

CORNELL Chronicle

Volume 27 Number 14 November 30, 1995

SEEING IS BELIEVING

Researchers work on developing skim milk that appears more like 2 percent.

5

PROGRESS AND TRADITION

Chemical-prospecting program in Sri Lanka helps sustain ancient medical practices.

8

CaRDI awards bridge gap between research, policy and practice

By Blaine P. Friedlander Jr.

Cornell's Community and Rural Development Institute (CaRDI) announced its 1995 Innovator Awards and 1995 Lifetime Achievement Awards on Monday, Nov. 20, at the Herbert F. Johnson Museum of Art.

CaRDI was established five years ago to build Cornell's capacity and visibility in the community and rural development field. Directed by Paul Eberts, Cornell professor of rural sociology, it works to increase attention to the needs of rural people and communities in New York state and the nation by promoting research and policy analysis on high-priority issues.



Hahn



Burns



Pelletier

"There is a lot of talk these days of the lack of relevance of academic research to real life problems," said Mildred Warner, CaRDI associate director. "The awards this year

reflect a set of research and extension programs which bridge the gaps between research, policy and practice — these programs and people work to improve all three aspects. They have found ways to expand collaborative relationships among scientific disciplines, while enhancing university and community partnerships."

Winners of the 1995 award are:

• **Participatory Action Research Network (PAR Network)**. This is a movement in social science, sponsored by the Mario Einaudi Center for International Studies, which positions the researcher as a collaborator with communities. The results: research that is much more likely to be

Continued on page 6

Supercomputer depicts collision of black holes

By Larry Bernard

A team of theorists has created a computer model that predicts what happens when black holes collide — a step toward solving Einstein's equations of general relativity and also a step toward new, collaborative ways of doing research.

The model, done on the world's fastest supercomputers at Cornell and the University of Illinois at Urbana-Champaign, depicts the geometry of black holes when two of them collide head-on and merge into a single black hole.

"We want to find out exactly how this merger takes place as these giant black holes come together. What happens is that they create a more massive black hole," said Saul Teukolsky, Cornell professor of physics and astronomy who participated in the research.

The work is presented in the journal *Science* (Nov. 10, 1995) by Teukolsky; former Cornell astrophysicist Stuart Shapiro; Richard Matzner of the University of Texas at Austin; Edward Seidel and Larry Smarr from the University of Illinois; Wai-Mo Suen from Washington University; and Jeffrey Winicour from the University of Pittsburgh.

The research is funded by the National Science Foundation as one of the federal government's "Grand Challenges" in high-performance computing and communications — an effort to show that broad collaborations among computer scientists and researchers in other fields, in this case astrophysics, can yield spectacular results in solving some of science's and the nation's most vexing questions. This work was done

Continued on page 6

Serving for the holiday



Frank DiMeo/University Photography

On Nov. 20, fraternity brothers at Chi Psi treated a gathering of children, families and single adults in Economic Opportunity Corporation of Tompkins County programs to a Thanksgiving dinner. Above, junior Jeff Fiore, right, helps house cook Eric Brown serve up stuffing for the assembled guests.

Cornell varsity teams excelled in fall seasons

By Dave Wohlhueter

The record shows .657 overall and .765 versus Ivy League competition. What does this mean? It's the lofty winning percentage generated by Cornell varsity athletic teams this past fall. The Big Red won over 65 percent of its events against all comers, and better yet, conquered Ivy League foes in more than 76 percent of its contests.

Although there were many, many exciting accomplishments, there's no doubt that the biggest turnabout was scripted by the men's soccer team. Coach Dave Sarachan's booters won just two games a year ago. In 1995, they lost just two en route to a 15-2-1 record, their first NCAA appearance since 1980 and a ninth-place ranking among the best in the country.

The Red was co-champion in the Ivy League with Brown, both with 6-1 records, but Cornell received the automatic bid to the NCAAs with a 2-1 victory over the Bears in Providence. In a contest, originally scheduled for Ithaca but moved to Easton, Pa., because of the weather, the Red saw its school-record 11-game winning streak halted by Lafayette, losing 2-0 in overtime. Characterized as a team that excelled in overtime all season long, the extra session loss was only the second (6-2-1) for the Red in 1995. Junior forward Eric Kusseluk led the offense with 18 goals and one assist, while senior goalkeeper Quinn O'Sullivan, who played 1,686 of 1,890 minutes, had a 0.69 goals-against average and an .814 save percentage. They were two of the four Cornellians named to the All-Ivy first team.

Continued on page 11

Judicial administrator renders decision in offensive e-mail case

Cornell Judicial Administrator Barbara L. Krause, on Nov. 16, issued her determination regarding complaints involving offensive electronic mail authored by four freshman students at the university. The text of her determination, released with the consent of the students involved, is as follows:

To the Cornell Community and Other Interested Persons:

The Office of the Judicial Administrator recently received many complaints regarding an e-mail message which listed 75 reasons why women should not have freedom of speech. With the permission of the four students involved, I am writing to inform you of this office's decision regarding the matter.

Understandably, the content of the "75 Reasons" offended,

Statement on e-mail hoax, Page 2

angered and distressed many people in the Cornell community and beyond. Cornell, however, does not have a hate speech code. Therefore, in order for our office to take disciplinary action against the four students, we had to find either that they engaged in sexual harassment or that they misused computer resources. Either of these findings would constitute a violation of Cornell's Campus Code of Conduct.

The four students who created "75 Reasons" distributed it very narrowly. Each of them sent the list to a handful of people they knew and whom they did not believe would find its content offensive. They did not send the list to specified groups in order to anger or offend them, nor did they float the list randomly over the Internet. They simply intended the

"75 Reasons" to be shared among a group of their friends.

Apparently, one or more of the original recipients sent a copy on to others and from there, the distribution spread all over the country and into Canada. By far the widest distribution of "75 Reasons" came from people who were offended by its content rather than from the four authors.

Given the facts of this case, I could not conclude that these students had engaged in sexual harassment. Sexual harassment requires conduct that is directed at an individual or group, or conduct that creates a hostile environment. The authors of "75 Reasons," however, did not direct the list at anyone with the purpose or effect of offending those recipients. In fact, our office did not receive a single complaint from any of the original recipients. Moreover, distributing

Continued on page 4

NOTABLES

Josephine Allen, associate professor of human service studies in the College of Human Ecology, was named the 1995 Social Worker of the Year by the New York State Chapter of the National Association of Social Workers. Recognized for her "outstanding contributions to community and leadership ability and willingness to improve the quality of life on behalf of the association," Allen is the director of the College of Human Ecology's social work program and teaches undergraduate and graduate level courses in social policy and social welfare services. She also is co-director of the Program on Gender and Global Change. Allen has served on the National Association of Social Workers' board of directors, was a delegate to the National NASW Delegate Assembly in 1987 and chair of the Peace and International Affairs Committee.

Roald Hoffmann, professor of chemistry and the John A. Newman Professor of Physical Science, has been awarded the Alexander Hamilton Medal, Columbia University's highest honor. Hoffmann, a 1951 graduate of Columbia, was one of five former Nobel Prize winners and Columbia graduates to be given the Hamilton Medal this month. Hoffmann shared the 1981 Nobel in chemistry for his mathematical theories explaining the behavior of atoms and molecules.

Two Cornell faculty members have been recognized as Distinguished Alumni of the Department of Environmental Sciences and Engineering (ESE) at the University of North Carolina at Chapel Hill. **Walter R. Lynn**, '54 MSSE from N.C., and Cornell professor of civil engineering science and technologies studies, and **Ray T. Oglesby**, Ph.D. '63 from N.C., and Cornell professor of natural resources, are 1995 ESE Distinguished Service Award Recipients.

Thomas D. O'Rourke, professor of civil and environmental engineering, received the Duke Lifeline Earthquake Engineering Award from the American Society of Civil Engineers (ASCE).

Recognizing his contributions to earthquake engineering, the annual award was presented by ASCE President Stafford E. Thornton at the society's Oct. 25 annual convention and exposition. ASCE represents more than 120,000 civil engineers worldwide and is America's oldest national engineering society.

CORNELL Chronicle

Henrik N. Dullea, Vice President for University Relations
Linda Grace-Kobas, Director, Cornell News Service
Simeon Moss, Editor
Karen Walters, Editorial Assistant
Dianna Marsh, Circulation

Published 40 times a year, Cornell Chronicle is distributed free of charge to Cornell University faculty, students and staff by the University News Service. Mail subscriptions, \$20 for six months; \$38 per year. Make checks payable to Cornell Chronicle and send to Village Green, 840 Hanshaw Road, Ithaca, N.Y. 14850. Telephone (607) 255-4206. E-mail: cunews@cornell.edu. Second-Class Postage Rates paid at Ithaca, N.Y.

POSTMASTER: Send address changes to the Cornell Chronicle (ISSN 0747-4628), Cornell University, 840 Hanshaw Road, Ithaca, N.Y. 14850.

It is the policy of Cornell University actively to support equality of educational and employment opportunity. No person shall be denied admission to any educational program or activity or be denied employment on the basis of any legally prohibited discrimination involving, but not limited to, such factors as race, color, creed, religion, national or ethnic origin, sex, sexual orientation, age or handicap. The university is committed to the maintenance of affirmative action programs that will assure the continuation of such equality of opportunity. Sexual harassment is an act of discrimination and, as such, will not be tolerated. Inquiries concerning the application of Title IX may be referred to Cornell's Title IX (Coordinator of Women's Services) at the Office of Equal Opportunity, Cornell University, 234 Day Hall, Ithaca, N.Y. 14853-2801 (telephone 607 255-3976).

Cornell University is committed to assisting those persons with disabilities who have special needs. A brochure describing services for persons with disabilities may be obtained by writing to the Office of Equal Opportunity, Cornell University, 234 Day Hall, Ithaca, N.Y. 14853-2801. Other questions or requests for special assistance may also be directed to that office.



Adriana Rovers/University Photography

A Japanese zelkova tree in front of Rockefeller Hall was one of many large trees severely damaged or destroyed on campus by an early season snowstorm on Nov. 14 and 15.

Grounds dept. asks for patience during damaged-tree work

The unexpectedly large Nov. 14-15 storm, which set early snowfall records throughout the Northeast, had a devastating effect on many area trees. And the damage was especially visible on some large, older trees, of the type that grace the Cornell campus.

"The damage was the worst I've seen here," said Dennis Osika, director of the grounds department, who has been at

Cornell for more than a decade.

Immediately following the storm, Osika said, the grounds department responded to over 50 on-campus reports of major trees damaged or fallen.

"The most severe emergencies have been taken care of," Osika said, "but now we have to concern ourselves with the cleanup."

The tree work is being completed by

the grounds department, with assistance from outside tree experts. Osika acknowledged that for some people on campus there will be "environmental shock" from the loss of some familiar trees.

But he asked that people be patient during the clean-up process.

"There will be noise from the tree removal, and we want people to bear with us," Osika said.

BRIEFS

Water Notice: By requirement of the New York State Health Department Sanitary Code, Section 5-133: The Cornell University Department of Utilities shall accept public comment on the Water Supply Emergency Plan Update for at least 14 days following the date of first publication, Thursday, Nov. 30, 1995. The plan is available for review and comment at the Water Filtration Plant, 101 Caldwell Road, Ithaca, NY 14853, during the hours of 8 a.m. to 4:30 p.m., Monday through Friday. Contact Ann Christofferson at 255-3381 for further de-

tails. The plan was developed in coordination with the other major water-supply systems in Tompkins County to respond to potential interruptions in water supply from breaks in supply mains, pumping station breakdowns, infiltration of pollutants, natural disasters and other such emergencies. It has recently been updated in accordance with the state regulation.

Salvation Army needs bell-ringers: The Salvation Army has kicked off its annual Christmas Kettle Campaign, and all

it needs now is you. Throughout the season, volunteer bell-ringers will be stationed at donation kettles in various places around the county. But in order for the campaign to be successful, the Salvation Army needs more volunteer bell-ringers. Last year, the lack of volunteer bell-ringers cost the organization an estimated \$20,000 in uncollected donations, local commander Captain Chuck Thomas reported. If you have the time and would like to be of service to those helping the less fortunate, please call the Salvation Army at 273-2400.

CU issues warning on Thanksgiving e-mail hoax

Cornell officials announced Nov. 27 that an electronic message over the Thanksgiving holiday, purporting to come from the campus judicial administrator, was a hoax and is being investigated. H. David Lambert, vice president for information technologies, warned that impersonation of any member of the campus community, electronically or otherwise, will be investigated aggressively by university officials and by outside authorities as appropriate. Here is his statement:

"On Thanksgiving Day, Nov. 23, an electronic mail message was sent to a large number of the Cornell community with electronic mail addresses. This message, purporting to be a 'confidential memorandum' from Barbara L. Krause, Cornell's judicial administrator, discussing the recent actions involving the circulation of offensive material authored by four Cornell undergraduates, was a hoax. The message was not authored by Ms. Krause and should not be interpreted by anyone who receives it as reflecting her

views, the views of the Office of Judicial Administrator, or of Cornell University on the previous incident.

"Careful examination of the alleged e-mail address of Ms. Krause would have indicated that it did not come from the Cornell system (cornell.edu) but rather from another server, 'phantom.com.'

"Staff of Cornell Information Technologies became aware of the unusual traffic on the system on Thanksgiving Day and, after ascertaining the external source of the message, took steps to limit its distribution. Thus, not every address on campus actually received the message.

"Yesterday, Nov. 26, a group calling itself 'Online Freedom Fighters Anarchist Liberation' (OFFAL) posted a message on various electronic bulletin boards claiming responsibility for the hoax. The authors threaten to take similar action against other universities which in their judgment condemn unpopular viewpoints.

"Cornell takes the impersonation of any member of the Cornell community

most seriously, and a thorough investigation has been initiated both on campus and with external authorities. No information about that investigation is available at this time.

"As we have recommended previously concerning offensive electronic mail, I urge recipients of this most recent message to trash it and not send it to others, thereby perpetuating the hoax and further accomplishing the objectives of its perpetrators.

"In addition, I would ask your cooperation in not sending commentaries on the message directly to Ms. Krause — not only because she was not the author of the original message but also because her office needs to be able to respond to its ongoing, legitimate workload. If, however, you do wish to share specific information concerning this hoax with the university administration, we have established a special mailbox for that purpose: forged_ja_email@cornell.edu.

"Thank you very much for your cooperation."

New policy governs cyberspace conduct and responsibility

By William Steele

Cornell has developed the "Responsible Use of Electronic Communications Policy" to address a growing reality on campus: Students, faculty and staff increasingly are using electronic communications for course work and to remain in contact with friends and colleagues — and that has resulted in an increased use of Cornell's computers, servers and networks.

The policy is the result of two years of effort by a campus committee representing the offices of Information Technologies, Human Relations, the Judicial Administrator and the University Counsel.

Following the initial release in May 1994, the university developed procedures to help guide individuals responsible for administering university computer resources. Development of the policy framework and procedures was followed by extensive campus review. The policy, including the procedures, was recently released to the campus.

The term "electronic communications" in the policy's title encompasses e-mail, the World Wide Web, postings on Usenet and other electronic bulletin boards, electronic video technologies and future electronic communications tools.

The policy strongly embraces the Cornell principle of freedom with responsibility. Specifically, the policy states that "Cornell University expects all members of its community to use electronic communications in a responsible manner. The University may restrict the use of its computers and network systems for electronic communications in response to complaints presenting evidence of violations of other university policies or codes, or state or federal laws."

"The beauty of this policy," explained Marjorie W. Hodges, policy adviser to the Office of Information Technologies and a member of the drafting committee, "is that it works within our existing disciplinary framework. For example, if allegations concern potential violations of the Campus Code of Conduct, we forward that complaint to the judicial administrator for determination."

That was, she pointed out, exactly what happened in the recent "75 Reasons" e-mail case (see story, page 1).

"When that incident occurred," Hodges said, "Cornell was fortunate to have already issued a policy in this area and fortunate that procedures were in place to respond."

Hodges noted that the policy could also be applied in the case of the forged memo recently circulated on campus (See story, page 2). As the policy makes clear, forging electronic communications is a violation of the Campus Code of Conduct.

An appendix to the policy includes specific examples of prohibited activities, including the use of electronic communications to:

- Harass, threaten or otherwise cause harm to specific individual(s), whether by direct or indirect reference.
- Impede, interfere with, impair or otherwise cause harm to the activities of others (for example, by "jamming" an electronic mailbox with repeated messages).
- Download or post to university computers, or transport across university networks, material that is illegal, proprietary, in violation of university contractual agreements, or otherwise is damaging to the institution. (This would include, for example, the use of copyrighted material without permission.)

The appendix also outlines procedures to be followed when such violations occur.

In addition to formal distribution, the policy will be presented in a series of focus group discussions across the campus. The policy document is posted on the World Wide Web at <http://www.univco.cornell.edu/ru.html>.

Observing World AIDS Day

The theme of World AIDS Day 1995, on Dec. 1, is "Shared Rights, Shared Responsibilities." Here are some campus and community events planned around the annual observance:

• **Dec. 1, 5:30 - 6 p.m.:** The eighth annual Candlelight Vigil in Observance of World AIDS Day will be held on the Ithaca Commons.

• **Dec. 6, 12:15 - 12:35 p.m.:** A brief gathering of Cornell students, faculty and staff in honor of World AIDS Day will be held in front of Willard Straight Hall, sponsored by Into the Streets, SAFER and Cornell AIDS Action.

• **Dec. 1-15:** The Johnson Museum of Art will observe World AIDS Day with a series of events over a two-week period. In addition to visiting exhibitions and work from the permanent collection, student and community organizations will provide information to make viewers aware of the complexity of the AIDS crisis. (See calendar, page 12).



Adriana Rovers/University Photography

President Hunter Rawlings and William B. Lacy, center, director of Cornell Cooperative Extension, answer questions for Nancy Fey, news production/media services, on the statewide Cooperative Extension television program *Second Tuesday*, taped on Nov. 9 in the Martha Van Rensselaer Hall television studio.

Rawlings reaffirms commitment to Extension

By Blaine P. Friedlander Jr.

Cornell President Hunter Rawlings reaffirmed the university's commitment to Cornell Cooperative Extension as extension employees convened Nov. 14 via a statewide teleconference. While state and federal revenue sources may be drying up, Rawlings and other administrators are actively seeking new areas for Cooperative Extension development.

"We are always looking for growth opportunities, and we don't want to downsize unthinkingly," said Rawlings, who made a guest appearance on the statewide Cooperative Extension television program *Second Tuesday*. "For example, distance learning offers opportunities to deliver Cornell extension information to many sites," he said.

Rawlings also lauded the service for its attention to New York state and explained that he believes that teaching, research and extension are "inextricably intertwined" at Cornell.

Second Tuesday, produced by Cornell Media Services and hosted by Nancy Fey, is distributed via satellite to

county extension offices statewide.

Bill Lacy, director of Cornell Cooperative Extension, explained that while facing dwindling financial resources, "we at CCE already have a model for [projects such as] distance learning. Into the 21st century, we at Cooperative Extension are positioning ourselves well to serve the people of New York. We need to think of ourselves as the front door to the university," he said.

For the upcoming legislative session, Lacy said that CCE ought to be prepared for any financial contingency. In fact, he believes that budget issues and the implementation of the strategic plan are extension's primary goals for the upcoming year.

Later in the telecast, Lacy explained that his tenure so far has been full of adventure. He said: "CCE is a vital organization for the state, but we have to make it more well-known."

J.C. Shaver, CCE assistant director, reported that recent surveys reflected a need for improved links between the faculty and field representatives, adding that restructuring certain processes within CCE could facilitate those links.

First-hand knowledge



Charles Harrington/University Photography

Tompkins County-area State Senator James Seward (R-50th) was given a tour of the new teaching hospital complex at the College of Veterinary Medicine on Nov. 21. The legislator was accompanied by Dean Franklin Loew and Prof. Fran Kallfelz, director of the teaching hospital, and he met with teachers, staff and students. Above, Seward, far right, talks about clinical rotations with fourth-year vet students, from left, Robin O'Neal '96 and Steve Kochis '96, while large-animal-medicine resident Lisa Weisensel, DVM, examines a patient.

Safe surfing: Security and password tips for CU e-mailers

By Daisy Z. Dailey

Security on the Internet is a complicated issue—some areas are more secure in terms of information exchange and retrieval than others. The World Wide Web, a collection of hypertext-based information on the Internet, for example, is a public place and security is minimal. On the other hand, many people assume that electronic mail is safe from prying eyes. This is not always the case.

An e-mail message goes through a computer called a "mail server" which routes the message within the Cornell network or out onto the Internet. Within the Cornell system, this procedure is secure. The mail server is kept in a physically secure room, and only those with proper authorization have access to it. When mail leaves the Cornell network and travels onto the Internet, there may be times when electronic privacy is at risk; there are ways for other people to monitor transmissions and see the content of your message. The good news is you can protect yourself. There are preventive measures such as encryption, but the safest and easiest route is to be careful what you send and where.

Transmitting highly confidential information? Think about sending it by other means, such as regular mail or delivering it in person. Another solution is encryption software, which is available for free online (one popular choice is PGP—short for "Pretty Good Privacy") and for purchase. In addition to protecting a message, encryption software can be used to verify that a message was sent by you. PGP encryption of signatures and messages will soon be a feature of Eudora, the popular electronic mail program for Macintosh and Windows used at Cornell.

Be careful with addressing messages—particularly at Cornell, where the use of Network identities (Net IDs) means that people are identified by a series of easily mistyped letters and numbers.

According to the August 1995 online edition of *MacWorld*, "... with e-mail there is always the chance that your message might be intercepted, forwarded or accidentally sent to the wrong address."

With this in mind, content of a personal nature may not be suitable for e-mail. Be sure the person receiving the message knows it's private; if you don't want the message to be forwarded, explicitly state that in your message.

Remember that when you read your e-mail, it is automatically downloaded to the hard drive of the computer at which you read it. This means that unless you protect it, the mail can be accessed by anyone who has access to that computer. If you do not want your e-mail files to be accessible, it is wise to protect them as you would any other private files—lock them, encrypt them or save them to a secured disk.

Protect yourself: passwords, Net IDs and security

Your Net ID establishes you in the Cornell network and allows a variety of privileges. The password protects electronic data, ensuring that only the person issued that password can access it. The online information available to you is wide-ranging, some of it personal. The personal information—grades, classes and health insurance details, for example—is information you do not want others to access. Passwords also protect Cornell's computing system by restricting access to members of the Cornell community. Therefore, giving out your password could threaten the security of the Cornell network.

Don't let someone assume your network identity. If you share your password with someone, that person can "be" you, using your password to read and reply to e-mail, post



Erin M. James '96 ILR, a student employee at CIT, enters her password in her Balch Hall dorm room.

Adriana Rovers/University Photography

The do's and don'ts of choosing a password

When choosing a password, don't use your login name in any form, e.g., as-is, reversed, capitalized, doubled, etc.; don't use your first or last name in any form; don't use your spouse's, partner's or child's name; don't use your mother's maiden name; don't use other information easily obtained about you. This includes license plate numbers, telephone numbers, social security numbers, the brand of automobile you drive, the name of your street, your address, etc.

Choose a password that is six or more characters long with at least one number included in the group. Many people prefer to intersperse numbers and letters and use mnemonic devices, such as the first letters of words from a favorite song, poem or sentence that is easy to remember. Others invent a nonsense word that is easy to recall.

to newsgroups, impersonate you in "chat rooms" or look at—and change—your personal information. Sometimes a person will harass or ridicule another person electronically using a "borrowed" Net ID.

There may be rare circumstances under which you must share your password, such as with a Cornell Information Technologies (CIT) consultant who is trying to solve a

technical problem you might be having. If you do share your password with anyone, change it as soon as possible afterwards. It is also wise to change your password several times a year to ensure that you are the only one who knows it. If you suspect that someone else is using your Net ID and are unsure what to do, contact the CIT Service HelpDesk (124 CCC, 255-8990, helpdesk@cornell.edu).

Respect the computing rights of others

Cornell's "Policy Regarding Abuse of Computers and Network Systems" states: "The use of computers and network systems in no way exempts any member of the university community from the normal requirements of ethical or legal behavior in the Cornell community. . . . Members of the University community are expected to follow certain principles of behavior in making use of computers and network systems, in particular to respect and to observe policies governing the privacy of or other restrictions placed upon data or information stored in or transmitted across computers and network systems, even when that data or information is not securely protected. . . ."

According to CIT policy, all access privileges (which include all accounts, user IDs, network IDs, telephone codes and any other access codes) are to be used for an individual's exclusive use and are authorized for use by no other person. Violations of the above may constitute a violation of the Cornell Campus Code of Conduct and/or the Code of Academic Integrity.

Despite the need for caution, computing at Cornell is a vital part of academic and administrative life. Take the time to ensure your personal electronic security by following the steps outlined above.

Offensive e-mail case *continued from page 1*

the list to a handful of friends did not create a hostile environment.

Some have suggested that the students should be responsible for creating a hostile environment because they placed the list in circulation to begin with. Having attended a mandatory training session with Cornell Information Technologies, perhaps they should have been more aware of how easily others could forward "75 Reasons." But the fact that others continued to distribute the list with their names on it does not support a finding that the four authors created a hostile environment.

I also concluded that the students did not misuse the University's computer resources, as defined by University policies. Again, these policies do not prohibit hate speech. To the contrary, they reaffirm the concept of free speech and recognize that certain offensive messages may have to be tolerated in a community which values the right of all to speak freely. This is not to suggest that all speech has the same value, or even that speech like "75 Reasons," distributed in a different manner, might not constitute harassment or other computer misuse. The

distribution by the four students in this case, however, was very limited, was not intended to harass and was not intended to interfere with any of the recipients' computer systems.

Although I do not find a violation of the Campus Code of Conduct based upon the facts in this case, the students themselves recognize that they have caused great anger and hurt to many people. They deeply regret their actions and want to begin the process of restoring their reputations and the community's confidence in them. Toward that end, in addition to the public letter of apology they wrote that was printed by the *Cornell Daily Sun* on Nov. 3, 1995, the students have offered to do the following:

- Each of them will attend the "Sex at 7:00" program sponsored by Cornell Advocates for Rape Education (CARE) and the Health Education Office at Gannett Health Center. This program deals with issues related to date and acquaintance rape, as well as more general issues such as gender roles, relationships and communication.

- Each of them has committed to perform 50 hours of community service. If possible,

they will do the work at a non-profit agency whose primary focus relates to sexual assault, rape crisis, or similar issues. Recognizing that such agencies may be reluctant to have these students work with them, the students will perform the community service elsewhere if the first option is not available.

- The students will meet with a group of senior Cornell administrators to apologize in person and to express regret for their actions and for the embarrassment and disruption caused to the University.

- One of Cornell's fundamental principles is "freedom with responsibility." I believe that the willingness of the four students to take the steps outlined above—even absent a finding that they violated the Campus Code of Conduct—demonstrates their understanding that the list of "75 Reasons" clearly overstepped the bounds of respect and decency. Even if they did not violate the Code of Conduct, each of the students is willing to accept responsibility for the harm that they caused and to take affirmative steps to correct it.

In concluding my report on this matter, I would like to address briefly the related issue of how the community at Cornell and beyond

responded to the list of "75 Reasons."

Some people, angry and offended, subjected the four students to threats of death, other bodily harm, e-mail "bombings," and even threats to "bring down" Cornell's entire e-mail system. Ironically, allegations of such conduct would suggest a Code violation much more clearly than the allegations in this case. For those who responded to the violence of "75 Reasons" with violence of your own, I urge you to reconsider your actions and to look for more positive ways to convey your message.

Others of you took the time to explain to these young men *why* their words were so hurtful. Coming as they did in some cases from survivors of sexual assault, your words enabled the students to understand (in ways that a judicial system never could) how much pain and distress the "75 Reasons" caused. As strongly as I urge the violent responses to stop, I hope that people at Cornell and elsewhere can follow the lead of those who have attempted to turn a very negative incident into a positive learning experience.

Barbara L. Krause
Judicial Administrator

CORNELL RESEARCH

Developing skim milk that looks and tastes like 2%, without the fat

By Blaine P. Friedlander Jr.

Cornell researchers at the Northeast Dairy Foods Research Center (NDFRC) may have found ways that could make skim milk taste, look and smell more like its cousin, 2-percent milk, but without the fat.

"The dairy industry needs an acceptable alternative for consumers who may avoid drinking milk because they do not want the fat and do not like the sensory quality of skim milk," said David M. Barbano, professor of food science. His report, "Identification of the Aroma and Flavor Components Necessary to Produce a Fat-Free Milk with the Taste of 2 Percent Fat Milk," appeared in the NDFRC's 1995 Annual Report.

Barbano and his colleagues are in search of the compounds in 2 percent milk that are responsible for the aroma and flavor, then they will determine which ingredients or blends mimic 2 percent milk.

Whole milk contains 3.25 percent fat. The dairy shelves also stock milk products at 2-percent, 1-percent and skim, which has very little milk fat (less than .5 percent).

The researchers first had to test the senses. They found that people use the color of milk to distinguish between the fat gradations. People notice that 2 percent milk is more white than skim milk. In fact, they said skim milk is perceived as having a green or blue tint. In the lab, viscosity and color could be matched, and panelists could distinguish the milks — detecting significant differences in aroma.

The study, "The Influence of Fat on Sensory Properties, Viscosity and Color of Lowfat Milk," appeared in the *Journal of Dairy Science* (Vol. 78, No. 6, 1995). Harry T. Lawless, associate professor of food science, and Lance G. Phillips, research associate in food science, co-authored that report with Barbano.

Since 1972, whole milk sales have been halved from 40 to nearly 20 billion pounds annually, while the sales of low-fat milk have soared from 8.2 to 25.3 billion pounds. Skim milk sales were con-



Adriana Rovers/University Photography
Professor of food science David Barbano, left, and Lance Phillips, research associate, pose in the Pilot Plant in Stocking Hall. In the foreground, skim milk, with an added food-grade whitener, will be sent to four different locations in the U.S. for consumer trials.

stant between 1972 and 1984, but more than doubled from 3 to 6.4 billion pounds between 1985 and 1992.

"A new, fat-free milk should be nutritious, but with a pleasing appearance and taste for drinking, for use in recipes, for pouring on breakfast cereal or adding to coffee," Barbano said.

"Health conscious consumers would probably acknowledge the nutritional advantages of skim milk over other beverages and might drink skim milk if it tasted better," he said. "If these consumers could be brought back to drinking a fat-free fluid milk, this would represent an increase in total milk consumption."

Still, there are hurdles. Riboflavin gives skim milk that blue-green sheen when the fat is removed. Fat adds whiteness to the milk, which hides the riboflavin tint and renders the liquid opaque. The legal fat limit for skim milk is .49 percent, while the legal limit for fat-free milk is .2 percent fat content. Less fat means more blue-green color.

"We started the research with finding how people tell the difference between milks with different fat contents. In normal light conditions, about 75 percent of testers saw the difference between 2 percent fat milk and skim milk. When guessing was factored in to the tester's decision, that percentage dropped to 63 percent," said Phillips. "In false light — such as a room lit in red — 46 percent of the testers differentiated the skim versus 2 percent. When guessing was factored in, the figure dropped to 20 percent."

"Color is important to our sensory perception," Phillips said. "Our research is designed to keep people from abandoning an excellent, nutritional product. After all, it has a high degree of bio-available calcium. It's a very nutritional product."

The goal of this research is to enhance the aroma, flavor and appearance and to increase consumer acceptance of skim milk. "Our results suggest that a fat substitute for use in a fat-free milk needs to change the appearance attributes of the milk more than its flavor and tactile attributes," Phillips said.

Undergraduate researcher helps create process to temper ceramics

By Larry Bernard

A major problem in finding a strong material able to withstand high temperatures is that the properties that allow such materials to take the heat make them susceptible to fractures.



Stephen Sass

Jessika Trancik uses a 1600°C furnace to prepare specimens as the first step toward proving the concept that ceramics can be tempered.

Ceramics would be particularly good candidate materials because they can have high melting points — above 2,000 degrees Celsius — but they are brittle and break easily, like glass.

Now Cornell materials scientists — a professor working with a graduate student, Ersan Üstündag, and an undergraduate student, Jessika Trancik — have come up with a novel way to temper ceramics so they won't crack easily. Such a process has the potential to be used for a new generation of materials, for such applications as aircraft jet turbines, for example, where components are subjected to high temperatures for long periods under high mechanical loads in hot burning gases.

The Cornell team has done to ceramics what already is well-known for glass: they temper, or strengthen, the material, by imposing a compressive stress on its outer surface that does not allow cracks to propagate.

"We want a whole new generation of materials for high-temperature structural applications," said Stephen Sass, Cornell professor of materials science and engineering, who directed the studies.

Nickel alloys now used in turbines, for example, go up to 1,150 degrees Celsius, just below their melting temperature.

"Ceramics are a natural," Sass said. "They frequently melt at temperatures above 2,000

degrees Celsius, and they're already oxidized so they aren't much affected by hot gases. But, they are not very forgiving — they chip easily and are very brittle. We can improve that. In the same way you can toughen glass, you can toughen ceramics."

With glass, two outer pieces sandwich a middle layer with a different composition, which are then all bonded together at high temperatures. When glass cools, the inside layer tries to contract more than the outer layer, but can't because of the "sandwich," and that superimposes a stress on the outer regions, limiting its susceptibility to fractures.

The Cornell researchers came up with a scheme to do that with ceramics. They bonded alumina, a ceramic compound consisting of aluminum and oxygen, to nickel aluminate, another ceramic containing nickel, aluminum and oxygen. They reduced the nickel aluminate by removing oxygen, which decreases its volume and pulls the ceramic in with it. That imposes compressive stresses in the outer surfaces, so cracks can't flourish.

The work, funded by the U.S. Office of Naval Research and the U.S. Air Force Office of Scientific Research, was described on Nov. 2 at the American Ceramics Society meeting in Seattle by Trancik, a Cornell junior in materials science. She did much of

the experimental work — including X-ray diffraction studies to measure the strains and, from them, the stresses generated in the aluminum oxide.

Cornell has applied for a patent on the process, and Trancik is one of the co-inventors along with Sass and Üstündag, who now is a postdoctoral researcher at Los Alamos National Laboratory.

"What holds back engines from letting jets fly faster is that they are limited by the relatively low melting temperatures of the current metal components of the engine. But tempered ceramics would be a very useful way to go to higher temperatures," said Trancik, who is now on an engineering co-op semester at Intel Corp. in Portland, Ore.

Said Sass: "It's a very interesting and potentially useful process. But there are still many challenges that have to be overcome before our proof of the concept of tempering is translated into practical applications."

"What makes this research even more exciting to me is that an undergraduate student played a central role in its success," Sass said. "I was very proud of Jessika, watching her present the results of her research to a group of distinguished scientists in Seattle. She was the only undergraduate giving a talk at this meeting, and she did an excellent job answering the questions of the experts in the audience."

Author: Economic influences are key factor in urban woes

By Dennis Shin '96

William Julius Wilson says the problems of the poor in America's inner cities are exacerbated by racial prejudice, but the roots of understanding urban poverty lie in examining unequal and discriminatory economic class structures.

A noted author and professor of sociology and public policy at the University of Chicago, Wilson visited the Cornell campus Nov. 13-17 as an A.D. White Professor-at-Large and spoke Nov. 13 on the topic "Power, Racism and Privilege" to a packed Goldwin Smith Hall audience.

With faculty and students spilling into the aisles and toward the back of the auditorium, Wilson told his audience that, given the current political climate, his speech could not be more timely. Delivering a politically energized lecture on how the dynamics of race and class shape life among the poorest sectors of the nation's population, he sounded the warning that unprecedented rates of joblessness and poverty have reached dangerous levels in American cities.

"But, it's not just simply a matter of race or racism," Wilson said at a press conference before his lecture. "I assume the race factor. Besides the fact that these places are segregated based on a history of racial discrimination, something else is happening here. We need to go beyond race to explain the impact of these economic and political factors."

Wilson doesn't believe racism has declined in America, but he provided research data to support the view that economic influences play a key role in defining the "new urban poverty." Citing results from his own studies of unemployment in three of Chicago's predominantly-black ghettos, Wilson said that in the 1950s employment rates were considerably better in ghetto neighborhoods, sometimes reaching as high as 70 percent. By 1990, however, only 37 percent of all males under his study held jobs.

"An easy explanation for this is racial segregation," Wilson said. "However, a race-specific argument is not sufficient to



Adriana Rovers/University Photography
William Julius Wilson, A.D. White Professor-at-Large, speaks at Goldwin Smith Hall, Nov. 13.

'But, it's not just simply a matter of race or racism. I assume the race factor. Besides the fact that these places are segregated based on a history of racial discrimination, something else is happening here. We need to go beyond race to explain the impact of these economic and political factors.'

— William Julius Wilson

explain recent changes in such neighborhoods. After all, these historical black-belt neighborhoods were just as segregated by skin color in 1950 as they are today, yet the level of employment was much higher then."

He provided a multitude of explanations for the decline in job opportunities, ranging from a nationwide decline in the need for unskilled workers to changes in the global economy. Ineffective government programs and public policy also have contributed to joblessness, Wilson said.

Author of *The Truly Disadvantaged: The Inner City, The Underclass and The Public*, Wilson gained national prominence for his innovative research and theories on the interaction of race and class within inner city communities. He recently finished another book, tentatively titled *Jobless Ghettos: The Disappearance of Work and its Implications for Society*, which will be published next summer at the height of the presidential elections.

"All of my books are controversial. . . . As a social scientist, I don't accept the

view that I should not be involved in the public policy debate," Wilson said.

Expressing his views on current national politics, Wilson criticized the Republican Congress for discouraging "bold social programs" and claimed that recent budget cuts merely reflect political priorities. He firmly stated that President Clinton must veto the upcoming welfare-reform bill because the legislation would only exacerbate the problems of the urban poor.

In a politically active role, however, Wilson stressed the need not "just to fight bad strategies" but also to sense "the moral obligation to provide alternative strategies." He promised that his new book presents a policy framework that centers around his vision to create a public-private partnership that would provide jobs to the urban underclass.

Describing the relationship between joblessness and violent crime, Wilson argued that reducing unemployment rates in inner cities would solve a number of other problems that plague urban life. He attributed such developments as declining marriage rates, increased drug trafficking and gang violence to the overall disappearance of work in the inner cities. Employment provides stability, Wilson argued, and without stability the social organization of any community deteriorates.

"I'm from an urban area, so I wanted to hear what he had to say about where I grew up," said Cassia Charles '98. "Also, I want to go into the medical profession, and one thing I want to focus on is urban America, so I would like to know more about the people I'm going to be dealing with."

"He has a talent for addressing questions that other people find very difficult to tackle and for which there are usually various invested answers," said Elaine Wethington, associate professor of human development and family studies, speaking of Wilson.

"Sometimes the solutions he provides evoke controversy among those who hold different views," she added, "but he's good at meeting his critics."

CaRDI awards *continued from page 1*

translated into action if the community is part of the design and implementation — not merely a recipient of the results. The PAR Network links a number of community-based projects that provide Cornell students and researchers with opportunities for collaborative, hands-on experience within the community. Studies are done in subjects as diverse as natural resource management, education, industrial and labor relations, and local governance.

• **Parenting Skills Workshop Series.** This program teaches better parenting skills to parents. It focuses on finding positive ways to change a child's behavior and to provide a supportive environment. Although first developed and run in Tompkins County by Cornell Coop-

erative Extension, Ithaca Youth Bureau and the Tompkins County Department of Social Services, workshop facilitators have been trained across the state.

• **David Pelletier**, Cornell associate professor of nutrition, took a successful community collaborative research process and sought to understand why excellent work did not translate more effectively into policy change. In that effort, he shifted the focus of the Community-Based Nutrition Monitoring Project from research to problem-solving, involved the project's constituents, encouraged community coalitions to define a research agenda, and gave credence to alternative perceptions of problems and their causes. Lifetime Achievement Award winners:

• **D. Guy Burns**, retired economic development specialist, was honored for his role in putting economic development on the Cornell Cooperative Extension map. Burns helped to broaden its perspective beyond the farm. He pioneered the industrial extension program (modeled after the agricultural prototype) linking the engineering college with manufacturing firms, and he helped create Cornell's Center for Manufacturing Enterprise. He also provided support to CCE's Economic Vitality initiative, which explicitly stressed the linkages between economic development, worker training, and social supports critical to community well-being.

• **Alan Hahn**, Cornell professor of human ecology, was honored for his role as

the architect of a "Public Policy Education Model," designed to help broaden the set of constituents included in community problem-solving. This served to extend the definition of the problems and the range of alternatives considered. This model manages diverse voices in a policy debate, crucial to addressing the causes rather than symptoms. Since 1966, Hahn has taught community decision-making, intergovernmental relations, citizen participation and human services politics. He has provided training for hundreds of extension educators and policy-makers, not only throughout New York but across the nation. Hahn has written *The Politics of Caring* (Westview Press, 1994) and will continue his work on public issues education.

Black holes *continued from page 1*

by the Binary Black Hole Alliance, involving researchers at five universities in a variety of disciplines.

Black holes are the remnants of stars that have exhausted their nuclear fuel and exploded, collapsing in on themselves with gravity so strong nothing can escape, not even light. While never seen directly, indirect evidence of their existence is strong.

One of the ways to confirm their existence is by detecting the gravity waves they produce when they form. Like ocean waves or light waves, gravity produces ripples at the speed of light that emanate from a structure in space. A project to detect these waves is under way, in the form of a Laser Interfer-

ometer Gravitational-Wave Observatory (LIGO), which should be operating within five years.

The new supercomputer model will help characterize the gravity wave patterns that should emerge from black hole collisions, which LIGO should detect.

"We're hoping to predict what LIGO will find," said Teukolsky. "The success of this present simulation gives us the confidence we understand how to solve Einstein's equations. It's a diagnostic tool to help us make sense of the solution."

The Cornell model of the collision was done by having the supercomputer at the Cornell Theory Center — an IBM SP1 paral-

lel processor — track the path of light rays propagated out from the surface of the black holes. The surface, or event horizon, of a black hole is the point at which light no longer can escape.

"Before having computational tools for studying the collision and merger of two black holes, we had to rely on sketches and intelligent guesses to describe the interaction," the researchers write. "The numerical simulations have revealed new qualitative features of the collision and have pointed the way to simple analytic models that reveal the underlying physics."

The Cornell researchers also created a supercomputer animation of the process, in

which two black holes approach each other then collide, their centers finally merging as they become one massive object. The simulation was done a year ago by physics undergraduate students who have since graduated.

"This is a new way of doing science for us," Teukolsky said. "In the past, we've had small research groups and individual collaborations. This is a much more elaborate structure and an example of how successful such an arrangement can be. The next step will be to study more realistic astrophysical situations, where the black holes are in orbit about each other before spiraling together. This problem will tax even the new IBM SP2 machine."



George Hudler, associate professor of plant pathology, who teaches the course "Magical Mushrooms, Mischievous Molds," shows off a fungus to graduate student Jamie Jonker, far left, Agriculture and Life Sciences, and junior Rosanna Lora, Human Ecology, in the Dean's Garden behind Warren Hall.

Adriana Rovers/University Photography

Plant pathology course gets *Rolling Stone's* attention

By Peggy Haine

George Hudler, associate professor of plant pathology, can be curious and passionate about things other people consider odd, if not downright disgusting. This is probably one of the things that brought him to the attention of *Rolling Stone*.

Hudler's popular course, "Magical Mushrooms, Mischievous Molds" (Plant Pathology 201), was featured in a story about unusual academic offerings in the magazine's fall college issue. *Rolling Stone* included Cornell as one of the "bastions of free inquiry and academic eccentricity . . . in spite of the Radical Right's attempts to cut university curricula to the core." Unusual courses at Berkeley, Smith and Stanford were among those cited.

What is it like for a serious academic to be interviewed by a trendy national publication?

"It was exciting," Hudler said. "I was thrilled when they first called. Actually, the *Rolling Stone* researcher who contacted me was a Cornellian.

"I certainly view the course as a stress-free introduction to a fascinating part of the world most people aren't familiar with," Hudler said. "Not only is it important for students to know about these things in their day-to-day lives, but many of our students will one day be in positions of formulating policy on environmental issues, and this information will be important to them."

But for the present, Plant Pathology 201 serves as an introduction to "the rotten world around us," from medicines to edible mushrooms, from intentionally fermented foods (bleu cheese, beer and other brews) to the nasty things that live on last month's pasta salad tucked in a lower corner of a Collegetown fridge — producing toxic, sometimes carcinogenic by-products, with antisocial-sounding names like aflatoxin and vomitoxin.

According to Hudler, mushrooms, molds, yeasts and other related microbes have helped mold world history. He cites the influence of the fungus, *Puccinia graminis tritici*, which causes wheat rust, thought to have been responsible for the Old Testament famines that precipitated the enslavement of the Israelites in Egypt. Without wheat rust, says Hudler, Moses may never have led the Israelites into the desert, and the tablets spelling out the Ten Commandments might still be lan-

Hudler is involved in extension work

As a plant pathologist, George Hudler has been involved in extension work as well as teaching and research. His research focuses on diseases of trees and on developing integrated pest management strategies for the Christmas tree industry, which generates approximately \$60 million dollars worth of retail sales each year in New York state alone. He also does research on "tar spot," which, as its name might suggest, is a splotchy-looking fungus that disfigures maple leaves toward the end of the season. Its damage, more cosmetic than economic, is distressing to homeowners and foresters.

Hudler has recently signed a contract with Princeton University Press to write a textbook/trade book about magical mushrooms and mischievous molds.

'I certainly view the course as a stress-free introduction to a fascinating part of the world most people aren't familiar with.'

— George Hudler

guishing atop Mount Sinai.

Another fungus, *Claviceps purpurea*, produces ergot, which attacks rye and can be a powerful hallucinogen, and may have been in part responsible for the fabled mysteries of Eleusis. The fathers of Western thought, Plato, Socrates and Euripides, sought rest and inspiration at that retreat site, possibly ingesting this LSD-like substance. Was ergot their muse?

But it's not all toxins and mind alteration in Hudler's class. Students sniff the penicillin sharpness of bleu cheese and learn that the discovery of penicillin triggered a fruitful search for other organically derived medicines, including Cyclosporin A, used to help the human body accept an organ transplant; Lovastatin, to lower cholesterol levels; Ergostat, a vasoconstrictor prescribed for sufferers of migraine headaches; and Beano, an over-the-counter medication for folks who have oversubscribed their legumes.

Students also learn about the "humongous fungus." Touted as the largest living organisms on earth, one occupies about 30 acres in Michigan and another an even larger area in Oregon. DNA analyses of mushrooms sprouting from these masses indicate that each originated from its "mother" fungus several thousand years ago and remains connected to it underground.

The course explores other cultures' ancient and modern uses of fungi, whose health-giving qualities Western researchers are just now investigating. For instance, Asian medical practitioners prescribe extracts of the culinarily trendy shiitake mushroom in the treatment of high blood pressure and some cancers. Others tout kombucha, a symbiotic/synergistic growth of yeasts and bacteria that produces a vinegary "tea" credited as a general tonic. And local entrepreneurs may want to know more about the reishi mushroom, valued in Asia as an aphrodisiac and aging retardant. This particular decay fungus grows in woods not far from Cornell.

For some of Hudler's students, "Magical Mushrooms, Mischievous Molds" is the beginning of a passion. They go on to take rigorous courses in plant pathology and field mycology. For others, perhaps pre-med seniors who have stoked up on sciences and gotten their medical school applications in, it can be a fun reward for all those grinding years of P-chem, microbiology and statistics labs and exams. For still others, it's a fairly stress-free chance to enjoy and learn more about the world around them. They attend self-guided lab tours to observe live specimens in season, and they write papers on such topics as the possible effects of hallucinogenic mushrooms on the origins of religion, the symbiotic pairings of fungi and algae to form lichens, and fungi as agents of death in mystery novels.

"Magical Mushrooms, Mischievous Molds," now in its sixth year, ends the semester with a joyous "final feast." Hudler and his teaching assistants whip up a regal repast of marinated mushrooms, mushroom soup, mushroom pate, mushroom quiche and mushroom bread, all washed down (for those of age) with home-brewed beer and wine, products of yeasts' efforts. Students leave with full bellies, recipes and an appreciation for humankind's historical and continuing interaction with fungi.

Researchers help fine-tune whale studies

By Roger Segelken

A two-week experiment in the Pacific Ocean off the coast of southern California proved three things, according to Cornell scientists:

- Acoustic surveys can help U.S. Navy operations comply with the Marine Animal Protection Act.

- Together with visual surveys conducted by the National Marine Fisheries Service (NMFS), acoustic surveys can do a better job of estimating whale populations.

- The ocean is awfully noisy if you're a whale.

Operating from the U.S.S. Acoustic Explorer, September's "Whales '95" exercise by scientists from the Cornell Bioacoustics Research Program tested new methods of determining whales' whereabouts from the sounds they make. The exercise combined visual sightings and Cold War technologies, originally employed by the Navy for tracking enemy submarines, with new procedures and equipment developed by the Bioacoustics Research Program for locating, identifying and counting whales.

While the ship trolled for whales by towing a mile-long array of 16 hydrophones, pop-up buoys packed with recording equip-

'We demonstrated that it is possible to tell, from the sounds whales make, precisely where they are swimming at any given time.'

— Christopher W. Clark

ment were sunk on the ocean floor. Back in the Ithaca laboratory, that data will be incorporated with information on visual sightings and with September recordings from Pacific Ocean sections of IUSS, the Navy's Integrated Undersea Surveillance Systems. Analysis will take months, but the scientists are already calling the mission a success.

"We demonstrated that it is possible to tell, from the sounds whales make, precisely where they are swimming at any given time. That should enable the Navy to schedule exercises without disturbing whales, and it gives the NMFS a new tool for counting marine mammals that make sounds," said Christopher W. Clark, director of the Cornell Bioacoustics Research Program.

The biologists already had some idea what a noisy place the Pacific is because the Bioacoustics Research Program is responsible for representing marine mammals' interests in the controversial ATOC (Acoustic Thermometry of Ocean Climate) project. However, linking so many listening devices together in one area — where military, commercial shipping and fisheries traffic is heavy — really gave them an earful.

"It's like standing in the middle of a busy airport," Clark said, adding that biologists are just beginning to learn how sensitive marine mammals are to manmade noise.

A pleasant surprise was the whales' willingness to visit the research ship at close range. One rare sight was of blue whales breaching — possibly a mating behavior — and then a blue whale started singing. The biologists were amazed to see five 75-foot-long fin back whales, shoulder-to-shoulder, in a kind of synchronized swimming maneuver.

"The fin backs seemed curious about our boat," Clark said. "They were swimming alongside the hydrophone array, as if they were checking it out."

Towing the mile-long cable through water was producing vibrations, something like strumming a giant guitar string, he said.

Perhaps, in a sea of discordant racket, the sound of curious scientists was music to the whales' ears.

Amedeo Hotels is partner at research center

Amedeo Hotels, owners and operators of the New York Palace, a midtown Manhattan luxury hotel, has formed a partnership with the School of Hotel Administration's Center for Hospitality Research to support research projects that will combine the theoretical aspects of academic research with the practical demands of a thriving hotel operation.

"We are confident that our partnership with the Cornell University Center for Hospitality Research will result in important contributions to the hospitality industry, particularly in the luxury segment of which we are part," said Richard J. Cotter, managing director of the New York Palace. "In a sense, our hotel has become a working laboratory where exciting ideas and innovations with long-term benefits will be explored with Cornell. We look forward to a dynamic joint venture."

Leo Renaghan, director of the Center for Hospitality Research, welcomed the support of Amedeo Hotels. "This collaboration is essential in strengthening both the industry and academia," he said.

Central to the partnership is the Amedeo Research Grant designed to foster original research that will lead directly to long-term improved profitability of international luxury hotels. Research topics will focus on the needs of the hospitality end user. Results will, in turn, be translated into operating principles in the areas of operations, management, marketing, human resources, accounting and finance.

The \$100,000 Amedeo Research Grant will be administered by the Center for Hospitality Research. The grant competition is open to researchers with an interest in theoretical and empirical developments that have application to the luxury segment of the hotel industry.

A panel of academic and industry judges will award grants of up to \$20,000 based on a project's potential contributions to luxury hotel management, research methodology and innovation of ideas or design.

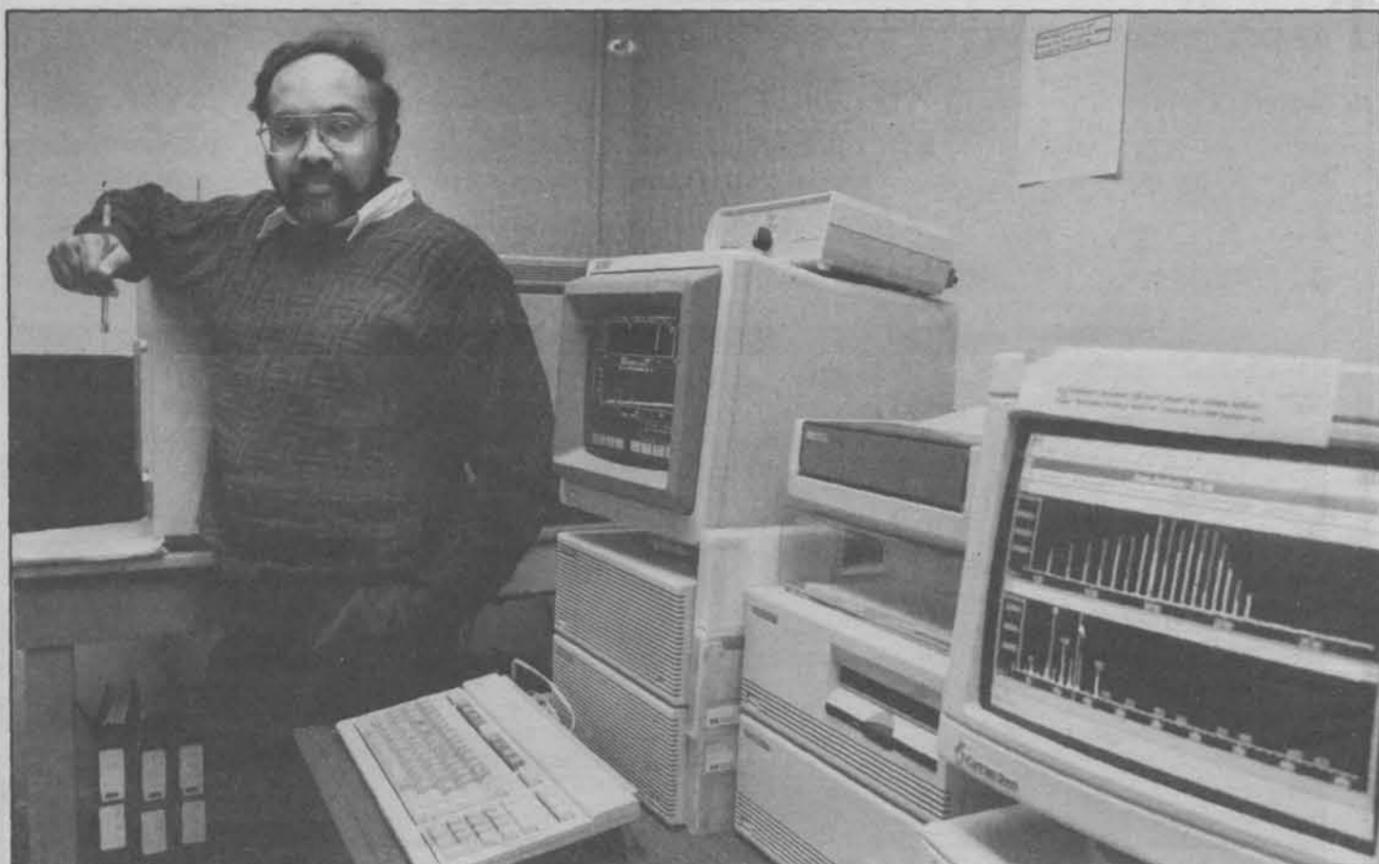
Academic judges are: Cathy Enz, associate professor of management; Craig Lundberg, the Kenneth Blanchard Professor of Human Resources Management; and Steven Mutkoski, the Banfi Vintners Professor of Wines, Education and Management, all of the School of Hotel Administration; and Vithala Rao, the Deane W. Malott Professor of Management and professor of marketing and quantitative methods at the Johnson Graduate School of Management.

Industry judges are: Bjorn Hanson, Coopers & Lybrand; Michael Glennie, president of the Boca Raton Resort & Club; Peter C. Yesawich, president and chief executive officer of Robinson, Yesawich & Pepperdine Inc.; and Richard Chambers, director of marketing for the New York Palace.

Scholars from the United States and abroad presented research proposals before judges at the Palace Nov. 13. Those who met preliminary criteria have been invited to prepare full proposals for review and approval by judges in January. Research must be completed by January 1997.

Cornell's Center for Hospitality Research was designed as a forum in which scholars and industry professionals can work together in pursuit of common research goals. Its mission is to focus academic research on the needs and concerns of the hospitality industry, to address pervasive issues that may affect international competitiveness and to ensure that business maximizes the benefit of research through the rapid conversion of findings into practice.

The addition of Amedeo Hotels brings to 10 the number of corporations affiliated with the Center for Hospitality Research. Others include Banfi Vintners, Cini-Little International, EcoLabs, Medallion Hotels, Procter & Gamble, Marriot Hotels and Resorts, Choice Hotels, NHV Hotels International and Holiday Inn Worldwide.



Athula B. Attygalle, senior research associate and director of the Chemistry Department's mass spectrometry facility, poses in his office in Baker Laboratory.

Chemical-prospecting grant sustains ancient practices

By Robert Hill

Athula B. Attygalle, a senior research associate in Professor Jerrold Meinwald's group in the Department of Chemistry, has been awarded a second grant from the Japanese pharmaceutical giant Sankyo Ltd. to conduct an ethnobotanically based chemical prospecting program in Sri Lanka. This greatly extends an existing chemical prospecting program currently conducted by CIRCE (Cornell Institute for Research in Chemical Ecology).

Cornell chemists won their first Sankyo grant in 1993 to collect extracts of plant material from Sri Lanka for screening in Japan to isolate potential pharmaceuticals. The original samples were mainly bark samples selected at random in the Sinharaja Forest area, one of the few remaining regions of unexplored and unexploited rain forest in the world. The Cornell team collaborated with scientists from the University of Sri Jayawardenapura in Sri Lanka; the samples collected by the Sri Lankan botanists were extracted using a solvent, and the residue obtained after evaporation of the solvent was sent to the Sankyo labs in Tokyo for study.

"Most of these samples were not very interesting," Attygalle explained, "but a few of the extracts looked promising on the basis of the initial screening."

In fact, of the 300 samples screened over two years, several extracts showed promising activities which are being more closely analyzed.

"Although this is better than the average rate of success in similar investigations, such random screening is a very expensive procedure. It seemed reasonable that a targeted selection of screening samples would be much more efficient and cost effective," Attygalle said.

So Sankyo agreed to fund a second phase

of prospecting in the amount of \$71,000, on the basis Attygalle's suggestion that if randomness can be reduced in the choice of screening samples, then efficiency, cost effectiveness and, naturally, profits would rise. The samples, Attygalle suggested, could be provided by a group of "native doctors" who practice indigenous medicine in Sri Lanka.

The island and nearby Indian subcontinent have a rich, millennia-old tradition of ayurvedic medicine — practice based on treatment by natural plant compounds. Attygalle suggested that these native practitioners, the repository of a long ethnobotanical tradition, could best target the plant compounds likely to be pharmacologically active substances and thereby eliminate a good deal of the randomness in the original sample selection and screening methods.

There was some initial skepticism, even in the mind of Attygalle, the Sri Lankan chemist suggesting this approach. But, he conceded, "Some of the preliminary screenings [of ayurvedic medicinal compounds] showed that the traditional knowledge is not simply 'hocus-pocus.' Centuries of traditional practice have optimized these formulations. I think the time has come for proper scientific investigations."

So, earlier this year while visiting his home country on another research project, Attygalle spoke privately with some of the Sri Lankan medical practitioners.

"Their attitude was very encouraging," he recalled. "They were convinced we would do this thing properly and that we weren't simply trying to steal their secrets, such as has happened in the past, in Madagascar, for example."

In the wake of Attygalle's visit, the Sri Lankan ayurvedists have formed a bargaining group, the Sri Lanka Foundation for Indigenous Medicine. The agreement governing Sankyo's phase two screening project will be signed with this group, and the univer-

sity will then act as its broker with Sankyo.

"They are very wary when they hear 'big business.' They're very suspicious of international business interests, but they have confidence in us and they know that all agreements will be in place," Attygalle explained. "They trust us."

Central to this agreement is the guarantee that if any commercial product is derived from these investigations, a significant fraction of the sales would be directed to Sri Lanka to support forest conservation efforts.

Attygalle will return to Sri Lanka in December to arrange for the shipment of the medicinal extracts. First samples are expected in January 1996 and will come directly from Sri Lankan medical plantations that supply the indigenous ayurvedic practice in South Asia. "There is already an industry in place that extracts these compounds for practitioners," Attygalle said, "so the extraction will be that much easier."

Some of the pharmacologically active compounds will be isolated and purified in Cornell's Baker Laboratory. Traditional chromatographic techniques followed by spectroscopic studies then will be used to determine the structures of these compounds. Part of the Sankyo funding will be used to document the ethnobotany and natural history of these plants, together with pharmacological findings, in a database. Eventually, this data will be used to produce a book recording the tradition of botanical medicine in Sri Lanka and documenting active pharmacological compounds.

"This is not simply an enjoyable chemical project," Attygalle reflected. "It is one of the most benign ways that we can exploit our environment. And it preserves an ethnobotanical tradition of knowledge which may well not otherwise survive another generation. As we all know, these traditions are dying; both the plants and knowledge about their utility are rapidly becoming extinct."

Annual agribusiness conference is set for Dec. 12

By Blaine P. Friedlander Jr.

John Frank, deputy chief counsel to the U.S. House Agriculture Committee, will provide insight into the 1995 Farm Bill while Cornell agricultural experts assess the current and future economic conditions at the annual Agribusiness Situation and Outlook Conference on Dec. 12 on campus. It is sponsored by the university's Department of Agricultural, Resource and Managerial Economics.

The morning plenary session begins at 10 a.m. at the David L. Call Alumni Auditorium in Kennedy Hall. John Brake, Cornell

professor of agricultural economics, will address "The Current Situation and Outlook for the National Economy." Following Brake's lecture, Frank will present his invited talk, "Preparing Federal Farm and Food Policy for the 21st Century."

In the afternoon, three plenary sessions will run concurrently, beginning at 1:15 p.m.:

- Session A, in the David L. Call Alumni Auditorium, will address the outlook for grains, feed and other farm outputs, as well as the dairy situation and outlook.

- Session B, in Room 145 Warren Hall, will address the fruit, grape and wine situa-

tion and outlook, as well as the current perspective and future view toward vegetables and ornamentals.

- Session C, in Room 166 Martha Van Rensselaer Hall, will address "Consumers and Consumption Patterns," as well as "Labeling Regulations and Consumer Food Choices." This concurrent session, offered for the first time, is sponsored by the Department of Consumer Economics and Housing.

Pre-registration is \$15 through Dec. 1. Registration at the door is \$20. For more information, contact Wendy Barrett at (607) 255-1581.

Panelists address issues confronting fraternities, sororities

By Gaston Ceron '96

"How Can We Improve the Greek System?"

That was the question discussed by a student, faculty and staff panel before a small, but active, crowd at the David L. Call Alumni Auditorium of Kennedy Hall on Nov. 15.

The event, organized to discuss concerns about the future of Cornell's fraternities and sororities, was sponsored by the Cornell Political Forum's Debate Society.

Five panelists addressed several issues confronting the Greek system, including perceptions of alcohol abuse and out-of-control parties, elitism and exclusion, and poor relations with faculty and administrators.

Student representatives on the panel were: James Mallios, president of the Order of Omega society; Vaughn Lowery, president of the Africana and Latino Greek Letter Council (ALGLC); and Erin Linehan, Panhellenic Council vice president for judicial affairs. Susan Murphy, vice president for student and academic services, and Jennifer L. Gerner, assistant dean for undergraduate and graduate studies and professor of consumer economics and housing in the College of Human Ecology, completed the panel. Randy Stevens, associate dean of students and director of fraternity and sorority affairs, served as moderator.

Panelists' introductory comments were followed by a question-and-answer period. One issue each of the panelists agreed on was the need for those involved with the Greek system to stress responsible drinking among students.

Mallios, representing the InterFraternity Council, explained the recent steps the IFC has taken to promote responsible alcohol management, and he discussed the need for fraternities to emphasize all aspects of Greek life to

'The Greek system needs to remember its long and proud history at this university.'

— Susan Murphy

prospective members during the recruiting process.

"We're trying to find out what the freshmen in the '90s want," Mallios said.

But in discussing widespread impressions of out-of-control parties and binge drinking at fraternity gatherings, Mallios chided the media for often perpetuating inaccurate images, and he said problems with alcohol exist on campus beyond Greek houses. However, he suggested that fraternities and sororities need to return to stricter crowd and invitation controls for social events.

Linehan offered community service as an area in which the Greek system could improve, and Murphy called for a return to traditional values and ideals among fraternity and sorority members.

Lowery spoke of the recruiting problems that face Cornell's minority fraternities and sororities and of the differences between the IFC and ALGLC systems. He explained that minority Greek organizations at Cornell, and nationwide, started in reaction to racial discrimination and exclusion by mainstream fraternities and sororities, and the minority houses have continued to persevere.

"Our [the IFC's and the ALGLC's] cardinal principles are similar," Lowery said, but he said the different histories and traditions of the systems have kept them separate. He

also noted the importance of the ALGLC members' national organizations as agents for social change.

In response to a question about the perceived elitism of Greek organizations, Linehan pointed out that of the more than 700 women who rush sororities, approximately 95 percent receive bids to join houses. Mallios also argued for the diversity of fraternities at Cornell.

"With over 40 houses on campus, there really is a house for everyone," he said, adding, "Exclusion and choice are not unique to the Greek system."

Addressing an apparent lack of involvement by junior and senior sorority members, Linehan said she recognized a decline in interest after the sophomore year, but suggested that the large size of sororities may be at fault and that a solution may be to have houses promote a greater sense of community among all members. She also suggested that sororities take on more women's issues.

When asked about the faculty's opinion of the Greek system, Gerner said, "Many members of the faculty find the Greek system quite foreign. They don't understand it." But she said she felt faculty opinion could be improved through lectures and discussions sponsored by Greek houses.

In discussing the Cornell administration's relations with the fraternity and sorority system, Murphy admitted the attitude has often shifted between benign neglect and displeasure. Work needs to be done, she said, to strengthen administrative appreciation and support of the Greek system, including remembering the system's history of contributions.

Sarah Hunter, the evening's organizer and events coordinator for the Cornell Political Forum, said she was pleased with the discussion, despite the small turnout.

Having their cake

After cutting the cake commemorating the 70th anniversary of Willard Straight Hall, Brian Barrett, second from left, WSH program board co-chair, Michael Merritt, center, WSH personnel coordinator and administrative board chair, and Dean of Students John Ford, second from right, sample the cake and ice cream. Serenading the celebrants during the Nov. 20 event are Seth Kibel, far left, and W. Gary Wetstein. The anniversary celebration, in the Memorial Room, was co-sponsored by the Willard Straight Hall Administrative Board and Program Board, and units of the Office of the Dean of Students.



Charles Harrington/University Photography

United Way quilt sells agency's message of caring and warmth

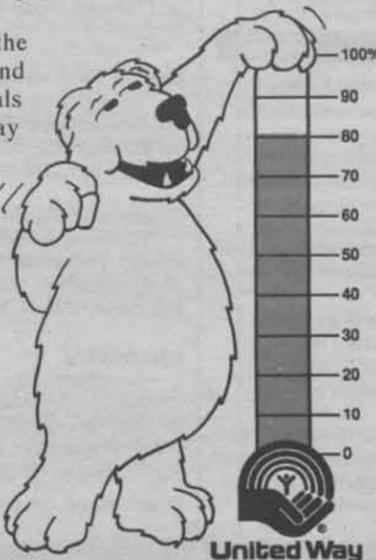
By Darryl Geddes

"With you, we're helping to make our vibrant crazy quilt called 'community' a warmer place to be."

This year's motto for the United Way of Tompkins County annual campaign has become a work of art — literally.

A quilt bearing the campaign slogan and photos of individuals helped by United Way agencies is making its way around the county to help urge individuals to support the campaign.

"The quilt is a perfect match for this year's United Way theme, which portrays the community as a quilt of different colors and patches," said Valerie DeSantis,



director for United Way campaign communications. "It's a tremendous asset for us."

The idea for a quilt to help sell the agency's message came from United Way volunteer Ann-Marie Tutton, assistant vice president of Tompkins County Trust Co. "The quilt actually is an extension of the national campaign," she said. "I thought it was important to tie the national campaign in with our local efforts."

"I think it really helps visualize the campaign for many people," she added. "And the fact that it was created by volunteers makes the project that much more meaningful."

Five members of the Tompkins County Quilters' Guild stitched together the nine-panel quilt. The panels spell out U-N-I-T-E-D-W-A-Y.

"It took us about three weeks to complete," said quilter Brigid Hubberman, who was assisted on the project by Enid Zollweg, Alanna Fontanella, Jane Converse and Judi Heath. "We think it's an appropriate piece for the United Way, because quilts bring warmth and security, much like the United Way."

Others assisting with the quilt were local photographer Dede Hatch, Kinkos, which transferred the photography to the fabric, and Susan Spear, who designed the quilt frame.

The quilt has been making the rounds of area businesses and institutions. It already has been displayed at Cornell, Ithaca College, Montgomery Ward, M&T Bank, Wegmans



and Tompkins County Trust Co.

Contributions to the United Way make the quilt's message complete. If you haven't contributed to the 1995 Cornell portion of the campaign, contact your division volunteer or Rhonda Velazquez at the Cornell United Way office at 255-6418 or <rhv2@cornell.edu>.



Charles Harrington/University Photography

Musicians rehearse for the Dec. 3 jazz workshop and concert.

Jazz workshop, concert for all ages is Dec. 3

Music lovers of all ages are invited to take part in a jazz workshop sponsored by Cornell's Department of Music Dec. 3 at 4 p.m. in Barnes Hall.

The workshop, led by Karlton Hester, assistant professor of music, will answer many questions about jazz, including: what is jazz, where does it come from, who are the performers and what type of instruments are featured in jazz?

"We hope this workshop will educate individuals with a better sense of what jazz is, which will hopefully encourage more

individuals to attend jazz performances," Hester said.

The opportunity to listen to live jazz will come hours later at 8:15 p.m. that evening when the Cornell Jazz Ensembles under the direction of Hester give their semiannual concert in Barnes Hall. The concert features be-bop, swing and more contemporary music, along with student compositions from Hester's course on introduction to improvisational theory.

The workshop and the concert are free and open to the public.

Carnegie Hall performance Dec. 4 to benefit Cornell music department

By Darryl Geddes

Fortepianist Malcolm Bilson will perform works by Mozart, Haydn and Brahms in an evening of performances by faculty and students of Cornell's Department of Music on Monday, Dec. 4, at 8 p.m. in Weill Recital Hall at Carnegie Hall, 881 7th Ave., New York City.

The evening, billed as "The Lincoln Hall Renaissance," pays tribute to Cornell's music program and seeks to raise funds for the renovation of Lincoln Hall, the music department's home on campus.

Hosts for the evening's activities, which feature a champagne reception immediately following the program, are Cornell President Hunter Rawlings and his wife, Elizabeth; Carnegie Hall board chairman Sanford Weill and his wife, Joan; and Natan and Jessica Weill Bibliowicz. Weill, his daughter and son-in-law are Cornell alumni.

Bilson, the Frederick J. Whiton Professor of Music, has been in the forefront of the period instrument movement for more than two decades. Last year in a New York City appearance, Bilson performed the complete cycle of Beethoven sonatas on early keyboards. His performances on period instruments have contributed greatly to the restoration of the fortepiano to the concert stage and

to recordings of "mainstream" repertory.

Joining Bilson on stage will be pianists Xak Bjerken, David Borden and Edward Murray, soprano Judith Kellock and the Cornell Chamber Singers under the direction of Scott Tucker. The program will feature the music of Brahms, Chopin, Gershwin and Stravinsky. Kellock will perform the world premiere of *Alter? When the Hills Do*, a composition by doctoral student Anna Weesner.

The Cornell Department of Music has had three separate addresses on campus since its creation in 1903. No site has been ideal for educating students in music studies. Lincoln Hall, which the department moved to in the 1960s, gave faculty and students more elbow room and a permanent home, but the stone structure, originally built for the study of civil engineering and architecture, remains inadequate for music instruction and appreciation.

The \$15 million Lincoln Hall renovation and expansion project would provide the department with 50 percent more space. Key elements of the project include a climate control system to ensure the proper maintenance of instruments and library collections, a two-story rehearsal room and a computer laboratory.

For more information on the "Lincoln Hall Renaissance" or for tickets, call 1-800-331-0650.

Soprano Bryn-Julson to perform Dec. 8

Soprano Phyllis Bryn-Julson will perform works by Schumann, Kurtág, Aperghis and Ives on Friday, Dec. 8, at 8:15 p.m. in Barnes Hall. Xak Bjerken will provide the accompaniment. The performance is free and open to the public. Earlier in the day, Bryn-Julson will speak at a public lecture at 1:25 p.m. in Barnes Hall.

Bryn-Julson's concert dates for the 1994-1995 season included performances of Berg's *Seven Early Songs* with the Milwaukee Symphony and a program of Copland, Charles Ives and Elliot Carter at the DaCamera Society in Houston. Her European engagements have included performances of Ligeti's *Requiem* and works by Boulez.

Bryn-Julson's recent seasons have included the world premiere of Charles Wuorinen's *A Winter's Tale* at Rutgers University; she also sang the composition in Lincoln Center with the Chamber Music Society of Lincoln Center.



Bryn-Julson

A popular guest artist, Bryn-Julson has performed with the Boston, Chicago, Dallas and Atlanta symphonies and the New York and Los Angeles philharmonies.

In 1988, the soprano became the first American ever to give a master class at the Moscow Conservatory of Music.

Educated at Syracuse University, Bryn-Julson made her opera debut in the 1976 world premiere of Roger Session's *Montezuma* with the Boston Opera Company and, in 1983, made her Covent Garden debut in Stravinsky's *Le Rossignol*.

She has recorded on numerous labels, most notably Deutsche Grammophon, CBS Masterworks and Nonesuch.

CALENDAR

from page 12

MUSIC

Department of Music

• Friday, Dec. 1, 8:15 p.m., Barnes Hall: The Cornell Gamelon Ensemble will present "A Taste of Indonesia VII," an evening of Indonesian arts, featuring the famous Javanese shadow puppet theater and Javanese dances, accompanied by a complete ensemble of gongs, drums, metallophones, xylophones and vocalists. In the shadow theater, royal audience scenes, classical Javanese popular songs, politically incorrect clowns and wild and bloody battles take place in a world of beautiful palaces, powerful kings, passionate women and controversial ogres. According to Javanese custom, the audience can walk around and look at the screen and instruments from all sides. Indonesian crafts and snacks will be on sale.

• Saturday, Dec. 2, 8:15 p.m., Bailey Hall: The Cornell University Wind Symphony presents "Bach to Bach." David Conn conducts this concert featuring J.S. Bach's *Fantasia* and "Great" *G Minor Fugue*, as well as P.D.Q. Bach's *Grand Serenade for an Awful Lot of Winds and Percussion*. Also featured will be the Holst's "March" from his *Moorside Suite*, Fisher Tull's *Sketches on a Tudor Psalm* (based on the same melody as Vaughan Williams' *Fantasia on a Theme of Thomas Tallis*) and Bernstein's *Slava*. The Brass Ensemble will perform a Ravel transcription by Mark Scatterday, as well as holiday music.

• Sunday, Dec. 3, 4 p.m., Barnes Hall: The Cornell Music Department invites all children to bring their parents, grandparents, teachers and friends to participate in an exciting jazz workshop concert conducted by Karlton Hester and his Lab Ensemble. What is jazz? Functional or artistic, popular or esoteric, instrumental or vocal, improvised or composed, "hot" or "cool"? Does it originate in Africa or America? Who is McCoy Tyner? All such and your questions will be answered at this free and open event. This is the first of an upcoming series of workshops/concerts in which the Music Department invites everybody who is interested in learning something about instruments and their music.

• Sunday, Dec. 3, 8:15 p.m., Barnes Hall: The Cornell Jazz Ensembles, under the direction of Karlton Hester, will give its semiannual concert.

• Monday, Dec. 4, 8:15 p.m., Barnes Hall: A free student chamber music concert under the direction of Sonya Monosoff will perform Mozart's "Kegelstatt" Trio, for clarinet, viola and piano; Chopin's *Scherzo in B-flat Minor*, for solo piano; Bruch's *Two Pieces*, op. 83, for piano, violin and cello; Matt Bohm's work for piano, clarinet and guitar; and Clara Schumann's *Trio in G Minor*, op. 17.

• The Tuesday, Dec. 5, MIDImadness concert has been rescheduled for Tuesday, Dec. 12.

Cornell Concert Commission

On Sunday, Dec. 3, Bailey Hall will vibrate with the cadence of rapper Coolio. Opening the event is The Roots, a young jazz and hip hop sensation. Tickets are available at Willard Straight Hall, Ithaca Guitar Works and through Ticketmaster. They are \$11 and \$13 for Cornell students and \$15 and \$17 for the general public.

Willard Straight Hall Program Board

Each Thursday in November from 8 to 10 p.m. in the Memorial Room, the WSH Program Board is presenting a coffeehouse to celebrate the 70th anniversary of the Straight. Jon Carmen will perform Nov. 30.

Bound for Glory

Dec. 3: Amy Gallatin and Stillwaters will perform. The show runs Sunday nights from 8 to 11, with live sets at 8:30, 9:30 and 10:30 p.m. in the Commons Coffeehouse of Anabel Taylor Hall. Admission is free and is open to everyone. Kids are always welcome, and refreshments are available. Bound for Glory is broadcast on WVBR-FM, 93.5 and 105.5 from 8 to 11 p.m.

RELIGION

Sage Chapel

The Rev. Robert Johnson, director of Cornell United Religious Work, will give the sermon Dec. 3 at 11 a.m.

African-American

Sundays, 5:30 p.m., Robert Purcell Union.

Baha'i Faith

Fridays, 7 p.m., firesides with speakers, open discussion and refreshments. Meet at the Balch Archway; held in Unit 4 lounge at Balch Hall. Sunday morning prayers and breakfast, 7 a.m.

Catholic

Weekend Masses: Saturday, 5 p.m.; Sunday, 10 a.m., noon and 5 p.m., Anabel Taylor Auditorium. Daily Masses: Monday-Friday, 12:20 p.m., Anabel Taylor Chapel. Sacrament of Reconciliation, Saturday, 3:30 p.m., G-22 Anabel Taylor Hall. A Spanish Mass will be given Dec. 3 at 7 p.m. in the Anabel Taylor Auditorium.

Christian Science

Testimony meetings sharing healing through prayer and discussion every Thursday at 7 p.m., Founders Room, Anabel Taylor Hall. For more information see <http://www.msc.cornell.edu/~bretz/cso.html>.

Episcopal (Anglican)

Sundays, worship and Eucharist, 9:30 a.m., Anabel Taylor Chapel.

Friends (Quakers)

Sundays, 11 a.m., meeting for worship in the Edwards Room of Anabel Taylor Hall. Discussions most weeks at 9:50 a.m., 314 Anabel Taylor Hall.

Jewish

Morning Minyan at Young Israel, 106 West Ave., call 272-5810.

Friday Services: Conservative, 5:30 p.m., Founders Room, Anabel Taylor Hall; Reform, 5:30 p.m., ATH Chapel; Orthodox, Young Israel, call for time, 272-5810.

Saturday Services: Orthodox, 9:15 a.m., One World Room, ATH; Egalitarian Minyan, 9:45 a.m., Founders Room, ATH.

Korean Church

Sundays, 1 p.m., chapel, Anabel Taylor Hall.

Latter-day Saints (Mormon)

Sunday services: Cornell Student Branch, 9 a.m., Ithaca ward, 1 p.m. For directions or transportation, call 272-4520, 257-6835 or 257-1334.

Muslim

Friday Juma' prayer, 1:15 p.m., One World Room, Anabel Taylor Hall. Daily Zuhr, Asr, Maghreb and Isha' prayers at 218 Anabel Taylor Hall.

Protestant Cooperative Ministry

Sundays, 11 a.m., chapel, Anabel Taylor Hall.

Sri Satya Sai Baba

Sundays, 10:30 a.m., 319 N. Tioga St. For details call 273-4261 or 533-7172.

Zen Buddhist

Tuesdays, 5 p.m.; Thursdays, 6:45 p.m., chapel, Anabel Taylor Hall.

SEMINARS

Agricultural, Resource & Managerial Economics

"Measuring the Impact of Climate Change on Agriculture and Energy," Robert Mendelsohn, Yale University, Dec. 1, 1 p.m., 131 Warren Hall.

Animal Science

"Using the World Wide Web to Find and Disseminate Information," Dan Brown, animal science, Dec. 5, 12:20 p.m., 348 Morrison Hall.

Anthropology

"Modernity's (Indigenous) Stepchild: 'Aboriginalizing' Education in a Pintupi Community," Fred Myers, New York University, Dec. 1, 3:30 p.m., 215 McGraw Hall.

Applied Mathematics

"Stable Ergodicity and Partial Hyperbolicity," Mike Shub, IBM T.J. Watson Research Center, Dec. 1, 3 p.m., 310 Rhodes Hall.

Astronomy & Space Sciences

"Images of Protostar Formation in Dark Clouds," Bill Langer, JPL, Nov. 30, 4:30 p.m., 105 Space Sciences Building.

Biochemistry

"Finding Genes Causing Human Cardiovascular Diseases," Rick Lifton, Dec. 1, 4 p.m., large conference room, Biotechnology Building.

Boyce Thompson Institute

"Two Independent Mechanisms Are Involved in Polymerase Gene-Mediated Resistance to Cucumber Mosaic Virus," Peter Palukaitis, plant pathology, Dec. 6, 3 p.m., Boyce Thompson Auditorium.

Chemical Engineering

"Recent Developments in the Simulation and Modeling of Linear, Branched and Network Polymeric Systems," Juan de Pablo, University of Wisconsin, Dec. 5, 3:45 p.m., 165 Olin Hall.

Chemistry

"Spectroscopic Measurements of Surface Chemistry, Self-Assembly, and Biopolymer Adsorption at Liquid/Liquid and Liquid/Solid Interfaces," Robert Corn, University of Wisconsin, Nov. 30, 11:15 a.m., 119 Baker.

Continued on page 11

CALENDAR from page 10

"X-ray Crystal Structure Analyses of Carbocations Stabilized by Hyperconjugation or Bridging," Thomas Laube, Eidgenossische Technische Hochschule, Zurich, Dec. 4, 4:40 p.m., 119 Baker.

"Porous Organic Coordination Solids," Stephen Lee, University of Michigan, Dec. 5, 11:15 a.m., 119 Baker.

"Spectroscopy and Dynamics of Single Molecules," Jay Trautman, AT&T Bell Labs, Dec. 5, 4:40 p.m., 119 Baker.

City & Regional Planning

"Placemaking: A Critical Practice," Linda Schneekloth and Robert Shibley, SUNY Buffalo, Dec. 1, 12:15 p.m., 115 Tjaden Hall.

Cornell Cooperative Extension

The monthly forum will be held Dec. 4 from 8:30 to 10 a.m. in 401 Warren Hall.

Ecology & Systematics

"Evidence for Balancing Selection in the Phosphoglucose Isomerase Gene in Two Species of Field Cricket," Laura Katz, ecology & evolutionary biology, Dec. 6, 4 p.m., A106 Corson Hall.

Electrical Engineering

"Constrained Channels: High Density Optical Recording and Constellation Shaping," Steve McLaughlin, Dec. 5, 4:30 p.m., 219 Phillips Hall.

Entomology (Jugatae)

"The Role of Vision and Olfaction During In-flight Maneuvers by Three Species of Insects in Wind-Dispersed Semiochemicals," Oliver Zanen, Nov. 30, 4 p.m., A106 Corson Hall.

"Small Scale Temporal and Spatial Heterogeneity of Insect Populations in Agricultural Soils," Mike Villani, Dec. 7, 4 p.m., A106 Corson Hall.

Fruit & Vegetable Science

"Fruit and Vegetable Polycultures in Tropical Homegarden Systems," Eric Fernandes, soil, crop & atmospheric sciences, Nov. 30, 4 p.m., 404 Plant Science Building.

"What's New for You on the World Wide Web?" Jim Siefker, consultant, fruit & vegetable science, Dec. 7, 4 p.m., 404 Plant Science Building.

Genetics & Development

"Molecular Genetics of Sexuality in *Chlamydomonas*," Ursula Goodenough, Washington University, Dec. 4, 4 p.m., large seminar room, Biotechnology Building.

Geological Sciences

TBA, Kirk Maasch, University of Maine, Dec. 5, 4:30 p.m., 1120 Snee Hall.

Immunology

TBA, Heesun Kwak, immunology, Dec. 1, 12:15 p.m., Boyce Thompson Auditorium.

Materials Science & Engineering

"Growth of SiC and III-Nitride Thin Films via Gas Source MBE and MOVPE and Their Characterization," Robert Davis, North Carolina State University, Dec. 7, 4:30 p.m., 140 Bard Hall.

Neurobiology & Behavior

"Sexual Selection for and Evolution of Eye-stalks in Flies," Jerry Wilkinson, University of Maryland, Nov. 30, 12:30 p.m., A106 Corson Hall.

"Dynamic Organization of Movement Synergies by the Cerebellum," John Welsh, New York University Medical Center, Dec. 7, 12:30 p.m., A106 Corson Hall.

Ornithology

"Sex for Influence in the Wattle Jacana: Canal Zone Conflict," Peter Wrege, neurobiology & behavior, Dec. 4, 7:30 p.m., Fuertes Room, Lab of Ornithology.

Peace Studies Program

"Bushwhacked! Vannevar Bush and the Problem of American Science Policy," Michael Dennis, science & technology studies, Nov. 30, 12:15 p.m., 153 Uris Hall.

Physiology

Degree defense, Carolina Friere, Dec. 4, 3 p.m., Lecture Hall III, Veterinary Research Tower.
TBA, Eva Maria Kinne-Saffran, Max-Planck-Institut of Molecular Physiology, Dec. 5, 4 p.m., Lecture Hall III, Veterinary Research Tower.

Plant Biology

"Potential Significance of Rising Atmospheric CO₂ Levels on Photosynthesis, Carbon and Nitrogen Partitioning, and Productivity of Natural and Managed Ecosystems," Dave Wolfe, fruit & vegetable science, Dec. 1, 11:15 a.m., 404 Plant Science Building.

Plant Breeding

"Advanced Backcross QTL Analysis: A Method for the Discovery and Utilization of Valuable Genes From Unlikely Sources," Steven Tanksley, plant breeding, Dec. 5, 12:20 p.m., 135 Emerson Hall.

Plant Pathology

"Biology of a Mixed (Up) Mating System: Selfing

and Outcrossing in *Cryphonectria parasitica*," Robert Marra, plant pathology, Dec. 6, 12:20 p.m., 404 Plant Science Building.

Russian Literature

"The Dialogue Between the Jew, the Christian and the Philosopher (M. Gershenson, V. Rozanov and V. Ivanov): The Problems of National Identification in Russian Culture at the Beginning of the 20th Century" (in Russian), Vera Proskurina, visiting scholar, Institute of World Literature, Moscow, Dec. 5, 3:30 p.m., 177 Goldwin Smith Hall.

Science & Technology Studies

Computers and Privacy Panel Discussion, Dec. 4, 4:30 p.m., 609 Clark Hall.

South Asia Program

"The Impact of Structural Adjustment on Poverty in India," Chandra Mohan, Jawaharlal Nehru University, New Delhi, deputy editor of *Business India*, Dec. 4, 12:15 p.m., G-08 Uris Hall.

Statistics

"Gaussian Stochastic Processes: Prediction and Estimating the Prediction Error," Markus Abt, University of Waterloo, Dec. 6, 3:30 p.m., 100 Caldwell Hall.

Textiles & Apparel

"The Role of Free Radicals in Biodegradable Polymeric Biomaterials," Keun Ho Lee, Ph.D. candidate, Nov. 30, 12:20 p.m., 317 Martha Van Rensselaer Hall.

"Mapping of Noncrystalline Regions in Semicrystalline Polymers," Narayanan Sundararajan, M.S. candidate, Dec. 7, 12:20 p.m., 317 Martha Van Rensselaer Hall.

Wildlife Science

"Conservation Biology of the Florida Scrub Jay in Relation to Natural Fires," John Fitzpatrick, director, Lab of Ornithology, Nov. 30, 3:35 p.m., 304 Fernow Hall.

World Wide Web

The Olin-Kroch-Uris Reference Services Division is sponsoring the following classes in the Uris Library Instruction Lab from 2 to 4 p.m.:

- Social Sciences on the Internet, Dec. 6;
- Publishing on the Web: Intro to HTML, Dec. 7 and Dec. 13.

Signup is not necessary, but classes are limited to 20, so come early. Info: 255-4144, e-mail: <olinref@cornell.edu>.

theater

Theatre Arts

William Shakespeare's *Measure for Measure* will be performed Nov. 30 and Dec. 1-2 at 8 p.m. in the Proscenium Theatre. Tickets are \$6 and \$8. Call 254-ARTS for information.

miscellany

Alcoholics Anonymous

Meetings are open to the public and will be held Monday through Friday at 12:15 p.m. and Saturday evenings at 5 p.m. in Anabel Taylor Hall. For more information call 273-1541.

Campus Store Book Signings

Jose Barreiro, editor in chief of *Akwé:kon Journal*, will be at the campus store Nov. 30 to talk about the current state of Native America. Call Emily Gray at 5-3421 for time.

Lunchtime Meditation

For beginner through experienced meditators, health educator Nanci Rose will give instruction in various techniques every Wednesday from 12:15 to 1 p.m. in the North Room of Willard Straight Hall. Open to all faculty and staff and sponsored by the ALERT Peer Education Program. For information, call Gannett at 255-4782.

Mann Library Gateway Announcements

The library recently has established an email list that sends information about new databases, system changes and other Gateway news automatically to subscribers. Register for the mailing list at <<http://www.mannlib.cornell.edu/announce/announceform.html>>. The Mann Library Gateway is at <<http://www.mannlib.cornell.edu>>.

Writing Workshop's Walk-in Service

Free tutorial instruction in writing.
• 178 Rockefeller Hall, Sunday, 2 to 8 p.m., Monday through Thursday, 3:30 to 5:30 p.m. and 7 to 10 p.m.
• RPCC, Conference Room 3, Sunday through Thursday, 8 to 11 p.m.
• 320 Noyes Center, Sunday through Thursday, 8 to 11 p.m.

sports

Home games are in ALL CAPS.
Records are as of Monday.

Men's Basketball

Dec. 1-2, at Iona Tournament
Dec. 6, LEHIGH, 7:30 p.m.

Women's Basketball (2-0)

Dec. 2, at Monmouth, 3 p.m.

Women's Fencing (2-1)

Dec. 2, at Harvard w/Columbia, Princeton

Men's Hockey (3-2-1)

Dec. 1, YALE, 7:30 p.m.
Dec. 2, PRINCETON, 7 p.m.

Women's Hockey (2-1-2)

Dec. 2, HARVARD, 2 p.m.
Dec. 3, NORTHEASTERN, 2 p.m.

Men's Polo (5-3)

Dec. 1, at Yale, 8 p.m.
Dec. 2, SKIDMORE, 8:15 p.m.

Women's Polo (6-2)

Dec. 1, SKIDMORE, 7:30 p.m.
Dec. 2, at Yale, 1 p.m.

Men's Squash (0-4)

Dec. 2, at Harvard, 1 p.m.

Men's Swimming (2-1)

Dec. 2, COLUMBIA, noon

Women's Swimming (1-1)

Dec. 2, COLUMBIA, 3 p.m.
Dec. 7, at Ithaca, 6:30 p.m.

Men's Indoor Track

Dec. 2, CORNELL RELAYS

Women's Indoor Track

Dec. 2, CORNELL RELAYS

Wrestling

Dec. 1, at Penn State, 7:30 p.m.
Dec. 2, at Penn State Invit.

Varsity teams excelled continued from page 1

Coach Sue Medley's volleyball team compiled a 20-10 overall record – its first 20-win season since 1989 – and swept through the Ivy round robin competition with a 6-1 slate, earning the No. 1 seed in the Ivy tournament, where the Big Red went 2-2. Senior Adrienne Greve was named to the All-Ivy first unit.

The women's soccer team, under Coach Randy May, competed successfully through an 11-5-3 schedule against the finest opponents in the East. The 11 wins tied the school record for most victories in a season set by the 1987 team. In the Ancient Eight, the race went down to the last weekend, and the Red finished tied for second with an unbeaten 5-0-2 mark. The booters advanced to the ECAC tournament, where they beat Dartmouth 2-0 and lost 2-1 to Colgate in the finals. Senior Lori Penny, a four-time All-Ivy first-team selection, became the school's all-time career goal scorer with 33 tallies.

Coach Jim Hoffer's football team, picked by the "experts" for fourth place in the pre-season, saw its Ivy League championship aspirations dashed in the final game of the season. The Big Red, 6-4 overall, lost at



Tim McKinney

Junior Rob Elliott, an All-Ivy first-team performer, was one of many keys to the success generated by the men's soccer team this fall.

demic squad.

The men's and women's cross country teams were 1-1 and 2-0, respectively, under Coach Lou Duesing, and were highly competitive at the Heptagonal Championships. The women placed third, and junior Kate Walker received All-Ivy honors for her fifth-place showing. The men finished seventh. The highlight for the women was the two seventh-place finishes at the Stanford Invitational and National Invite at Penn State.

A 3-3 overall slate was what the lightweight football gridders recorded, while they were 1-3 in the ELFL for a third-place tie. Senior tailback Jon Roth was named the ELFL Most Valuable Player.

The highlight of the women's tennis campaign was the capturing of the ECAC championships and placing second at the ITA team championships. Senior Olga Itskhoki continued her winning ways for Coach Linda Myers, capturing the A Flight at the ECACs and taking all three singles matches at the ITA match. The men's tennis team, under the direction of Coach Barry Schoonmaker, competed in a number of tournaments and continued its improvement as it looks forward to the spring season.

Junior Chris Simms and senior Kevin Sweeney qualified as individuals for the ECAC golf championship, after Coach Dick Costello's Big Red missed the four-man team cutoff by two strokes. Earlier in the year, Simms was the medalist at the Leo E. Keenan Invitational at St. Bonaventure, shooting 68-72-140.

The fall teams have established the groundwork for the winter teams and the early season results are a preview of good things to come. As the Lynah Rink Faithful so joyously shout, "We Want More!"

The Big Red . . . conquered Ivy League foes in more than 76 percent of its contests.

Penn 37-18 in the last contest, while Princeton and Dartmouth tied, giving the Tigers the Ancient Eight crown, with Cornell and the Quakers tied for second place at 5-2. Tailback Chad Levitt, a unanimous All-Ivy first-team pick, was No. 1 in the Ivies in rushing, scoring and all-purpose running. The *Football News* chose him as the Ivy League Player of the Year for the second straight season. Senior quarterback Steve Joyce, in his first full year as a starter, set six individual records and directed the team to eight others. Senior wide receiver Ron Mateo was the top vote-getter on the District I Academic All-America first team. The 18 seniors become the ninth consecutive class to graduate with a career winning record.

The field hockey team played in its first ever ECAC championships, falling to Yale 2-0 in the semifinals after beating the Elis 2-0 in the regular season finale. Coach Shelby Bowman's crew was 9-8 overall for its first winning slate since 1985. The Red tied for fourth place in the Ivies with a 3-3 mark. Over the course of the year, Cornell set or tied four team records and four more individual marks. Sophomore Cari Hills set a school record for points in a season (36) and a new career mark for assists (18). Hills was named to the All-Ivy and Mid-East Regional All-America teams. Senior Renee Land and sophomores Sarah Vickers and Jamie Marcinec were named to the College Field Hockey Coaches Association National Aca-

CALENDAR

November 30 through December 7

All items for the Chronicle Calendar should be submitted (typewritten, double spaced) by campus mail, U.S. mail or in person to Chronicle Calendar, Cornell News Service, Village Green, 840 Hanshaw Road.

Notices should be sent to arrive 10 days prior to publication and should include the name and telephone number of a person who can be called if there are questions.

Notices should also include the subheading of the calendar in which the item should appear.

dance

Department of Theatre Arts

The Dance Theatre Fall Concert, a compilation of original faculty and student choreography, will be held Dec. 7 to 9 at 7:30 p.m. in the Class of '56 Dance Theatre. Tickets are \$3. For more information, call 254-ARTS.

Cornell International Folkdancers

Open to the Cornell community and the general public. All events are free unless noted. Beginners are welcome. No partner necessary. For information, contact Edilia at 387-6547.

Dec. 3, Memorial Room, Willard Straight Hall: "It's Your World Ball," ballroom dances taught by Marguerite Frongillo, 7 p.m.; ballroom and other couple dancing, 7:30 p.m.

Israeli Folkdancing

Thursdays, 8 p.m., Edwards Room, Anabel Taylor Hall.

exhibits

Johnson Art Museum

The Herbert F. Johnson Museum of Art, on the corner of University and Central avenues, is open Tuesday through Sunday from 10 a.m. to 5 p.m. Admission is free. Telephone: 255-6464.

- "Art in Bloom: Botanical Illustration and the Artist's Interpretation," through Dec. 31.
- "Master Prints From Upstate New York Museums," through Dec. 31.
- "Akira Kurosaki Woodcuts," through Dec. 31.
- "Ukiyo-e Prints and Woodblocks," through Dec. 31.

• "Matisse: The Jazz Series," through March 24, 1996.

• 12 O'Clock Sharp: Thursday Noontime Gallery Talks: On Nov. 30, the talk will be on "Japanese Woodblock Prints" by Masako Watanabe, assistant curator of Asian art.

• World AIDS Day Events: In observance of World AIDS Day on Dec. 1, the Johnson Museum is planning a series of events through Dec. 15. In the galleries there will be four portrait drawings from the Mariposa collection by the California artist Don Bachardy. The portraits were commissioned by Mariposa to document prominent figures in the gay rights struggle. In galleries throughout the museum, special labels, noted with a red ribbon, will highlight works from visiting exhibitions and the permanent collection. The works will be used to point out the complexities of the AIDS crisis and provoke thought. The museum's education department will be running an all-day

film series on Dec. 1.

• Workshop: "Caring for Your Art on Paper," a conservation workshop with Tatyana Petukhova, Dec. 3, 2 to 4 p.m. Contact the museum at 255-6464 for information.

Cornell Library

"Paper, Leather, Clay & Stone: The Written Word Materialized," through Jan. 5, Kroch Library, Monday through Friday, 9 a.m. to 5 p.m.; Saturday, 1 to 5 p.m.

Hartell Gallery

M.F.A. Candidate Group Show, through Dec. 2.

Mann Library

Learn about the scope of the Department of Fruit and Vegetable Science's activities at the exhibit in the lobby of Mann Library. Examples of techniques and publications, highlighted by fruits and vegetables in decoration and art, will be on display through December.

Tjaden Hall Gallery

• Paintings by Spencer Baker, through Dec. 2.
• Sculpture by Laura Nova, B.F.A. thesis exhibition, Dec. 2 through 9.

Willard Straight Hall Art Gallery

• Photographs and clippings celebrating 70th anniversary of WSH, through Dec. 1.
• Ceramics studio and WSH darkroom show and sale, Dec. 4 through 8.

films

Films listed are sponsored by Cornell Cinema unless otherwise noted and are open to the public. All films are \$4.50 (\$4 for students and children under 12), except for Tuesday night Cinema Off-Center at the Center for Theatre Arts (\$2) and Saturday or Sunday matinees (\$3.50). Films are held in Willard Straight Theatre except where noted. Cornell Cinema's Website is: <<http://www-cinema.sife.cornell.edu>>.

Thursday, 11/30

"Fresh Kill" (1994), with guest filmmaker Shu Lea Cheang, 7 p.m.
"The Jar" (1992), directed by Ebrahim Foruzesh, with Behzad Khodaveisi, 9:45 p.m.

Friday, 12/1

"The Jar," 6:30 p.m.
"Kids" (1995), directed by Larry Clark, with Leo Fitzpatrick, Justin Pierce and Chloe Sevigny, 7:30 p.m., 9:45 p.m., midnight, Uris.
"Raging Bull" (1980), directed by Martin Scorsese, introduced by guest editor Thelma Schoonmaker '61, 8:45 p.m.

Saturday, 12/2

"The Thief of Bagdad" (1940), directed by Michael Powell, with Sabu and Conrad Veidt, introduced by Thelma Schoonmaker, IthaKid Film Fest, 2 p.m.
"The Life and Death of Colonel Blimp" (1943), directed by Michael Powell, with Roger Livesey, Deborah Kerr and Anton Walbrook, introduced by Thelma Schoonmaker, 6:45 p.m.
"Kids," 7:15 p.m., 9:45 p.m., midnight, Uris.
"I Just Wasn't Made for These Times" (1995), directed by Don Was, 10:15 p.m.

Sunday, 12/3

"Kids," 4:30 p.m.
Ithaca College Cinema Faculty Films: "Triptych" by Marcelle Pecot; "Ragnarok Superstrings" by William Rowley; and "Zona" (scenes from a work in progress) by Pierre Desir, 7 p.m.
"Reassemblage/Navajo Talking Picture" (1982/1986), directed by Trinh T. Minh-ha/Arlene Bowman, presented by Pentangle, 7:30 p.m., Uris, free.

Monday, 12/4

"China Is Near" (1968), directed by Marco



Raging Bull, starring Robert DeNiro, will screen at Cornell Cinema Dec. 1 at 8:45 p.m. Academy Award-winning film editor and Cornell alum Thelma Schoonmaker '61 will introduce the film. Schoonmaker, who has collaborated with Martin Scorsese since 1965, also will introduce this weekend two films by the late British director Michael Powell, to whom she was married.

Bellocchio, with Glaucio Maur, 7 p.m.

"I Just Wasn't Made for These Times," 9:30 p.m.

Tuesday, 12/5

"The Birds" (1963), directed by Alfred Hitchcock, with Rod Taylor and Tippi Hedren, 7 p.m.
"From the Pole to the Equator" (1987), directed by Yervant Gianikian, 7:30 p.m., CTA Film Forum.
"I Just Wasn't Made for These Times," 9:30 p.m.

Wednesday, 12/6

"The Year of Living Dangerously" (1983), directed by Peter Weir, with Mel Gibson, Sigourney Weaver and Linda Hunt, 7 p.m.
"China's First Swordsman" (1994), directed by Hong Jinbao, with Yang Fan, Zhao Changjun and Di Long, 9:30 p.m.

Thursday, 12/7

"Ripples Across Stagnant Water" (1995), directed by Ling Zifeng, with Xu Qing, 7 p.m.
"Waterworld" (1995), with Kevin Costner and Dennis Hopper, 9 p.m.

graduate bulletin

• **Thesis/Dissertation:** The thesis/dissertation submission deadline for a January 1996 degree is Jan. 12. Students should see the Graduate School thesis adviser for approval of the format of their thesis/dissertation before submitting the final copies to the Graduate School. Office hours are 9 a.m. to noon daily; also 1:30 to 3:30 p.m. on Mondays, Tuesdays and Thursdays; walk-in basis only, no appointments. Professional master's degree candidates should check with their field offices regarding the deadline, as it may be earlier.

• **Fellowships for 1996-97: Foreign Language and Area Studies Fellowships.** Applications for 1996-97 will be available at the end of November in the graduate field offices and the Graduate Fellowship Office. Application deadline is Jan. 26. Award includes 9-month stipend of \$8,000 plus full tuition for 1996-97 academic year; available to citizens or permanent residents of the United States.

• **Spring 1996 registration:** Registration is in the lounge of Sage Hall, 8:30 a.m. to 4 p.m., Jan. 18 and 19. New students and those continuing students with "holds" must register in person at Sage Hall. Continuing students with no "holds" do not need to go to Sage Hall for registration. To

determine if you have a "hold," check "Just the Facts" on Bear Access (beginning Jan. 15).

• **University holiday:** The Graduate School offices will be closed during the university winter holiday, Dec. 25 through Jan. 1. The offices also will close on Friday, Dec. 15, at noon.

• **GCA positions:** Graduate and Professional Student Housing will hold information sessions for those interested in a uniquely great experience and job as a graduate community assistant for 1996-97. This is a live-in position in one of the graduate resident buildings/complexes. All full-time graduate students are welcome. To apply you must attend one of these sessions: Tuesday, Dec. 5, noon to 1 p.m. at Hasbrouck Community Center; Wednesday, Jan. 17, 5:30 to 6:30 p.m. at the Big Red Barn; Tuesday Jan. 23, 7:30 to 8:30 p.m. at the Big Red Barn; or Monday, Jan. 29, noon to 1 at Hasbrouck Community Center. The position requires 10 to 20 hours per week and may not be combined with another assistantship; graduate students may work no more than 20 hours per week and receive full residence credit.

lectures

Africana Studies & Research Center

"An Africana Perspective on the Development of Women's Studies in South African Black Universities," Veliswa Tshabalala, University of Transkei, South Africa, and Fulbright Visiting Scholar at Clark Atlanta University, Nov. 30, 12:15 p.m., Hoyt Fuller Room, 310 Triphammer Road.

Amnesty International

"Women's Experiences in Exile," Mahnaz Afkhami, executive director of Sisterhood is Global and author of *Women in Exile*, Nov. 30, 7:30 p.m., Anabel Taylor Cafe.

Cognitive Studies/Linguistics Circle

"One Foot in Front of the Other," LouAnn Gerken, University of Arizona, Dec. 7, 4:30 p.m., 106 Morrill Hall.

East Asia Program

"Family Planning and Maternal Child Care in China in the 90s: A Grassroots Approach," Susan Holcombe, UNFPA-UNICEF joint project in China, Nov. 30, 4:30 p.m., A.D. White House.

Floriculture & Ornamental Horticulture

"Biological Control: How Political Is the Science, How Scientific Is the Politics?" Michael Villani, Dec. 7, 12:20 p.m., 37 Plant Science Building.

Science & Technology Studies

"Mentoring and the Integrity of Science," June Fessenden MacDonald, biochemistry, Dec. 4, 12:15 p.m., 609 Clark Hall.

Southeast Asia Program

"Japanese Religious Policy Towards Christian Churches in the Philippines 1941-45," Takefumi Terada, SEAP visiting fellow, Nov. 30, 12:15 p.m., Kahin Center, 640 Stewart Ave.

"State Formation as Family Reunion: Military Communes in the Armed Forces of the Philippines," Vince Boudreau, City College of New York, Dec. 7, 12:15 p.m., Kahin Center, 640 Stewart Ave.

Women's Studies Program

"Mothering Under Pressure: A Preliminary Study of Predictors of Poor Women's Sense of Self-Efficacy," Cybele Raver, Dec. 1, 3:30 p.m., ILR Faculty Lounge, 280 Ives Hall.

Continued on page 10

Social scientist's University Lecture will focus on America's welfare system

By Darryl Geddes

One of the nation's foremost social scientists, France Fox Piven, will speak on "The Assault on the American Welfare State" Nov. 30 at 4:30 p.m. in Hollis Cornell Auditorium of Goldwin Smith Hall, as part of Cornell's University Lectures program.

Piven, the Distinguished Professor of Political Science and Sociology at the Graduate School of the City University of New York, is the author or co-author of nine books, including the seminal piece on the welfare system, *Regulating the Poor: The Functions of Public Welfare* (Pantheon Books, 1971, 1993), *The Politics of Tur-*

moil: Essays on Class, Race and Poverty (Pantheon Books, 1974) and *The New Class War: Reagan's Attack on the Welfare State and Its Consequences* (Pantheon Books, 1982). Piven currently is at work on a book documenting the political significance of the National Voter Registration Act.

Her honors include the C. Write Mills Award for her book, *Regulating the Poor*, and the Founders Award from the Society for the Study of Social Problems.

Piven is the founder of Human SERVE, an organization which seeks to raise voting by poorer and minority people by making voter registration available in state agencies, such as welfare and unemployment offices.