation is. Maybe it's masochism, don't you think, Anne? But seriously, my real hobby, I guess, is to create things-not objects but organizational structures on a big scale.

AD: You always wanted to be an architect.

ID: I do like architecture, but I don't interfere with the architects on University projects. I let them do their job. I wanted to be a standup comedian, too. But I can't tell jokes. Maybe I'm a sort of organizational architect. That's what I'm trying to achieve through the North Campus projects like ITIC [the Integrated Technological Instruction Center to open in January, and reported on in our October issue]. I want to see if we can design buildings that facilitate creation rather than just analysis.

We're fortunate to have found some really good architects. And for Anne's part, she has worked very hard on the quality of University events, of publications, renova-

tion projects and landscaping.

JD: Someday, I'd like to see the whole North Campus become comparable to the Jefferson Mall at the University of Virginia. The new section will take advantage of the existing stands of evergreens, and have cascades of ponds, an outdoor amphitheater, forests, sylvan glades.

We're just completing two great facilities—the Engineering Center Building and its companion the [Ann and Robert H./ Lurie Tower-designed by Charles Moore ['47 BA, '92 PhD (Hon)], an outstanding architect and Michigan alumnus who had never been asked to do a project here till the early '90s, shortly before his death in 1993. They are different from anything else here.

We're building the new Lurie Tower-which, like Burton Tower on Central Campus, has a carillon-to the letter of Charles Moore's plans. Burton Tower was reduced a third in height because of a shortfall in fund raising; it's a wonderful structure, but the original design by Eliel Saarinen, the father of Eero Saarinen, who designed our School of Music building and the GM Tech Center, was more stunning. In 20 years, the North Campus will have an extraordinary character. It's exciting to think about.

precipice

that we

haven't

looked

down

yet.

Class of '99

he profile of the University's 5,149 first-year students reflects continuing changes in US society as well as in academic life. The following are some of the statistical highlights:

– The 5,149 entering first-year students constitute a record high, and a 5.3% increase over last year's class of 4,891.

- 52% scored 1200 or higher on the SAT exams (1600 being perfect), and 6% scored in the 1400-1600 range. Ten percent scored below 1000.

- For the first time in U-M history, women outnumbered men among entering students-2,587

-3,196, or 62.1%, were Michigan residents, and 1.953 (47.9%) nonresidents. ("We committed at least 3,000 slots for Michigan students in this fall's entering class, and we are extremely please that we were able to exceed that number by nearly 200 spaces," said Lisa Baker, associate vice president for university relations.)

Nonresident students came from all 50 states and many foreign countries, with New York sending 334, Illinois 209, New Jersey 170, Ohio 150, California 126, Pennsylvania 110, Massa-

chusetts 80, Florida 74, Maryland 73 and Texas 50.

Minority enrollment

breakdown of the Ann Arbor campus's total enrollment of 36,687 revealed that minority student enrollment (students from federally designated ethnic backgrounds) numbered 8,108, or 24.8% of all students-undergraduate as well as graduate/professional-up from last year's total of 7,927 (24.2% of enrollment).

This year's figure more than doubled the total of minority students enrolled in 1986, the year before President James J. Duderstadt established the Michigan Mandate to increase

minority enrollment.

Asian American students, who make up the largest portion of minority enrollment, totaled 3,519 (10.8%), up from 3,421 (10.4%) last year.

For the fifth straight year, enrollment of African Americans reached a record high, numbering 2,846, or 8.7% of total enrollment, compared with 2,715 (8.3%) last year.

Hispanic/Latino student enrollment fell slightly to 1,498 (4.6% of all students), from 1,533 (4.7%) last year.

Enrollment for Native American students

also dropped slightly to 245 (0.7%) from 258 (0.8%) last year.

The figures for undergraduates in Ann Arbor looked like this: Minority students were 25.6% (5,805 students) of total undergraduate enrollment: 2,548 of undergraduates were Asian Americans (11.2% of total; 2,026 (8.9%) were African Americans; 1,050 (4.6%) were Hispanic/Latino Americans. 181 (0.8%) were Native Americans.

The figures for graduate and professional programs on the Ann Arbor campus were as

Of the adjusted total of 10,021 (see note below), or 23%, were minority students.

- 9.7% of graduate/professional students were Asian Americans.

- 8.2% were African Americans.

- 4.5% were Hispanic/Latino students.

- 0.6% were Native Americans.

Note: Minority enrollment figures are based on adjusted totals. The adjusted total is a count only of US citizens and permanent residents enrolled in degree-granting programs and does not include enrollment figures for foreign students.

The adjusted total for all undergraduates is 22,669 rather than the 23,575 overall total. Enrollment statistics for U-M graduate and professional are based on an adjusted total of 10,021 graduate/professional students rather than the 13,112 overall total. And the adjusted total of all students on the Ann Arbor campus is 32,690 rather than the overall total of 36,687.

Commencement

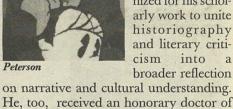
Journalist Neal Shine, who retired this December as publisher and president of the Detroit Free Press, and historian Hayden White, the University Professor and Professor of History of Consciousness (Emeritus) at the University of California at Santa Cruz, received honorary degrees at U-M's winter commencement Dec. 17, when approximately 2,000 students on the Ann Arbor campus graduated in a Crisler Arena ceremony.

U-M President James J. Duderstadt, the honorary degree recipients, studentspeaker Mary Ann Peterson '95 of Morenci, Michigan, and Thomas A. Roach, president of the U-M Alumni Association, spoke at the event.

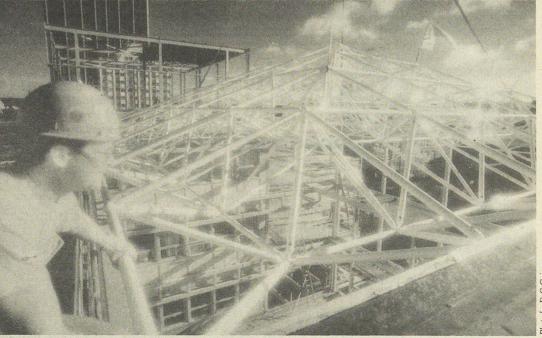
Shine, who won a staff Pulitzer Prize

for directing Free Press coverage of the 1967 Detroit riot, received an honorary doctor of humane letters degree.

White is recognized for his scholarly work to unite historiography and literary criticism into a



humane letters from the U-M.



Workmen lower the frame for the new Visitors Center skylight. The 19,000-square-foot addition to the existing Student Activities building is part of a \$5.7 million dollar project scheduled to be completed by September 1996.

NEW INSTITUTE TO FOCUS ON WOMEN AND **GENDER**

stablishment of an interdisciplinary Institute for Research on Women and Gender at the University was approved by U-M Regents in September.

The new institute will be a valuable component of the Michigan Agenda for Women, President James I. Duderstadt's plan to make the U-M a leader among US universities in promoting and achieving the success of women of diverse backgrounds as faculty, students and staff by the year 2000.

The institute will serve three key functions:

·Providing an institutional umbrella for ongoing faculty research efforts focusing on women and gender.

·Offering coordination, stimulation and support for effective interdisciplinary research.

·Heightening Michigan's national profile as a major source of knowledge about women and gender.

Abigail J. Stewart, professor of psychology and of women's studies, will serve as the inaugural director of the institute, which is temporarily housed in West Quadrangle.

Stewart called establishment of the institute "a very important step in recognizing and validating the tremendous resource of scholarly expertise on this campus." Research on women and gender "grew without resources" on campus for many years, and "the time has come to support scholarship with appropriate resources and administrative structures."

WHAT DO FACULTY DO?

By Lucy E. Drotning

any members of the public have the impression that faculty in major research universities do little teaching and devote many hours to spare time or to research projects that may not be related to university responsibilities. Mike Sweet, a newspaper columnist in Burlington, Iowa, sums up the sentiments when he writes:

[Research universities hire] bright people to work on projects that bring themselves and the university fame and fortune. With so many geniuses tied up doing pet projects, the teaching is left to teaching assistants, who work for a lot less money while hoping to become full professors so they can get someone else to do their teaching for them.

Classroom teaching is a major component of a faculty member's duties, but a professor's responsibilities extend beyond the classroom. Faculty also invest time working with students outside of class, preparing, or doing research and keeping up with developments in their field.

Three activities-teaching, research and service-form the core of a public college or universtity's mission. In 1988, the National Center for Research to Improve Post Secondary Teaching and Learning published a study called Faculty at Work. The study included the chart below, which provides some general information about the average number of hours faculty devote to these areas of activity, depending on the type of college or university where they

| How Faculty Spend Their Time: Average Hours per Week Faculty Activity | | | | | |
|--|----|----|---|----|----|
| | | | | | |
| Large Research | 18 | 20 | 8 | 10 | 56 |
| Small Research | 16 | 23 | 7 | 9 | 55 |
| Doctoral-Granting | 12 | 26 | 7 | 9 | 54 |
| Large Masters-Granting | 7 | 31 | 7 | 8 | 53 |
| Small Masters-Granting | 4 | 36 | 6 | 7 | 53 |
| Liberal Arts | 5 | 37 | 7 | 5 | 54 |
| 2-Year | 2 | 34 | 5 | 6 | 47 |

Faculty at major research universities average 20 hours a week teaching, 18 in research, 8 in scholarship and 10 in public service. (Source: Faculty at Work, National Center for Research to Improve Post Secondary Teaching and Learning, 1988.)

teach, as defined by the Carnegie Classifica-

While building a strong record of research and scholarship is an important part of the tenure process, a faculty member's commitment to teaching and service also is considered carefully in awarding tenure.

As Prof. Robert Weisbuch, former chair of the Department of English and head of a 1990 committee on undergraduate education, explains, "You still can't get tenure by being a great teacher who doesn't publish, but you are not going to get tenure unless you are a success in the classroom."

Tenured and tenure-track faculty do most of the teaching at Michigan. These faculty are responsible for 64 percent of the teaching load, and lecturers, hired for their teaching expertise, are responsible for 14 percent of the teaching load. For some larger classes, professors employ graduate Teaching Assistants, who can be thought of as professors-in-training, to teach smaller class sections that complement the lectures. The sections led by TAs account for the remainder of the teaching load.

This article is excerpted from a pamphlet of the same name by Drotning, a senior researcher in the Office of Academic Planning and Analysis. The pamphlet, published by the Office of University Relations, details faculty responsibilites at the University. To obtain a copy, readers may, write, call, fax or e-mail Michigan Today. (See masthead for access.)

Unlocking the mysteries of sharp global change

research scientist Enriqueta Barrera is using evidence from some of the world's tiniest marine creatures to learn more about what the world was like 70 million years ago, when dinosaurs still walked the Earth.

Until recently, most scientists believed that the dinosaur's era was a time of long-term global environmental stability, with temperatures much warmer and more uniform than they are today. Many experts thought the only major global change during this period took place about 65 million years ago, and that it was caused by Earth's collision with a large asteroid. The extinction of many species, including dinosaurs, is commonly traced to the collision.

But Barrera, an associate research scientist in geological sciences, thinks that five million or so years before any catastrophic asteroid collision, something else happened to "trigger global cooling, a major change in ocean circulation patterns, a large drop in sea level, and mass extinction of many tropical marine organisms.'

She is not sure what happened, but she says the sharp climatic changes are recorded in the shells of microscopic sea creatures called foraminifera buried in the sediment of a stretch of water that scientists have dubbed the Tethys Sea after the wife of the mythological Greek

Seventy-one million years ago, Earth's continents were clustered together and sea level was much higher (see map). The Atlantic Ocean was very small, but the Pacific was enormous, covering about half the Earth.

The Tethys Sea-a shallow, salty body of warm water teeming with corals and bi-valves that formed large reefs and with the tiny one-celled foraminifera-separated continents in the northern and southern hemispheres.

As they grow, foraminifera incorporate varying ratios of oxygen isotopes from sea water in their shells. As they die, their shells pile up in layers on the ocean floor. Barrera analyzed changes in oxygen iso-

U-M's research expenditures reach another all-time high

esearch expenditures at the University of Michigan exceeded the \$400 million mark in 1994-95 for the first time in the University's history. The total—\$409,235,763, to be exact—is a 6 percent increase over the previous year.

"Increases in the annual research expenditures demonstrate the continued leadership of the University in the advancement of knowledge and in the application of leading-edge technologies for the benefit of society," said Homer A. Neal, U-M vice president for research, in his annual report to the U-M Regents.

"The data in this report, as well as the wealth of faculty effort undertaken without external support, are indicative of the rich diversity of scholarly activity that has earned the U-M the distinction of being one of the nation's leading research universities."

Despite the continued success of University faculty in obtaining support for research activity, Neal cautioned that tougher times might lie ahead. He noted that current Congressional budget resolutions project major reductions in federally sponsored research from key agencies by the year 2002, ranging from 20 percent to over 40 percent in some cases. President Clinton's long-term budget projections, Neal noted, also include major reductions in discretionary federal funds—the source of funding for research activities.

Of the U-M's 1994-95 total research expenditures, \$277,900,041 came from federal agencies and \$131,335,722 from non-federal sources.

Research support from federal agencies accounted for 67.9 percent of the U-M total. Major funding agencies included the

Department of Health and Human Services, \$159,604,286; National Science Foundation, \$47,889,200; Department of Defense, \$23,329,784; NASA, \$11,186,624; and the Department of Energy, \$9,598,093.

Research support from non-federal sources accounted for 20.2 percent of the U-M total and included \$28,650,827 from industry and \$16,882,303 from others, including contributions. U-M funds ac-

counted for 11.9 percent of the University's total research expenditures.

Neal also noted that "the field of life sciences continues to maintain a dominant position in terms of the University's research expenditures, recording a 134.2 percent increase over the past 10 years and accounting for \$182.2 million (44.5 percent) of the total expenditures in FY 1995.

"Engineering accounted for 17.5 percent of the total research expenditures in FY 1985 (\$27.9 million), but with a phenomenal doubling of expenditures in five years, accounted for 19.6 percent of the total in FY 1990. Engineering has maintained its 19.6 percent share of the

University research expenditures over the past five years, with \$80.2 million in expenditures in FY 1995.

"The social sciences continue to show a significant research capacity at the U-M, accounting for 13.8 percent of the total research expenditures in FY 1995. The \$56.5 million in expenditures represents a 177 percent increase over the \$20.4 million expended in FY 1985.

"Research expenditures in the physical sciences recorded a 259 percent increase over the past 10 years. The \$51.7 million spent in FY 1995 accounted for 12.6 percent of the total research expenditures."

Regents will hold public forums on presidential search

The University of Michigan Board of Regents elected Regents Nellie M. Varner and Shirley M. McFee as co-chairs of the Presidential Search Committee to replace outgoing President James J. Duderstadt and announced that it would hold a series of nine public forums in December and January to hear from the University community, as well as the general public, on the selection of the University's next president.

Five of the forums will be at the Ann Arbor campus, one each at the U-M-Flint and the U-M-Dearborn, and one each in Grand Rapids/Western Michigan and in metropolitan Detroit. The forums began Dec. 4 in Ann Arbor, with sessions for faculty and for students. At the first of the public forums, nearly 50 students and faculty addressed the Regents. A common theme among several faculty was urging Regents to seek an academic leader and not just a manager, as some other schools have done.

Prof. Patricia Gurin, chairman of the Department of Psychology, said, "Every candidate that you interview is going to insist that he or she has strong academic values. Sensitivity to what values the candidates are expressing is absolutely essential in this search process. This is a time to use this search to



rner McFee

engage in a major undertaking of clarifying what the Regents want the values to be that will guide the University in the next decade of our existence."

W. James Adams, a professor of economics, urged the

Regents to appoint a faculty advisory committee to assist them in the search.

The second forum, with two sessions, for alumni and staff, also was held at the Ann Arbor campus Dec. 14.

Two sessions are set for Jan. 18: a forum for faculty, staff and students at the regional campuses: the U-M-Flint session will begin at 10 a.m. and the U-M-Dearborn session will be at 3 p.m.

On Jan. 19, an open forum will be held on the Ann Arbor campus, beginning at 10 a.m.

Two more open forum sessions will be held in January: one in Grand Rapids/Western Michigan and the other in Detroit. Details for the forum sessions will be announced as soon as they are available. Interested persons can get details on those forums from the office of News and Information Services, 313-764-0105.



Barrera in U-M's Stable Isotope Laboratory where she analyzes ocean core samples.

tope ratios in foraminifera in ocean sediments deposited during a several-millionyear interval at six locations in the South Atlantic, Indian and tropical Pacific oceans. (The Mediterranean Sea is the only remnant of the Tethys Sea.)

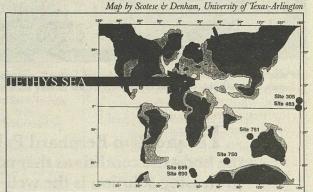
Barrera found evidence for long-term gradual high-latitude cooling and a rapid and sharp decrease in deep ocean temperatures—possibly as much as four degrees C—lasting over a million-year time span beginning about 71 million years ago. She concludes that "both oceanic and continental changes occurred in conjunction with a suggested 150-foot drop in sea level. After about one million years, sea level seems to have gone back up."

Barrera speculates that the drop in sea level may have dried shallow areas of the Tethys region, greatly reducing or stopping the production of warm and salty water flowing into the Pacific and Indian oceans. This may have allowed colder water from polar latitudes to spread into equatorial areas. When sea levels went back up, this circulation pattern reversed again.

"Sedimentary analysis indicates the sudden extinction of many tropical shallow water reef-forming organisms, as well as other deep water organisms," she said. But it is still impossible to say whether it was the colder water, shifts in sea levels or something else that killed the aquatic life and whether their disappearance is linked to the extinction of the dinosaurs.

Barrera presented her findings at the Geological Society of America meeting in New Orleans in November. Her research has been funded by the National Science Foundation. Collaborating with her were U-M research scientist Charles Jones, Samuel M. Savin of Case Western Reserve University and Ellen Thomas of Wesleyan University.

-Sally Pobojewski (NIS)

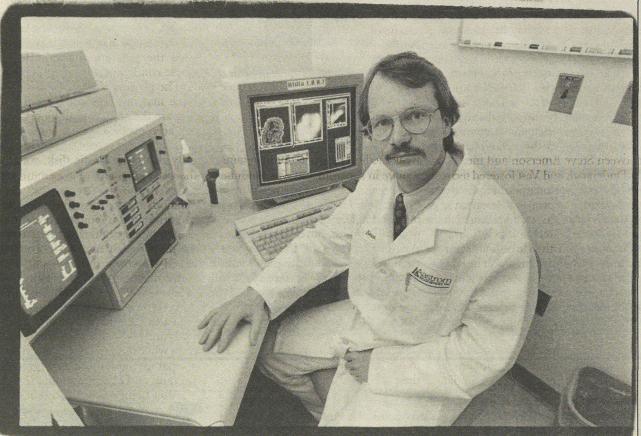


Map of the position of the continents 70 million years ago. Lightly shaded areas show continental margins covered by shallow seas. Site numbers show the locations of ocean sediment cores used in Barrera's research.

UNIVERSITY-SPONSORED RESEARCH IS LEADING TO BREAKTHROUGH IN CELLULAR AND GENE THERAPY

STEMMING the Tide of Cancer

By Peter Ephross



Palsson with a prototype of the Cell Production System™, a device he and colleagues developed that may be uniquely capable of growing human stem cells (the source of blood cells) for use in bone marrow transplantation and other therapies.

The problem Bernhard Palsson faced was how to create outside the body the conditions that occur naturally inside it. Resting on his promising solution is the well-being not only of the 15,000 to 20,000 patients who receive bone marrow transplants each year, but also of thousands of patients with other cellular and genetic disorders.

Bone marrow produces all the circulating blood cells. Transplantation of bone marrow, one of the earliest forms of cellular therapy, is used in treating a variety of cancers ranging from testicular and ovarian to lymphoma and leukemia. To protect the marrow from being damaged by chemo-

therapy or radiation therapies, it is removed from patients before treatment, preserved during therapy and then returned to re-establish bone marrow function.

Unfortunately, bone marrow transplants are both very expensive, costing from \$80,000 to \$150,000, and very uncomfortable. But if chemical engineer Bernhard Palsson has his way, these transplants will soon become easier and cheaper. Along with hematologist Steven Emerson, his former U-M colleague, Palsson developed cell culture procedures that allow for the growth of human marrow outside the body in devices called "bioreactors" that Palsson designed, built and tested in his laboratory on North Campus.

Palsson's bioreactors automated the previously tedious and labor-intensive regimen required to process the cell culture. The performance of these devices was so promising that in 1989, with the University's help, Palsson, Emerson and Michael Clarke, a U-M molecular hematologist, established in Ann Arbor one of the nation's first tissue-engineering companies, Aastrom Biosciences, Inc. The company, which separated from U-M in 1992, has set out to design, develop and manufacture the scientists' Cell Production System™ (CPS) as its principal product.

"What we can do is take a small amount of bone marrow, inoculate it into one of these bioreactors and grow a transplantable dose of cells," explains Palsson, who is leaving Michigan to join the new bioengineering department at University of California-San Diego in January.

Using the CPS eliminates the need to have the patient undergo general anesthesia and an operating room procedure during which about one liter of bone marrow is sucked from the patient's hip. "The alternative that the CPS provides is local anesthesia, and a simple draw from the hip that takes about five minutes and can be performed in a doctor's office," says Palsson. The CPS may cut the cost of a transplant by more than half. In addition to making it easier to harvest the marrow from the patient, adds Palsson, the CPS may decrease the amount of time it takes the cells to readjust to the body's environment after transplantation by as much as one-third, eliminating expensive care in the hospital.

The ability to use cell culture approaches to grow bone marrow was first developed for mouse bone marrow in England in the 1970s. During the 1980s, however, attempts to apply this method to humans failed because the human bone marrow cultures died after six to eight weeks.

The research that ultimately led to the CPS began soon after Palsson, a native of Iceland, arrived at Michigan in the fall of 1984 after earning his PhD from the University of Wisconsin-Madison. His early research focused on mathematically describing red blood cell metabolism and the production of the therapeutic proteins from animal cell lines.

As a part of this research, Palsson's lab had already built a series of bioreactors that could grow mammalian cells that produce and secrete proteins of therapeutic value. His lab had put significant effort into studying metabolism, growth and protein-production rates in cell culture systems.

"But developing bioreactors systems for bone marrow was a much more difficult challenge than I faced earlier,"

Photo hy Poter Yot

THE UNIVERSITY'S ROLE

Palsson says, "because the product was the cells themselves, not the proteins that the cells made." Making a cell bioreactor required not only a fundamental understanding of the complex dynamics involved in blood's feeding, oxygenating and protection of tissue, but the ability to mimic the processes in an artificial environment.

Why were tissue engineers succeeding with preserving mouse marrow cultures but not with human ones? Palsson's calculations showed that where mouse cell cultures could survive on a weekly feeding of a solution of nutrients and animal serum, a culture of human bone marrow stem cells (stem cells are the cells that all blood cells originate from, and they start the long process of forming mature blood cells) required daily feeding. Although the research was complicated, even Palsson was surprised by the simplicity of the result showing that "we could get the culture to be much more productive by adjusting only one critical variable."

Palsson and Emerson then went to the laboratory with this and other findings. In less than a year and a half, with Emerson concentrating on cell biology and Palsson on optimizing cell culture systems and designing bioreactors, they confirmed the validity of their approach to growing human bone marrow outside the body. Their rapidly fed cultures of bone marrow stem cells could be sustained for

up to half a year.

Being able to replicate bone marrow stem cells is the "holy grail" of cellular hematology, the science of blood cells, because it opens a series of important clinical applications. According to Terry Papoutsakis, professor of chemical engineering at Northwestern University, the CPS is likely to have a "profound impact on the clinical treatment of a large number of patients," and not just cancer patients but those with other disorders such as sickle cell anemia and AIDS.

Perhaps the most important clinical application will be in gene therapy of blood disorders through insertion of a "healthy" gene into a target cell, leading to healthy progeny of all the blood cell lineage from the stem cell, and thus a cure for a number of ailments.

It will be a couple of years before Aastrom's products will be ready for the market, Palsson says. However, preliminary results from a study performed at the Anderson Cancer Center in Houston and presented this month at

the annual meeting of the American Society of Hematology in Seattle were positive. If full clinical trials do succeed and Aastrom markets the CPS, the University will have a shining example of what is called technology transfer: shepherding research done at universities into the private sector.

"In the United States, high-powered graduate schools churn out scientists willing to take a chance at hundreds of small venture-funded start-ups"-Wall Street Journal, Nov. 29, 1995

Michigan played a vital role throughout the development of Aastrom Biosciences (the two A's stand for "Ann Arbor," while "strom" is from stroma, the name for the type of stem cells used to grow bone marrow cells).

"When I arrived here in 1984, there was an entrepreneurial and interdisciplinary atmosphere prevailing in the Engineering School," Bernhard Palsson says. He credits the creative environment to James J. Duderstadt, who was then dean of the School of Engineering and now U-M's president, and Charles Vest, who was associate dean of academic affairs at the time and is now president of the Massachusetts Institute of Technology.

"Interdisciplinary work among faculty members is often paid lip service," Palsson says, "but Duderstadt and Vest strongly supported and enabled the interdisciplinary environment that led to the collaboration between Steve Emerson and me."

Duderstadt and Vest fostered technology transfer and interdisciplinary research in many ways, Palsson says, one of which was to help establish the Cellular Biotechnology Laboratories located in the Dow Connector Building on North Campus. The labs were not assigned to any particular faculty member; instead, they served as a home for interdisciplinary work between faculty in engineering on one hand, and life and clinical sciences on the other.

Once their cellular engineering experiments confirmed their initial calculations about the feasibility of growing human bone marrow stem cells outside the body, Emerson and Palsson contacted the U-M Intellectual Properties Office (IPO), one of the University offices responsible for technology transfer.

"We want to put technology to work in the public sector so that it does not lie fallow on the laboratory shelf," says current IPO director Robert Robb. His predecessor, Robert Gavin, played a critical role in the establishment of Aastrom, Palsson says. Gavin helped Aastrom attract investments from a venture capitalist firm and from the State of Michigan Pension Fund.

The U-M retains patent rights and a percentage of Aastrom's stock. Today, after a few more rounds of investment, Aastrom has close to 50 employees in its 20,000-square-foot facility on Domino's Farms just northeast of Ann Arbor.

Palsson took a leave of absence from U-M to serve as Aastrom's vice president for developmental research. As the company has grown and succeeded with its major goals, he has weakened his ties to it, but he retains a share in Aastrom and will continue to help it as needed.

Biotechnology is a risky field; many companies fail to live up their original promise. But in the past year, Aastrom has received three key patents and has passed the first round of clinical testing necessary to have its products approved by the FDA. The second round of testing, which will test the efficacy of the products, will begin next year.

The CPS may prove to be critical to the delivery of cell therapies other than bone marrow transplantation. In

the fall, Aastrom announced a \$25 million dollar partnership with the French pharmaceutical firm RPR Gencell. Overall, estimates the Wall Street Journal, the drug industry has invested about \$14 billion in biotechnology since 1990.

"The CPS has the potential to become a big ticket product," Palsson says. "Cellular therapy is a therapy of the future. Producing cells on site in this sort of automated fashion is needed, and few companies are pay-

ing attention to it."

How the CPS Works

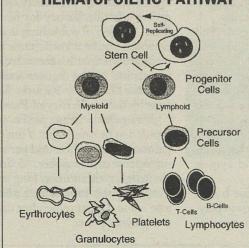
The Aastrom Cell Production System™ is made up of three components: an automated platform that can be thought of as a VCR housing, a disposable bioreactor that is inserted like a VCR cassette, and an auxiliary robotic device that inoculates and harvests the cells automatically under sterile conditions.

The process works like this: The bone marrow, containing stem cells that are the source of all blood cells, is placed inside a syringe and inoculated into the bioreactor, which basically is a large plastic disk, roughly the size and shape of a medium size pizza. The robotic device then "wobbulates" to distribute the cells uniformly throughout the bioreactor.

The bioreactor is then inserted into the platform. By means of a computerized system, a nutrient-animal serum containing fluid flows across the marrow cells at a highly controlled and precise rate. This fluid interaction recreates the environment inside the body and allows the stem cells to multiply, while oxygen is provided though a separate mechanism at physiological rates and concentration.

After being "played" for about 10 to 14 days the bioreactor cassette is ejected from the platform and placed on the auxiliary robotic device. The robotic device then swivels the bioreactor to suspend the cells, and they are then drained into a sealed IV bag. The cassette is tossed. The cells are now ready to go into the clinic. "Nowhere during this process," Palsson says, "is the cell culture system's integrity compromised, resulting in an automated closed sterile cell production process."

HEMATOPOIETIC PATHWAY



The course followed in the formation of blood cells (hematopoietic pathway) begins with stem cells, which provide a supportive structure from which the various types of blood cells branch. The two major branches are cells evolving into marrow (myeloid) family and lymph (lymphoid) family lines. The marrow family cells include crythrocytes (red blood cells), granulocytes (cells containing granules) and clotting-agent platelets (thrombocytes).

An IV bag containing the stem cells is placed inside a plastic

'bioreactor,' which functions like a video cassette. The 'cassette' is inserted into a plastic 'platform,' a device containing the cell culture. The platform is analogous to a VCR.

The bioreactor is 'played' inside the cell-culture platform for about two weeks. The playing involves feeding it with a nutrient-animal serum to simulate the body's environment. The feeding is controlled by a computer-controlled robotic device that bathes the cells with the solution.

When the cells are ready, the platform ejects the bioreactor. The IV bag containing cells ready for transplantation is removed, and the bioreactor cassette is tossed.

Illustration Courtesy of Aastrom Biosciences, Inc

For a lot of people the idea of retirement conjures up pictures of rest and relaxation—endless rounds of golf, a home in the Sunbelt, a few wellearned shopping sprees and vacations. Or maybe you're the busy type who wants to turn your attention to a neglected hobby. In any case, what most of us don't envision is a retirement during which we continue to work at the same-or an increased—pace that we did during out careers.

But there are people for whom retirement is a mere technicality of the tax form—an opportunity not so much to stop their work as to re-arrange their work schedule. These people continue working, in and out of their fields, often at a more productive rate than in their career days.

Michigan Today talked with five such "retirees" (for lack of a better term) among the many we could have chosen from the ranks of the faculty. They range in age from their 60s to the century mark, and each seems to have sailed by the port of retirement without even glancing at the shore.

Their Brains Just Won't Quit By Derek Green

William G. Dow Professor Emeritus, Electrical Engineering Retirement: 1964

William G. Dow's contributions to the University are legion—of course he's had 70 years in which to make them. Dow, who joined the faculty in 1926, is the father of modern electrical engineering and computer science at U-M; the guiding force behind the establishment of real-world joint research programs that team faculty and students with industry and government; the launcher of the Space Physics Research Laboratory space science programs—the list could go on, but then there would be no room to tell what he's doing lately, at the age of 100.

"My field is physical electronics—the physics of elec-

tronic devices," Dow says. "I deal with electricity that moves outside wires-in arcs, vacuum tubes, lightning, fluorescent lights." He got his latest patent at age 95, but he's working on two projects that he'd like to see patented during his century years. In his office in the Cooley Bulding on North Campus, where he spends two days a week (he spends two more at ERIM, a remote-sensing research company whose predecessor he co-founded), Dow described his current work and reflected on life in general:

"Robert Sampson and I are waiting for a systems patent. The subject of the patent, which would belong to ERIM, has to do with a scheme for using controlled nuclear energy for providing ground transportation for vehiclescars, trucks, buses and railroads, perhaps even steam ships—by a process that produces no unpleasant emissions of any kind. It uses a compound of titanium and chlorine known as titanium tetrachloride, each molecule containing one atom of titanium and four of chlorine. This substance is a liquid that is like water in viscosity."

The process, Dow says, "involves a nuclear reaction that breaks down titanium tetrachloride into titanium dichloride and chlorine, the chlorine escaping as a gas." Titanium dichloride, a crystalline powder, can be stored and transported. "It is hungry for its two lost two chlorine atoms, but it will happily take oxygen instead," he explains. "When exposed to small amounts of water in the fuel cell of the vehicle, the titanium dichloride cracks the water and converts itself into titanium oxychloride, with one atom of oxygen joining the titanium molecule and two atoms of hydrogen being released. The hydrogen is exposed to atmospheric oxygen in the fuel cell, burns' there to produce electric power to drive the vehicle. Water is the byproduct."

The titanium oxychloride is returned to the base power plant where the original preparation of the titanium dichloride was carried out. There, it is exposed to chlorine. "It prefers chlorine," Dow says, "so it returns to titanium tetrachloride and releases the oxygen to the atmosphere. So the only effect on the atmosphere is the oxygen used in the vehicle to permit burning of electricity and the oxygen released back into the atmosphere when the compound is rechlorinated. It is a totally clean process environmentally."

Use of the fuel would not significantly change the design or weight of an automobile, Dow predicts, nor sub-

Peter Steiner **Professor Emeritus, Law and Economics** Dean Emeritus, LS&A Retirement: 1991

Peter Steiner was the dean of the College of Literature, Science, and the Arts from 1981 to 1989. Before that he had been professor of economics and law since 1968. Steiner received his doctorate at Harvard in 1950, has held a Guggenheim fellowship, a Ford Faculty Research fellowship and served on at least one Presidential Task Force (1968-on Productivity and Competition). He is also an author, co-author or contributor to numerous books and articles on economics-including one of the most widely used college textbooks on economics in the country, Economics, published by Harper Row and now in its 10th edition since 1966.

When Steiner retired from those various professions, he seized the time to begin a book he had long been contemplating. Another tome on macro- and microeconomics? On productivity and probability? Sort of. The book is called Thursday-Night Poker: Understand, Enjoy, Win, and it is slated to appear from Random House in February 1996.

A poker book? It might surprise those for whom Peter Steiner will always be the man behind the Dean's List, but he is has for years been an avid, even legendary, poker player. "In one way or another I've been meaning to write a poker book for many years," he says. "I've always enjoyed playing, and have some insights on the game by virtue of my background in statistics and economics."

Steiner says most poker books, even the few he thinks are excellent, are flawed because they fall into one of three categories. The first type of book tells what to do without explaining why; the second group assumes people play poker only to win money rather than as recreation; and the third sort assumes players are playing in a casino. What is missing, Steiner feels, is a book that explored poker's "theoretical framework."

"I'd had the idea in my head [for such a book] for 25 or 30 years, but never had time to work on it until I



retired in 1991," he says. "So then I started writing fragments of a book, not knowing whether anyone beyond my friends would be interested." The fragments grew into a 200-page manuscript that Steiner polished and sent to publishers. Along with the perfunctory rejections, there were two very enthusiastic responses. The one from Random House led to a contract two

The book Steiner finished falls into four broad areas. The first is an overview of "these games called poker"; the second focuses on probability, odds and risk; the third section discusses various skills needed to play poker well, and the long fourth section contains information and exercises on sharpening and implementing those skills.

As in his formal career, Steiner meticulously researched his subject. He ran calculation and complex computer analyses of probability, and approached some of the work as "game theory" though he was careful not to overdo the latter. "I was trying to think about the game as it was played-not as a sterile math exercise-but with reasoning and calculation playing a role." (To add flesh and blood to his poker ruminations throughout the book, Steiner creates colorful characters who have distinctive playing styles and names like William "Bluffalo Bill" Baxter and Tyrone "Ty" Tass.)

Steiner also went on the road-and where else but to Las Vegas?-where he tried his hand at serious casino playing for the first time. "It sounds funny to say that you're

'doing research' in Las Vegas casinos, but in a way I was. Casino poker is a very different game."

Steiner's interest in poker-both theoretical and practical-dates back to his days in the Navy, where he served and played cards aboard the USS Independence. After leaving the Navy, he was always sure to become involved in friendly-though not necessarily low stakes-games. This is the arrangement Steiner refers to as Thursdaynight poker-the kind of game where experienced amateurs play with other amateurs.

"Thursday night" poker players "play poker," Steiner says, "they don't engage in it or work at it or suffer through it." Casino poker, on the other hand, is a purely professional endeavor. Most books treat the "Thursday night" player as if he or she plays only for money rather than mainly for leisure.

Steiner held to a regular writing-and-research schedule to finish the book-working mostly mornings to get the writing done and doing his research when he could. And while his post-retirement work has so far been influenced by (and has drawn on) his economics background, to this point he hasn't completed work specific to his academic field.

In the next several months Steiner will pursue a less rigorous, though personally satisfying, topic-putting together a family history for his children and grandchildren. The job of publishing books in the Steiner family, he points out, has now fallen to his wife, Patricia, a skilled translator of Spanish literature. She has just published a translation of Don Segundo Sombra: The Great Novel of the Argentine Pampa, by Ricardo Guiraldes, published this year by the University of Pittsburgh.

Meanwhile, Steiner will continue to play in what is reputed to be one of the, if not the, highest-stakes poker games in Ann Arbor, and perhaps to pursue a growing interest in casino poker. "I find it is a very pleasant, challenging vacation—as long as you remain reasonable. That's a point I make in the book. You win some, you lose some. If you remember that, you can have a lot of fun playing poker."

w unimpoco.

THE CHARLES PERSONAL STREET

Frank R. Kennedy Thomas M. Cooley Professor Emeritus of Law Retirement: 1984

When Frank Kennedy retired from the U-M Law School 11 years ago, he knew exactly what he was going to do: promptly begin serving as a consultant for the prominent Chicago law firm of Sidley & Austin. What Kennedy didn't know then was that he would continue in that position long enough to enjoy a "second retirement" last year at the age of 81. But that doesn't mean Kennedy is stopping now. "I enjoy working," he says. "Way too much to give it up and relax."

During his teaching years, Kennedy became a nationally recognized expert on bankruptcy law, serving from 1971-1973 as executive director of the Washington, DC, Commission on Bankruptcy Laws. It was only natural that when he retired, he should go on working in the field.

"I spend most of my time at home," he says, "where I have a basement with a fax and a word processor and access to all sorts of on-line legal information. And I also have my own volumes of case law. I do come in to campus once a day, to check my mail."

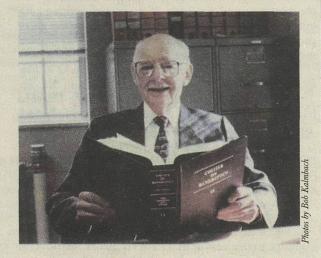
Kennedy arrived at Michigan in 1961. Initially he didn't do much consulting, although he did work as a "reporter" (legal jargon for the person who drafts the language) for the Advisory Committee on Bankruptcy Rules for 11 years before taking over as the committee's director in 1971.

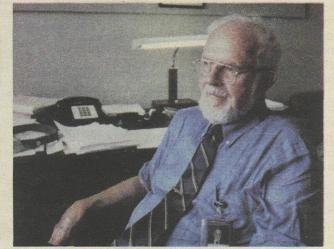
After he retired from teaching and began consulting for Sidley & Austin, he liked the fact that he could do most of his work in Ann Arbor, "and when I had to go to Chicago, I would fly from Detroit to O'Hare, go down to the subway, then up to my office-without ever having been exposed to the elements. What more could you ask?"

Throughout his retirement from the Law School, Kennedy has written numerous articles on bankruptcy law for legal journals. But his "real work" is perhaps the most monumental job he's tackled yet: the creation, with another professor, of a multivolume treatise on bankruptcy law, under contract by Little, Brown publishers. This task requires him "to try to keep up with all the case law coming out, which of course I can't do, but it keeps me sharp, he says."

Kennedy's reason for taking on a work load many law clerks would find tough is simple: "I enjoy the work. I spend time each day reading and writing, and I can spend time with my wife, Patricia."

He admits his work production in the last few years may have slowed down-a bit. "We're publishing the treatise one book at a time," Kennedy says. "I might not get as much work out as I used to, and I might not last to see the treatise, but I enjoy working as much as, if not more, than I ever did."





stantially alter operational costs, but on a large scale, a hydrogen-based fuel economy would eliminate the vast environmental costs and damages associated with petro-

When people ask him to reflect on the great advancements in science and technology he's lived through, Dow prefers to look ahead, saying, "You ain't seen nothing yet! The advances in the 21st century will be much greater, and they will derive from the economic use of nuclear power, both fission and fusion."

His second patent project involves using nuclear fusion for producing thrust to drive space vehicles. "I think it's possible to make fusion engines that could fit into a 747 jet," he says. "You'd take off in New York using an internal combustion engine. When you got to 50,000 feet, you'd switch to the fusion engine and accelerate to orbital velocity without ever seriously disturbing the passengers because you used the conventional power in the first 10 minutes before reaching orbit height. In 40 to 45 minutes, you're over Sidney, Australia. You reverse engines, switch to conventional engine and land. Total trip is one hour." You get to Mars in six weeks rather than the nine months it takes now. I haven't finished showing how this is possible, but I hope to do it if the Lord lets me live long enough. I've completed 80 percent of the work, but first I must finish the work on the ground transportation system."

Inevitably, Dow is asked for secrets of longevity: "Number one is to select the right grandparents. Number two, don't let the armchair get you. Keep active physically, mentally and emotionally, as I have done. It's not how far I walk that is important, it's how far I climb. I climb hills or stairs for 30 minutes to an hour every day. You must get the heart working. My sister who was three-and-a-half years older than I, died when she was 101, but I'm in better shape than she was at the same age. I lost a major heart artery at the age of 80 due to a blood clot. My doctor told me the muscle had turned to scar tissue in that area. They didn't like to do bypasses on patients my age. Your collateral arteries can pick up the load-but you have to ask them every day.

"Number three, it's extremely important to have a good family life. Edna Dow, the mother of my children, died in 1963. In 1968, I married my present wife, Katherine Keene Dow. We've been very happy together, as Edna and I were. Katherine's children and mine have found it a very satisfactory way for their elders to carry on a productive and happy life."

Their Brains Just Won't Quit

Phyllis Weikart Associate Professor Emeritus, Kinesiology Retirement: 1994

Don't even talk about being busy with Phyllis Weikart, professor emeritus of kinesiology. In fact, she jokes, she finally had to retire "so that I could get to work-retirement freed up time for me to get even busier."

Kinesiology is the study of sports and movement mechanics, an area that overlaps with sports medicine, physical education and developmental psychology. Weikart's own area of expertise was-and is-the study of physical movement and early learning. And what keeps her busy these days is the interest that primary and secondary educators all over the country have in her novel research on the effects of movement on learning ability.

Weikart developed and directs a project called Education Through Movement: Building the Foundation. In a nutshell, her research has revealed that early sensitivity to rhythm is a crucial indicator of a child's later ability to recognize and respond to complex patterns-including language, mathematics and even social interaction. She has documented a link between decreasing test scores among children and adolescents and the TV-age decline of early physical activities that help build a foundation for learning-activities ranging from dancing with parents and siblings to group children's games.

"I believe we as a society have overlooked something fundamental in education," she says. "Visual and auditory processing, language, mathematical skill-all are closely tied to early development. Yet when we address questions of education we forget to ask where the child is in terms of fundamental movement skills."

Weikart is trying to focus more attention on this problem. Since retirement she's published a book on the subject, Foundations in Elementary Education: Movement (High/ Scope Press, 1995), and is the co-author of another with her husband, David (Foundations in Elementary Education: Music, High/Scope Press, 1994). She also has contributed articles to childhood journals. In addition, Weikart keeps a busy out-of-town schedule of workshops, conferences and speaking engagements from school districts and

groups interested in her low-tech, low-cost highly effective teaching meth-

"I spend a lot of time on the telephone when I'm at home," she says. "And a period of every day is dedicated to writing-usually the morning time." During summer, Weikart actually steps up that schedule by holding certification workshops in which she teach-

ers educators how to build a foundation that supports the all-round development of physical and mental skills in chil-

Teachers from around the country attend at the 300acre High Scope Conference Center near her home in Clinton, 30 minutes southwest of Ann Arbor. In addition to the Conference Center, there's a High Scope Institute, a research-oriented think tank directed by Weikart's husband, David. According to Phyllis, he's as busy as shesomething she thinks has been important to her commitment to keep working. "I'm sure it's a factor. If one person in a marriage is sitting back and the other is doing a great deal-it's just not compatible. Each person's excitement fuels the other."

Aside from their busy careers, the Weikarts have four daughters and five grandsons to fill in any breaks in their work schedules.

What keeps Weikart, 64, tackling this busy schedule day in and day out? "It's become something of a mission to me," she admits. "In this age of high technology, children's motor development may not be keeping pace with their cognitive development and their chronological age. I don't like the idea of sitting back-especially when there's a chance that I can make a difference."

John W. Aldridge Professor Emeritus, English Retirement: 1992

During his 28 years at Michigan John Aldridge published nine books on contemporary writers-many of whom (such as Norman Mailer and Joseph Heller) Aldridge counts among his friends. He also regularly contributed to national magazines like Esquire, the Atlantic Monthly, Playboy and Harper's and appeared regularly as the book commentator on the MacNeil-Lehrer news program. At the same time, Aldridge kept up a regular teaching load, in many cases teaching students who had come to Michigan specifically to study liter ary criticism with him.

Like any formidable critic, Aldridge made his share of enemies-among them Gore Vidal, who once called Aldridge a "literary gangster." When he retired from teaching in 1992, Aldridge seemed as likely a candidate as anyone to coast toward a well-earned breather. Instead he published two books, Classics and Contemporaries and Talents and Technicians: Literary Chic and the New Assembly-Line Fiction. The latter work, published in May 1992, the date of his official retirement, contains trenchant criticism of contemporary writers like Raymond Carver and Jay McInerney, whom he condemned as the homogenized products of university writing programs, their sales successes manufactured by the glitzy promotion campaigns of publishing houses, coordinated with flashy reviews in the New York news media.

Talents and Technicians drew immediate attacks in Vanity Fair and Atlantic Monthly, among others, and the New York Times Book Review ran a long exchange between him and other critics. Other articles quickly followed. Today, at age 72, Aldridge is still in the thick of things.

Why not take a breather? "I saw no reason to stop working," says Aldridge. "The same things that got me into it [literary criticism] interest me today and I'd still like to comment on them. It wasn't as if I could just sit down and start watching TV."

TV doesn't seem to be a looming presence in Aldridge's future. In the last year-and-a-half he's kept busy by publishing articles on the work of novelist Cormac McCarthy, on Joseph Heller's Closing Time, a sequel to Catch-22, and Norman Mailer's latest novels, Harlot's Ghost and Oswald's Tale. But he's set aside that type of writing for the last few months for another



project-his memoirs.

"It's really a literary autobiography," Aldridge says. "And it's something I've intended to do for some time." Though Aldridge characterizes himself as a "rather slow writer," he says work on the memoir has been going unusually

quickly. "It's going very well, and writes much faster than other work I've done. It's amazing how much you remember, once you sit down and try."

Aldridge's work routine "hasn't changed much" since he retired. He tends to stay up and get up late, reading in the morning and then writing in the afternoon. "I've always written in the afternoon. I still do." A good day's writing for Aldridge begins after lunch and stretches to 4:30 or 5 pm.

Like most of the others we spoke to for this article, Aldridge has a very active spouse. Patsy Aldridge is the librarian of the U-M English Language Institute. Recently, she was invited to South Africa where she helped design and set up a similar library near Johannesburg. John describes their mutual busy-ness as a sort of "support" network each has for the other.

Aldridge's plans include another book on contemporary writers-this time, one that "will talk about the excellence of much of what is being written today." Recently named one of the "Ten Top Fiction Critics" of this century in an anonymous poll for the Dictionary of Literary Biography (1994 Yearbook), Aldridge says that "maybe" he'll give up writing "when senility sets inuntil that day, I think I'd prefer to stay busy."

Derek Green '87, '91 MFA, is an Ann Arbor freelancer and a media relations consultant to the auto industry.



ETTERS

Oops on Oswald

IN OCTOBER'S "A Famous ELI Student," it states of Marina Oswald, "She arrived in Ann Arbor . . . in January 1965, two months after Kennedy's slaying." Wasn't Kennedy killed on November 22, 1963? Oops.

Edith Horvath Ann Arbor

Yes, Marina Oswald came to U-M 14 months after the assassination of President Kennedy, not two months, as we erroneously inserted into Kathy Hulik's story-Ed.

Memory of 1965 Teach-In

I WAS enrolled in a political science class during the spring of 1965. One member of our class attended the teach-in and came to recitation the next day all pumped up about the scandalous things she had learned the previous night. Our recitation leader calmly responded to her rantings by citing historical precedents and correcting her miscon-

She had made herself known earlier in the semester by strutting into class and snarling, "I'm a physics major; why do I have to take this PoliSci crap?" I thought the ignorance she demonstrated the day after the teach-in was similar to the ignorance I continue to observe in many adults, whose unwillingness to learn history mandates that every generation has to rediscover the wheel.

Robert Probasco '66 Moscow, Idaho

THANKS VERY much for the evocative article by Matthew Newman on the teachins at Michigan during the early days of the Vietnam war. It was evocative because it brought back to me thoughts of a time in a place long suppressed in the recesses of stored memory.

I came to Ann Arbor in the late '60s as a graduate student and experienced the maelstrom of anti-war activities, not as an active participant, but as a sympathetic observer of the scene-and quite a scene it was. I recall, for example, attending one particular meeting of the University community in the large ballroom of the Michigan Union. Protest strategies and other heated issues were up for debate. Invective, deprecations and political rhetoric flew between the factions of the left and far left. The late Professor of Sociology Horace Miner got up to add civility and calming words to the din. He prefaced his remarks, however, by saying that he hesitated to speak for fear that his lineage would be maligned, after a dean was vilified

by an angry student with a profane reference to his mother.

Although student protests and other forms of political mobilization did thankfully contribute to the de-escalation and ultimate termination of our military involvement in Vietnam, what remains with me are memories of the rancor and divisions the war created. And while many students acted out of a genuine revulsion to the war and exercised constitutionally guaranteed rights, others thrived on the conflict.

Today, I study the plight of Vietnam veterans professionally. While most do as well as their nonveteran peers, others still suffer from the trauma of their war experience. It is on them I focus and know that there but for the grace of God go I.

Robert E. Klein '70 MA; '78 PhD Washington, DC

I MUST PROTEST the glorification of the 1965 "teach-in" protest. This activity, and the subsequent campus demonstrations during the 1960's, certainly did not add luster to the reputation of the University. I was not proud then of a wimpish administration that would allow a handful of radicals to disrupt a major university, and cannot feel positive about your publication describing these protests as "debates."

The only positive item I can remember from the entire series of episodes was a 1967 College of Engineering letter from the then dean noting that as far as he knew, none of the students of the College had participated in the "anti-war protests" because, in his opinion, they were all too busy with their

An occasional historical item in Michigan Today is appreciated. However, you should stick to items that represent positive happenings, and not attempt to glorify events which only served to tarnish the image of a great University.

Richard A. Humes '51 Eng. Bel Air, Maryland

More on Rank Rankings

SURVEYING THE US News academic rankings this year of undergraduate, grad, and professional schools, Michigan adherents have some cause for pride, but also, unfortunately, much cause for chagrin. It simply will not do, as some with a clearly vested interest contend, to say that only Michigan professors and administrators are qualified to assess Michigan's academic standing. That would be the logic of Lloyd Carr voting the Wolverines first in the coaches poll, and no one could imagine him doing anything like that in 1995.

The good news is that taken as a whole the professional schools do quite well, with some 10 or 11 being ranked in the top 10 nationally. Social Work, Law, Dentistry, Nursing, Music, Public Health, Pharmacy, Engineering, and Business Administration score impressively, although slight improvement could be expected from the latter three. Medicine ranks 10th in the estimation of professors, and a majestic fourth in the opinion of directors of intern and residence programs.

The crucial ranking of graduate school departments, so vital to the University's standing as a research giant, gives a mixed result. The behavioral sciences continue to be the strongest area. Political science came in second only to Harvard, and represented the only subject in which Michigan outranked Berkeley (U-M 2; Cal 3).

The bad news is that in vital subjects such as physics, chemistry and biology, Michigan just does not measure up to the quality expected of a university which aspires to worldclass research status. Michigan outscores the mediocre schools; it falls short when compared to the super powers.

The real disaster, however, is the undergraduate ranking, even though in the first column-academic reputation-Michigan is tied for 8th with five other schools. As far as the other parameters, Michigan's performance on SAT scores is unimpressive to say the least. Not only do a number of private schools outdo it, but so does the University

Does Michigan have the clout to lure full professors from the Harvards and Stanfords and Cals? Does it have the status to keep them from luring away its full professors? The University can attract an associate professor from anywhere, promote him or her to full professor, and then feel self-important until that scholar accomplishes something terrific and then gets a call from Harvard or Cal or Stanford or some similar school, and leaves Ann Arbor, and never looks back. Michigan seems, alas, to have become a kind of Triple-A farm team for the Major Leagues of academe.

I. N. Kaye '54 Boulder, Colorado

M.F.K. Mistake

I AM A serious collector of the works of M.F.K. Fisher, with an almost-complete collection of her writings. I have also consulted dozens of sources for biographical information about her. I cannot imagine what information led you to identify her as an alumna of the University of Michigan, in your Editor's Note on page 14, in regard to the letter from Susan Tyler Hitchcock '71.

Mrs. Fisher's only connection to Michigan was her birth in Albion in 1908. She moved with her family to California before she was three years old. She attended several colleges, including Occidental College in California, but never received a degree. Yours for editorial accuracy,

Kathryn P. Seestedt Marine City, Michigan Someone reading the October letter about Alumna

Helen Worth '35 mentioned that M.F.K. Fisher was "from Michigan." That remark was misinterpreted, believed and carelessly left unchecked. In fact, Fisher wrote in later years that because her spirit was of the Far West, she was sorry even to have been born in Michigan!-Ed.

Rankings, Co-ops and Lewis

SINCE YOUR October issue has a number of items relating directly on my personal experience, I am making several comments:

1. On "Rankings," your point on the difference between percentage of alumni giving and amount is well taken. Universities waste a lot of money and effort seeking many small gifts in order to build percentage rather than focus on prospects able/willing to give annual gifts of \$1,000 and up. I continue to be puzzled over the many low ranking in "alumni satisfaction" in US News for U of M. In the past 45 years, I have met hundreds of U of M alumni from coast to coast and abroad, only one of whom seemed dissatisfied. (He felt lost in a big institution.)

2. The new publication on housing coops at Michigan sounds intriguing. I was involved in the Rev. Harry Lynn Pickerill's Disciples Guild House on Maynard St. in 1941-43, with its boarding co-op in back. "Reverend Pick" came to U of M from TCU in 1934 and quickly became involved in the nascent coop movement, to which he introduced the Rochdale Principles for the first time. (Hence the Pickerill House.)

When I arrived in Ann Arbor in Sept. 1941, Abe Lincoln House was charging \$1.75 a week for board. Guild House was charging \$3. We had an Intercoop Council Purchasing Service, to which I was assigned because of my produce background from my Dad's farm in the Fruit Belt around Benton

Harbor, Michigan.

In 1941-42, the Coops faced an enormous crisis because the University began to react to the sniping by many leaders of the Intercoop Council who were members of the Communist Party. The U proposed to establish an "advisory council" of deans, threatening our total independence. In order to meet this threat, several of us mounted a campaign to wrest control of the ICC from the CP card-holders. After we were successful, the advisory council idea died. (This was my first introduction to real politics as an untutored, barely 18-year-old farm boy facing a group of brilliant, well-organized mainly New York intellectuals who still believed Marxism was the answer to the Great De-

3. Thank you for the coverage of Prof. Emeritus William Lewis. I have a wonderful watercolor he did on a boat on the river across from the River Rouge Ford Motor Co.

Your publication continues to bring great pleasure and poignant memories of my dozen years in Ann Arbor. It is a delightful mix of the old and new, the scholarly and the news-

> Melvin M. Marcus '45, BA '47, '48 MA, '59 PhD Co-Founder of Friends of U-M Museum Baltimore

At the turn of the century, student orators rivaled student athletes as big heroes on campus

MICHIGAN'S CHAMPION RATOR

In our March issue, Ann Arbor writer Linda Walker '66 MSW told the story of Henry Jamison (Jam) Handy's suspension from the University in 1903. While working as a campus correspondent for the Chicago Tribune, freshman Handy (who went on to pioneer in corporate public relations) had ridiculed Prof. Thomas Trueblood for allegedly dropping to bended knee to demonstrate for his male students the proper stance and delivery of a marriage proposal. Walker follows up that award-winning story (it took a bronze medal in the 1995 national competition of the Council for Advancement and Support of Education) with the following saga of another accomplished student of Professor Trueblood's.

t the turn of the century, the art of public speaking still played such an important role in society that the professor of elocution, Thomas C. Trueblood, even though lacking a graduate degree, was the highest paid member of the faculty.

In addition to his teaching of oratorical skills in classes that virtually all students were required to take, Trueblood created and supervised the debating and oratorical contests held within the University and against other universities. As a profitable sideline, he delivered speeches and taught elocution throughout the nation.

In those days the campus followed the success of intramural and extramural elocutionary teams as eagerly and proudly as it did the athletic squads. In a typical year-end roundup of U-M teams' successes, for example, the *Michigan Daily* wrote that the football team "was far and away ahead of anything in the west," and in the next breath noted that "our oratory and debating has been of the best." And Professor Trueblood, in relating to the *Daily* his orators' success in a match against the University of Chi-

cago, used military imagery in telling of the "the skirmish lines ... [where] there was no point that was not taken and retaken in the fight."

Like many areas of American life, collegiate athletic teams were becoming resegregated in the early 1900s under the rising influence of racists who sought to reverse the gains in social equality that followed the Civil War. Oratory and debate, however, still provided African American students on many campuses their only opportunities for competitive or competitive only opportunities for competitive or c

their only opportunities for competition and, for the most accomplished speakers, national recognition. The *Chicago Tribune*, for example, reported on two prize-winning Black orators at major contests held at Yale University. In 1902, the newspaper cited George Williamson Crawford's taking third prize as evidence of African American merit, and in 1903 it reported that, pre-



sumably after hearing him speak on the subject, unidentified parties had asked contest-winner William Pickens of Chicago to "raise an army" and become emperor of Haiti.

The Michigan Daily reprinted a story from the Columbus (Ohio) Dispatch that described the success of a 1902 graduate of the U-M law department, George W. Conrad, who obtained a job as a claims agent for the Pennsylvania Railway after graduation. The Daily editorialized that Conrad's hiring was a fitting answer to "some people [who] have expressed their doubt of the ability of the colored man to fill a reliable position well, and have been sarcastic about the future success young graduates among the colored race who have gone out from this University." The Daily added that Conrad had "obtained a position of responsibility and dignity rarely attained by his white college friends at so young an age."

Against this background, we can better appreciate today the excitement on campus in the spring of 1903, when Professor Trueblood set about organizing the annual series of campus oratorical contests that would determine Michigan's representative and alternate in the major annual regional contest of the Northern Oratorical League to be held in Minneapolis that May 1. Forty students were vying for the two positions, and among those who caught the attention of the *Daily* was Eugene Joseph Marshall of Detroit, a senior in the law department and one of 28 African-American students at Michigan in the academic year 1902–3 (only four of whom were women). The *Daily* published a mini-profile of Marshall:

"Eugene Marshall, the colored orator, who graduates from the law department in June, has already several openings for his life work. He has an offer from the Collegiate Prohibition Association to travel through the south delivering lectures. He has also offers of positions as a teacher in two Baptist colored colleges.

"While he has not yet closed with any offer, he expresses his intention of devoting himself to the work of elevating his race by education.

"Marshall has been working his own way through college. While doing it, his life has not been a bed of roses. He came here with \$50. After paying \$45 tuition fees in the University he was left with \$5. With this small start he has made his way. He is employed at the Sigma Phi house. He is a hard student and to find time to study in addition to his work he sleeps few hours."

Marshall was in the final field of six when the U-M finals took place on March 13, at University Hall. The details from the Daily's coverage of the campus contest convey the significance of oratory as a form of mass education and entertainment from ancient times till the electronic age: Detroit Mayor W. H. Maybury presided at the campus finals; Prof. L. L. Renwick was at the organ; the three judges of thought and composition included the president of Ohio State University; and the three judges who would determine how well the students delivered their orations included a Toledo judge.

Taking as his subject the "heroic manner" in which Alexander Hamilton had fought for the unity of the American colonies and the passage of the US Constitution, Marshall won the U-M finals.

"For the first time in the history of American universities, a colored man has won his highest honors in oratory in fair and free competition with all comers," proclaimed the *Ann Arbor Argus*. "The announcement of his victory will be read with pleasure by all who are working for the betterment of the colored race."

Marshall, now Michigan's champion orator, was subjected to a dizzying round of activities in the days before he departed for Minneapolis. On April 27, Prof. and Mrs. Trueblood entertained him and the other debate and oratory winners at their home on East University Avenue and presented Marshall with the Chicago Alumni Medal. At the team's send-off on April 29, Marshall delivered his oration to the general public packed into University Hall, and then left to board the train for Minnesota with, as the Daily stated, "the best wishes of all."

Against contestants from the Universities of Minnesota, Wisconsin, Iowa, Chicago, Northwestern and Oberlin College, Marshall came in second (after

Northwestern's orator). The Daily reported that the audience had received the speech of "Michigan's colored orator" with an ovation and that "not the slightest discrimination against him on account of his color was observed from the time the delegation left Ann Arbor. Special pains had been taken by Minnesota that he should be received and cared for just as members of other delega-

Marshall graduated in June 1903, and the next year the Detroit Tribune covered his speech to the "colored inmates" at Jackson prison on the celebration of Emancipation Day. Following the tenets of Booker T. Washington, Marshall advised that "the true way to solve the Negro problem in the opinion of the speaker was to stop agitating it and it would solve itself."

Records of Marshall's subsequent career are scanty. In 1941, the alumni office of the Law School sent questionnaires to its graduates, and Marshall replied on his form that he had received a PhB degree from the University of Chicago in June 1908, and was practicing law at his residence on Michigan Avenue in Chicago.

'We give value received'

In the same 1902-03 academic year in which Eugene Marshall achieved recognition as the University's top orator, the Michigan Daily drew fire after it described the 24 African American men and four women on campus in these terms:

With the exception of Ab Howell, the football player, everyone including the girls, is working his way through school. Almost without exception, too, these plucky colored boys came to the University penniless, sometimes without sufficient clothing, looking for a chance to work.

One of the colored boys came to the University a year ago from Alabama, with \$75 in his pockets. He rode on a freight train, on the bumpers, between cars, and in empty cars, from Alabama to Toledo.

Nine of the 28 Black students wrote to protest this characterization-and in doing so they took a swipe at Eugene Marshall:

We deny in toto that there are any colored students here who have come to the University by riding freights, 'on bumpers, between cars, and in empty cars from Alabama,' or anywhere else.

The colored students here recognize the high standards of this University, and many are self-supporting, while others are from families fully capable to bear any expense incurred by their sons and daughters.

It is true that most of the colored students here are working in fraternities, but they do this because of the prejudice that exists in the boarding houses and restaurants against colored students. But one must not infer from this that we are begging for assistance. We give value received for everything

There is no Colored Students' Benevolent Club in Ann Arbor as heretofore stated by one Eugene Marshall, and the public is hereby warned not to contribute to any such organization purported to be existing here.

Signed: John A. Mason, James G. Sterrs, Wesley Rawles, W. T. Roberts, Wm. W. Bradley, A. Biggs, W. H. Jackson, Isaac Bethel, W. H. Dickson

Records that might shed more light on Marshall's alleged activities relating to the allegedly nonexistent club have not been found.-LRW.

NEW STUDENT CODE OF CONDUCT ON ANN ARBOR CAMPUS

he University's Board of Regents passed in November a Code of Student Conduct for the Ann Arbor campus by a vote of seven to one, with an amendment that it

be reviewed again in three years. Regent Deane Baker was the lone dissenting vote.

Vice President for Student Affairs Maureen A. Hartford said she expected the policy to go into effect Jan. 1, giving the University time to distribute the new policy. Hartford called the Code, wich replaces an interim code in effect since November 1992, "much better" than previous versions, one of which was overturned in

court. "I think we've gotten much more clear and much more aware about what due process is owed to students when they violate our codes of conduct," she said.

The Code describes "possible behaviors which are inconsistent with the essential values of the University community," out- Hartford lines procedures to respond to such behavior



and suggests possible sanctions "intended to educate and to safeguard members of the University community.'

The Code, in describing student rights, says: "Students at the University have the same rights and protections under the Constitutions of the United States and the State of Michigan as other citizens. These rights include freedom of expression, press, religion and assembly.

"The University has a long tradition of student activism and values freedom of expression, which includes voicing unpopular views and dissent. As members of the University community, students have the right to express their own views, but must also take responsibility for according the same rights to others. . .

"Students have the right to be treated fairly and with dignity regardless of age, color, creed, disability, marital status, national origin or ancestry, race, religion, sex, sexual orientation, or veteran status.

... Students have the right to be protected from capricious decision-making by the University and to have access to University policies which affect them."

Violations described in the Code include "physically harming another person including acts such as killing, assaulting, or battering," "sexually assaulting or sexually harassing another person," "hazing, stalking, or harassing another person" and "violating University computer policies," among other actions that "may contradict the essential values of the University community."

The Code states, "The University considers the procedures for resolving disputes a part of its educational mission and is committed to a process which provides both peer review and mediation."

The eight-student work group solicited input from the University community over a seven-month period using focus groups, electronic mail and open forums to gather comments, objections and suggestions.

"We talked personally with 500 students, and much of their input is what made this document the way it is," said Jack Bernard, now a graduate of the Law School. "We did what we could to make all aspects of this code to emphasize the educational aspects. This is a much more mediation-oriented document."

During the public comments portion of the Regents meeting, Anne Marie Ellison '98 of Cincinnati, chair of the Michigan Student Assembly's Student Rights Commission, urged the Regents not to adopt the code.

This code fails to safeguard student rights, and I urge you not to put this policy in place,"

Ellison was joined by Devorah Adler '96 of Great Neck, New York, in speaking against

the code during the public comments. Adler said the code "is not the product of the student community it is intended to govern." Adler said that the work group held the status of employees of the University while they were gathering in- Ellison put and were reluctant to debate the issues openly.



Mary H. Rave, president of the Washtenaw County Branch of the American Civil Liberties Union (ACLU); Eugene Feingold, ACLU board member and professor emeritus of health services management and policy; and Sallie R Churchill, ACLU board member and professor of social work, all spoke against the

"The code deals with nonacademic matters, with matters in which the University should not be involved," Feingold said. "Why should the University invent our own legal system?"

UITION AND

rom the ancient Greek birthplace of democracy to the Balkan and Chechnyan slaughterhouses, the legacy of human rights across the European continent is both fruitful and frustrating.

This "idea whose time has come" has been a long time in the coming. Greco-Roman Stoicism introduced the world to pre-"natural law" doctrine, according to which the universal forces of creation require that humans order their behavior so that it is consonant with the "immutable" laws of nature. Christian adoption and interpretation of natural law doctrine, most prominently in the teachings of St. Thomas Aquinas, sustained the flame of natural rights theory through the Middle Ages, although its emphasis on duty and its continued recognition of slavery and serfdom distinguished it from modern notions.

Contemporary belief in political and property rights harks back to the European Renaissance and its aftermath, in the work of Hugo Grotius, Francisco de Vitoria, and Emmerich de Vattal, the "founding fathers" of international law, and in such national milestones as Magna Carta (1215), the Petition of Right (1628) and the Bill of Rights (1689) in England. These thinkers anticipated the concept of international human rights through their discussion of such issues as a state's responsibility for injuring citizens of other

The pantheon of European natural rights thinkers in the Age of Enlightenment would include Bacon, Descartes, Locke, Spinoza, Leibniz, Montesquieu, Voltaire, Rousseau and Diderot, who supplied the fundamental intellectual heritage for the belief that reason reveals self-evident human possession of inalienable rights to life, liberty and property; that rights are not surrendered in the social contract; and that the failure of the state to secure such rights legitimates revolution.

The revolutions that indeed swept both North America and Europe owed their emergence in good measure to this Continental intellectual ferment; and in return, of course, they brought forth Jefferson's Declaration of Independence and Lafayette's Declaration of the Rights of Man and of the Citizen.

Nonetheless, the burgeoning "rights revolution" met with considerable reaction in the Europe that spawned it, a critique that continued well into the 20th century. Burke, Hume, Bentham, Mill, von Savigny, Marx, Maine, Austin and Wittgenstein, among others, questioned the primacy of natural law and natural rights theory, asserting competing Utilitarian, Positivist, Idealist, Nationalist and Communist explanations for the development of civil society.

The flame still burned, however, in the anti-slavery, industrial, public education, trade union, universal suffrage, and national constitutional and civil rights reform movements of the 19th century. It burned as well in the \$ customary international law doctrine of humanitarian intervention, which was invoked by varying alliances in several Eastern European conflicts throughout the course of that Chechnya: Russian troops bombarded civilian neighborhoods. century.

In the early 20th century came the development of the humanitarian law of war, the founding of the International Labor Organization and the post World War I Covenant of the ill-fated League of Nations.

IN OUR TIME

But it took the disastrous rise and fall of the mid-20th century European dictatorships to re-establish the centrality of human rights doctrine "once and for all." Ironically, it was only in the aftermath of the most destructive conflagration in human history that the European continent, which had so long before given birth to the ideal of individual rights, could begin to secure them on a wider communal basis.

That work began in earnest, even before the end of World War II, in the planning conferences for the postwar institutions of the United Nations and of European integration. The proceedings of the International Military Tribunal at Nuremberg (1945-46), at which ranking Nazi officials were tried and convicted of war crimes, crimes against peace and crimes against humanity, were endorsed by the new United Nations, whose Charter highlights "faith in fundamental human rights." Further, the UN has promulgated the "International Bill of Rights"-the Universal Declaration of Human Rights (1948), and the International Covenants on Civil and Political Rights, and Economic, Social, and Cultural Rights (1966)—as well as myriad other rights-related agreements.

Meanwhile, European regional action for the promotion and the protection of rights was anchored in the European Convention for the Protection of Human Rights and Fundamental Freedoms (1950), under the auspices of the Council of Europe. The judicial instrumentalities of the Convention (the European Court and Commission), and its political arm (the Committee of Ministers of the Council of Europe), have continued at a quiet but steady pace to build a functioning system of national implementation and international supervision of rights guarantees, one that has inspired still-embryonic regional experiments within the Americas and in Africa.

But most unfortunately, the jurisdiction of the European Convention system does not yet extend throughout all of Central and Eastern Europe, so that it has been powerless to reach the tribal rivalries rending the social fabric asunder within the former Soviet empire. Compounding this failure has been the unwillingness and inability of the Conference on Security and Cooperation in Europe (the "Helsinki Process") to assert itself in post-Soviet human rights catastrophes.

Although the Helsinki Final Act (1975) establishes respect for human rights and fundamental freedoms as a linchpin in guiding the relations of the NATO, former Warsaw Pact, and neutral and non-aligned European nations, the Conference remains without enforcement machinery and, in the most recent cases of atrocities, without political con-

Just this September, however, the "will to act" finally crystallized in NATO air attacks whose ostensible end was to avenge the latest human rights abuses of the Bosnian Serbs. Whether "too little, too late" or "better late than never," it remains to be seen, as of this writing, what impact those belated Western military actions will have on the political effort to achieve a "just and lasting" settlement in the Balkans. The bombing and the jaw-boning did produce a preliminary accord upon which permanent settlement may be based. Among its provisions were the following:

"... [T]o adopt and adhere to normal international human rights standards and obligations, including the obligation to allow freedom of movement and enable displaced persons to repossess their homes or receive just

The establishment of a Bosnia and Herzegovina Human Rights Commission to enforce ... human rights obligations." (New York Times, Sept. 19, 1995)

On November 21, the warring parties initialed an armistice and agreement incorporating these provisions; that document is scheduled to be formally signed in Paris in mid-December. As the world community wrestles with the heart-wrenching question of whether the long-awaited,





Rwanda: Tutsis and Hutus killed and starved one another

A half-century after the **Nuremberg Trials, civil** society wrestles with success and failure under the rule of law

By Howard Charles Yourow

American-brokered peace legitimizes ethnic cleansing and forced relocation within its territorial provisions, it may at least celebrate the cessation of hostilities while awaiting the arrival of the NATO peace-keeping force.

It is hoped that the permanent settlement will indeed render justice as to the twin human rights concerns of reparations for abuses and punishment of abusers.

As to the perpetrators, one courageous development to emerge from the contemporary Southeastern European gloom is the establishment of the International Criminal Tribunal for the Former Yugoslavia at The Hague, under the authority not of the European intergovernmental organizations but of the United Nations. This ad hoc court, now struggling for the added funding essential to its continued existence and effectiveness, has begun to issue indictments for war crimes and genocide, some against the highest levels of the Bosnian Serb leadership, and to investigate abuses on the part of all of the warring parties. The new peace agreement requires all parties to cooperate fully with the Tribunal, but does not require the arrest of indictees by the signatory governments. Those indicted are, however, forbidden from holding elected office. Reaching back to the Nuremberg and other World War II precedents, the success or failure of the Tribunal's mission may well condition the likelihood of the establishment of a permanent World Criminal Court with human rights jurisdiction,

Article 6 The following acts, or any of them, are crimes coming within the jurisdiction of the Tribunal for which there shall be individual responsibility:. . .

(c) Crimes against humanity: namely, murder, extermination, enslavement, deportation, and other inhumane acts committed against any civilian population, before or during the war, or persecution on political, racial, or religious grounds in execution of or in connection with any crime within the jurisdiction of the tribunal, whether or not in violation of the Four - Power Agreement on Crimes Against Humanity, August 8, 1945 domestic law of the country where perpetrated. . .

Chechnya to Cambodia, from Argentina to Vietnam, from China to Iraq.

THE PAST IS PROLOGUE

How then can Europe move forward toward fulfillment of the human rights ideals that it has for so long held up to

The health of human rights in Europe itself will continue to depend upon, as well as to shape, the larger context of ontinental integration. A patient perseverance has, despite all, rekindled the possibilities of a secure; prosperous and democratic Europe in the half-century since the end of World War II. The strengthening of the national and international rights promoting institutions must remain the very highest priority. As the countries of the East join

which would range from the Balkans to Rwanda, from themselves to those of the Center and of the West, a new European identity can merge with the ancient local, national and regional identities.

The foundations have been laid-the élites and populace must somehow continue together to maintain the basic criteria: stable, democratic systems within functioning mixed-market economies, and respect for the rights not only of the individual but of ethnic, religious and racial minorities as well. In this light, the recent and ongoing tragedies must be taken as mirrors reflecting necessary work yet to be done. The rape and strangulation of Bosnia, and the butchering of the Chechnyan innocents, can best be avenged by a Europe determined to live up to the best of its ancient and recent past.

Still painfully mindful of its disastrous failures, Europe must turn to its real successes for the inspiration needed to fashion human rights progress in the time ahead, not only for the sake of its own well-being but for the sake of the whole world's as well.

For the whole wide world is shrinking, and this nowcommon wisdom does make us increasingly conscious that no man or woman, no land, and indeed no continent is any longer an island unto itself. The recent resistance of the Chinese regime, despite its playing host country to the UN Fourth World Conference on Women, to the evolving universal notions of the equality of women, is a dramatic case in point.

Astride the rich mixture of historic tribal, national and regional identities the world over stands our common human identity, our shared lot on this small blue planet, whether we are black, white, brown, yellow or red. Europe's story and continuing struggles are valuable to those who will guide the destinies of the rest of the world's people. Likewise, the history and drama of all peoples grasping toward the now-universal goals of the ongoing human rights revolution are of interest and import to Europe's own unfinished business.

The full and frank exchange of information and opinion-person-to-person, nation-to-nation and region-to-region-can only help move the human family forward together. In the end, that is what will count, and above all should have counted.

Howard Charles Yourow'86 LLM ,'93 S7D, of The Bronx, New York, an independent scholar and consultant on international human rights law, says readers may wish to contact a global clearinghouse for non-governmental humanitarian organizations, the Human Rights Internet at the Human Rights Centre, 8 York St., Ottawa, Ontario, Canada, ONKIN 5S6. E-mail: hri@hri.ca



Bosnia: Driven from their homes, Muslims may be permanently 'ethnically cleansed' by the recent peace agreement.

By Jared Blank

f you own a television you've seen Hal Cooper's work. Even if you don't believe in watching television, you've at least heard of Hal Cooper's work. The U-M grad (BA '46) has directed (or executive produced or associate produced or written or created or you-get-the-point) countless television programs. Heard of Search for Tomorrow? He was one of its first directors. I Dream of Jeannie? He directed 70 episodes. Maude? He was

director and executive producer. His directing resume is an amazing summary of how many of us spent countless afternoons and evenings watching The Brady Bunch, Gilligan's Island, The Odd Couple, The Dick Van Dyke Show-more than 50 different programs have at least one episode bearing his directing credit.

Cooper is spending five weeks on campus to direct James Thurber's The Male Animal at the Lydia Mendelssohn Theatre February 22-25. While he has returned to Ann Arbor in recent years to watch his son James '94 perform as a theater major, this is the first time he has worked at the Mendelssohn stage since 1946 when he played a villain in Angel Street.

"It's kind of a kick to come back," he says.

Cooper began his career in New York City as a successful child actor, which usually means a certain end to a budding career in show business (ask the cast members from Diff'rent Strokes), but he overcame the jinx. After starring in Big Brother's Rainbow House on the Mutual Radio Network from 1936-1940, he enrolled at Michigan, majoring in theater. He left the University for a short time to serve in WWII but returned to earn his degree in 1946.

Following a stint as the associate director of the Dock Street Theatre in Charleston, South Carolina, Cooper moved to New York City.

In February 1948 he received a phone call that began his career in television.

"I was told that the DuMont Network was looking for somebody to create a television show for pre-school age kids," Cooper recalls. "They called the program TV Baby Sitter. The idea was to keep the child occupied while the mother did housework. I developed a format which today is like Sesame Street-teaching the alphabet with fun

and music, using stories to teach a moral. But compared with the expensive special effects used on Sesame Street, our production was using an oatmeal box with a string."

Wilmer the Pigeon and a cast of characters premiered the completely unrehearsed program in late 1948. A glowing review in the Nov. 7 New York Times said Television Baby Sitter was the answer "for parents who have searched endlessly for suitable broadcast material for children of pre-Lone Ranger vintage."

But, the article continued, "the idea of a nation of housewives sitting mute before the video machine when they should be tidying up the premises or preparing the formula is not something to be grasped hurriedly. Obviously, it is a matter fraught

with peril of the darkest sort." Despite the threat of dark peril, the series ran until 1951.

In 1958 Cooper moved to Los Angeles with the dream of working on nighttime programs. ("Daytime was considered junk, nighttime was prestige. Even junk that was on at night was prestigious.") His break came in 1962 when Carl Reiner asked him to direct two episodes of the Dick Van Dyke Show. Once he had the nighttime credit, his career took off.

The young man from New York was taken by surprise by his next project-directing Death Valley Days during its post-Ronald Reagan period. "I knew nothing about horses or cowboys, but theater is theater and actors are actors. It was a big production in a suitcase. We shot on 16mm films, no lights-just reflective boards. It was shot for peanuts. We had to do a full half-hour show in two-and-a-half days. To save money, at the end of filming one show we'd turn the cameras around and film the begin-

ning of the next show-pretending as if it were a different location."

After 16 episodes Cooper received a better offer-directing I Dream of Jeannie. "Sitcoms are better paying, easier and more familiar," he says. Plus, he no longer had to give stage directions to horses or spend long days in the Arizona desert.

After Jeannie, the director John Rich (also a U-M grad) brought Coo-

per aboard the Gilligan's Island crew as associate producer. One of his first duties was to oversee the building of the famous lagoon, which sat on the CBS Studios lot until this year.

Cooper's first stint on Gilligan's Island lasted barely longer than the Skipper's fateful three-hour tour. John Rich was fired after a fight with a CBS executive who gave Rich the pink slip and told him to "take the guy who came in with you, too"-and so Cooper went. But he returned after the first season, following the departure of the shorttempered CBS exec, and directed episodes of the sitcom.

He directed multiple episodes of many other sitcoms in the late 1960s and early 1970s, and settled in as director and executive producer of the Beatrice Arthur hit,

"Maude was a love affair right from the beginning. It was the happiest six years of my life," Cooper says. The program stirred controversy with an episode devoted to Maude's decision to have an abortion. "There was some backlash," Cooper recalls, "and some people said they wouldn't watch anymore-some stations even banned it." Although William Paley, then-owner of CBS, backed Cooper and Lear, Cooper says he is "not sure if they could do the same episode today."

Cooper has not worked on a series since the shortlived The Powers That Be in 1992. "In the last two years I've been saying, 'No, thank you.' It's no fun anymore." He bemoans the current status of situation comedies. "Today is such cookie cutter stuff. Everybody does what everybody does. The reality is based on prior successful sitcoms rather than on life. There are 10 Friends on the air right now. You cannot formula-ize success. That extra element is elusive. Everybody thinks they know what that element is-say, a boy with a dog, for a while everyone had the boy and the dog-the sum of the parts does not equal the whole. Anything creative has an air of mystery about it. Somehow, sometimes, mysteriously you put the right colors on the palette."

He also believes that the way sitcoms are made has lessened the quality of the programs. "When you create a show," he says, "there's a big distinction, a huge distinction, between what you think is good and what you think people will like; 10 to 20 years ago you'd bring an idea you like to the network exec and he'd tell you whether he liked it or he didn't like it. Today, I never hear an exec say, 'I like it' or 'I didn't like it.' It's always, 'They'll like it' or 'they won't like it.' There's very little show business left in the executives who make the decisions about what goes on the air. It's all done with research and polling and actuarial figures and demographics. A lot of it, I'm sure, to an extent is accurate, but it loses heart. It lessens the ability to be innovative."

As a case in point he cites Love, Sidney, a program for which he was executive producer and director. Swoosie Kurtz and Tony Randall starred in the series, which featured Randall portraying a gay character. Critically, the show was a hit but it was killed after one season.

"Middle America and the Bible Belt were not interested in a homosexual Jew from New York," Cooper sighs. "The homosexuality was not featured anymore than it is with your own friends who are gay-you don't sit around and talk about it. They also didn't like that a gay man was hanging around a house with a little girl. It was a darling show."



Hal Cooper starred in Angel Street with Dorthy Murzerk in 1946; 50 years later he'll direct student actors on the same Mendelssohn stage.

hen PhD candidate Fan Zhang entered the the 19th Gatorade Ironman Triathlon World Championship in Kailua-Kona, Hawaii this October, he said his goal was just to finish "and set a precedent for one billion Chinese."

Zhang was not only the sole triathlete from the University of Michigan in this year's contest but also of his homeland. "The sport of triathlon is virtually nonexistent in China," he says, "due to the lack of training facilities and top-notch bikes, plus the roads are always congested," says Zhang, who was a collegiate track star in Beijing before coming to the United States to attend Auburn University.

A month after successfully setting his precedent, Zhang and a dozen or so fellow students from the College of Pharmacy gathered for a potluck during the taped television program covering the event. All kept their eyes peeled for a possible glimpse of Zhang.

Just three days earlier, he had defended his doctoral dissertation on the performance of two cholesterol-lowering drugs called bile acid sequestrants. "Because of it efficacy problems, large doses of the drugs are needed to be effective," Zhang says. "So patient compliance is really poor and may lead to therapeutic failure. We try to single out the reason behind this and suggest strategy for improvements that would make the therapy more effective and less costly."

As for his own cholesterol level, training for a 2.4mile ocean swim, followed by a 112mile bicycle race and then a 26.2mile marathon run-all to be completed within 17 hours-takes care of that. On weekdays he swims or runs at lunchtime and tops off the day with a two-hour bike ride; the week-

end regimen is more than double that.

At the potluck with his fellow students, who joined faculty in raising \$540 toward his travel expenses, Zhang described some



Zhang is training hard to become one of the few competitors to double in the Ironman Triathlon and Boston Marathon in the same year. 'I will suit up for China again' he says. It is an honor to represent my own country.

of the high points of the competition for him while the screen showed top Ironmen and Ironwomen experiencing the gamut of sensations from the proverbial thrill of victory to the multiform agonies of defeat.

As the camera closed in on the ultimate winner of the men's competition, Zhang told his fellow viewers to watch carefully because this was a point where he, himself, might appear on camera on his second-hand, 21-pound

"I passed him right along here," Zhang said with a big grin. "It made me feel very happy to pass the leader." After a pause, he added, "Even

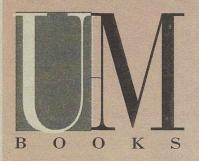
though I was still on my bike at the time, finishing the second segment and he was completing the run, it still made me feel happy. And it also thrilled me to realize that I was competing with the elite triathletes from all over the world."

Any source of good cheer is welcome to triathletes on the move. For many contestants, even success was agonizing, Zhang affirmed, as the TV program devoted considerable time to the misfortune of a top woman contestant. Leading her field and only a few dozen yards from victory, she collapsed for several minutes, finally rising to stagger the last painful and delirious yards across the finish line.

The men's winner finished in 8:20:34; the top woman in 9:16:46; and Zhang beat about half the field of 1,500 from 52 countries with his time of 12:14:48.

Although he did not become ill or experience great pain, Zhang said he was drained of energy throughout the day following the event. Now he's training for the 100th Boston Marathon this April and plans to compete in the 1996 Ironman competition as well.

But before taking that plunge, Zhang will first enter a contest with vastly more participants—the rat race. He is joining the Parke-Davis pharmaceutical research labs in January as a post-doctoral fellow, where he'll work on the regimen for developing new drugs.



Suggested reading: Books by U-M faculty and graduates, and works published by the University

CURLY SMOKE:

AN ANNEKE HAAGEN MYSTERY

By Susan Holtzer, St. Martins Press, New York, 1995, \$20.95 hardcover.

Holtzer's follow-up to her first novel, Something to Kill For, finds us once again in the presence of 40-something and divorced Anneke Haagen. The Ann Arbor native, after losing her home and belongings in a fire, seeks temporary respite in Mackinac Court, an eclectic group of homes whose residents are embroiled in conflict with an office-park developer. Conflict soon turns to conspiracy and murder, and Anneke and her police lieutenant lover try to sort out the details. A diverse mix of computer lore, romance and whodunnit, Curly Smoke is an appealing read for any mystery buff.-Paula Saha '96.

MICHIGAN AUTHORS

By the Michigan Association for Media in Education, Hillsdale Educational Publishers, Hillsdale, Michigan, 1993, \$39.95

Michigan Authors brings together an extensive listing of writers who were born in, live in or write about the state of Michigan. Many are U-M faculty members and graduates, from fiction writer Charles M. Baxter of the English department to freelancer Josephine Wunsch '36. Among the 745 authors listed are wives of Michigan governors, construction workers, farmers, judges, housewives, a bee keeper, a nun and a circus performer.-M.Q. Thorburn '97.

BEACON HILL: A LIVING PORTRAIT

By Barbara W. Moore '53 and Gail Weesner, with photographs by Southie Burgin, Century Hill Press, Boston, 1992, \$22 softcover, \$33 hardcover.

Moore and Gail Weesner take the reader

on a street-by-street guided tour through this historic Boston neighborhood in Beacon Hill: A Living Portrait. Stops along the way include a number of private homes of historical sig-

Moore and Weesner trace the history of

Beacon Hill from its beginning as "a range of rocky hills through its development in the 1800s and its vital struggle for preservation in this century."-MQT.

FEAR OF MATH: HOW TO GET OVER IT AND GET ON WITH YOUR LIFE

By Claudia (Cogan) Zaslavsky '38 MA, Rutgers University Press, New Brunswick, NJ, 1994, \$14.95 paper, \$37 hardcover.

Drawing on 500 autobiographies of students and professionals who feared math or thought mathematical reasoning was beyond their capabilities, Zaslavsky guides parents, teachers and students through a clear and effective regimen to overcome math anxiety and develop competence, appreciation and even delight in mathematical reasoning and problem-solving. She takes particular aim "at the myth that women and minorities are not good at math" and connects math competence with "a boost in self-esteem-and income." Zaslavsky is also the author of Africa Counts: Number and Pattern in African Culture, revised edition 1995, available from Independent Publishers Group 1-800-888-8741, \$14.95.-JW.

SUPER STUDENT/HAPPY KID

By Sally D. Ketchum '59, Summer Island Press, Williamsburg, Michigan. \$9.95.

A compendium of 40 chapters of concrete

suggestions for parents, high schoolers, middle schoolers and younger students, this practical guide offers "good basic advice for a lifetime of learning," notes Dean Cecil G. Miskel of U-M's School of Education. Elk Rapids (Michigan) 7th grader Lauren Wilkinson found that "the test tips will help kids who don't have much experience most of all." Cheryl Wall, a young mother, said, "My favorite section was 'Quiet."-IW.

THE CATHOLIC ETHIC IN AMERICAN SOCIETY

By John E. Tropman, Jossey-Bass Inc.
While work, wealth and self-reliance are the basic tenets of sociologist Max Weber's famous Protestant ethic, an emphasis on sharing provides the basis of the newly identified Catholic ethic, says Tropman, U-M professor of social work. Analyzing perspectives of both Christian groups on the value of money and work, and the importance of family, community and the individual, he concludes that while Protestant ethic values do support concern for others, "that concern is subdominant to the core value of work, wealth and achievement." His primary conclusion is that "people find it easier to provide help to others-and especially to the poor and disadvantagedfrom within the Catholic ethic, where providing help to the poor is part of the larger ethos of sharing."-Bernie DeGroat (U-M NIS).

Not all paintings of MOBY-DICK look mighty like a WHALE

By James M. Manheim

hrough his creation Ishmael, Herman Melville declared in 1851 that the great white whale Moby-Dick was a creature of such complexity and unknowability that it would necessarily remain "unpainted to the last," despite the various representations of whales that proliferated in Melville's time as they do in ours.

Alumna Elizabeth Schultz (PhD '67) has devoted much of her professional career to examining the creative disregard in which modern American artists have held Melville's notion of his whale's unpaintability.

Schultz, a professor of art history at the University of Kansas, dis-

cussed several painterly treatments of Melville's novel in a lecture titled "Creating a Cultural Icon: The Case of Moby-Dick." Her lecture introduced the U-M Museum of Art exhibition "Unpainted to the Last": Moby-Dick and American Art, 1930-1990. Schultz is the curator of the exhibit, organized by the Spencer Museum of Art at the University of Kansas.

Moby-Dick's unconventional structure

Moby-Dick's unconventional structure and its relentlessly philosophical spirit alienated most of the novel's 19th-century readers. But early in this century, literary scholars identified Melville's whale as one of American culture's most resonant and richly ambiguous symbols. Ever since then, The Whale has fascinated American artists of every stripe.



Ahab, Boardman Robinson, 1943

Commercial representations of Moby-Dick abound. The whale, Schultz noted, has adorned potholders and bath curtains and lawn sprinklers, and has lent its name to restaurants, computer disks and maternity clothes. But she offered the art works presented in "Unpainted to the Last" as a serious counterpoint to easy commercial meanings.

The exhibit's diverse and experimental images challenge "the popular and commercial reductionist and melodramatic interpretations of both the novel and the whale," she said. Schultz pointed to six general modes in which artists have responded to the novel: narrative, abstract, political, feminist, contemporary and icon-questioning.

Narrative realists such as Boardman Robinson and Mark Milloff have reacted to the novel's epic narrative scope. Realists, Schultz said, tend to assign "a heroic stature to Melville's characters and a magnitude to both the novel and the whale, thereby reinforcing its iconization." Robinson's *Ahab*, part of a group of illustrations for a 1943 book-club edition of *Moby Dick*, captures the novel's intensity, the elemental driveneness of its characters.

Contemporary experimentalists, on the other hand, have shared with Melville himself a strong tendency toward defiance of conven-



Insanity Series #4: He Who Has Never Felt Madness, Gilbert Wilson, 1950

Madness, Gilbert Wilson, 1950

their own pathbreaking explorations of chaotic inner worlds. In his *Insanity Series* Gilbert Wilson executed a fascinating transition from realism to surrealism to abstraction as he depicted Ahab's descent into madness. His Ahab's face fragments along the line of a scar that frequently appears in Wilson's representations of the mariner.

Political painters and pop-art satirists have questioned Moby-Dick's value as a cultural icon. Ecologically minded artists have taken the whale for a symbol of the natural world under attack by human conquest. Richard Ellis, a founding member of the Save the Whale movement, imagines Moby-Dick not as the solitary force Melville brooded over, but as a wounded member of the community of whales.

Feminists have responded to the total absence of important female characters in the novel, questioning the heroism of its characters and likewise meditating on the novel's engagement with the natural world.

Schultz's seemingly specialized pursuit, then, has led her close to some

of American art's deepest creative wellsprings. She ended her lecture with Ishmael's ecstatic peroration: "Nor when expandingly lifted by your subject, can you fail to trace out great whales in the starry heavens, and boats in pursuit of them." The sheer variety of artists who have traced out great whales in recent years suggests the continuing power of Melville's novel as a lens through which American artists have observed their own culture.



tional aesthetic bound-

aries and forms. The ab-

stract expressionists were

drawn to the experimen-

tal quality of Moby-Dick, or The Whale, to its fascinat-

ing, murky interiority.

Jackson Pollock and Frank

Stella, both represented in

"Unpainted to the Last,"

found in the novel's qual-

ity of unconscious rumi-

nation an analogue for

White Whale with Harpoons, Richard Ellis, 1984

Other artists among the 80 exhibited include Rockwell Kent, Robert Motherwell, Robert Indiana and Jerry Beck. The exhibition runs through December 24 at the Museum of Art. Schultz's *Unpainted to the Last: Moby-Dick and Twentieth-Century American Art*, was published earlier this year by the University of Kansas Press.

Whether these painterly efforts have proved Melville wrong, however, is another matter—one subject to a whale of a debate.



Attacking the Pod, Mark Milloff, 1986



Moby Dick, Vali Myers, 1972-74



Queequeg's Coffin, Jerry Beck, 1988

Michigan Today

JOHN WOODFORD- Executive Editor
-SHERRI MOORE- Graphic Designer
BOB KALMBACH- Photographer
BARBARA WILSON- Advertising
KATHLEEN CONRAD- Correspondence

Michigan Today is published four times a year by News and Information Services, The University of Michigan, 412 Maynard St., Ann Arbor, MI 48109-1399 Telephone: 313-764-0105 E-Mail: Johnwood@umich.edu

Circulation: 290,000

Information Services

JAMES J. DUDERSTADT- President
WALTER L. HARRISON- Vice President,
University Relations
JULIE PETERSON- Director, News and

U-M Regents: Deane Baker, Ann Arbor; Laurence B. Deitch, Southfield; Andrea Fischer Newman, Ann Arbor; Daniel D. Horning, Grand Haven; Shirley M. McFee, Battle Creek; Rebecca McGowan, Ann Arbor; Philip H. Power, Ann Arbor; Nellie M. Varner, Detroit; James J. Duderstadt, President, Ex-officio.

The University of Michigan, as an Equal Opportunity/Affirmative Action employer, complies with applicable federal and state laws prohibiting discrimination, including Title IX of the Education Amendments of 1972 and Section 504 of the Rehabilitation Act of 1973. It is the policy of the University of Michigan that no person, on the basis of race, sex, color, religion, national origin or ancestry, age, marital status, sexual orientation, disability or Vietnam-era veteran status, shall be discriminated against in employment, educational programs and activities, or admissions. Inquiries or complaints may be addressed to the University's Director of Affirmative Action, Title IX and Section 504 Compliance, 2012 Fleming Building, Ann Arbor MI 48109 (313) 764-3423(TDD 747-1388).