





By the time you read these words, the students in this fall's entering class will have announced their astute decision to matriculate at Case. As I write, however, these high school seniors are still weighing their options, and we are unabashedly courting them—with Experience Case days, our first Liberal Arts Weekend for prospective humanities majors, and faculty calls to accepted students, to describe what they can learn and achieve as Case undergraduates.

These calls are a joy to make. Some of the students are flabbergasted to answer their cell phones and find that they are speaking to a professor! (As one of them said to me, "What is your title?... And you're making these calls yourself?") But they begin to talk about their hopes and dreams very quickly.

Such remarkable young people! Courteous, engaging, and impossible to pigeonhole. I have notes on individual students who told me they were interested in civil engineering and Latin; in history and Antarctica; in biology and theater arts. One student, whom I interrupted during a volleyball trip, proclaimed her interest in the new communication studies department and in classics. And in response, I said to all of them: *You are the kind of student we have in mind for SAGES. We are as eager to cross disciplinary boundaries as you are. You would be coming to the right place.* 

I felt an unexpected, anticipatory pride in these students, and a resurgent pride in the scholarly community I was inviting them to join. And I trust that everyone in the College, as well as our valued alumni and friends, will feel the same.

Mark Turner Institute Professor and Dean

### A MIND SO RARE Merlin Donald joins Case as chair of cognitive science

Merlin Donald, a cognitive neuroscientist whose work explores the evolution of culture and the "subtler capabilities" of the human mind, has been named founding chair of the College's department of cognitive science.

Donald is the author of many scientific papers and two influential books: *Origins of the Modern Mind: Three Stages in the Evolution of Culture and Cognition* (Harvard University Press, 1991), and *A Mind So Rare: The Evolution of Consciousness* (W.W. Norton, 2001). Since 1972, he has been professor of psychology and education at Queen's University in Ontario, Canada. He has also been, at various times, a visiting professor at Harvard, Stanford, the University of California at San Diego, and University College, London. Donald was awarded a Killam Research Fellowship from 1994 to 1996, and is a Fellow of the Canadian Psychological Association and the Royal Society of Canada.

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# Schubert Center Child Policy Initiative to link research, education, policy

More than 300 faculty members across the university—in the social sciences, the humanities, medicine, dentistry, management, public health, nursing, and law—are engaged in child-related research and teaching. Now, in its latest initiative, the College's Schubert Center for Child Development is seeking to link research, education, and policy in this vital area.

Cheryl Lynne Morrow-White, M.D. (FAAP), has been named director of the Child Policy Initiative. A board-certified pediatrician who earned her B.A. at Harvard and her medical degree at the Case School of Medicine, Dr. Morrow-White has assumed major clinical and administrative roles with the Cleveland Clinic, Mt. Sinai Medical Center, and MetroHealth Medical Center. She has also been actively involved in advocacy as a national director of the American Heart Association.

### WHAT'S INSIDE

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# SAGES PREPARES FOR FALL LAUNCH

For SAGES, Case's innovative model for undergraduate education, the spring and summer of 2005 will seem like both a prelude and a countdown. Under the College's leadership, the program is completing a three-year pilot phase, and in the fall, it will be implemented universitywide. This means that, for the first time, an entire entering class—including students from arts and sciences, engineering, nursing, and management—will be enrolled in the Seminar Approach to General Education and Scholarship.

Here is an update on SAGES' preparations for launch in Fall 2005:

- SAGES has collaborated with the office of undergraduate admission to recruit students seeking a distinctive undergraduate experience. Last fall, brochures about SAGES went out to 38,000 high school students across the country, and during this spring's Experience Case days, prospective students and their families are attending mock seminars that introduce them to SAGES-style discussion. While many factors contribute to success in attracting applicants, the admission office regards SAGES as a significant draw. This year, the number of students applying to Case rose by 28 percent over last year's total, to a record-breaking 7,036.
- The renovation of quad-level Crawford Hall—the home of SAGES Central and the new SAGES café began in March and will be completed by midsummer. This project will create a novel, highly visible center for intellectual and social activity at the heart of the Case campus. The design includes work areas and conference space for visiting fellows, faculty, and students; a glass-walled seminar room, equipped for technologically



Kurt Koenigsberger, assistant professor of English, talks with SAGES students during a trip to the Crawford Auto-Aviation Museum, part of the Western Reserve Historical Society. Students from Koenigsberger's class "Traveling Cultures in Britain" visited the museum to obtain a context for essays by Virginia Woolf on the psychological and social impacts of the motorcar and airplane in the 1920s and 1930s.

enhanced communication and instruction; and an upscale café that will serve Peet's Coffee, remain open at night, and be staffed by baristas whose expertise in preparing espresso will be matched only by their authoritative knowledge of all things SAGES.

- SAGES seminar leaders for next year will include faculty members from nearly every department in the College and all of Case's professional schools.
- The first SAGES Fellows—visiting scholars appointed by Dean Mark Turner to teach University Seminars —will arrive in August 2005. Among them will be the first Samuel M. Savin SAGES Fellow, a distinction reserved for a senior scholar with an especially distinguished record of teaching and research. For Fall 2005, the Samuel M. Savin Fellow will be Edward G. Lawry, professor of philosophy at Oklahoma State University.
- Henry Louis Gates, Jr., chair of the Afro-American Studies Department at

Harvard University, will present a university lecture, addressed specifically to the new class of SAGES students, on September 15. Planning has also begun for a lunchtime SAGES concert on Wade Oval in mid-September.

For more information about SAGES, or to follow the progress of the Crawford Hall renovation by webcam, please visit www.case.edu/sages.

# art/sci

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# CHILD POLICY continued



"I anticipate interactions at all levels of the university as I address and champion the development of a robust child policy program at the Schubert Center for Child Development," said Dr. Morrow-

Cheryl Lynne Morrow-White M.D. (FAAP)

White. "I have always found the Case environment intellectually stimulating and supportive. It is with great expectations that I return to serve the university and the needs of children."

The CPI has three objectives, according to Jill Korbin, professor of anthropology and associate dean in the College, and Rick Settersten, professor and chair of sociology, who co-direct the Schubert Center.

The first is education. "Drawing on the expertise of local child advocates and policymakers, we will begin to develop policy modules that can be incorporated across the undergraduate curriculum," said Korbin. "We are aiming to create a more child policy-focused curriculum at Case, employing three strategies: curricular infusion, curricular expansion, and experiential learning." As part of the curricular expansion, a new course on child policy will be offered for the first time in Fall 2005.

On the experiential learning side, the CPI has received support from the Mann Endowment Fund to arrange student "externships" at local community agencies. Two Arts and Sciences undergraduates were recently named Mann Fellows and are completing service projects this spring. Rebecca Cohen, a senior majoring in sociology and minoring in psychology and anthropology, is currently working at the Center for Community Solutions on an early childcare and education campaign. Elizabeth Kiracofe, a junior majoring in psychology and minoring in early childhood studies, chemistry, and biology, is working for Voices for Children of Greater Cleveland on a project to assess and foster health care professionals' interest in child advocacy.

The initiative's second objective, Settersten noted, is research. "We plan to initiate a new series of publications to translate university-based child-relevant research for the use of policy and practice audiences," he said. These "Research and Policy Briefs" will summarize new and ongoing child-related research at Case and highlight implications for policy and practice in the field.

Communication is the CPI's third objective. "We want to foster ongoing exchanges between academics and policymakers on child-related matters through symposia, policy-relevant faculty talks, and other communications vehicles," Korbin said. For example, the Schubert Center has organized a CPI colloquia series called "Case Conversations on Children in Research and Policy." It has also partnered with the Case Center for Women and the Baker-Nord Center for the Humanities for a special series of lectures on "Girls and Girlhood."

Currently, the CPI is conducting a campus-wide survey of Case faculty and will produce an inventory of their research on children and childhood. This inventory will be posted on the Schubert Center's website later this spring.

The CPI is supported by a two-year start-up grant from The George Gund Foundation and The Cleveland Foundation.

#### SHUTT JOINS COLLEGE AS PYTTE ASSOCIATE PROFESSOR OF PHYSICS



Thomas Shutt has been appointed the first holder of the Agnar Pytte chair in the department of physics. Named in honor of Case President Emeritus (and physicist) Agnar Pytte, who led the university from 1987

Tom Shutt

to 1999, the chair was endowed through a generous gift from The Sherman Fairchild Foundation. The Pytte endowment supports an eminent scholar in the field of condensed matter physics, particle theory, particle astrophysics, or cosmology.

Formerly on the faculty of Princeton University, Shutt, a particle physicist, joins the College as an associate professor. He received his doctorate from the University of California, Berkeley, in 1993.

As a new member of Case's Center for Education and Research in Cosmology and Astrophysics (CERCA), Shutt has renewed a collaboration with physicist Daniel Akerib that began at UC Berkeley, where the two were postdoctoral fellows. Both Shutt and Akerib are currently involved in the XENON project, a consortium of scientists from Case, Columbia, Brown, Lawrence Livermore Laboratory, and the University of Florida who are engaged in the search for dark matter in the universe.

In addition to hiring current Case graduate students for his research group, Shutt has brought with him from Princeton two third-year graduate students, Eric Dahl and John Kwong. He will also be joined by Alexander Bolozdynya, a research associate who formerly worked with Akerib but is now a member of the XENON team.

"I'm thrilled to have Tom here. He wonderfully complements the existing program," said Akerib. "Given our closely related science goals, we will have the opportunity to work together again on joint projects, including XENON, and take advantage of synergies, each other's expertise, and intellectual ties between members of our groups."

# ARTS AND SCIENCES IN BRIEF

#### Dittrick receives world's largest historical birth control device collection

Case's Dittrick Medical History Center has become home to a major collection tracing the development of contraceptive technology from ancient times to the present.

With more than 650 artifacts and 150 books and ephemera from around the world, the Percy Skuy Collection on the History of Contraception is the largest The artifacts in the collection include amulets and folk medicines of varying efficacy, as well as a panoply of devices developed in modern times. Taken together, they tell a story that often combines, in Skuy's words, ingenuity and naïveté.

"Throughout history," he remarks in a catalogue of the collection, "people have employed a vast range of contraceptive practices that, however incredible and ineffective they may seem, were always used with good intention and in good faith."



James Edmonson, left, chief curator at the Dittrick Medical History Center, introduces Percy Skuy, collector.

assemblage of its kind. As a traveling exhibition, it has been displayed at medical meetings from Singapore to Switzerland. James Edmonson, chief curator at the Dittrick, first saw the collection at a Medical Museum Association meeting in Toronto in 1998, but never imagined it would one day reside at Case.

Percy Skuy is the former CEO of Ortho Pharmaceutical (now Janssen-Ortho), a Canadian pharmaceutical company specializing in women's health. A "born saver," as he puts it, he assembled the collection over a period of 40 years, always with the goal of illustrating "the motives and myths of contraceptive practices." In 2000, when Skuy began to look for a permanent home for the collection, his search brought him to the Dittrick, established in 1898 as a part of the Cleveland Medical Library Association and one of the five leading medical museums in the United States.

Edmonson promptly assembled a group of College faculty members, including Jonathan Sadowsky and Renée

Sentilles (history), Athena Vrettos (English), and Dorothy Miller (Center for Women), to suggest ways in which the collection might promote research and learning in the College and across the university. Edmonson also outlined how the Dittrick would care for and present the collection. After extended consideration, Skuy recommended that Janssen-Ortho donate the Skuy Collection to Case. A formal presentation was held at the Dittrick in early March.

Later this spring, a museum advisory committee of representatives from the faculty and the Cleveland community will work with Edmonson to design a permanent exhibition for the collection. There are also plans for an international symposium and a virtual exhibition online.

Artifacts from the collection are currently on display in the Dittrick. The library is open Monday through Friday 8:30 am to 7 pm; Saturday 9 am to 5 pm; and Sunday 1 to 6 pm.

# Humanities Week explores homelands and security

In mid-March, the Baker-Nord Center for the Humanities hosted Humanities Week 2005: "Homelands and Security." The event featured artists, playwrights, filmmakers, and scholars who reflected on the meaning of home, homeland, identity, and belonging.

The keynote speaker for the week was Art Spiegelman, one of today's most influential comic book artists and illustrators and the Pulitzer Prize-winning creator of the Holocaust narrative *Maus: A Survivor's Tale.* Spiegelman delivered his talk, "Comix 101: In the Shadow of No Towers," to a crowd of almost 600 people at the Cleveland Institute of Art. In addition, Ranjana Khanna, Humanities Week Visiting Scholar and associate professor of English and women's studies at Duke University, delivered a series of lectures on the concept of asylum.

Also featured in Humanities Week's public lecture series were artist Yolanda López ("The Virgin of Guadalupe and Her Impact as a Role Model"); Stephanie Coontz, professor of history and family studies at Evergreen State College ("Courting Disaster: The Past and Future of Marriage and the Family"); and Charles Cantalupo, a poet, filmmaker, and professor of English, comparative literature, and African studies at Penn State. Cantalupo gave a poetry reading and screened his latest documentary film, "Against All Odds." The López lecture was co-sponsored by the Center for Women, and the Coontz lecture by the College Scholars Program.

The theme of next year's Humanities Week, and of the Baker-Nord Seminar for Fall 2005, will be "Children and Childhoods." The Seminar program, which awards fellowships to Case faculty and to visiting scholars and artists, sponsors a series of discussions each fall intended to open new avenues for research and creative work in the humanities.

#### Protasiewicz awarded NSF "creativity grant"

John Protasiewicz, professor of chemistry, has received a special two-year, unsolicited grant from the National Science Foundation. Such awards provide continuing support to researchers whose NSFfunded projects have already yielded significant results. The purpose, according to the agency, is to "offer the most creative investigators an extended opportunity to attack adventurous, 'high risk' opportunities in the same general research area."



With this support, Protasiewicz plans to build on his prior work in designing new forms

John Protasiewicz

of plastics or polymers. Most research in this field, he explains, "is based on organic chemistry and thus involves mostly the elements carbon, hydrogen, oxygen, nitrogen, and sometimes sulfur. We believe there is a lot of potential for the 100 or so other elements of the periodic table to be utilized for these interesting materials." Such materials may lead to startling innovations in electronics, such as a television screen so flexible it could be rolled up and put in a pocket.

# Grant supports play to be written for MFA students

The Case/Cleveland Play House Master of Fine Arts (MFA) Professional Actor Training Program has been selected as one of only five recipients of a Playwright in Residence Grant, awarded by the National Endowment for the Arts and the Theatre Communications Group to support a playwright and a newly created production.



With this grant, nationally recognized playwright and Pulitzer Prize nominee Heather McDonald has been commissioned to write a play that will be produced by the Cleveland Play House and performed by students in Case's incoming MFA class in Spring 2007.

Mark Alan Gordon, associate director of the Case/Cleveland Play House MFA program, applied for the grant and will be collaborating with McDonald. Following the play's opening in Cleveland, the production will travel to New York City along with the four other NEA/TCGfunded productions.

"It is a remarkable achievement for an MFA partnership program that is only nine years old to gain this kind of national recognition," said Ron Wilson, chair of the theater arts program in Case's department of theater and dance.

#### Thompson appointed Armington Professor



Lee Thompson, associate professor in the department of psychology, has been appointed the Armington Associate Professor for 2005-07. Thompson is internationally known for her

Lee Thompson

research on how the genetic code is translated into complex behavior at the level of brain function.

The Armington Professor is to be a "member of the tenured faculty of the College whose professional activity and personal character support teaching, research, and programs intended to encourage the development of qualities of individual initiative tempered with appropriate concern for the rights of others."

Thompson is currently co-director of the SAGES pilot program and a member of the College's executive committee.

Earlier this year, she served on the search committee for the founding chair of the department of cognitive science. She has also served on a variety of other College, university, and faculty senate committees over the years.

In 2002, Thompson was the recipient of the Mortar Board Top Prof Award. Since joining the Case faculty in 1987 as a visiting assistant professor, she has taught a wide range of undergraduate and graduate courses in her department.

"All of us at Case have benefited from Lee's dedication to her work, her commitment to her students and colleagues, and her willingness to give of herself to promote the university's mission," said Mark Turner, Dean of the College of Arts and Sciences.

# ARTS AND SCIENCES ALUMNI AND

### Alumni Task Force prepares final plans for new alumni organization

The Case Western Reserve University Alumni Task Force has continued making plans for a single, unified alumni organization and is on target to submit its final recommendations to the Board of Trustees this spring.

During the Board's retreat in February 2005, task force chair Harold McRae (ADL '65) reported on progress in defining the new organization's mission, vision, and philosophy; in identifying channels for alumni engagement; and in selecting a name: The Alumni Association of Case Western Reserve University.

"This has been one of the most exciting and rewarding experiences that I've ever had, and this includes my professional career," said Laura Nosek (NUR'61, NUR'68, GRS'86), the task force communicator. "The level of dedication and commitment has been terrific."

McRae, Nosek, and more than 30 alumni from around the globe have been meeting regularly by conference call since July 2004 to develop their proposals. Many Case alumni have indicated to the task force that they want to be active partners in a vibrant, relevant organization that contributes to the growth of the university and to their own professional and personal development. They also want to be involved in helping the university attract students with the potential to provide superior leadership in a wide range of professional fields. Most important, they want the world to know about the university and the quality education they received.

Task force committees have addressed such issues as governance, leadership, communication, affinity groups, and local/regional alumni outreach. Case's Office of Alumni Relations, Programs, and Events has facilitated the restructuring process.

The model that the task force proposes at the Board of Trustees' April meeting will be based largely on feedback from an Alumni Forum held in July 2004, interviews with the leadership of alumni associations from our peer institutions, more than 75 individual alumni interviews, and the research and recommendations of its members.

Nosek emphasized that President Edward M. Hundert, Provost John Anderson, and the Board of Trustees are solidly behind this effort. "They want it to be alumni-driven," she said. "The president values the alumni and the ideas they bring. He wants to draw from their expertise and go to them for counsel."

To learn more about the task force's progress, visit the Alumni Forum website at www.case.edu/alumni/forum or contact the Alumni Task Force at taskforce@case.edu.

### Options for Planned Giving Many ways to support the university

Planned giving to the university is a method of including charitable giving in a total financial plan. There are many effective vehicles—a bequest through a will or retirement account, a charitable gift annuity, or a charitable trust, just to name a few—that alumni and friends of Case use in support of the university. Moreover, many of these vehicles also promote personal financial goals:

- Saving for retirement
- Avoiding capital gains tax
- Providing for a grandchild's education

As with all financial decisions, a planned gift should be designed with care. The Office of Gift Planning at Case works with alumni to design and facilitate the planned gift that is most appropriate and beneficial.

For more information, contact the Office of Gift Planning at giftplan@case.edu or 216.368.4352 or visit www.cwru.edu/development/planned/index.html.

## ALUMNI WEEKEND AND HOMECOMING October 14-16, 2005

Alumni Weekend at Case is an opportunity to remember and celebrate your college days. Whether making new friends or reconnecting with old ones, alumni will find something to enjoy by participating in this university tradition.

Alumni Weekend coincides with Homecoming to create an all-campus, all-alumni, and all-student event.

Reunion class celebrations will be held for all class years ending in either "0" or "5." For more information, visit www.case.edu/alumni/events/home.html. To volunteer to help plan your reunion, contact Jennifer Schuller at 800.866.6260 or jennifer.schuller@case.edu.

#### ARTS AND SCIENCES ANNUAL FUND

Please consider supporting the College of Arts and Sciences with a 2004-05 Annual Fund gift! Visit http://giving.case.edu or use the envelope inserted in this issue of *art/sci*. A contribution makes an immediate impact by supporting this year's activities, even as it helps establish a foundation for the College's future.

# STUDENT NEWS

### AFFINITY GROUPS SHOWCASE

#### MATHUR MAKES USA TODAY ACADEMIC TEAM



Sunjay Mathur, a junior majoring in religion, was named in February to *USA Today*'s third All-USA College Academic Team. According to the sponsor, the All-USA program is "designed to find students who excel not only in scholarship but also in leadership roles on and off campus."

In an essay he submitted for the competition, Mathur described the "Journal Distribution Project" that he started with Case neurology professor Robert Friedland during his freshman year at Case. The project collects medical journals that doctors and researchers would otherwise discard and distributes them to health professionals in developing countries. The project has also earned Mathur the prestigious Morris K. Udall Scholarship, awarded to recognize activities that improve the environment.

Mathur, who is enrolled in the Pre-Professional Scholars Program in medicine, is currently spending his junior year at Oxford University.

#### **COLLIER NAMED ACADEMY OF POLITICAL AND SOCIAL SCIENCE FELLOW**



Emilee Collier, a junior majoring in communication sciences and political science, has been selected as a Junior Fellow of the American Academy of Political and Social Science. She has also been awarded that organization's Undergraduate Research Award for her paper "Assessment of a Tripartite Conceptualization of Media Bias in Newspaper Coverage of the

2004 Presidential Election Campaign."

Collier faced competition from more than 40 applicants. As a Junior Fellow, she has been invited for an expenses-paid trip to Washington, D.C., to be installed as a Fellow and receive a cash award.

According to Mary Step, professor of communication sciences, Collier's paper began as a project in COSI 328, "Media Literacy and Effects," and was expanded during an independent study. The paper tests a conceptualization of media bias that includes measures of objectivity, balance, and contextual detail (historical and social background). Comparing articles from *The Washington Post* and *The Christian Science Monitor*, Collier found no difference in their campaign coverage with respect to balance. But in its reporting about both George W. Bush and John Kerry, the *Monitor* did score higher with respect to objectivity and contextual detail.

#### HISTORY ASSOCIATES SUPPORTS STUDENTS, DEPARTMENT OBJECTIVES

The History Associates at Case promotes the educational and research objectives of the department of history, providing financial support for graduate students and arranging programs that attract alumni as well as members of the broader community.

The organization funds three annual prizes for graduate students: for the best master's thesis defense, the best Ph.D. dissertation defense, and excellence in teaching.



It also sponsors three dissertation completion awards each year, helping graduate students travel to archival collections and cover other expenses as they finish their degrees.

Graduate student Bernie Jim describes his dissertation research during a History Associates roundtable in February. Aaron Alcorn, Steve Crandall, and Susan Murnane also made presentations.

This year, a

new History Associates prize was funded and named in honor of the late Frank Borchert, who served as University Vice President for Budgets and Planning. This prize will be awarded annually for the best Ph.D. dissertation.

Also this year, the History Associates established an endowment fund in honor of Carl W. Ubbelohde, the Henry Eldridge Bourne Professor Emeritus of History, who passed away in December 2004. This fund will support an annual Ubbelohde lecture by a visiting scholar.

"This is one way we have to acknowledge and continue the legacy of a distinguished professor at Case Western Reserve University, who remains in the hearts and memories of decades of students and colleagues," said History Associates President Gladys Haddad, who is also an alumna of the College and a faculty member.

For information on joining the History Associates, or to learn about upcoming events, please contact Sarah Fritsch in the Development Office of the College of Arts and Sciences, at sarah.frisch@case.edu or 216.368.3549.

# MERLIN DONALD continued



Merlin Donald

Last fall, when the College of Arts and Sciences sponsored Cognitive Science Week to celebrate the creation of its newest department, Donald was one of the featured speakers.

According to Mark Turner, dean of the College of Arts and Sciences, the cognitive science department's distinctive focus is on human creativity in all its forms: in the arts and technology; in education and communication; in the conceptual structures and social arrangements that define human cultures. Though grounded in the "sciences of the mind"—neurobiology, neuroscience, psychology, and linguistics—the department's interests extend across other sciences, the arts, and the humanities as well.

Much the same can be said of Merlin Donald and his work. After earning his Ph.D. from McGill University in 1968, Donald did his early empirical research in the field of human cognitive and clinical neuroscience. During the past 15 years, however, he has steadily extended the boundaries of his discipline, insisting that the higher functions of the modern communities. "Cognitive science needs to establish a more valid framework, anchored in the cultural world that humanity has created, before it can build better models of the mind, truer to the subtler capabilities that become evident in its natural environment, culture," Donald explained. "To achieve this change of framework, it needs richer interactions with the social sciences and humanities."

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By the same token, "the humanities and social sciences have also run into limits in their present paradigms, just as cognitive science has. They, too, need a fresh infusion of new ideas. Cognitive science has many such new ideas that might prove liberating to scholars in other disciplines."

In Donald's view, it is inevitable that universities will increasingly promote interactions between cognitive science and other fields. "After all," he said, "we are all unified by dint of the fact that we are interested in advancing our understanding of the same subject: humanity." And he sees the creation of the cognitive science department at Case as a landmark opportunity, both personally and institutionally. "Sometimes, an administrative initiative—such as setting up a new department—can have a very large impact on a field. And I am at a point in my life where I would like to leave more than just an academic imprint. And so, this is an extraordinary opportunity to be on the ground floor on something that is going to happen. I looked at the probabilities very carefully, and I made the judgment that there was a very good chance it would happen first at Case. I know there are other universities that are thinking this way, but I don't know any others that have come this far."

Psychology professor Sandra Russ, whose research focuses on creativity in children, is one of the first College faculty members to hold a secondary appointment in cognitive science. "The international stature of Merlin Donald will ensure that our new department is 'on the map' from the start," she said. "He and his work are highly regarded. His appointment should attract outstanding scholars. His leadership ability and deep understanding of the area of cognitive science should lead to development of research and educational programs that are exciting and that genuinely contribute to the field."



### ARTS AND SCIENCES GOES GLOBAL WITH VIDEOCONFERENCING

When faculty and staff in the College of Arts and Sciences want to communicate globally, they turn to cameras, microphones, and television sets—and, increasingly, to laptops and highspeed Internet—for videoconferencing.

A common communications tool in corporate America, videoconferencing is new to Arts and Sciences. But it has begun to permeate the College in a number of applications, including faculty searches, research collaborations, guest lectures, and artistic performances around the world.

The potential of videoconferencing became clear to Dean Mark Turner and Chief Information Officer Thomas Knab when a faculty committee consulted experts in Canada, Denmark, Belgium, and the United States last year about designing the College's new department of cognitive science.

The success of that

collaboration led Turner to

encourage 16 departments

conducting faculty searches

this year to use the technol-

ogy for initial interviews as

widest net possible." On a single day in January, for

example, Knab and Case

MediaVision arranged for

the department of music to

a means of "casting the



Kinetic Shadows

interview seven applicants in five different time zones, from Rome to London to California.

Not only does this approach expand the pool of first-round candidates; it also saves the College money and effort in the initial search phase.

Face-to-face interaction is the ideal form of communication when meeting someone new, noted Todd Oakley, associate professor of English and cognitive science. "But, he added, "once you get used to the technology, it is almost like having the candidate or expert in the room."

Oakley has had many opportunities to observe the benefits of videoconferencing: as a member of search committees and of the exploratory committee for cognitive science; as an external adviser for a doctoral student at the University of Aarhaus in Denmark; and as a collaborator on special journal projects. In each case, Oakley has found that videoconferences are superior to e-mails or phone calls.

"You know what the other person means," Oakley said, "because you have the tone of voice and the gestures that make communication so precise."



Even before he joined the College last year, Tom Knab was introducing the Case community to innovative uses of videoconferencing technology. In October 2002, while he was director of distancelearning networking at the Cleveland Institute of Music, Knab provided the technical

Tom Knab

expertise to create "Kinetic Shadows," a dance performance choreographed by Case assistant professor of dance Gary Galbraith. For this event, dancers and musicians in Cleveland and Los Angeles collaborated in a seamless, interactive performance broadcast over the high-speed Internet2 network.

More recently, Knab connected Arthur Heuer, a ceramics expert from the Case School of Engineering, conservators at the Cleveland Museum of Art, and researchers at the Louvre Museum in Paris to determine the authenticity of ceramic works attributed to the 16th-century French artist Bernard Palissy. The Case music department and MediaVision have also partnered with Indiana University to conduct the first live stereoscopic 3-D videoconference.

In working with different networking sites, Knab has expanded the College's global connections. For example, the music department's interview with a candidate at London's Royal Academy of Music has sparked discussions about joint classes involving the two institutions.

According to Knab, exposure to videoconferencing has also led many faculty members to experiment with classroom applications.

Last fall, when physics professor Philip Taylor taught "Quantum Theory of Solids," he linked sixteen graduate students from Case and Syracuse University, using internet protocol (IP) videoconferencing. Taylor also used Smart Board technology, which enabled him to transmit the equations and notes for his lectures to the receiving classroom at Syracuse.

"We'll continue to partner with the MediaVision initiatives at Case to expand the use of this technology across the university," said Knab. "We'd like to see IP videoconferencing used to communicate with prospective students, alumni, and others in the dynamic Case community. Soon, you'll even be able to connect by videoconference to the new SAGES café on the first floor of Crawford Hall.

"We feel the College is leading the charge in this area and initiating a cultural change in how the university thinks about global communications."

## **RESEARCH ROUNDUP**



#### CHIEL TEAM DEVELOPS BIOLOGICALLY INSPIRED DEVICES FOR MEDICAL, INDUSTRIAL USES

Drawing on an understanding of how slugs, leeches, and earthworms traverse their environ-

ments and grasp objects, a team of Case biologists and engineers, led by biology professor Hillel Chiel, has developed flexible robotic devices that could make invasive medical procedures safer for patients and easier for doctors to administer.

The researchers have obtained a patent for a new endoscopic device and a provisional patent for a gripping device that may have industrial as well as medical uses.

Both inventions contain muscle-like, latex "actuators." In the endoscopic device, the actuators inflate and contract in sequence, propelling the device forward so that it can worm its way into curving tubing such as the colon. In the "gripper," one of the actuators contains a mouth that opens and closes, mimicking the manner in which California sea slugs grasp seaweed. This device could meet an industrial need for grippers that can pick up soft objects without destroying them.

With support from the National Science Foundation, Chiel has studied the detailed movements of soft-tissue animals like the California sea slug for nearly two decades, chronicling their behavior on film and with MRI imaging. His collaborators include Roger Quinn, director of the Biorobotics Laboratory in the School of Engineering, and Randy Beer, professor of electrical engineering and computer science, who together designed the robotic devices.



### EXLINE ANALYZES A BARRIER TO FORGIVENESS

Julie Exline, assistant professor of psychology, has found that people with a certain personality type may find it difficult to relinquish justified feelings of resentment and forgive others.

Exline is lead author of an article titled "Too Proud to Let Go: Narcissistic Entitlement as a Barrier to Forgiveness," in the *Journal of Personality and Social Psychology*. She and her colleagues studied subjects who demonstrated excessive self-admiration and a preoccupation with defending their rights. In responses to actual, hypothetical, and laboratory-based situations, such people were easily offended, exhibited unforgiving attitudes, and failed to let go of their grudges over time.

Exline's research interests involve emotional and social processes and "the many challenges that can arise in spiritual and religious life." Her collaborators on the forgiveness study were Roy Baumeister of Florida State University, Brad Bushman of the University of Michigan, W. Keith Campbell of the University of Georgia, and Eli Finkel of Northwestern University.



#### STARKMAN, COLLABORATORS TAKE THE UNIVERSE'S TEMPERATURE(S)

Recent findings by Glenn Starkman, Armington Professor of Physics and Astronomy, and colleagues contradict the standard view of why temperatures vary

from place to place in the universe, and hence from point to point on the sky. And, indirectly, their results challenge previous estimates of when the stars were formed.

Starkman and three collaborators have been studying the cosmic microwave background (CMB): the "afterglow" radiation left over from the early ages of the universe. The CMB is one of the most conclusive pieces of evidence supporting the Big Bang theory—the idea that the universe began some 10 to 20 billion years ago in a hot and dense state, and has been expanding and cooling ever since.

"We see radiation—microwaves—coming to us from every direction on the sky," Starkman says. "The intensity, which is broadly equivalent to temperature, of the radiation varies from place to place by a very small amount." Cosmologists are interested both in small-scale variations (between points on the sky that are close to each other) and large-scale variations (between distant points). That's because these variations "offer great insight into the origin, evolution and content of the universe."

Until now, all of these variations were thought to have originated in the primordial universe. But Starkman and his colleagues believe otherwise. They suggest that the large-scale variations align so closely with the geometry of the solar system, they must be due to effects *within* the solar system. Some features of these large-scale variations had been interpreted as evidence that stars formed early in the history of the universe. But if these variations have a solar system origin, then the evidence for early star formation disappears. This will come as a relief to most astrophysicists, who were having trouble explaining how stars could have formed so early.

Meanwhile, Starkman says that his team's explanation for large-scale temperature variations raises a new and fundamental problem for cosmologists: where are the large-scale variations imprinted by the larger universe that their theories had predicted? As a Guggenheim Fellow in 2005-06, Starkman will pursue this question at Oxford University's new Institute for Particle Astrophysics and Cosmology.

The research team—which includes Dominik Schwarz of the University of Bielfeld in Germany; Dragan Huterer, formerly at Case but now an NSF Fellow at the University of Chicago; and Case researcher Craig Copi—published its findings in the journal *Physical Review Letters*. A more accessible version will appear in *Scientific American* later this year.

# NEW BOOKS, RECENT ACHIEVEMENTS



**Richard A. Settersten Jr.**, professor of sociology, is co-editor (with Frank F. Furstenberg Jr. and Rubén G. Rumbaut) of *On the Frontier of Adulthood: Theory, Research, and Public Policy* (University of Chicago Press, 2005). The contributors to this volume examine how social and economic changes over the past half century have complicated the transition from adolescence to adulthood, and ask how public policy initiatives might improve outcomes for young people during this critical period. The book is the first major product of the Research Network on Transitions to Adulthood and Public Policy, funded by the John D. and Catherine T. MacArthur Foundation.

In addition to serving as co-editor, Settersten wrote the volume's concluding chapter, which offers proposals to restructure education and job training programs, expand services for at-risk youth, and foster civic engagement. "The evidence in this book," he writes, "suggests that early adulthood is a critical time to continue investing in those who have had troubled beginnings and make new investments in those who have not."



In her new book, *Defining Women's Scientific Enterprise: Mt. Holyoke Faculty and the Rise of American Science* (University Press of New England, 2005), history professor **Miriam Levin** examines how four generations of faculty at an exemplary women's college established their own professional identities while training large numbers of students who would go on to obtain medical degrees and doctorates in the sciences and mathematics. Mt. Holyoke was founded as a Protestant seminary, and in her account of the "female science mission" that emerged there between 1837 and 1937, Levin "weaves religion into, rather than out of the story," asking how the scientific enterprise was informed by religious belief as well as by

gender conventions, teaching practices, and the evolving "marketplace for scientific knowledge."



**Ross Duffin**, Fynette H. Kulas Professor of Music, has received the 2005 Thomas Binkley Award from Early Music America. The award recognizes outstanding achievement in both performance and scholar-ship by the director of a university or college collegium musicum (early music ensemble).

Duffin has served as chair of Case's department of music and has taught early music classes here and at workshops throughout the United States and Canada. For almost two decades, he hosted the National Public Radio program "Micrologus: Exploring the World of Early Music." The author of *Shakespeare's Songbook* (Norton, 2004), a compilation of 160 songs performed, quoted, or alluded to in Shakespeare's

plays, Duffin had previously earned the prestigious Noah Greenberg Award from the American Musicological Society for his contributions as a scholar and performer.

The Thomas Binkley Award is named for the legendary lutenist and educator who founded the Early Music Institute at Indiana University. Duffin, who recalls wearing out his LP copies of Binkley's recordings thirty years ago, said that the award also recognizes the excellence of Case's early music program "as a training ground for future performers and collegium directors."



Research on changes in the composition of basaltic magmas as they move from the Earth's upper mantle to its surface has earned **James Van Orman**, assistant professor of geological sciences, the 2005 F. W. Clarke Award of the Geochemical Society.

The award recognizes "a young scientist for a single outstanding contribution to geochemistry or cosmochemistry." Van Orman assumes that he is being honored for a series of papers he wrote as a doctoral student at MIT, where he graduated in 2000. He joined the Case faculty in 2002.

Most of Van Orman's research involves a combination of experimental work and numerical modeling. Currently, he is collaborating with several other Case scientists, including Dan Lacks and John Angus from the department of chemical engineering, on geochemical projects. These include an effort to simulate silicate magmas (and thus

improve our understanding of volcanic eruptions) and a study of micro-diamonds in petroleum reserves.

### ARTS AND SCIENCES ON DISPLAY AT RESEARCH SHOWCASE

The third annual Research ShowCASE, held at the Veale Center on April 7 and 8, highlighted the work of 87 Arts and Sciences faculty and students and hundreds more scientists and scholars from Case and its affiliated institutions.

This free public event exhibited the remarkable variety of faculty, postdoctoral, graduate, and undergraduate research and scholarship conducted at the university. Real-world applications of this research, critical insights, and creative and intellectual activities were on display for students, faculty, staff, alumni, and the community.

Poster presentations by Arts and Sciences faculty ranged from "Mars Was a Water Planet: The Belief in Canals on Mars in 19th-Century France" by Marie Lathers (modern languages and literatures) to "Racial Equality in Intelligence" by Joseph Fagan (psychology). In addition, Research ShowCASE included demonstrations, workshops, panel discussions, and special sessions.

For example:

- In a workshop titled "Creative Research in Fiction and Nonfiction," Thrity Umrigar and Ted Gup (English) explored how writers navigate between fact, memory, and imagination in journalism, memoir, and fiction. Both read from their work during the session.
- A panel discussion titled "Cleveland Cultural Collaborations: Artists and Scholars Unite" featured Tim Beal (religion), Georgia Cowart (music), and Ellen Landau (art history and art). The trio of Arts and Sciences professors discussed the growth of collaborations between Case and University Circle, where artists and scholars are making connections and enriching Cleveland's cultural climate.



Left to right, Gary Stonum (English) talks with Thrity Umrigar and Ted Gup following their presentation "Creative Research in Fiction and Nonfiction" at Research ShowCASE.

William Deal (religion), Ralph Harvey (geological sciences), and Heather Morrison (astronomy) led a session titled "Perspectives on Outer Space: Images that Shape Our Imagination." The program examined media images used to elicit public support and funding for the space program in the United States.

Also part of Research ShowCASE was the unveiling of the second volume of *The Value of Research*, a Case publication that highlights the university's research strengths. The work of 12 Arts and Sciences faculty is featured in this year's volume, including historian Ted Steinberg's research on nature's role in American history and chemist Malcolm Kenney's development of a new photodynamic therapy (pc4) that offers hope as a cancer treatment.

To read a pdf version of the publication, visit http://ora.ra.cwru.edu/ospa/. For more information on Research ShowCASE, visit http://ora.ra.cwru.edu/showcase/.

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