

CORNELL Chronicle

Volume 27 Number 2 August 31, 1995

NEED COMPUTER ACCESS?

Mann Library opens a 'course-free' computer lab for students, relieving some congestion on the information superhighway.

3

A DAY AT THE FAIR

The governor honors retiring Dean David L. Call, and President Rawlings tours Cornell exhibits at the State Fair.

7

Returning Cornell students register online, not in line

By Larry Bernard

Students returning to Cornell face registration with about the same enthusiasm as they do a surprise exam. But this year, they have a welcome surprise: They can register online instead of in line.

Responding to student needs, a team of staff members from several Cornell units has improved the process students must go through to pick and choose courses and to register. No longer do continuing students have to wait in long queues to check if they are registered—now they can do it electroni-

cally by computer, and from wherever they are, even from their homes.

Cornell offices of Student and Academic Services, University Registrar, Bursar, Financial Aid and Student Employment, with staff from Cornell Information Technologies/Information Resources (CIT) and its Project Mandarin Inc. team, have worked together to improve students' access to their accounts, both academic and financial.

Using "Just the Facts," the more than 2-year-old user-based service that lets students view information about their Cornell status on the Bear Access menu, returning

students may take advantage of enhanced features that eliminate the need for validation stickers on their ID cards. Charlayne Beavers of the University Registrar's office is project manager of the "Just the Facts" Management Team.

In the past, continuing students—students returning for another semester—had to wait in line to get a sticker on their ID cards showing they were registered. If there was a "hold" on their registration—for unpaid bills, unpaid tuition, academic, health or disciplinary reasons—they would not have known that until they were through the

line. Then, they would have to go elsewhere to clear up the hold and return again to lines for registration.

But now, "Just the Facts" on Bear Access shows whether they are registered or if there is a "hold" on their eligibility. Bear Access is the Internet-based suite of network services for information and access on courses, the World Wide Web, news and chat groups, the library catalog and other databases.

"Students can log on to any computer wherever they are and look up their registration status," said David S. Yeh, assistant vice

Continued on page 2

Rawlings and freshmen enter 'new frontier'

By Dennis Shin '96

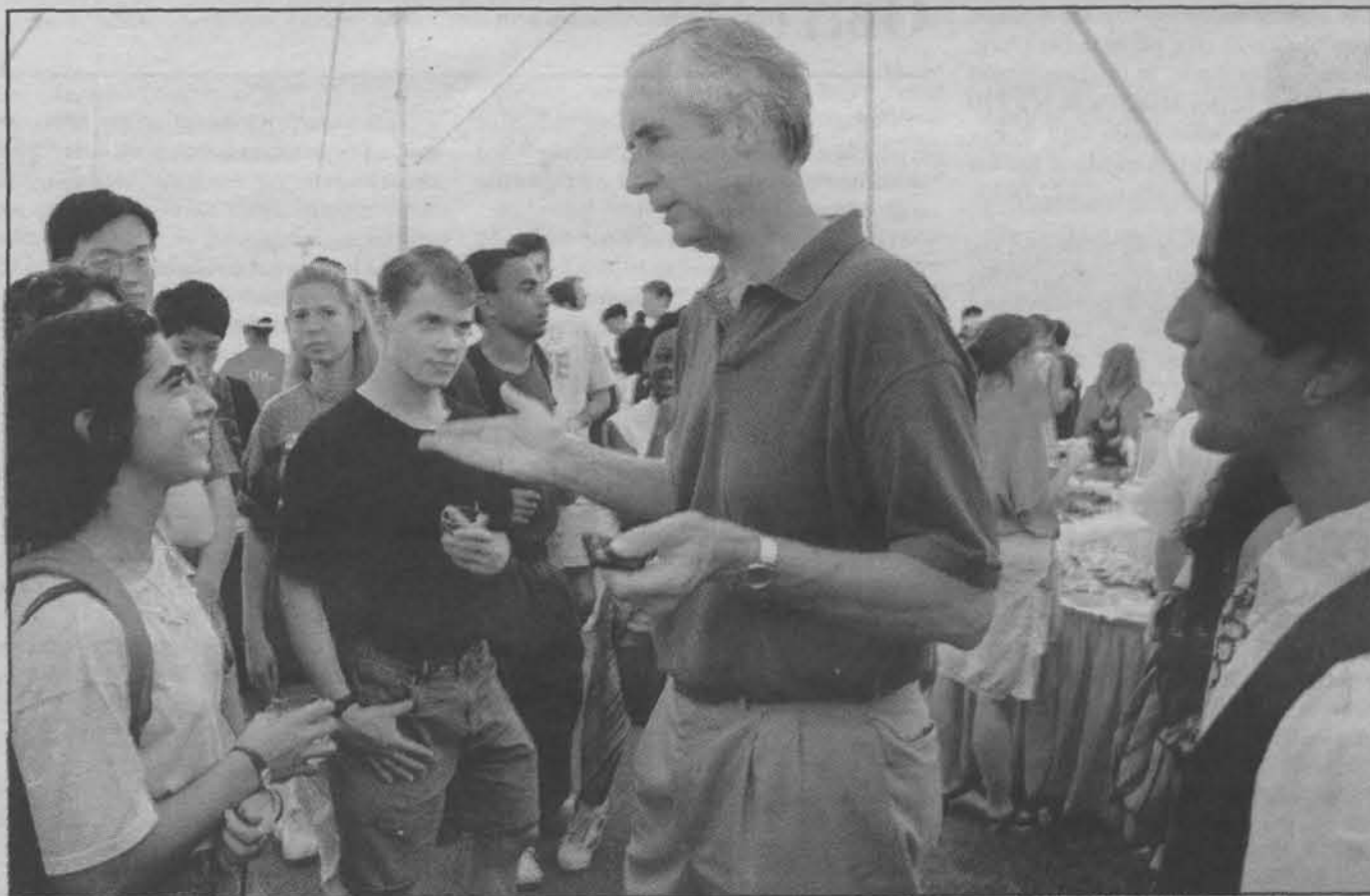
Having moved into dorm rooms the day before, new students poured into Barton Hall on Saturday to hear President Hunter Rawlings greet the entering class of 3,200 freshmen and their families during the university's traditional Convocation ceremony. A highlight of the annual orientation program for new students, the president's address officially welcomed the Class of 1999 to campus.

Comparing the new Cornellians to pioneers standing "at the edge of a new frontier full of promise," Rawlings emphasized the importance of students taking an active role in shaping the course of their education.

"It is not enough to be here soaking up knowledge in lecture halls. You have to be more than a sponge," advised Rawlings.

He encouraged students to immerse themselves in the rich and vibrant intellectual environment that Cornell provides. Describing the university as "a place of great possibilities and yet paradoxes," Rawlings invited students to explore their new home in such ways as attending lectures, volunteering in the community and participating in extracurricular activities.

If Rawlings appeared to speak with the bright-eyed enthusiasm of a Cornell freshman, perhaps it was because, in a number of ways, he is one. Having succeeded President Frank H.T. Rhodes this summer, Rawlings jokingly compared him-



Adriana Rovers/University Photography

President Hunter Rawlings converses with students at the President's Reception on the Arts Quad Aug. 27.

self to the entering frosh and shared his own experience of arriving at and adapting to Cornell. Citing such rites of passage as scaling the infamous Libe Slope and strolling through the Plantations, he spoke of the numerous ways in which he and his wife spent their first weeks here getting acquainted with the university.

"The intellectual energy of this place is contagious—and I hope you will be as

affected by it from the very beginning as Elizabeth and I have been," he said.

One of his chief priorities as university president, Rawlings announced at Convocation, will be to enhance Cornell's reputation as a university that "puts students first." Demonstrating his dedication to the scholarly development of students, he asked them to join him in an educational partnership aimed at improving the

intellectual vitality on campus and strengthening the bonds between teaching and research.

Lastly, Rawlings assured the entering class that his door would always be open. He stressed the importance of maintaining clear lines of communication between students, faculty and the administration. He promised to keep in close contact with

Continued on page 4

Birds offer clues to human family dynamics, biologist Emlen finds

By Roger Segelken

Each time the story of a stepfather or a new boyfriend harming his mate's children hits the headlines, one Cornell biologist is not surprised.

Stephen T. Emlen, author of a new theory of family social dynamics that explains the evolutionary roots of behaviors such as infanticide, has seen bird families act similarly.

"As horrible as it seems, infanticide for the perpetrator can be 'adaptive' in the evolutionary sense," said Emlen, professor of neurobiology and behavior. "However, if

we understand when biological tendencies are working against us, we can sometimes intervene and effect a better outcome."

Emlen spent more than 10 years studying the organizational structure and social interactions of birds that live in complex, extended families before he issued 15 predictions that may be applied to human family affairs.

The 15 predictions and Emlen's "Evolutionary Theory of the Family" are published in the Aug. 29 issue of the journal *Proceedings of the National Academy of Sciences*. He expects that some sociologists, psycholo-

gists and anthropologists will have trouble with the notion that many of our most crucial life decisions are influenced by natural rules—rules that were molded by evolutionary forces during our pre-industrial history of living as hunter-gatherers.

"I don't disagree that human behavior is strongly shaped by our current cultural environment," Emlen said. "But we have much more to draw on. Humans also possess a set of biologically based predispositions for interacting with relatives. That biological heritage is based on flexible decision rules that were adaptive during our

long evolutionary history of living in extended family groups."

Emlen's Prediction 9—based on numerous animal studies but proved almost daily by human affairs—states that "replacement breeders (as step-parents are known) will invest less in existing offspring than will biological parents." The prediction adds, "They may infanticidally kill current young when such action speeds the occurrence, or otherwise increases the success, of their own reproduction." Replacement breeders do not gain a fitness benefit when they help

Continued on page 6

BRIEFS

■ **Campus Club:** The Cornell Campus Club will break with tradition next week when it opens the year with a morning coffee instead of the usual Fall Tea. The coffee will take place Sept. 7 from 10 a.m. to noon at the Sheraton Inn & Conference Center, adjacent to the Triphammer Plaza. The club's new honorary president, Elizabeth Trapnell Rawlings, wife of Cornell President Hunter Rawlings, will be present to greet those attending. During the coffee, guests may join Campus Club and sign up for its many activity and service groups. The club also sponsors a lecture series and several social events throughout the year. The Campus Club is an organization open to women in the Cornell community, including trustees, faculty, staff, graduate students and the spouses of men in these categories.

■ **English teachers:** Interested in helping people from foreign countries associated with the Cornell community? The Cornell Campus Club has a program for teaching English as a second language to persons temporarily in Ithaca. The classes require a two-hour commitment per week, plus preparation. For more information contact Ann Marie Dullea at 277-2488 or Joan McMinn at 277-0013.

■ **English classes:** Registration for free English classes sponsored by the Cornell Campus Club will take place today (Aug. 31), from 7:30 to 9 p.m. in the One World Room, Anabel Taylor Hall. There is a \$10 registration fee. Classes begin Sept. 5. For further information call Ann Marie Dullea at 277-2488 or Joan McMinn at 277-0013.

■ **English skills:** Visiting academicians seeking to improve English-language skills can take a non-credit course Tuesdays and Thursdays, Sept. 19 to Nov. 30. Fee is \$450. Registration deadline is Sept. 14. Call Donna Columio at the School of Continuing Education and Summer Sessions at 255-7259.

CORRECTION

In last week's *Chronicle* article about new faces on campus, we inadvertently left out the university's new counsel, James J. Mingle, who started in his Cornell post in early August. Previously general counsel for the University of Virginia, Mingle also serves as secretary of the corporation at Cornell.

CORNELL Chronicle

Henrik N. Dullea, Vice President for University Relations
Linda Grace-Kobas, Director, Cornell News Service and 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.

Community welcome



Yukiko Matsuda, first-year graduate student from Japan majoring in public affairs, talks with Richard Dolge from the Tompkins County Trust Co. on Aug. 25. Dozens of merchant, community and campus groups introduced their services and products to students during the fourth annual information fair last week on Ho Plaza.

Adriana Rovers/University Photography

OBITUARY

Peter Gergely, Cornell professor of civil and environmental engineering, died at his home on Aug. 25, after a long battle with cancer. He was 59.

Gergely, who taught at Cornell for 32 years, made major contributions to a wide variety of structural engineering problems, ranging from design procedures that have been adopted by national building codes to complex seismic analyses and design solutions for nuclear reactor facilities. He was consultant on more than 20 major projects.

His research led to important advances in understanding the mechanics of reinforced and prestressed concrete, with emphasis on using research results to improve building codes. He also made pioneering contributions in structural dynamics, earthquake engineering and hazard mitigation, particularly for structures and facilities built in regions of moderate seismicity.

Gergely was one of the primary leaders of the National Center for Earthquake Engineering Research headquartered at SUNY-

Buffalo since its inception in 1986, and played key roles in developing new seismic provisions for eastern states and in working with national agencies in developing new and improved seismic design philosophies and codes. He has published more than 100 technical papers.

He was born in Budapest, Hungary, on Feb. 12, 1936, a son of the late Maria and Istvan Gergely. He entered the Technical University of Budapest in 1954 and was a freedom fighter during the Hungarian Revolution of 1956, leaving Hungary at the very end of the Hungarian resistance to the Soviet invasion to come to North America.

Gergely studied civil engineering at McGill University in Montreal and the University of Illinois. He came to Cornell immediately after receiving his Ph.D. in 1963. He became chairman of the Department of Structural Engineering (1983-88) and director of the School of Civil and Environmental Engineering (1985-88).

As an educator, Gergely was instrumental in the training and development of thou-

sands of young engineers through his inspired teaching and advising of undergraduates and graduate students. He co-authored a three-volume undergraduate textbook series (John Wiley) in the 1970s.

He consistently ranked in the top group of Cornell engineering faculty, and this year he received a Dean's Prize for Excellence in Teaching.

No funeral service will be held. A memorial service is scheduled for Saturday, Sept. 16, at 4 p.m. in Alumni Auditorium, Kennedy Hall.

Survivors include his wife, Kinga, son Zoltan, daughter Illa and her husband, David Burbank, and a grandson, Istvan Burbank (all of Ithaca), and a sister, Agota, of Pecs, Hungary.

Contributions in Gergely's memory may be made to either Hospicare of Tompkins County, 172 East King Road, Ithaca, N.Y. 14850, or to the Peter Gergely Seminar Series and Distinguished Lectureship in Structural Engineering, c/o Marsha Pickens, Carpenter Hall.

Register online *continued from page 1*

president for Student and Academic Services (SAS) who spearheads the process.

Students get their registration status immediately, can update their local address and, if registered, can look at their course schedule. "Just the Facts" also gives students grade reports, information about financial aid, bursar accounts and other items.

Another enhancement: Starting this fall, Cornell will pre-enroll 16,500 undergraduate and graduate students for Spring 1996 classes. Online instead of in line. They will do so using CoursEnroll, a button on the "Just the Facts" menu that serves as an online course request service. Previously, they had to do it all on paper, which went through several hands before being put in a database.

"Our goal, by this time next year, is for students to have their full course schedules for next semester available to them online by the last day of classes," Yeh said.

Waiting for grades to be mailed home? No need. With "Just the Facts," students can access grades as soon as they are processed. Questions about grades from a previous semester? Why wait for a transcript? Students can access their grades by semester or all at once. Eventually, they may be able to order copies of their transcripts online.

Already students can review bursar and Cornellcard accounts by month or semester,

always with up-to-the-minute status; check financial aid status; keep track of work-study hours and direct loans; and get summaries of financial aid packages—all online, 24 hours a day, seven days a week.

Further, Cornell plans to make other features possible in the near future, such as an online add-drop of classes, to eliminate the grand ballet known as Course Exchange.

'Students get information much sooner - when they want it, wherever they are.'

- David Yeh

Also, Cornell administrators are considering how to make these services available via the World Wide Web.

These advances are made possible by CIT working with SAS. Through CIT's Project Mandarin Inc., "Just the Facts" offers not only "virtual registration" but all information that students and their faculty advisers need with a click of the mouse using the access software Faculty Advisor.

"We are really seeing a lot of projects coming together that we've laid the ground-

work on for the last two or three years," said H. David Lambert, Cornell vice president for information technologies. "These create a real impact on the lives of students. We articulated, in CIT's strategic vision three years ago, the notion that we could, working with others on campus, use technology to revolutionize service to students. What we're seeing here is nothing less than that."

Said Yeh: "What's really new is that everyone can see their course schedule. In the past, they couldn't see that until late in the semester. Students get information much sooner - when they want it, wherever they are. The savings in time and effort is very significant."

The service is available from any Cornell computer - at public computer labs, libraries, residence hall rooms (ResNet), offices, kiosks. And, if the student has E-Z Remote communications software and a modem, it's available from anywhere in the world by tapping into Cornell's network.

Streamlining also helps in other ways. The registrar also can see available classrooms at a glance and make assignments for classes as needed. "It takes us 30 seconds to assign 3,000 classes in 350 rooms. It used to take four months," Yeh said.

The real benefit - better service, with students online, not in line.

Mann Library offers students 'walk-in' computer access

By Susan J. Barnes

Here is good news for Cornell students who never can seem to find an open computer: Mann Library has opened a computer lab that is "course-free"—open to individual students at all times and never reserved for regular class instruction.

In collaboration with Cornell Information Technologies (CIT) and the College of Agriculture and Life Sciences, the new lab will relieve congestion some students may experience on the information superhighway.

"This new facility is evidence of a further commitment to supporting student computing, to providing facilities needed by students as computing embeds itself in every course they take," said Jan Olsen, director of Mann Library. "Unlike the College of Agriculture's other computer facilities, this one won't be used for regularly scheduled classes—leaving as many as 94 hours a week available for use by individual students."

The new lab will contain 20 Macintosh IIcx's, provided by the College of Agriculture. Formerly in the Riley Robb microcomputer center, these computers have been upgraded by CIT to 250 megabytes of hard disk drive space and 12 megabytes of random access memory. Through computer networking, they will have Bear Access and the Mann Library Gateway. The library is expected to hire 15 student part-time assistants for the lab.

"Faculty have done such a tremendous job of integrating instructional technology into their teaching that the college's computing labs are becoming occupied by that teaching," said Dean Sutphin, Cornell associate dean and director of academic programs in the College of Agriculture. "We had to do something to ensure that students had the opportunity to do their work. Heavy student use of the existing labs provided us with an early indicator of demand that exceeds our current capacity."

Bill Kehoe, microcomputer center assistant, noticed what the educators also had seen: well-used computer labs.



Jan Olsen, left, director of Mann Library, oversees the installation of the new undergraduate computer lab with, center, Bill Kehoe, microcomputer center assistant, and Dean Sutphin, associate dean and director of academic programs in CALS.

"As more professors demand electronic research best done on computers, the college has an ever-increasing need for more workstations," Kehoe said. "In this lab, students get technical support that is not available when they are using their own computers at home. They also have access to software they don't own themselves, plus access to high-speed network connections."

The lab is open to all Cornellians, but it will be especially useful for students in the colleges of Agriculture and Human Ecology.

At the original computer lab in Mann

Library, microcomputers are used about 70,000 times annually—an average of about 200 users a day. This lab sometimes is used for classes, Cornell Cooperative Extension and other projects.

The collaboration, said Carrie Regenstein, CIT associate director for instructional services, is useful for all parties. "It brings us lots of bang for the buck, a way of making technology available where it will be used as much as possible," Regenstein said. "This model of service is similar to Uris Library, where the lab is used for

library instruction during the day and for open access all other times. That has been very successful."

Regenstein once had believed that as private ownership of computers increased, the need for such labs would decrease. "But we haven't seen that at all. It's been just the opposite," she said. "Although roughly 60 percent of students own computers here, we have not yet seen portable computers that are so light that they can be comfortably carried up hills, much less across the ice in the winter."

Bathrick hopes to bridge gap between Theatre Arts and campus

David Bathrick, professor of film and German studies, has been named chairman of the Department of Theatre Arts.

He succeeds Bruce Levitt, who had served as chairman since 1986. Levitt will return to the faculty next year after a yearlong sabbatical.

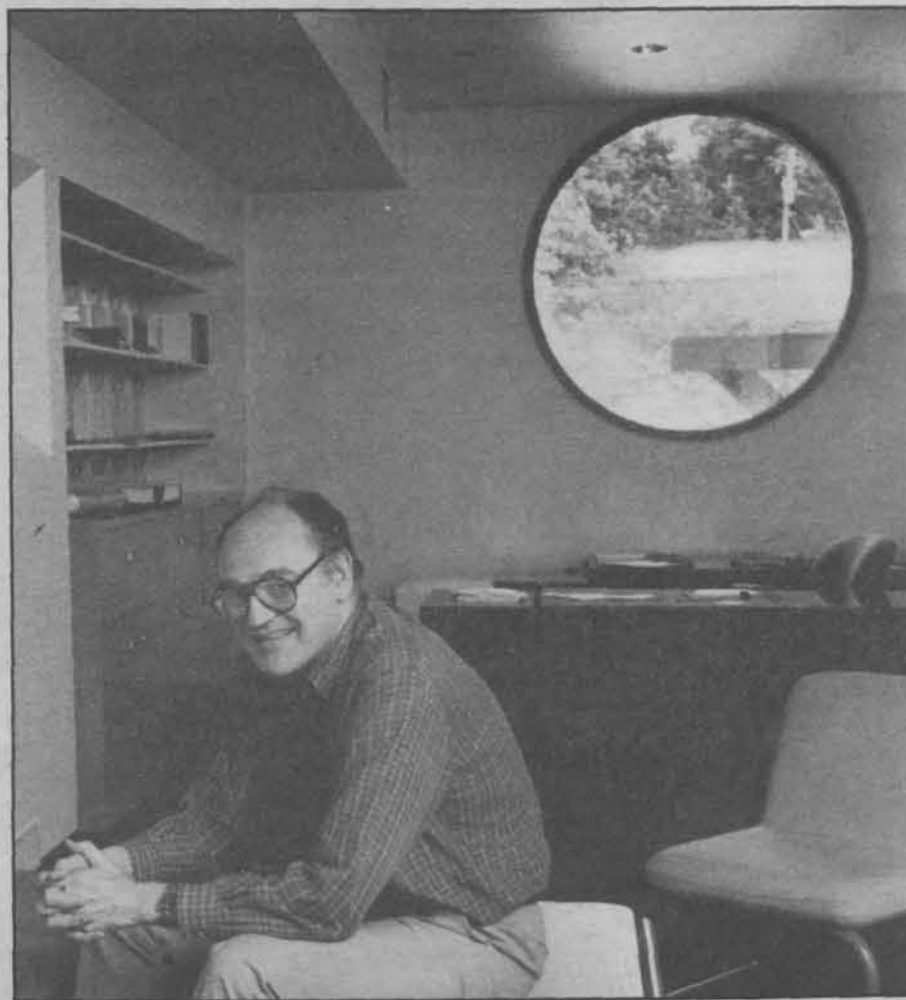
Bathrick, who joined Cornell in 1987 after 17 years at the University of Wisconsin, looks forward to seeing the department foster a closer relationship with the academic life on campus.

"Sometimes the bridge between campus and Collegetown can seem very wide," Bathrick said, referring to the Center for Theatre Arts (CTA) location across the gorge from main campus. "We often mount productions at the center that are related not only to coursework, but to general scholarly projects on the campus, and in some cases the connection between the two never gets made."

Bathrick cites cross-disciplinary post-performance discussions, conferences, lectures and involvement with such organizations as the Society for the Humanities as some of the ways to encourage interchange between the department and the academic community.

"What we've discovered since we've been in this building is the extent to which courses that were originally thought of as just theater arts courses really serve the interests and needs of students across campus," he said. "For instance, engineers and architecture students are taking lighting and scenic design courses. I think we can more actively pursue courses that cross over into other disciplines."

According to Bathrick, one of the department's goals as a producing theater



Professor David Bathrick at the Center for Theatre Arts.

is to educate people about issues they might not find in normal theater offerings, by experimenting with new kinds of works or bringing in theater groups new to the

Ithaca community.

"We might put on a production of Goethe's *Faust* that would be produced not as *Faust* has been done for the last

hundred years, but with a new kind of staging showing interesting use of the text or interesting examples of European stage design." Bathrick also mentioned the possibility of booking foreign dramatic touring groups that could perform in English or in their native languages.

Another major goal of Bathrick's will be to build a stronger graduate program in theater studies. "I think the interchange between the graduate program and the undergraduate program sets the intellectual tone of a department," he said, adding that getting the best students and expanding the program will be an important base for anything the department does. "Ours is not a large graduate program, but to me it's very important to the spirit of the department."

He hopes also to promote the creation of a graduate film program on campus by building on the strength of the undergraduate film concentration and the presence of Cornell Cinema.

Bathrick is the author of dozens of papers and several books, including *The Powers of Speech: The Cultural Politics of the GDR*, which focuses on the social function of literature and culture in the politics of East Germany. He is editor of *New German Critique*, a publication he co-founded at the University of Wisconsin.

In addition to his 17 years at Wisconsin, Bathrick has been affiliated with the Goodman School of Drama in Chicago.

Bathrick earned a bachelor's degree from Dartmouth College (1959) and a Ph.D. from the University of Chicago (1970). He also attended Free University in West Berlin, Germany.

Kramnick examines role of universities

By Dennis Shin '96

What goes on far above Cayuga's waters?

Speaking to an audience of new students and parents in Bailey Auditorium during freshman orientation on Aug. 26, Isaac Kramnick examined that question and explored the dynamic role of universities in modern America. Kramnick is chair of the Government Department and associate dean of the College of Arts and Sciences.



Kramnick

To understand what universities do, Kramnick encouraged students to go to the Eddy Street gate, which sets off Cornell from Collegetown, where they will find an inscription reading, "So enter that daily thou mayest become more learned and thoughtful."

Universities often have such gates, he explained, in order to remove students from the rest of the world and educate them in isolation. Even

Cornell's alma mater depicts this separatism in its second verse, Kramnick noted. "But that is by no means all that colleges and universities do," he said.

The university exists in today's society as a dynamic institution that serves a great number of purposes, many of which are not obvious, according to Kramnick.

With the development of the university in the post-Civil War era, new purposes of higher education evolved as schools set out to make their students more useful and implemented practical training in addition to traditional liberal arts education.

"Cornell University, in fact, in its early years required all students to do manual work on campus in order to learn useful mechanical skills," Kramnick said. "We did, by the way, abandon this requirement some time ago."

Besides educating students and preparing them for the professional world, Kramnick listed various other roles society designates to the American university.

In a way, Kramnick observed, the university takes over as a parent, and it serves as the "custodian of high culture and good taste, which it passes on to each new, barbaric television-crazed freshman class."

It also provides for class mobility since a university education offers individuals tickets of entry to higher status, both socially and economically. Unintentionally, the university further serves as a political forum in which the major issues of the day are tried and debated. As an example, Kramnick pointed out how college campuses have led the struggle to promote gender and racial equality in the United States since the 1960s.

"The college and the university in America have become perhaps the most crucial agent in the socialization of young people," Kramnick stated.

During his lecture, Kramnick added that the inscription on the inside of the Eddy Street gate continues with a second line, which reads, "So depart that daily thou mayest become more useful to thy country and to mankind."

Rawlings *continued from page 1*

students by making himself accessible and also by visiting them at their residence halls. The open invitation seemed to strike a chord with his audience.

"I really like him. He's very enthusiastic, and his speech made me feel very welcome," said Samantha Sherman, a freshman in the College of Agriculture and Life Sciences.

"Rawlings strikes me as a very dynamic speaker," added Engineering College freshman Dennis Chow. "It seems like he cares about the students and he wants to learn from them, too. It's a two-way street, and I like that."

Besides offering advice to the incoming class, the president also addressed the parents. Referring to his own four children, the youngest of which is in college, Rawlings reminded parents to keep in touch with their new Cornellians.

"He spoke on two levels which connected with both the students and the parents. We thought that was a nice touch, and it made us immediately like him," said Jim and Ann Silvius, parents of engineering student Mark Silvius.

When asked if there was one particular message he hoped to convey to the entering class, President Rawlings said emphatically, "Participate actively in your education. There are so many resources here available to the students, and it is to their advantage to make use of them."

With his own orientation wrapping up and the freshman one under way, Rawlings seemed to share in the anxiety and thrill of embarking on a new experience together with the last Cornell class of the 20th century.

"This is an exciting time to be at Cornell," Rawlings said. "It's impossible not to feel that sense of excitement as you walk around campus."

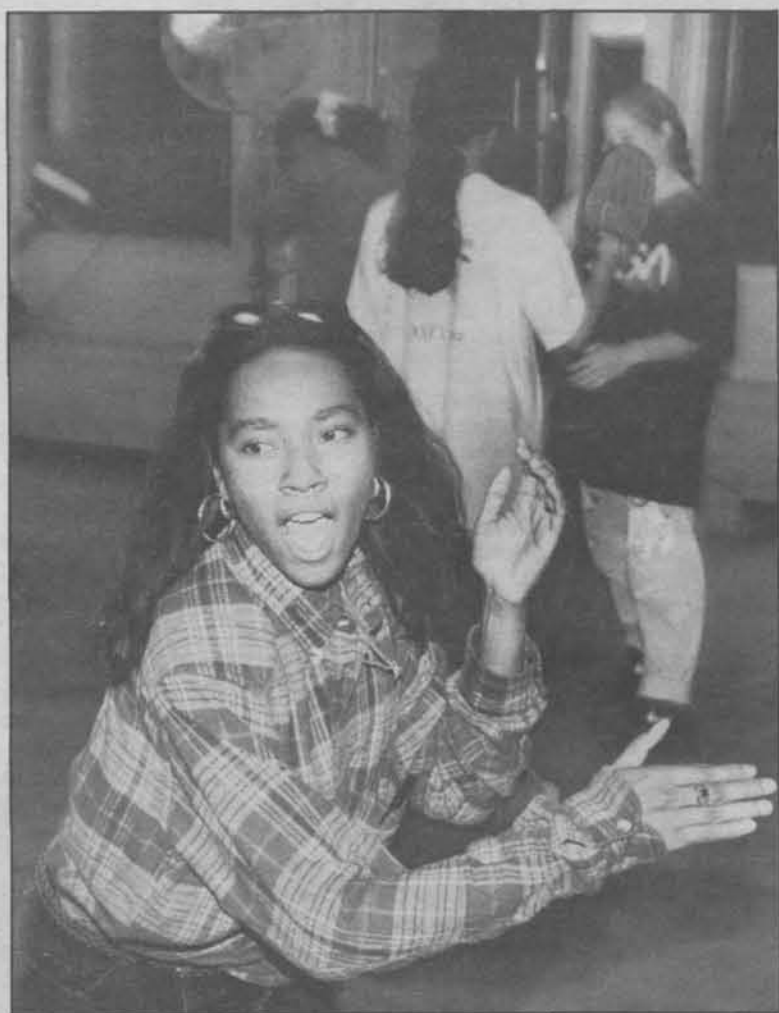
Cornell welcome



More than 3,000 members of the Class of '96 arrived on campus last week, unloading truckloads of belongings. Top: Hamilton Ho, right, of Medford, N.J., with the aid of Dave Kennedy of Baltimore, carries clothes to his room using the "slap-and-scream" technique at the Human Ecology Dean Francille Sunday's President's Reception; 1-5: Sing; parents lend a valuable helping

Photo
Adrian

the Class of 1999



1999 joined the Cornell community and getting acquainted with orientation events. Clockwise from the top left: Daniel Howard, with the help of alumnus Mark Ciszewski, chats with new students at the Quad.

s by
overs

ESP is real, professor tells freshmen, parents

By Roger Segelken

Freshmen and families attending a Saturday afternoon orientation lecture on extrasensory perception (ESP) by psychology Professor Daryl J. Bem got a lesson in scientific objectivity and scholarly inquiry by a man who knows how to fake ESP but usually doesn't.

Now one of the world's leading researchers in the parapsychology question of whether ESP is real and the first to publish positive results in a mainstream psychology journal, Bem was a magician performing mentalist tricks on stage long before he was a psychologist—since age 17, in fact. His magician's skill at making others believe mental telepathy was occurring when it wasn't eventually led to his serious examination of the phenomenon, he told the audience in Alumni Auditorium.

"In order to do ESP research, you have to have tenure," the tenured professor began, giving the freshmen an early introduction to the academic world they are about to enter. Undergraduates make the best research assistants in ESP research because graduate students and postdoctoral researchers can't afford to risk their reputations, Bem noted. When he writes letters of recommendation for undergraduates who assisted him in the so-called ganzfeld experiments, he said the letters' recipients may think, "That's a pretty cockamamie thing to do but at least you know how to collect data."

Like a typical lecturing professor, Bem first defined his terms. "Psi" is the scientific term for any anomalous process of information or energy transfer. The term includes telepathy (receiving information from another person), clairvoyance (knowledge of an event that no one else perceives) and precognition (knowing of an event before it happens), as well as psychokinesis (a mind's control over matter), the psychologist noted. "Who," he asked rhetorically, "believes this kind of stuff?"

About 50 percent of the American public believes in ESP and other psi phenomena, according to a Gallup poll, and among college-educated Americans, 66 percent believe. The believer rate for college professors in general is the same 66 percent, but for psychologists the number drops to 34 percent.

"Psychologists don't believe in it," Bem said, "and neither does Carl Sagan."

To scientists who say ESP is an impossibility, Bem said, "I say shame on them." New and seemingly impossible scientific phenomena are being proved to be true all the time, he said, noting that until the early 18th century, most scientists didn't believe in meteorites.

Not that psi can't be faked, Bem said, describing how clever psychics manage to give such personalized readings. "And the advice psychics give is usually reasonable—about as good as you get from counselors," he said. "You just shouldn't be paying \$2.99 a minute (on a 900 call) for it."

Bem, the magician/psychologist who once studied to be a physicist, said he got involved in psi research through parapsychologist Charles Honorton. Bem was asked to find any way Honorton or his experimental subjects in ganzfeld (or total field sensory isolation) tests could be faking. He couldn't; the magician was convinced the experiments were scientifically valid, and he collaborated with Honorton on examining his and others' ganzfeld tests of ESP.

In the now-standardized ganzfeld ESP test, "receivers" have a one-in-four or 25 percent chance of correctly guessing the information supposedly being transmitted from the mind of the "sender." However, in more than 60 ESP experiments conducted by parapsychologists, including Bem, a statistically significant 33 percent of "receivers" get the message. The surprising results from the Honorton-Bem analysis of ESP experiments were announced to a 1993 national meeting of the American Association for the Advancement of Science (AAAS), shortly after Honorton died, and were subsequently published in the journal *Psychological Bulletin*.

Bem's experiments at Cornell continue, he said, describing the ganzfeld experience. "Receivers" relax in a reclining chair, listening first to the soothing voice of a meditation instructor. Their eyes are covered by halved table-tennis balls while earphones play "white noise" to block other sounds. "College students are always so sleep-deprived they often fall asleep," Bem said.

"Modern physics has phenomena that physicists don't understand," Bem said. "At some point our view of how reality really works is going to change."

In the meantime, Bem said, he is among the minority of psychologists. "I am a believer," he stated. "People in my department are just amused. But they don't want to throw me out... I think."



Bem

Russian, N.Y. apple scientists will join forces

By Linda McCandless

At Cornell's Agricultural Experiment Station in Geneva, the end of the Cold War and the subsequent breakup of the Soviet Union means that horticulturists are now free to collaborate on one of the great botanical controversies: the origin of the apple. The "gardens" of mutual interest are wild apple forests in the mountainous regions of Central Asia where wild *Malus* is concentrated.

"Apple genetics and germplasm of wild *Malus* are of mutual interest in hybridization with *Malus domestica* to produce apples with increased disease and insect resistance," said Vladimir V. Ponomarenko, curator of the *Malus* germplasm collection at the N.I. Vavilov Research Institute of Plant Industry in St. Petersburg, Russia. Ponomarenko's "wildest dream" was to visit the 3,000 accessions of apple in the USDA-ARS collection at Geneva, as he did recently during a three-week "apple" tour of the United States.

Ponomarenko's botanical explorations for the origins of apple have taken him on 34 collecting missions throughout the entire territory of the former USSR. They parallel similar missions made by Philip L. Forsline, horticulturist and curator of the USDA-ARS Plant Genetic Resources Unit (PGRU), and Herb Aldwinckle, chairman of the Department of Plant Pathology, who have trekked to Kazakhstan and other middle Asian countries on similar missions. PGRU hosted Ponomarenko along with Cornell's departments of Plant Pathology and Horticultural Sciences.

Aldwinckle and Forsline have made preliminary evaluations of samples of *Malus sieversii* for resistance to apple scab, cedar apple rust and fire blight — all important diseases to commercial apple growers in New York state. If *M. sieversii* is as resistant as horticulturists suspect, it could be extremely important in the breeding of new disease-resistant varieties at the Station.

"Ponomarenko is the most accurate *Malus* taxonomist in the former USSR," said Forsline. "Our plan at PGRU is to expand our collections of these species in collaboration with him. In addition, we will visit collections in other areas of Russia like Maykop and Volgograd. We also may develop three-way collaborations with colleagues in China."



From left, Jim McFerson, supervisor of the USDA-ARS Plant Genetic Resources Unit, Phil Forsline, horticulturist and curator of the apple collection at PGRU, and Vladimir Ponomarenko, curator of the apple collection at the N.I. Vavilov Research Institute of Plant Industry in St. Petersburg, examine the New York State Agricultural Experiment Station's collection of *M. sieversii*, a highly resistant apple from Kazakhstan, which is being evaluated for resistance to apple scab, cedar apple rust and fire blight.

Forsline is planning a return-trip to Kazakhstan this fall with former Cornell graduate student Elizabeth Dickson and James Lüby from the University of Minnesota to make additional collections of *M. sieversii* in areas that were not collected in previously. Ponomarenko will accompany them to certain locales.

During his weeklong visit at Geneva, Ponomarenko conducted a seminar and several roundtable discussions on his four-fold areas of interests: the Vavilov Institute; genetic resources of wild *Malus* of the former USSR and their utilization in breeding; origins and evolution of *M. domestica*; and the current state of apple breeding in Russia.

Ponomarenko showed Geneva horticulturists slides that amply demonstrated the incredibly diverse adaptations that apple has made in Europe, Caucasus, Middle Asia, Eastern Siberia and the Far East. Apples range in size from berries to half-pounders; in color from white to yellow, green and red; in taste from sweet to bitter; in flowers from common five-petaled varieties to multi-petaled to no petals at all; and in form from single to multitrunked; from bush to 200-year-old tree. In his discussions, Ponomarenko concentrated on *M. sylvestris*, *M.*

orientales, *M. sieversii* and *M. baccata* — wild species that contributed to the domestic apple as we know it.

Apples of Western and Central Europe (*M. sylvestris*) tend to be extremely resistant to dry, hot summers and dry, cold winters. Apples of the Caucasus (*M. orientalis*) are tall, late blooming trees that produce prodigious quantities of bitter-tasting fruit. Apples of Central Asia (*M. sieversii*) are resistant to a very hot, dry climate and produce large red, yellow and green, bitter- and sweet-tasting fruits that easily are stored for up to three months in casual stone cellars. Apples of Eastern Siberia (*M. baccata*) are hardy in -40°C winters and grow multitrunked, extremely dwarfed forms that are productive after only two years' growth. In the Far East, *M. manshurica* produces cherry-size fruit in a very humid climate on rocky salt- and wind-swept cliffs overlooking the Pacific Ocean.

M. sieversii and other species have been hybridized over thousands of years, noted Ponomarenko. In general, the species migrated along trade, silk and spice routes from Middle Asia into Eastern and then Western Europe — assessments with which horticulturists at the Experiment Station generally agree.

Arntzen named president of BTI

By Blaine P. Friedlander Jr.

Charles J. Arntzen, a premier researcher who is developing new medicinal uses for plants, on Friday becomes president and chief executive officer of Boyce Thompson Institute for Plant Research Inc. at Cornell, replacing Ralph W.F. Hardy, who retires today (Aug. 31).

"I am personally pleased that the institute has attracted a leader with such outstanding scientific accomplishments and administrative experience," Hardy said. "His breadth of senior management experience in academe and industry will provide a basis for strong leadership for BTI."



Arntzen

Prior to coming to BTI, Arntzen was professor of biochemistry and biophysics at the Albert B. Alkek Institute of Biosciences and Technology at Texas A&M University, Houston. He also served as adjunct professor in physiology at the University of Texas Medical School, Houston. Before that, he was the deputy chancellor for agriculture and dean of the College of Agriculture and Life Sciences at Texas A&M University, and he also served as director of the Texas Agricultural Experiment Station.

One of the most noted examples of Arntzen's research includes developing fruits and vegetables into low-cost delivery systems to replace costly and often-dreaded injection vaccinations. "The hope is to make transgenic fruits or vegetables such as bananas with antigens for diarrheal diseases of children in developing countries," Hardy said. "Using plants to enhance human health may be an increasingly important theme for plant science."

Looking out for humanity is indeed part of the institute's mission. The institute's founder, Col. William Boyce Thompson, discussed the relationship between plants and human health almost 70 years ago. The institute is the only major national independent not-for-profit plant research facility in the country.

Under Hardy's leadership, the institute has flourished as one overwhelming theme has come forward: the environment. "Over 90 percent of our current research projects relate to environmental concerns," Hardy said.

Birds offer clues *continued from page 1*

rear offspring of previous breedings, the biologist noted, because the offspring do not carry the step-parent's genes.

Other predictions deal with such matters as family group stability and instability, assistance in the rearing of young, incest avoidance within families and disruptions expected with the loss of a biological parent. His new theory, Emlen said, tries to "Darwinize" the social-science field of family life studies by adding an adaptive approach to complement current mechanistic and developmental approaches of studying family function.

Emlen's adaptive approach considers four factors to have been of special importance in the evolution of natural rules of family interactions: genetic relatedness of individuals within and outside family groups, social dominance among such individuals, the benefits of group living for the family and the probable success of independent reproduction if members leave the family group.

Highly social birds, such as the white-fronted bee-eaters that Emlen studied in Kenya for eight years, make good "animal models" for the study of human family dynamics, the Cornell biologist said. No other mammals, including the non-human primates, form the socially monogamous extended families that many humans have, but numerous bird species do, Emlen observed. "This is the type of family structure which, until very recently, typified virtually all human societies."

Animal behavior studies, he wrote in the National Academy journal article, "provide us with a valuable window through which we can more easily view the fundamental biological rules that govern social interactions within family groups. By looking through this window, we can gain insights into non-cultural factors that affect our own social behaviors."

A better understanding of genetic predispositions might help human-service workers and parents predict and avert



Stephen Emlen, professor of neurobiology and behavior, studies birds in Panama.

problems, Emlen said. He cited, as an example, families with step-parents and step-children, and noted that step-children are more likely to get in trouble and drop out of school.

"If we consider even the possibility of heritable tendencies for parents to invest slightly less in children who do not share their genes (step-children), we can use this awareness to detect possible symptoms of family stress much earlier, before any serious problems occur," Emlen said.

The part of the theory that relates economic resources and chances of reproductive success to family size can predict widespread social changes, as well, Emlen noted. "As better economic opportunities come up, extended families tend to 'disintegrate' into nuclear families," he said. "This has happened repeatedly in industrial societies throughout the world."

And knowing what works for most families, human and otherwise, can alert us to possible problems when we try a different model, the biologist said, pointing to single-parent situations.

"Female parents living in extended family situations have a built-in support group, consisting not only of their male mate but also a network of female relatives," he said. "When nuclear families became the norm, this female kin support group largely disappeared. And with the increase in divorce rates in recent decades, mothers often are losing the support of their mates as well."

"Such a rapid change from extended family to single-parent parenting is without parallel in the animal kingdom," Emlen noted. "It constitutes a social experiment for which we have no animal models. When a female of a species in which both parents typically provide care for offspring loses her mate, she often is unable to rear her dependent young alone, and she seldom, if ever, continues to produce additional offspring without pairing again."

Human single parents should be aware, he said, that they are "participating in a new experiment — given our evolutionary past."

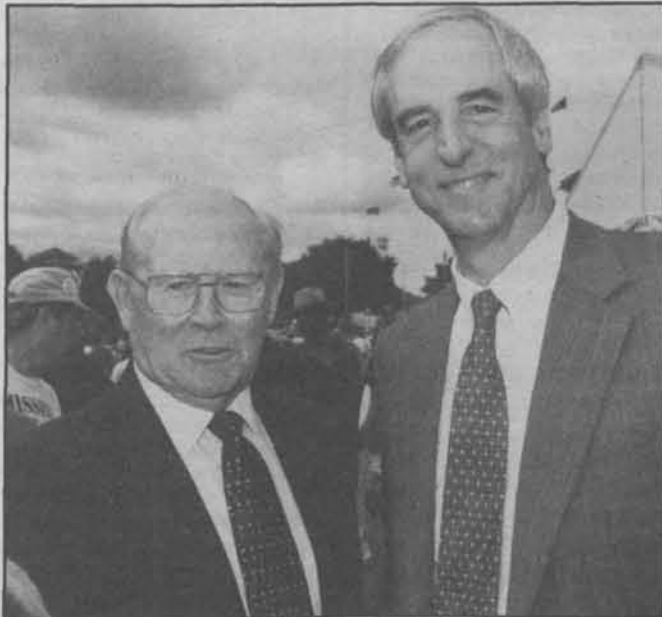


A day at the Fair

President Hunter Rawlings and representatives from the College of Agriculture and Life Sciences went to Syracuse for opening day of the State Fair on Aug. 24. While there, they attended a Governor's Day Luncheon honoring state agriculture and retiring Dean David L. Call, and toured Cornell exhibits.

Photographs by
Adriana Rovers

Gov. George Pataki greets Cornell President Hunter Rawlings and Vice President Henrik Dullea at opening day at the State Fair in Syracuse Aug. 24.



Rawlings, right, meets with Richard T. McGuire, commissioner of the state Department of Agriculture and Markets, which organizes the State Fair each year.



Pataki, center, greets well-wishers at the Governor's Day Luncheon honoring state agriculture. The governor recognized retiring Dean David L. Call, at right with his wife, Mary. At left is Cornell trustee Richard C. Call.



During a tour of the Youth Building, which houses 4-H exhibits and participants from every county, Rawlings gets a lesson in "enviro-shopping" from Kerry Ann Newell and Alicia Johnson, youth participants in the New York City 4-H program.



Dan Tennesen, assistant professor in the Department of Floriculture and Ornamental Horticulture, explains his hydroponics exhibit.

Gov. Pataki honors Dean Call for his years of service to N.Y. agriculture

By Blaine P. Friedlander Jr.

Before a few hundred of David L. Call's closest friends, colleagues and relatives, Gov. George E. Pataki said last Thursday that the retiring educator was "richly deserving of our gratitude for a job well done." After 17 years of stewarding Cornell's College of Agriculture and Life Sciences (CALS), the dean officially steps down today (Aug. 31).

A heaping helping of praise for Call

was served at the Governor's Day Luncheon honoring state agriculture on Aug. 24, opening day of the 1995 State Fair in Syracuse. Cornell President Hunter Rawlings also attended the luncheon and added his personal congratulations.

Richard T. McGuire, commissioner of the state Department of Agriculture and Markets, presented Call with a \$5,000 check—money raised from the luncheon—to add to the David L. Call Ever-Green Ivy Fund.

Noting several of the dean's accomplishments, Pataki pointed out the Integrated Pest Management program, "initiated as a pioneer program to reduce the use of chemicals in agriculture, is now a national model." Pataki also indicated that the PRO-DAIRY program has been a boon to New York's dairy production.

Call has enjoyed a 45-year association with Cornell. The dean's accomplishments make for an extraordinarily long list; he expanded CALS into biotechnology and

developed a state-of-the-art repository for agricultural information. One of his most important decisions was to actively recruit minority students, faculty and staff.

The governor praised Call as an educator and visionary who "worked aggressively to ensure future viability of the food and agricultural system. While doing so, he has earned the heartfelt appreciation of the food and agricultural community, as well as the citizens of the Empire State."

CALENDAR

August 31
through
September 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

Cornell Dance Series

Singer, writer, choreographer and performer Meredith Monk will present "Songs From the Hill," an evening of music and movement, Sept. 1 at 8 p.m. in the Proscenium Theatre at the Center for Theatre Arts. Tickets are \$10, \$8 for students and seniors, and are available at the center's box office or by calling 254-ARTS.

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.

- "Light and Shadow: Mezzotints From the 17th Century to the Present," through Oct. 14.
- "Cornell Art Department Faculty Exhibition," through Oct. 15.
- "Augustus Vincent Tack: Landscape of the Spirit," through Oct. 22.
- "Indian Miniatures and Photographs," Sept. 2 through Oct. 22.

Cornell Library

"Remembering Cornell" documents the history of Cornell with vintage photographs, memorabilia, original manuscripts and other rare materials. Designed as a walking tour, it is displayed throughout Olin, Kroch, Uris, Mann and other libraries through Sept. 9. A souvenir guide is available.

Hartell Gallery

Ithaca artist Renate Ferro is exhibiting a retrospective of her *Birthwork* series, 1986-1995, at the Hartell Gallery in 129 Sibley Dome through Sept. 1. *Birthwork* combines drawing, printmaking, collage and artist's books in reflecting on the imperative of women's choice and the attendant joys, uncertainties and challenges of creativity. The gallery is open from 8 a.m. to 5 p.m.

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.

Thursday, 8/31

"La Strada" (1954), directed by Federico Fellini, with Giulietta Masina and Anthony Quinn, 7 p.m.
 "Outbreak" (1995), directed by Wolfgang Petersen, with Dustin Hoffman, Morgan Freeman and Donald Sutherland, 9:30 p.m.

Friday, 9/1

"Before Sunrise" (1995), directed by Richard Linklater, with Ethan Hawke and Julie Delpy, 7 p.m., Uris.
 "To Live" (1994), directed by Zhang Yimou, with Gong Li, 7:30 p.m.
 "Outbreak," 9:15 p.m., Uris.
 "Vertigo" (1958), directed by Alfred Hitchcock, with James Stewart and Kim Novak, 10 p.m.
 "Pulp Fiction" (1994), directed by Quentin Tarantino, with John Travolta, Uma Thurman and Samuel Jackson, midnight, Uris.

Saturday, 9/2

"Outbreak," 7 p.m., Uris.
 "Casablanca" (1942), directed by Michael Curtiz, with Humphrey Bogart and Ingrid Bergman, 7:30 p.m.
 "To Live," 9:45 p.m.
 "Before Sunrise," 9:45 p.m., Uris.
 "Pulp Fiction," midnight, Uris.

Sunday, 9/3

"Before Sunrise," 7:30 p.m.
 "Casablanca," 9:45 p.m.

Monday, 9/4

"The Magnificent Ambersons" (1942), directed by Orson Welles, with Joseph Cotten and Anne Baxter, 7 p.m.
 "Pulp Fiction," 9 p.m.

Tuesday, 9/5

"... and the Earth Did Not Swallow Him" (1994), directed by Severo Perez, 7 p.m.
 What You See Is What You Get Series: "Cutting Edge" (1995), various directors, 7:30 p.m., CTA.
 "Badlands" (1973), directed by Terrence Malick, with Martin Sheen and Sissy Spacek, 9:15 p.m.

Wednesday, 9/6

"A Flame in my Heart" (1988), directed by Alain Tanner and Myriam Mezieres, with Mezieres, 7 p.m.
 "Adjusting in Nicaragua: The World Bank IMF and Community Development" (1994), 48 mins., and "School of Assassins" (1995), 18 mins., Latin American Film Series, 8 p.m., Uris, free.
 "Badlands," 9:30 p.m.

Thursday, 9/7

"The Last Klezmer" (1994), directed by Yale Strom, 7 p.m.
 "Kiss of Death" (1995), directed by Barbet Schroeder, with David Caruso, Samuel Jackson and Nicolas Cage, 9 p.m.

graduate bulletin

- **Late registration:** Bring student ID card to the University Registrar's Office, 222 Day Hall, and go to the Graduate School for course enrollment.
- **Course enrollment:** Forms are available in graduate field offices and at Sage Graduate Center. Return completed form in person to the Graduate School by Friday, Sept. 22. Students who completed precourse enrollment forms last spring do not need to complete a course enrollment form; if there is a change in their schedules, they should complete a Course Drop and Add form.
- **Faculty meeting,** Friday, Sept. 8, 4 p.m., General Committee Room, Sage Graduate Center. This meeting is solely for the purpose of voting on August degrees.
- **Teaching assistant workshops:** Saturday, Sept. 9; registration forms are available at graduate field offices or at the Office of Instructional Support, 14 East Ave., Sage Hall, phone 255-3493. There is no charge to students.

lectures

City & Regional Planning

"President Clinton's National Urban Policy: A Community Empowerment Agenda," Michael Stegman, assistant secretary for policy development and research, U.S. Department of Housing and Urban Development, Sept. 1, 12:15 p.m., 115 Tjaden Hall.

Industrial & Labor Relations

The annual pre-Labor Day forum will be held Aug. 31 at noon in G10 of the Biotechnology

Building. The theme of this year's forum is "The Future of Unions" and will be addressed by Lynn Williams, former president of the United Steelworkers of America, and Edward Cleary, president of the New York State AFL-CIO.

Southeast Asia Program

"A Publishing Episode in Vietnam in 1752 and the Southeast Asia Program Today at Cornell," Keith Taylor, Asian studies, Aug. 31, 12:15 p.m., Kahin Center, 640 Stewart Ave.

"Memories of Underdevelopment: Indonesia in the Late Sukarno Period," Benedict Anderson, government, Sept. 7, 12:15 p.m., Kahin Center, 640 Stewart Ave.

music

Department of Music

• Sept. 1, 8:15 p.m., Barnes Hall: A program of 17th-century Italian and English music will be performed by the Elizabethan Conversation (Susan Sandman, recorders, and Derwood Crocker, lute) and William Cowdery, chamber organ. Sandman, a music professor at Wells College, won a National Endowment for the Humanities Study Grant this summer to work on the music of Hildegard von Bingen. Lutist Crocker also is a nationally acclaimed early instrument maker. He has built the lute and chamber organ to be played in the evening's concert. Cowdery is on Cornell's music faculty and is the university choirmaster.

• Sept. 2, 8:15 p.m., Barnes Hall: The Sienko Viol Consort will perform all the fantasias for viols by Henry Purcell (1659-1695) in commemoration of the tercentenary of his death. The Sienko Viol Consort grew out of the annual Cornell Summer Viol Program, founded by John Hsu in 1970. Its main focus is on French Baroque solo viol playing, but other viol repertoires also are taken into consideration. Since 1985, the program has been supported by the Carol T. Sienko Memorial Endowment Fund, and the ensemble is named in her honor. Members of the consort include Martha Bishop, Selina Carter, Laurie Castellano, Roland Hutchinson, Brent Wissick, Rosamond Morley and Hsu.

• Sept. 3, 8:15 p.m., Barnes Hall: Fortepianist Malcolm Bilson and soprano Judith Kellock will end the weekend with songs by Johannes Brahms (*Wie Melodien, Dein blaues Auge, Nachtigall, Standchen, An eine Aeolharfe, Der Tod und Sonntag*) and Robert Schumann's *Waldszenen*, op. 82. In the second half of the concert, Kellock will sing Schumann's *Frauenliebe und-leben* and will finish with Franz Schubert's *Suleika, Dass sie hier gewesen, Du liebst mich nicht, Lachen und Weinen, Die junge Nonne, An die Nachtigall* and *Suleikas zweiter Gesang*.

Bound for Glory

Sept. 3: Singer-songwriter and former Ithacan Mark Rust will open up the 29th season of Bound for Glory. The show runs Sunday nights from 8 to 11, with live sets at 8:30, 9:30 and 10:30 p.m. 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.

religion

Sage Chapel

The Rev. Robert Johnson, director of Cornell United Religious Work, will give the sermon Sept. 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.

Christian Science

Testimony and discussion every Thursday at 7 p.m., Founders Room, Anabel Taylor Hall.

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.

Saturday Services: Orthodox, 9:15 a.m., Edwards Room, ATH; Conservative/Egalitarian, 9:15 a.m., Founders Room, ATH.

Korean Church

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

Latter-day Saints (Mormon)

Discussions on the Book of Mormon: Wednesdays, 7:30 p.m., 314 Anabel Taylor Hall. All are invited to come and discover the religious writings of ancient American cultures.

Sunday services: Cornell Student Branch, 9 a.m., Ithaca ward, 1 p.m. For information, 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

Astronomy & Space Sciences

"Bending Modes of Stellar Disks," Jerry Sellwood, Rutgers University, Sept. 7, 4:30 p.m., 105 Space Sciences.

Boyce Thompson Institute

Distinguished Lecture in the Life Sciences: "Zoopharmacognosy: A 'Biorational' Strategy for Phytopharmaceutical Prospecting," Eloy Rodriguez, biological sciences, Sept. 6, 3 p.m., Boyce Thompson Auditorium.

Ecology & Systematics

"Ecological and Evolutionary Implications of Skeletal Variation in a Caribbean Soft Coral: Pattern and Process," Jordan West, ecology & evolutionary biology, Sept. 6, 4 p.m., A106 Corson Hall.

Fruit & Vegetable Science

"Thesis: The Influence of Postharvest Heat Treatment on the Shelf-Life Qualities of Fresh Market Tomato," Chime Paden Wangdi, fruit & vegetable science, Aug. 31, 4 p.m., 404 Plant Science Building.

"The Changing American Diet: Consequences for Sustainability," Marvin Pritts, fruit & vegetable science, Sept. 7, 4 p.m., 404 Plant Sciences.

Mechanical & Aerospace Engineering

"Entrepreneurism — America's Best Weapon in Global Competition," Gordon Blankton, president and CEO of Nypro Inc., Sept. 7, 4:30 p.m., 155 Olin Hall.

Microbiology

"Feline Immune Deficiency Virus Infection: Vaccination Studies and Antiviral Therapy," Herman Egberink, Faculty of Veterinary Medicine, Utrecht, The Netherlands, Sept. 1, noon, Boyce Thompson Auditorium.

Plant Pathology

"The New York Seed Potato Program," Steven Slack, plant pathology, Sept. 6, 12:10 p.m., 404 Plant Sciences Building.

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.

Cornell Savoyards

Auditions for Cornell Savoyards' fall production, Ruddigore, will be held on campus Sept. 6 from 7 to 9 p.m. in 403 Barton Hall. Leading roles for: four baritones, one tenor, one soprano, one mezzo, one alto, including large chorus. Appointments are encouraged, although walk-ins are welcome. Accompanist provided. Monologue or reading encouraged. Also looking for technical crew. Info: 257-0496.

Emotions Anonymous

This 12-step group that helps people deal with emotional problems meets on Sundays at 7:30 p.m. and Tuesdays at 8 p.m. at the St. Luke Lutheran Church, 109 Oak Ave., Collegetown. For more information call Ed/Karen at 273-5058.