

CORNELL Chronicle

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FOOD AND DEVELOPMENT

World Food Day symposium focuses on solutions to problems in the Greater Horn of Africa.

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PRESIDENTIAL APPOINTMENT

Malden C. Nesheim is named chairman of federal Commission on Dietary Supplement Labeling.

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Roundtable: U.S. business needs scientist-managers

By Darryl Geddes

Help Wanted: Corporate America seeks scientist or technologist with management and leadership skills.

The scientist as manager may fast become the new business elite if corporations are to survive and flourish in a global marketplace driven by rapidly changing technologies.

"Companies need senior executive teams who are comfortable with science and technology," said Dolf DiBiasio, a director with the consulting firm of McKinsey & Co. "This is not to say that a CEO has to have a science or technology background, but those that don't should ensure that their senior leadership teams have an individual or two with educational training in science or engineering and some applied experience."

DiBiasio's comments came during a roundtable discussion on "The Scientist as Manager: Emergence of a New Business

Corporate science gap is a concern. Page 4

Elite?" held Oct. 18 at the Cornell Club in New York City and sponsored by Cornell's Johnson Graduate School of Management. The event also featured presentations from I. MacAllister Booth, chairman, president and chief executive officer of Polaroid Corp.; Arati Prabhakar, director of the National Institute of Standards and Technology, U.S. Department of Commerce; Sheila Tobias, educator and co-author of *Rethinking Science as a Career*; and Alan G. Merten, dean of the Johnson Graduate School of Management.

Much of the discussion touched on the need for scientifically and technologically literate voices to be heard and represented in corporations. Speakers suggested to those in attendance - included representatives from Warner Lambert, Bristol Myers Squibb, Citibank, Union Carbide, Schering-Plough Corp. and Johnson & Johnson - that an

executive trained in the sciences would be a welcome addition to the corporate hierarchy.

DiBiasio said scientific and technological literacy is an attribute that corporations cannot be without. "Most major corporate decisions now involve making choices among current and new technologies," he said. "These decisions can affect the entire business from product development to distribution, marketing, sales and finance."

Polaroid CEO Booth, BME '55 and MBA '58, admonished those who believe scientists should be relegated to the lab. "The thinking that scientists shouldn't and couldn't become CEOs nor that corporate leaders could be expected to evaluate technologists is outdated and dangerous.

"Leaders of companies need to be inquisitive about technology," he continued. "They can't be afraid of it or merely accept what others say about it. In this rapidly

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Frat brothers score with IACC



Adriana Rovers/University Photography

Brothers from Cornell's Sigma Alpha Mu chapter recently helped children from Ithaca Area Community Day Care Center's (IACC) Wildlife After School Program paint a mural in St. Paul's Methodist Church gym. With the children, from left, are Marc Weissman '98, David Silverman '98, Jason Leder '97 and Lyn Donohue, director of the IACC program.

Solutions sought to the world's 'hidden hunger'

Research fortifies crops. Page 4

By Susan Lang

Although the "Green Revolution" has boosted the calorie and protein contents of diets in developing countries, staving off famine, more than a billion people still suffer from "hidden hunger" - debilitating mineral and vitamin deficiencies that compromise health, cognitive abilities and productivity, according to a group of Cornell scientists.

Development requires that these deficiencies in iron, vitamin A, iodine, selenium and zinc be permanently eradicated, they say. And since supplements have failed to be sustainable interventions, the Cornell interdisciplinary group of scientists is spearheading an international effort to combine the forces of food production with those of nutrition and health.

Their goal: to develop permanent food-based solutions to micronutrient malnutrition, such as carotene-rich rice and corn, wheat that's full of zinc and iron, or irrigation water that's been fortified with iodine.

Their first major effort is an international workshop, "Food-Based Approaches to Preventing Micronutrient Malnutrition: Setting

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Cornell's Web home page provides gateway to the virtual university

By Bill Steele

A new, spruced-up gateway to Cornell now greets Internet surfers looking for information about the university. In addition to the information formerly supplied by CUinfo, the new "Welcome to Cornell University" server on the World Wide Web offers a photo tour of the campus, direct links to admissions and alumni information, and helpful hints for those planning to visit the campus.

Anyone entering the familiar Web address <http://www.cornell.edu> from an off-campus location will see the new page. From a computer on campus, that URL, or Internet address, will still open the old CUinfo page, which has been slightly redesigned. Users may switch between the two pages with a click of the mouse. To go directly to the new page from an on-campus location, enter the URL <http://www.info.cornell.edu/CUHomePage.html>.

Cornell Information Technologies (CIT), which maintains CUinfo, asked the Cornell Information and Referral

Center (IRC) to create the new server.

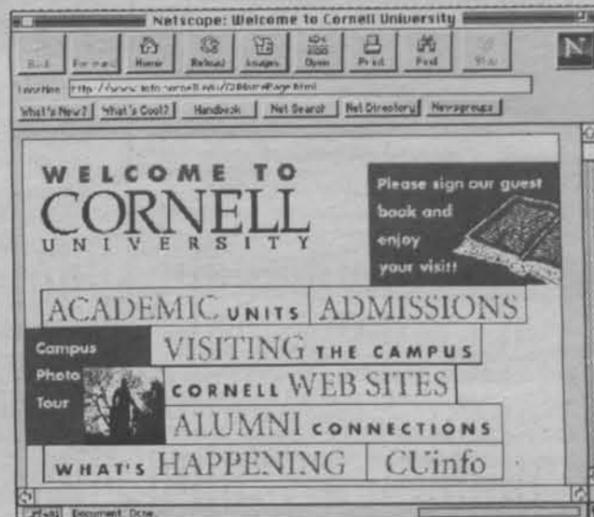
"Future students will be forming their image of Cornell years before they come here, from our Web pages," said H. David Lambert, vice president for information technologies. "It's time to build a partnership between the technologists, the content providers and the people whose focus is on what the university looks like to an outside community."

"We approached it as a publication and as a marketing tool," said Joel Seligman, director of campus information and visitor referral. "The Welcome page assumes you know little or nothing about Cornell when you begin."

It also assumes that you don't want to wait around all day for information. Publications Services graphic designer Deena Wickstrom looked at a lot of other universities' home pages before creating Cornell's new opening page, and she decided that "simple" was best.

"You're supposed to be getting to the information, rather than being dazzled by graphics," Wickstrom said.

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BRIEFS

Cooperative Extension Award:

Norman R. Scott, Cornell vice president for research and advanced studies and professor of agricultural and biological engineering, has been given Cornell Cooperative Extension's highest honor: the 1995 Friend of Extension Award. The Friend of Extension Award is given by Director of Extension William B. Lacy, on behalf of the Cornell Cooperative Extension System and Epsilon Sigma Phi, to honor persons who have had an ongoing commitment and partnership with Cooperative Extension in New York state. It was presented to Scott on Oct. 11 as part of the Cornell Cooperative Extension Professional Conference, "Research and Outreach—New Connections, New Responsibilities" in Saratoga Springs. Scott, a member of the Cornell faculty since 1962, served as director of the Cornell Agricultural Experiment Station and director of the Office for Research in the College of Agriculture and Life Sciences, after having served as chairman of the Department of Agricultural and Biological Engineering.



Scott

Johnson & Johnson award: Johnson & Johnson, the medical products and pharmaceutical manufacturer, has awarded Harold Scheraga, professor of chemistry, a \$270,000 grant over three years to investigate how ribonuclease A and thrombin fold and how thrombin interacts with its receptors. Scheraga's integrated experimental and theoretical inquiry will examine how inter-atomic interactions determine the manner in which a polypeptide chain folds into the native conformation of a protein (the protein-folding problem), and how the resultant protein carries out its biological function in interactions with both large and small molecules, as in enzyme-substrate, hormone-receptor or antigen-antibody interactions (docking). The grant was awarded to Scheraga through Johnson & Johnson's Focused Giving Program, which funds research in health-care products at leading universities and research institutions.



Scheraga

The College of Engineering has named the first group of faculty members to win new awards for their teaching excellence. The College of Engineering Teaching Awards, which include \$2,000 for each recipient, will go to 20 faculty members. The awards place teaching quality on an equal basis with research quality in evaluating the performance of individual faculty members, said John E. Hopcroft, the Joseph Silbert Dean of the College of Engineering. Candidates are nominated by department chairs, and winners are selected by a committee of faculty from engineering and other colleges at Cornell.

Engineering college establishes teaching awards

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"Teaching is more than lecturing in a classroom; it is a demanding task of engaging students in a learning process," Hopcroft said, adding that it includes a wide range of activities — such as lecturing, advising, project supervision, curriculum development and course-work design — and takes place not only in classrooms and laboratories, but also in offices, hallways, workshops, study-break lounges and club meetings — "anywhere faculty and students meet to exchange ideas."

"We need a vision of teaching that encompasses all these aspects and a mechanism for identifying those truly outstanding teachers among us," Hopcroft said. "We as a community need to publicly acknowl-

edge our faculty's commitment to teaching excellence and reconfirm its importance to the institution."

No recipient may receive the award more than once in three years, and individuals having won a major national teaching award in the past two years or a college or university award in the last year are ineligible for nomination.

Endowments have been established for 14 of the 20 awards. This year's teaching award winners and their department affiliations are listed below, followed by the name of the award:

Louis D. Albright, agricultural and biological engineering, Robert '55 and Vanne Cowie '57 Award;

Donald L. Bartel, mechanical and aerospace engineering, J.P. and Mary Barger '50 Award;

David F. Delchamps, electrical engineering, Dean's Fund Award;

James R. Engstrom, chemical engineering, Richard Tucker '50 Award;

Peter Gergely, civil and environmental engineering, James and Mary Tien Award, awarded posthumously;

Douglas A. Haith, agricultural and biological engineering, Dean's Fund Award;

Bruce R. Kusse, applied and engineering physics, Dean's Fund Award;

Yu-Hwa Lo, electrical engineering,

Michael Tien '72 Award;

John A. Muckstadt, operations research and industrial engineering, S. Yau '72 Award;

Thomas W. Parks, electrical engineering, Dean's Fund Award;

Clifford R. Pollock, agricultural and biological engineering, Stephen '57 and Marilyn Miles Award;

Richard H. Rand, theoretical and applied mechanics, J.P. and Mary Barger '50 Award;

Ferdinand Rodriguez, chemical engineering, Dean's Fund Award;

Phoebus Rosakis, theoretical and applied mechanics, J.P. and Mary Barger '50 Award;

David B. Shmoys, operations research and industrial engineering, S. Yau '72 Award;

Michael O. Thompson, materials science and engineering, J.P. and Mary Barger '50 Award;

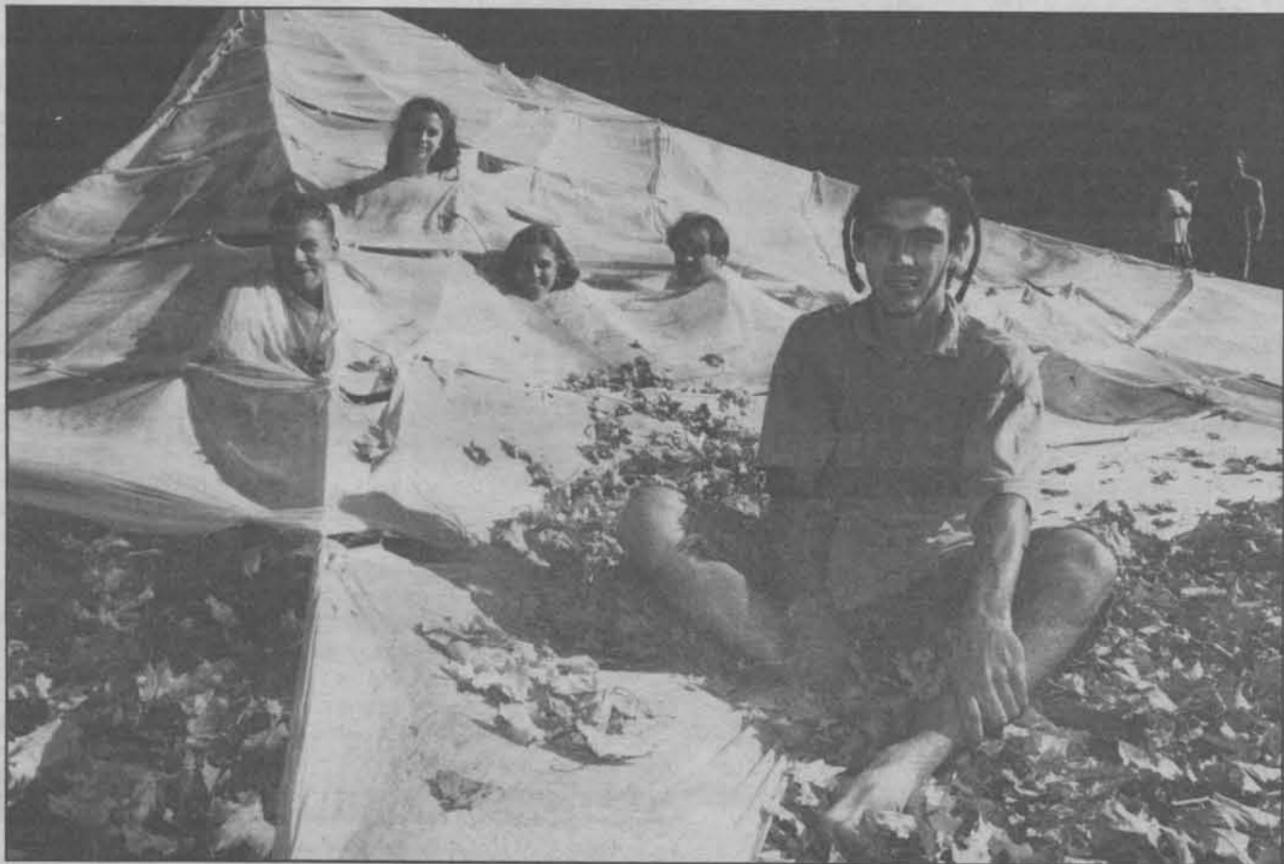
H.C. Torng, agricultural and biological engineering, Michael Tien '72 Award;

Zellman Warhaft, mechanical and aerospace engineering, J.P. and Mary Barger '50 Award;

Frank W. Wise, applied and engineering physics, James and Mary Tien Award;

Ramin Zabih, computer science, Abraham T.C. Wong Award.

Autumn art



Adriana Rovers/University Photography

Students in the College of Architecture, Art and Planning sit amid their "Leaf Catcher" on the Ag Quad. The structure, made of cheesecloth and hemp rope and designed to resemble a giant maple leaf, was billed as a "seasonal interior landscape, attuned to the subtleties of the shifting elements." The project was part of the Landscape Architecture and Design and Environmental Analysis exhibition, held Oct. 13. Student designers, from left, are Doug West '98, Amy Greenstein '98, Elizabeth Pulver '97, Paul Ballard '97 and Craig Maldonado '97.

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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.

Web home page *continued from page 1*

The first page users see is a Welcome to Cornell "image map," made up mostly of red lettering on a white background. Clicking on the area around any title — such as admissions — takes you to another page. Because the image is mostly white space, it loads quickly, even for home users connecting via less-powerful modems.

Other pages carry on the red-and-white theme with narrow banners, reminding viewers they are still looking at material from Cornell University. Wickstrom eventually hopes to encourage other Web sites on campus to use similar banners.

Of the nine services to which users can link from the Welcome page, Seligman is proudest of the "Campus Photo Tour," an online version of the campus walking

tours IRC provides for campus visitors. It includes views of 37 campus sights and buildings, with links from each one to more information about related departments and programs.

"We encourage departments and programs to supply us with links to their information that we can add under each photo," Seligman said.

Other links from the opening page take users to information on academic units, campus events, visiting the campus, other Cornell Web servers, the Cornell Alumni Federation and the old CUinfo page.

The site is still very much a work in progress, Wickstrom added. "We expect to change it at least every six months," she said.

A Web server for alums

Among the links on the new "Welcome to Cornell University" World Wide Web page is one to another new Web server created by the Cornell Alumni Federation. It brings together a variety of topics of interest to alumni that formerly were scattered in unconnected online and off-line sources.

Included on the server are a directory of the staff of Alumni Affairs, a listing of regional Cornell clubs and other alumni affiliate groups, calendars of events both on campus and in regional clubs, and information on travel programs and airline discounts available to alumni.

The server was built and is maintained by Andy Baxevanis '84, whose Web pages for the Cornell Club of Maryland inspired the new project.

Dworkin: Impose limits on political campaigns, but protect free speech

By Linda Grace-Kobas

"Just too liberal."

Do TV ads composed of three words superimposed on a candidate's face contribute to informed debate during political campaigns? Or do they degrade the political process with slogans that are "mindless, preposterous, malicious, mendacious and empty?"

Legal scholar Ronald Dworkin sees a real danger to American democracy in the current state of political campaigning, in which candidates must spend millions of dollars, primarily to buy advertising time on television. The cost of the ads drives up the cost of the campaign, so that even after winning election, politicians spend most of their time raising money for the next one. Dworkin noted that the average cost of winning a seat in the Senate rose from \$610,000 in 1976 to \$3.8 million in 1992.

"Nobody can now run for national office in the United States who is not rich or who does not have the talent for raising money from the rich," he said in this year's Daniel W. Kops Freedom of the Press Lecture before an overflow audience in the Moot Courtroom of Myron Taylor Hall on Oct. 17.

Dworkin, professor of law at New York University with a joint appointment at Oxford, recommends a more subdued European model of campaigning, in which longer, free-standing presentations of candidates' views are broadcast.

But how would he convince Americans to redefine the almost-no-limits interpretations of the First Amendment that have been reinforced by Supreme Court decisions? Any recent proposals to limit either campaign spending or the content of political advertising have been subjected to court challenges.

"Free speech is supposed to serve democracy," Dworkin said, but there must be harmony among the people's values. In the past 10 years, many advocates of free speech who championed the fight against the McCarthy hearings and loyalty oaths have wavered when the First Amendment is used to defend loathsome pornography or hate speech.

Many people believe that limits imposed on political advertising and campaign spending will lead to limits on non-political speech as well, Dworkin conceded.

He argued that society can place limits on political spending and advertising in a manner consistent with the Constitution that would not also limit individuals' right to free speech, which must be protected.

He described two views of democracy: the currently favored majoritarian model, in which individual rights reign supreme; and his own favored constitutional model, in which community and social values can be factored into the equation delineating individual rights.

"Our politics are becoming populist in entirely the wrong way and are more and more driven by the instantaneous reading of public opinion," Dworkin said.

This "politics as horse race" mentality is leading to home page voting, in which everyone may have a say, but in which deliberation and societal values play less and less a role.

In his constitutional conception of democracy, caps on political expenditures and limits on the nature of political advertising would be constitutional, because real free speech issues are not at stake, while the political process would be improved, Dworkin argued.

Conversely, hate speech and pornography should not be restricted, because individuals' right to free speech is a constitutional value that is fundamental to our society, he said.

The Kops Freedom of the Press Fellowship Program was established in 1990 by Daniel W. Kops '39, former editor of the *Cornell Daily Sun* and founder and president of Kops-Monahan Communications.



USAID adviser Gayle Smith, left, and M. Ibe Ibeike-Jonah, Cornell Ph.D. student in rural sociology, participate in a discussion on World Food Day, Oct. 20, in the Moot Court Room of Myron Taylor Hall.

Symposium examines initiatives in Africa

By Simeon Moss

Can impending crises in the Greater Horn of Africa be averted, and how can sustainable development be encouraged? What can and should be the role in the region of nations, donor nations, non-governmental relief organizations (NGOs) and other interested parties?

These questions were the focus of a World Food Day symposium at Cornell, Oct. 19 and 20, sponsored by Cornell's Institute for African Development, and co-sponsored by: the United States Agency for International Development (USAID), Cornell's Africana Studies and Research Center; the Berger International Legal Studies Program; Cornell African Students' Association; Cornell International Institute for Food, Agriculture and Development; Einaudi Center for International Studies; Friedrich Ebert Foundation; and the Peace Studies Program.

The consensus among conference speakers – who included academics, relief specialists, journalists and UN and former government officials – was that attention must move away from "crises reaction" in Africa and toward "crisis prevention" and development. And solutions must not be imposed on the region but must be developed from consultations with, and led by, the parties in the region.

In speaking about the USAID's Greater Horn of Africa Initiative, USAID adviser Gayle Smith said: "The initiative aims to take more leads from Africa and less from ourselves. . . . If we listen, we might learn something."

All sessions of the symposium, which was free and open to the public, were held in the Moot Court Room of Myron Taylor Hall. Speakers took questions from audience members, often producing lively discussion and debate.

Smith, who was Thursday night's keynote speaker and helped organize the conference, discussed the evolving role of the USAID in the sub-Saharan region, comprised of Eritrea, Ethiopia, Sudan, Djibouti, Somalia, Kenya, Uganda, Rwanda, Burundi and Tanzania. She admitted that the agency and other relief organizations – such as the UN and many local and international NGOs – have been acting in a reactive way to crises. She asserted that the USAID's latest

initiative – which she described as an "experiment" – is an attempt to work toward a regional perspective, instead of focusing on problems in individual countries.

The initiative's prime interests, Smith said, are crisis prevention, food management and food security.

"Every NGO has a different method of providing food aid," for instance, Smith pointed out. "They need to be standardized."

"The greatest problem is not population growth but improper use of resources," said Josephine Mahinda, a Cornell MPS student in international development, who spoke at a symposium roundtable on prevention strategies.

And, to prevent future conflicts, several speakers, including M. Ibe Ibeike-Jonah, Cornell Ph.D. student in rural sociology, pointed out it's important to look at how conflicts are resolved.

"There needs to be justice and fairness in the way they are resolved, or it's only postponing the conflict to another period," Ibeike-Jonah said.

His comments were particularly pertinent in the context of the aftermath of the recent genocide in Rwanda and the attempts to carry out a war-crimes tribunal there.

Although great challenges remain for the immediate future – particularly in the Sudan, Rwanda and Burundi – positive developments in the region have included: the recent efforts of the Intergovernmental Authority for Drought and Development (IGADD) – a ministerial agency formed by Sudan, Ethiopia, Eritrea, Kenya and Uganda – to try to mediate the civil conflict in the Sudan; the resolution of the war between Eritrea and Ethiopia; some experiments in ethnic federalism; and increased efforts toward regional collaboration.

At the conclusion of the conference, David Lewis, director of the Institute for African Development, and Joan Mulondo, the institute's program coordinator, pointed out that the value of the symposium lay in its gathering together of "people who should be brought together" to talk about the issues.

Lewis said the institute was tentatively planning a refugee study group conference for the spring.

AlliedSignal CEO: The death of American manufacturing is a myth

By Darryl Geddes

The death of American manufacturing is nothing but a myth, and if you're not convinced take a look at AlliedSignal, said the firm's chief executive officer, Lawrence A. Bossidy, who delivered the Hatfield Address Oct. 19 in Schwartz Auditorium.

Bossidy is the 1995 Robert S. Hatfield Fellow in Economic Education, the highest honor Cornell bestows annually on outstanding individuals from the corporate sector.

A manufacturer of aerospace and automotive products, such as Autolite spark plugs, Bendix brakes, chemicals, fibers, plastics and advanced materials, AlliedSignal today has 400 facilities in 40 countries and posts sales of \$14 billion.

When Bossidy arrived at AlliedSignal in 1991, he found a company overstaffed and leaking cash. Bossidy met with customers and employees to ascertain the reasons for the

company's sluggish performance. The company's resurgence under Bossidy's leadership, however, came not without a price:

Since 1988 the firm has slashed its work force from 140,000 to 88,000 and reduced its divisions from 54 to 38.

Cuts such as these, Bossidy said, are seen on Wall Street as necessary to remain competitive.

But on Main Street, he said, these cutbacks paint a picture of manufacturing's demise.

"Anyone who thinks that manufacturing no longer matters is sadly disillusioned," Bossidy noted. "Manufacturing's share of American gross domestic product has remained remarkably stable, ranging from 20 to 23 percent since the end of World War I.

"Since 1985 manufacturing exports have more than tripled to \$500 billion," he continued. "Every billion dollars of additional manufacturing exports creates 17,000 new jobs in the country, and during the past decade, manufacturing exports have saved or created 3 million American jobs – more than double that of service exports."

The turnaround of the big three automakers is perhaps the most visible example that American manufacturing is flourishing, he said.

"They have rediscovered the basic notion of selling quality products at competitive prices and have returned to pre-eminence in their marketplace," Bossidy noted.

He said that manufacturing will help America be a vigorous competitor in overseas markets, such as China and Japan. "To expect the service sector to lead the way is misguided," Bossidy said. "It's simply too early in the economic development cycles

in these markets for there to be much demand for many of the services that we have to offer.

"Manufacturing is a vital and vibrant part of our economy," Bossidy said. "Manufacturing is alive and well here and now and will be far into the future. Manufacturing has entered a new era of change unlike any we have witnessed in the last 50 years. We've made great strides. We've regained our lead in the global marketplace, but the hardest and most rewarding work lies ahead."

The Hatfield Fund for Economic Education was established by the Continental Group Foundation to honor former Continental Chairman Robert S. Hatfield. The fund supports campus visits by distinguished business leaders who deliver major addresses on economic issues of national importance. They are intended to serve as major platforms for the exchange of ideas between the corporate and academic communities.



Bossidy

Fighting malnutrition by altering grains' cell structures

By Blaine P. Friedlander Jr.

Manipulating cell structure in grains can boost essential micronutrients like iron and zinc, increase plant yield, improve seedling viability and decrease the need for crop fertilization, Cornell researchers report.

"This is what we term a field crop fortification project, and it is a win-win-win situation," said Ross M. Welch, Cornell professor of soils and crops, who holds a joint appointment with the U.S. Department of Agriculture as a plant physiologist. He and his colleagues will be meeting at a major international workshop, "Food-Based Approaches to Preventing Micronutrient Malnutrition: Setting an International Research Agenda," with opinion leaders from 30 countries, Nov. 6 through 9 in Salt Lake City.

About 1 to 2 billion women, infants and children in the world today have a deficiency in micronutrients such as iron or zinc, Welch said. "For women of child-bearing age, this is crucial," he said. "Without iron, women become anemic. But most importantly, anemia has a negative affect on the cognitive development of a fetus. The problem of 'hidden hunger' could be solved by food-based programs."

Welch and his colleagues have found that by manipulating the cellular structure in corn, they can manufacture more layers of micronutrient-rich cell layers. More nutrient capacity translates into healthier food and a decrease in fertilization at the farming level.

To improve the nutrient composition, scientists must first get under the grain's skin. Beneath the corn's hull is the aleurone layer, where beneficial micronutrients are stored. In a normal corn seedling, there is a single layer of aleurone cells. By taking mutant corn seedlings — where there are several aleurone layers — and cross breeding with normal seedlings, corn seed with several aleurone layers begin to develop. Scientists call this the multiple aleurone layer (Mal) gene. It may look like a normal seedling, but it packs a stronger micronutrient punch.

Rice has a similar cellular structure as corn, according to Welch. However, forms of processing grain — such as milling — displace the micronutrients. Milling, or processing, strips the aleurone layer, and the grain contains much fewer essential micronutrients. Scientists are working on ways to recapture them.

Welch, who has been working on this and similar problems for most of his career, believes that scientists must look toward the future welfare of humanity. He believes that the world faces generations of children with diminished intellectual ability due to deficiencies in essential micronutrients. "These children will stay in nutritional poverty, and it becomes a vicious cycle — a cycle that needs to be broken," he said.

In the years of the "Green Revolution," scientists managed to stave-off world famine by introducing calorie-enriched plants. But, agriculture paid a price for more calories: nutrient-poor plants.

"We know that staples such as rice and beans can grow in mineral-poor soils. But, those mineral-poor crops brought in great amounts of calories, displacing the mineral-rich crops like leafy green vegetables," he said.

"But, if we didn't have calorie-rich foods, there would be widespread famine. We need to add micronutrients into the food on the front-end. That means putting them into the seed."

The agriculture strategies for micronutrients working paper three, "Breeding for Staple-Food Crops with High Micronutrients Density: Long-Term Sustainable Agriculture Solutions to Hidden Hunger in Developing Countries," is expected to be published by the International Food Policy Research Institute, Washington, by the end of the year. It was written by Welch and his colleague, Robin D. Graham, professor of plant science at the University of Adelaide, South Australia.

An article, "Improving the mineral reserves and protein quality of maize kernels using unique genes," appeared in the journal *Plant and Soil* in 1993. Welch authored it along with Margaret E. Smith, Cornell professor of plant breeding, Darrell R. Van Campen, Cornell associate professor of nutritional sciences, and Stephen C. Schaefer of the USDA.

While wheat, rice and maize represent about 54 percent of the world's food production, those grains constitute 90 percent of the diet in developing countries. Welch indicated that boosting a grain's micronutrient density by about 20 percent could significantly improve people's health.

'Hidden hunger' continued from page 1

an International Research Agenda," with opinion leaders from 30 countries, Nov. 6 through 9 in Salt Lake City.

"This is doing the obvious, yet no one approached the problem this way before. We are putting together a heterogeneous forum to focus on food as a way of relieving the 'hidden hunger' in the world," said Gerald Combs, Cornell professor of nutrition and a key organizer of the workshop.

Organized by Cornell and the Thrasher Research Fund and co-sponsored by the Cornell International Institute for Food, Agriculture and Development (CIIFAD), the Thrasher Research Fund, the United Nations' Food and Agricultural Organization and UNICEF, the workshop brings together physicians, nutritionists, agriculturists, social scientists, program development leaders and members of multilateral and bilateral organizations. The working groups not only will set a research agenda on these problems but they also hope to have a major impact on the future of international food and nutrition research.

"The focus of agricultural production historically has been to boost yields. Yet, one-third of the world's children under 5 years of age are stunted, due to inadequate nutrition;



Adriana Rovers/University Photography
Gerald Combs, professor of nutrition and nutritional sciences, and Ross M. Welch, professor of soil, crop and atmospheric sciences, pose in the greenhouse with rice plants.

44 percent of women are anemic (involving iron deficiency); and 240 million are at risk for vitamin A deficiency," Combs reported.

"We're developing a whole new way of looking at agriculture so that the outcomes of agricultural production are viewed in terms of human health and well-being," Combs said.

"Our perspective involves a food-systems approach — one that takes into account not only agricultural production but also food processing, transportation, genetic improvements of crops, food engineering, cropping systems, food accessibility, demands on women's time, family decision-making and food choices, and food acceptability, among other factors," he said.

To tackle the hidden hunger problem, two years ago Combs collaborated with Ross M. Welch, Cornell professor of plant nutrition and a plant physiologist for the USDA's U.S. Plant, Soil & Nutrition Laboratory; John Duxbury, Cornell professor of soil, crop and atmospheric sciences; and several other Cornell scientists to form a working group called Food Systems for Improved Health (FSIH). The workshop is an outcome of this effort.

Survey: 'Science gap' in business threatens U.S. competitiveness

By Darryl Geddes

While technology is an increasingly important issue for today's business leaders, senior managers at the nation's leading corporations say that fewer than 50 percent of their colleagues are technologically literate, according to "The 'Science Gap' in Management," a new report by the Johnson Graduate School of Management.

More than 90 percent of the executives surveyed for the report agreed that as we continue to move toward a knowledge-based economy, it is becoming increasingly important for senior managers to have the technological background to understand the business opportunities, limitations and implications of technology decisions. About one-third said their companies expect to

hire more scientifically trained professionals for management positions than they have in the past.



Merten

as those commonly found in finance, marketing and sales — is a significant problem for corporations. They also said their companies would be more competitive if more senior managers were technologically literate.

"The survey shows a 'technological lit-

eracy' gap in corporate America," said Alan G. Merten, dean of the Johnson School. "Yet technology is becoming increasingly important to companies in all sectors of the economy. In fact, in today's world, no industry is isolated from technology."

Two-thirds of the executives surveyed felt that scientific training, with its emphasis on quantitative and analytical skills, creativity and problem-solving, is a good background for the next generation of managers and that their companies target scientifically trained professionals for management positions.

"Professionals who combine scientific or other technical knowledge with business training could become the so-called 'gold collar' workers, a new generation of business elite with several distinct areas of expertise," Merten said.

However, the survey also showed several barriers to hiring scientifically trained people for management positions. Slightly more than half of the senior executives said "lack of business experience" and "not understanding a market-driven culture" were potential barriers for scientists seeking management positions.

However, these barriers may be overcome by an MBA degree, according to the Johnson School survey. Almost 90 percent of those surveyed said a scientifically trained person is more likely to be hired for a management position if he or she has an MBA.

The Johnson School commissioned a telephone survey of 500 senior managers at Fortune 1,000 companies. The results were released Oct. 18 at a roundtable forum in New York City.

Roundtable continued from page 1

changing world, companies will be led by executives that are comfortable and inquisitive about technology."

Booth said that scientifically trained managers are desperately needed to help close the widening communication gap between the laboratory and the boardroom. Bridging this historic divide is imperative, he said, especially in light of federal cutbacks in research and development funding.

"Nevertheless, simply putting 'techies' in the CEO chair is not a panacea for the chasm between headquarters and technology, nor will it resolve the challenge of living in a world of technological change," cautioned Booth.

"The task for corporate leaders is to build a foundation — a team that will grow and appreciate the value and adapt to the technological changes around us."

Author Tobias said no student destined for a career in management should be without some sort of intensified

scientific training.

Tobias underscored the usefulness of a science education by noting that scientists could find their skill and knowledge applicable to many career fields, including law, journalism, sales and marketing, economics and banking, to name a few.

Taking one's scientific training to the boardroom or courtroom makes sense, she noted, especially in light of the lack of openings in science careers due to cuts in federal funding.

Speaking via satellite from Washington, D.C., Prabhakar underscored the need for technological literacy in all areas — including politics.

"We are going through deep structural change, and technology, as a part of that change, is an enormously powerful tool that human beings will be using for everything," she said. "For that reason, the role of the technolo-

gist really comes to the fore."

She said technologists must think aggressively about how science and technology can relate to the business, academic and political worlds. "Unless we figure out how to build those linkages, we are going to miss opportunities."

The roundtable discussion pointed to the need for programs, such as the Johnson School's 12-month MBA Option for Scientists. The 12-month option was designed specifically for individuals with advanced scientific or technical degrees and draws heavily on their prior analytical training and experience. Twenty-nine students, of which nine hold doctoral degrees, currently are enrolled in the program, which was offered for the first time this summer. Administrators say the program supplements the graduate training of scientists and engineers, many of whom now find themselves working in non-academic settings.



Carl Sagan, Cornell's David Duncan Professor of Astronomy and Space Sciences, speaks at a naturalization ceremony in the main courtroom of the Tompkins County Courthouse on Oct. 18.

Sagan holds court before 67 newly naturalized citizens

By Larry Bernard

New U.S. citizens — 67 Tompkins County residents from 27 countries — were treated to a few words about the Bill of Rights last week from Carl Sagan, the David Duncan Professor of Astronomy and Space Sciences at Cornell.

Sagan gave brief remarks at the naturalization ceremony held by the Supreme Court of the State of New York on Wednesday afternoon, Oct. 18, in the main courtroom of the Tompkins County Courthouse.

"The Bill of Rights — it is no good to have

them if they are not used," Sagan said. "Through disuse, these rights become . . . no more than patriotic lip service. Your rights — use them or lose them," he told the group of new citizens.

"I hope you will engage in the political process and teach the Bill of Rights to your children," he said.

Among those being naturalized was Anathanassios Panagiotopoulos, associate professor of chemical engineering at Cornell.

Sagan explained that the ideal that gave birth to this nation "had to do with

who ruled the country." It was not to be kings, the military, high priests or a ruling class, he said. "The American ideal was different, breathtakingly radical. It would be ruled by ordinary people working together," Sagan said.

He told them that Thomas Jefferson felt that "the people themselves are the only prudent repositories of power" and that education was the "insurance policy" for that. "If we don't engage in the political process, we become disenfranchised. Part of the duty of citizenship is not to be intimidated into conformity," Sagan said.

Outdoor educators descend on Cornell for conference

By Carol Stone

Outdoor education leaders from 80 university-based outdoor programs across the United States and Canada will descend on the Cornell campus today — some literally, just down from a mountaintop — for a three-day conference, through Oct. 28.

About a third of the 300 administrators, instructors, student leaders and professional climbers, hikers and camping guides attending the Ninth International Conference on Outdoor Recreation and Education will camp out during their stay at a special tent city adjacent to Alumni Field.

There will be 65 workshops, seminars, panels, demonstrations and expositions by day and three major lectures today, Friday and Saturday evenings.

The public is invited to attend these special programs:

- Dan Tillemans, director of Cornell Outdoor Education, will present a slide show, "Arizona Overland Journey," about his 100-day solo hike from Utah to Mexico, which passed through every life zone in North America. Tillemans will speak tonight at 7:30 p.m. in Statler Au-

ditorium. Admission is free.

- Royal Robbins, world-famous Yosemite rockclimber and equally adventurous white-water kayaker, will discuss life as an adventure in a lecture Friday evening at 7:30 in Bailey Hall. Robbins, credited with the first grade VI climb in the world, five first ascents of Half Dome, the first solo ascent of El Capitan in Yosemite and 24 first descents of rivers in California and Chile, will challenge listeners to apply the same motivations of outdoor adventure in their daily lives. Tickets are \$4 at the door.

- Shari Kearney and Lucy Smith, senior instructors at the National Outdoor Leadership School in Lander, Wyo., will present "Ten Years of Women's Expeditions: Climbing and Learning" Saturday evening at 8 p.m. in Statler Auditorium. Their slide lecture covers five major Himalayan expeditions — three of them with all-women climbing teams. Admission is \$4 at the door.

The conference has attracted many of the leaders of the movement for outdoor education. They include Paul Petzoldt, noted mountaineer and educator who founded the National Outdoor Leadership School and wrote *The Wilderness Handbook*; Josh Miner, found-

ing president of the Outward Bound movement in the United States and co-author of *Outward Bound USA*; and Bill Phillips '51, chair of Outward Bound's International Advisory Board and chair of Cornell Outdoor Education's own advisory council.

Cornell Outdoor Education, host of the conference, is itself an example of the dramatic rate of growth that the field of outdoor education has experienced in recent years. Established in 1976 as part of the Department of Physical Education, the program now conducts 200 courses, enrolls 2,800 participants and trains 200 student leaders annually. The Phillips Outdoor Center in the lower level of Cornell's Field House, which was completed last year, equips and outfits thousands of campers, climbers and hikers each year. Cornell's 4,800-square-foot Lindseth Climbing Wall is the largest natural-rock indoor wall in North America.

Late registrants may sign up for the conference at the door. The admission fee for Cornell students is \$15 per day. Cornell faculty members and staff are welcome at a day-rate of \$35. All others will be charged the professional rate for the conference, \$190, which includes three meals a day.

Journalist to talk on Germany's neo-Nazi movement

Yaron Svoray, an Israeli journalist who infiltrated Germany's neo-Nazi movement, will speak Nov. 5 at 8 p.m. in Statler Auditorium of Statler Hall. Tickets are \$4; \$2 for students.

Posing as an Australian journalist named Ron Furey, Svoray went undercover in October 1992 to determine the strength and resources of the neo-Nazi movement. In his eight-month travels with

many of the neo-Nazi movement's members, Svoray found the organizations to be much larger than the government had reported. He found the movement supported by all sorts of people, from lawyers and engineers to professors, law enforcement officials and the military.

Svoray writes of his undercover work in his book, *In Hitler's Shadow*, which also was the subject of an HBO movie, *The*

Infiltrate, aired in June.

The son of Holocaust survivors, Svoray was educated at the Hebrew University in Jerusalem and Queens College in New York. He was a sergeant major in the Israeli Defense Force and a detective with the Israeli Central Police Command.

The lecture is sponsored by Cornell Hillel, the University Program Board and the Student Assembly Finance Commission.

Nesheim to chair panel on labeling of supplements

By Roger Segelken

Malden C. Nesheim, Cornell professor of nutritional sciences, has been appointed by President Bill Clinton as chairman of the newly formed Commission on Dietary Supplement Labeling.

Formation of the seven-member commission was authorized by the Dietary Supplement Health and Education Act of 1994 to do a study and issue a report to the White House and Congress within two years.



Nesheim

After holding hearings and securing information from federal agencies, the commission is expected to produce recommendations on new regulations and legislation.

"There is a vast array of products between medicinals and basic foodstuffs that are not covered by existing regulations," Nesheim explained. "Some products that make health claims undoubtedly are effective, and some are harmless or merely useless. But a few can be hazardous, especially if consumers don't know what they contain and in what concentrations.

"This commission will try to determine whether labeling regulations can protect the consumer, and if so, we will propose regulations and suggest how they should be implemented," Nesheim said.

A member of the Cornell faculty since 1959 and university provost from 1989 until his retirement from that post in 1995, Nesheim is a specialist in the relationship between diet and disease as well as in public-health issues. He has served as president of the American Institute of Nutrition, chair of the National Nutrition Consortium and member of review panels and study sections of the National Institutes of Health and U.S. Department of Agriculture. For the Institute of Medicine's Food and Nutrition Board, Nesheim served on the committee that wrote the 10th edition of Recommended Dietary Allowances. He chaired the panel that wrote the 1990 edition of "Dietary Guidelines for Americans," the federal government's official advice on dietary practices.



United Way update

As of Oct. 25, the 1995 Cornell United Way Campaign has raised \$297,633, 58.4 percent of its goal of \$510,000.

The United Way of Tompkins County supports 39 local agencies and 100 programs through its \$1.45 million campaign. As of Oct. 26, the organization had reached 38 percent of its total goal.

If you have questions regarding Cornell's campaign, contact your division deputy or Rhonda H. Velazquez in the Cornell United Way office at 255-6418 or <rhv2@cornell.edu>.

CALENDAR

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Bailey Series

The Saint Paul Chamber Orchestra, conducted by Hugh Wolff with Evelyn Glennie as percussion soloist, will perform a program of Rossini, Vivaldi, Miyoshi and Mendelssohn on Oct. 28 at 8:15 p.m. in Bailey Hall. Tickets range from \$23 to \$38 - from \$20 to \$32 for students - and are available at the Lincoln Hall ticket office Monday through Friday, 9 a.m. to 1 p.m. VISA, MasterCard and CornellCard are accepted. For more information call the box office at 255-5144.

Bound for Glory

Oct. 29: Christopher Shaw, Adirondack folk singer and story teller, 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.

readings

Creative Writing Program

Alice Fulton from the University of Michigan will give a poetry reading Oct. 26 at 8 p.m. in Tjaden Auditorium. Along with her most recent collection of poetry, *Sensual Math*, Fulton is the author of *Powers of Congress*, *Palladium* and *Dance Script With Electric Ballerina*.

religion

Sage Chapel

Joseph Williamson, dean of the chapel and religious life at Princeton University, will give the sermon Oct. 29 at 11 a.m. (EST begins.)

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. All Saints' Day Masses: Nov. 1, 12:20 and 5:15 p.m. in the Anabel Taylor Hall 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 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

African Development

"Freedom of Association, Ethnicity and the Transition to Democracy in the Horn of Africa," Kifle Gebremedhin, agricultural & biological engineering, Oct. 30, 12:20 p.m., 208 West Sibley Hall.

Africana Studies & Research Center

"Tracking in Education: The Perpetuation of Racial and Class Privilege in the Ithaca School System," Don Barr, human service studies, and Deborah Manning, Ithaca City School District, Nov. 1, noon, 310 Triphammer Road.

Agricultural, Resource & Managerial Economics

"In Search of Modern Sustainable Agriculture: A View From Upland Indonesia," Yujiro Hayami, Aoyama Gakuin University, Tokyo, Oct. 27, 1 p.m., 32 Warren Hall.

"The Impact of Trade Liberalization on Mexico's Dairy Sector: A Spatial Economic Analysis," Charles Nicholson, ARME, Nov. 2, 12:15 p.m., 401 Warren.

Animal Science

"Genetically Diverse Pigs in Nutrition Research Related to Lipid Metabolism," Wilson Pond, Baylor College of Medicine, Oct. 31, 12:20 p.m., 348 Morrison Hall.

Astronomy & Space Sciences

"Diffuse Ionized Gas in Spiral Galaxies and the Disk-Halo Connection," Richard Rand, University of Maryland, Oct. 26, 4:30 p.m., 105 Space Sciences Building.

Bronfenbrenner Life Course Center

"Intergenerational Relationships After Divorce," Matthias Moch, University of Konstanz, Germany, Oct. 31, noon, 114 Martha Van Rensselaer Hall.

Chemical Engineering

"Diffusion in Zeolites," Douglas Ruthven, University of Maine, Oct. 31, 3:45 p.m., 165 Olin Hall.

Chemistry

"Chemistry With Solids: The Site Preference Problem," Gordon Miller, Iowa State University, Oct. 26, 11:15 a.m., 119 Baker.

The Oct. 30 seminar by Michael Goetz has been canceled.

City & Regional Planning

"Environment: The Changing Roles of Federal and State Regulators," Debora Martin, U.S. Environmental Protection Agency, Oct. 27, 12:15 p.m., 115 Tjaden Hall.

Ecology & Systematics

"Biological Invasions and Our Changing Ecosystems: Meeting the Challenge of Large-Scale Environmental Manipulations," Edward Mills, Cornell Biological Field Station, Shackleton Point, N.Y., Nov. 1, 4 p.m., A106 Corson Hall.

Electrical Engineering

"A Framework for Operations in Competitive Electric Power Industry," Marija Ilic, MIT, Oct. 31, 4:30 p.m., 219 Phillips Hall.

Entomology (Jugatae)

"The Effect of Manure on Western Corn Rootworm, the Soil Arthropod Community and Corn Plant Growth," Leslie Allee, Oct. 26, 4 p.m., A106 Corson Hall.

"Entomology and Intellectual Property," Richard Cahoon, Nov. 2, 4 p.m., A106 Corson Hall.

Food Science

"State Sponsored Kosher Food Laws," Yakov Dombroff, Bureau of Kosher Enforcement, Division of Consumer Affairs for New Jersey, Oct. 31, 4:30 p.m., 204 Stocking.

Fruit & Vegetable Science

"Fruit Extension Programs in New York," Warren Stiles, fruit & vegetable science, Oct. 26, 4 p.m., 404 Plant Science Building.

"Report From the Real World of an Extension Specialist," Regina Rieckenberg, Cornell Cooperative Extension, Nov. 2, 4 p.m., 404 Plant Science.

Genetics & Development

"Cytoplasmic Dynein and the Genetics of

Nuclear Migration in *Aspergillus nidulans*," Ron Morris, Robert Wood Johnson Medical School, Oct. 30, 4 p.m., large seminar room, Biotechnology Building.

Geological Sciences

"Evolution of the Indian Ocean Monsoon: Marine Sediment and Climate Model Constraints," Warren Prell, Brown University, Oct. 31, 4:30 p.m., 1120 Snee Hall.

Horticultural Sciences

"Anatomical Studies of Flower Development in Grapevines," Martin Goffinet, horticultural sciences, Oct. 30, 11 a.m., Food Science Conference Room, Agricultural Experiment Station at Geneva.

Immunology

"Swine Have a One J_H, Few V_H, and No IgD: Implication for Repertoire Development," John Butler, University of Iowa, Oct. 27, 12:15 p.m., Boyce Thompson Auditorium.

Latin American Studies

"Investigating the Origins and Diversity of Oca and Andean Tuber Crop," Eve Ermswiler, Bailey Hortorium, Oct. 31, 12:15 p.m., 153 Uris Hall.

Materials Science & Engineering

"Seeded Gels for the Preparation of Tailored Ceramics," Gary Messing, Penn State University, Oct. 26, 4:30 p.m., 140 Bard Hall.

Neurobiology & Behavior

"MEGApodes: The BIG Picture," Darryl Jones, Griffith University, Australia, Oct. 26, 12:30 p.m., A106 Corson Hall.

Nutritional Sciences

"Public Debate About Nutrition Advice: A Tale of Three Reports," Stephen Hilgartner, science & technology studies, Oct. 30, 11:15 a.m., N-211 Martha Van Rensselaer Hall.

"Evaluation of Effectiveness of Iron-Folate Supplementation and Anthelmintic Therapy Against Anemia in Pregnancy: A Study in the Plantation Sector of Sri Lanka," Martha Kartasurya, nutritional sciences, Oct. 31, 12:20 p.m., 100 Savage Hall.



From left: Shannon Pennell as sweet Rose Maybud, Sidney Green as trusty Adam and John Dillon as Robin Oakapple in the Cornell Savoyards' production of *Ruddigore: Or the Witch's Curse*. See the Theater listings for details.

Thomas Hoebbel Photography

"Treatment of *Trichuris trichura* Infections Improves Growth, Spelling Scores and School Attendance in Some Children," Veni Hadju, nutritional sciences, Nov. 1, 12:20 p.m., 100 Savage Hall.

"Enterokinase - A Member of the Trypsin-like Family of Serine Proteases," Martha Stipanuk, nutritional sciences, Nov. 1, 3:30 p.m., 200 Savage.

Ornithology

"Global Warming and Bird Distribution," Jeff Price, American Bird Conservancy, Oct. 30, 7:30 p.m., Fuertes Room, Lab of Ornithology, 159 Sapsucker Woods Road.

Pharmacology

"Magnetization Transfer NMR Measurements of Creatin Kinase in the Intact Heart," Joanne Ingwall, Brigham and Women's Hospital, Boston, Oct. 30, 4:30 p.m., Lecture Hall III, Veterinary Research Tower.

Physiology & Anatomy

TBA, Ann Word, University of Texas, Southwestern Medical Center, Oct. 31, 4 p.m., Veterinary Research Tower.

Plant Breeding

"The Discovery of a New Race of the Golden Nematode in New York State and Prospects for Providing Host Resistance," Bill Brodie, plant pathology, and Robert Plaisted, plant breeding, Oct. 31, 12:20 p.m., 135 Emerson Hall.

Plant Pathology

"The *hrp* Genes of *Erwinia amylovora*," Zhong-Min Wei, plant pathology, Oct. 31, 3 p.m., A133

Barton Laboratory, Geneva Agricultural Experiment Station.

"Recombination Between Cauliflower Mosaic Virus and Transgenic Plants Under Conditions of Low Selection Pressure," William Wintermantel, plant pathology, Nov. 1, 12:20 p.m., 404 Plant Science Building.

Psychology

"The Hippocampus and Memory Consolidation: The Stuff Dreams Are Made Of," Bruce McNaughton, University of Arizona, Oct. 27, 3:30 p.m., 202 Uris Hall.

Sloan Colloquium

"Community Health Improvement: Money Well Spent or Dollars Down the Drain?" Valerie Sellers, New Jersey Hospital Association, Oct. 26, 4 p.m., 114 Martha Van Rensselaer Hall.

South Asia Program

"India's Economic Reforms," C. Collyns, I.M.F., Oct. 26, 11:40 p.m., 335 Baker Hall.

"Topics in the Study of the Indus Valley Script," Steve Bonta, linguistics, Oct. 30, 12:15 p.m., G-08 Uris Hall.

Stability, Transition & Turbulence

"Hierarchical Order in Wall Bounded Shear Turbulence," Nadine Aubry, Oct. 31, 12:30 p.m., 178 Rhodes Hall.

Statistics

"Partitions and the Symbolic Method for Computer Algebra," James Stafford, University of Western Ontario, Nov. 1, 3:30 p.m., 100 Caldwell Hall.

Textiles & Apparel

"Conductive Textiles," Hans Kuhn, Milliken Research Corp., Oct. 26, 12:20 p.m., 317 Martha Van Rensselaer Hall.

"Physical Interactions Affecting the Adhesion of Dry Particles," Don Rimal, Eastman Kodak, Nov. 2, 12:20 p.m., 317 MVR Hall.

Wildlife Science

"Wildlife Contraception and Non-capture Methods of Studying Reproduction in Wildlife: New Answers to Old Questions," Jay

Kirkpatrick, ZooMontana, Billings, Oct. 26, 3:35 p.m., 304 Fernow Hall.

SYMPOSIUMS

Cornell Outdoor Education

The Ninth International Conference on Outdoor Recreation and Education will feature three lectures, Oct. 26, 27 and 28:

• "Arizona Overland Journey," a slide and lecture by Dan Tillemans, director of Cornell Outdoor Education, Oct. 26, 7:30 p.m., Statler Auditorium.

• Royal Robbins, white water kayaker and world-famous Yosemite rock climber, will present a lecture challenging the audience to apply the same motivations of outdoor adventure to daily life, Oct. 27, 7:30 p.m., Bailey Hall. \$4 at the door.

• "Ten Years of Women's Expeditions: Climbing and Learning," Shari Kearney and Lucy Smith, Oct. 28, 8 p.m., Statler Auditorium. Their slide lecture will cover five major Himalayan expeditions, three of them with all-women climbing teams. \$4 at the door.

Genetics & Development

A symposium in honor of Bruce Wallace, professor emeritus, will be held Oct. 27 in G1 of the Biotechnology Building beginning at 12:30 p.m.

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Speakers include:

- "Overdominance - A Half Century Later," James Crow, University of Wisconsin;
 - "Standing on the Shoulders of Giants: A View of Novel Roles for Population Genetics," Stephen O'Brien, National Cancer Institute;
 - "The Molecular Basis of Adaptation in Desert Drosophila," James Fogleman, Denver University;
 - "Determinants of Genomic Diversity," Charles Aquadro, Cornell; and
 - "Detecting Selection in Natural Populations," Richard Lewontin, Harvard University.
- For more information, contact Rosemary Schmizzi at 255-2100; e-mail, rts2@cornell.edu.

Nutritional Sciences

The Meinig Symposium on Maternal and Child Nutrition will be held Oct. 27 from 2 to 5:50 p.m. in 700 Clark Hall. This is in celebration of the Nancy Schlegel Meinig Professorship in Maternal and Child Nutrition. The speakers are Janet King, director of USDA Letterman Human Nutrition Center; Eileen Kennedy, director of USDA Office of Nutrition Policy; Micheline Beaudry, chief of the nutrition section of UNICEF; and Catherine Bertini, executive director of the World Food Programme. Moderator is Cutberto Garza, director of the Division of Nutritional Sciences at Cornell. Respondant is Jere Haas, the Nancy Schlegel Meinig Professor of Maternal and Child Nutrition in Cornell's nutritional sciences division. A reception will follow from 4:30 to 5:30 p.m.

theater

Theatre Arts Department

Fires in the Mirror: Crown Heights, Brooklyn and Other Identities will be presented Oct. 26-28 at 8 p.m. and 29 at 2 p.m. in the Class of '56 Flexible Theatre. Tickets are \$6 and \$8. Call 254-ARTS for information. A post-performance discussion will be held Oct. 26.

Cornell Savoyards

This Halloween you'll be haunted by Cornell Savoyards' production of *Rudwig: Or the Witch's Curse!* Come in costume and get a chance to win a door prize. Shows will be held Oct. 27, 28, Nov. 3 and 4 at 8 p.m. and Oct. 28 and Nov. 5 at 3 p.m. in Kulp Auditorium at Ithaca High School. Tickets, available at Willard Straight Hall ticket office, Logos and Hickey's, are \$9 evenings, \$7 students and seniors; \$6 matinees. For reservations and information, call 277-4847.

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.

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., Collegietown. For more information call Ed/Karen at 273-5058.

Flu Shot Clinics

Influenza vaccine is being offered by University Health Services on a first-come, first-served basis only during clinics. Cornell students and their spouses, faculty and staff members are eligible. Morning clinics will be held in the main lobby of Gannett Health Center on Oct. 26, 27, 31 and Nov. 3 from 8:30 to 11:30 a.m. Afternoon clinics will meet from 1:30 to 4 p.m. on Oct. 27 and Nov. 2 and 3. A fee of \$10 will be charged. For information, call Gannett Health Center at 255-4082.

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.

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 Cross Country (1-1)

Oct. 27, Haptagonals at Van Cortlandt Park

Women's Cross Country (2-0)

Oct. 27, Haptagonals at Van Cortlandt Park

Field Hockey (7-7)

Oct. 28, at Brown, noon
Oct. 29, at Boston College, 1 p.m.

Football (3-3)

Oct. 28, at Brown, 1 p.m.

Lightweight Football (3-1)

Oct. 27, at Pennsylvania, 7:30 p.m.

Men's Soccer (10-1-1)

Oct. 28, ADELPHI, 2 p.m.
Nov. 1, at Syracuse, 8 p.m.

Women's Soccer (8-3-2)

Oct. 27, at Brown, 7 p.m.
Oct. 29, at Massachusetts, 1 p.m.

Men's Tennis (0-1)

Oct. 27-29, CORNELL FALL INVIT.
Nov. 2-5, Rolex Reg. Champs. at Princeton

Women's Volleyball (15-6)

Oct. 27, PRINCETON, 7 p.m.
Oct. 28, PENNSYLVANIA, 4 p.m.
Oct. 31, SYRACUSE, 7 p.m.

Call the Big Red Hot Line at (607) 255-2385 for up-to-date scores and info.

Paul O'Connor '96 accounts for 150s air attack

sports profile

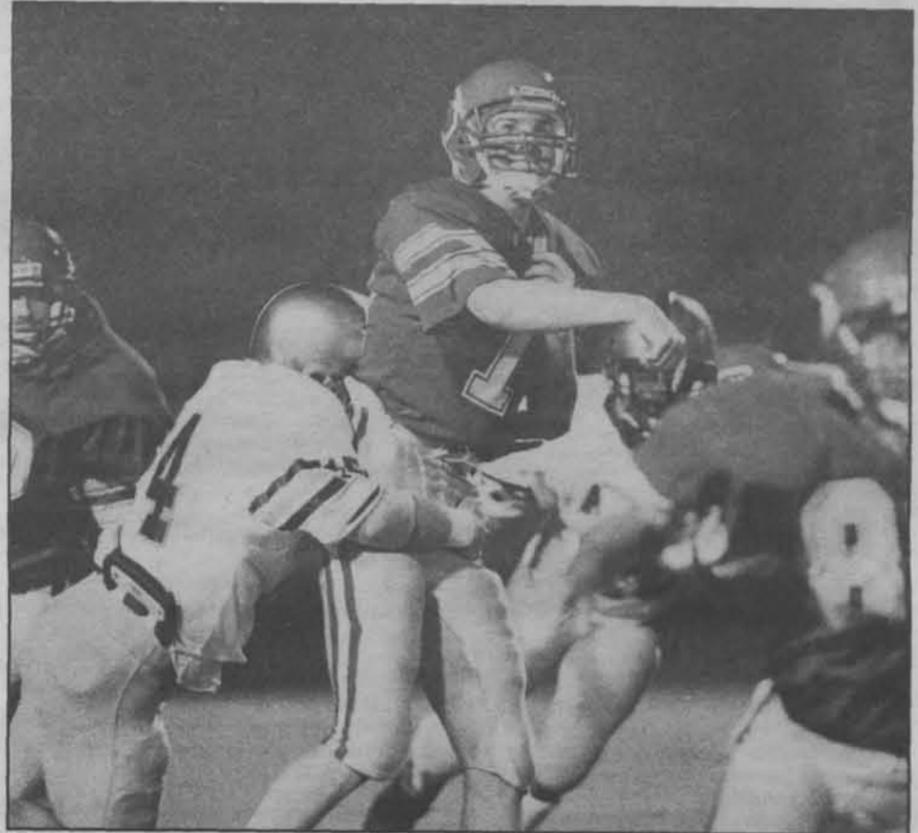
By Liam O'Mahony '96

Call it the Green Mountain-Buckeye expressway. No, it's not a new direct thoroughfare from Vermont to Ohio, but the geographic link represents the Cornell lightweight football team's potent passing attack. Led by senior quarterback Paul O'Connor, a native of Montpelier, Vt., where he lettered on the gridiron, the hardwood and the diamond, and his corps of wide receivers, of which three (junior Nolan Hecht and sophomores Tim Hedges and Richard Merchant) hail from Ohio, the 150s (3-1 overall, 1-1 Eastern Lightweight Football League) began the 1995 campaign with an exhibition win over the alumni team and two commanding victories against Pennsylvania (30-6) and Princeton (52-33), before losing at Navy 31-0.

"We are more experienced this year, and the offensive line is the best we've had here in a long time," said the 6-2 O'Connor, an agricultural economics major. "The receivers ('The Ohio Connection') have been playing well and getting open a lot, and I've got more touch on the ball this year." His improved play and accuracy have been evident by his personal statistics through Oct. 13: 41 completions out of 82 attempts for 739 yards (surpasses his 1994 total of 688 yards) and eight touchdowns (six in '94).

After playing free safety on the freshman football team, the right-handed signal caller, on the suggestion of a friend who was a kicker on the lightweight squad, decided to play for the lightweight gridder as a sophomore and has been the team's primary passer for three seasons. "The last couple of years I put a lot of pressure on myself to try to make plays," said O'Connor. "Now we have enough offensive players so I don't have to do it all."

In the first two games, O'Connor made



Tim McKinney

Quarterback Paul O'Connor takes a hit during a 1994 lightweight football game.

big plays anyway and dissected the Quaker and Tiger secondaries by dialing locally and long distance to senior running back Jon Roth, Hecht and Hedges.

"Paul has improved dramatically," said co-head coach Terry Cullen. "He takes a lot of pressure off of the running game because he throws the ball so well." With greater pass protection, O'Connor, who prefers staying in the pocket, has had time to operate on opposing defenses. He had a "Vermonster" game against Princeton, for which he was named the ELFL Player-of-the-Week, while victimizing the defensive backs for 399 yards and six scoring strikes.

With a concentration in accounting, O'Connor is planning for his future and seeking employment in an audit division at a major firm. Until he graduates and embarks on such a career, the die-hard Boston sports enthusiast will enjoy his senior year, especially his farewell game at Schoellkopf Field on Nov. 3 when he and his classmates will have their last chance to defeat rival Army, which beat the Big Red twice in 1994. Still in pursuit of the ELFL title despite the loss to Navy, O'Connor has enjoyed his career as a 150 gridder. "It's been a good time hanging out with the guys and playing ball," O'Connor said. "It's been fun, and I'm going to miss it."

NPR reporter to discuss British theater and television Oct. 30

By Darryl Geddes

Michael Goldfarb, a reporter for National Public Radio and the BBC, will speak on "Shades of Gray: The Benefits and the Problems of Market Forces in British Television and Theatre" Monday, Oct. 30, at 4:30 p.m. in Auditorium D of Goldwin Smith Hall. The lecture is free and open to the public.

As a reporter, Goldfarb's assignments have

been wide-ranging. He has covered the GATT negotiations and Margaret Thatcher's resignation as prime minister. For BBC Radio, he wrote and presented "Our American Hero" re-examining - on its 30th anniversary - the assassination of President John F. Kennedy.

Goldfarb's coverage of the arts includes interviews with filmmaker Sydney Pollack and authors William Styron and Robert Caro and a television special for BBC

on the 1989 and 1991 London International Festival of Theatre.

In addition, the Antioch College graduate has written for *The Guardian*, *The Washington Post* and *Newsday* and has appeared in several Broadway and Off-Broadway productions.

Goldfarb's presentation is supported by University Lectures and is part of the Fall Arts Festival.

Harvard scholar to deliver Irvine Lecture at Cornell Oct. 27

Amartya Sen, one of Harvard University's most distinguished faculty members, will present the Cornell Law School's 1996 Irvine Lecture on Oct. 27. He will discuss "Human Rights in Developing Countries."

The lecture, which is free and open to the public, begins at 4 p.m. in the MacDonald Moot Court Room of Myron Taylor Hall.

Sen, the Lamont University Professor, holds faculty positions in the departments of economics and philosophy. Prior to his appoint-

ment at Harvard, Sen was the Drummond Professor of Political Economy at Oxford University. He was an Andrew D. White Professor-at-Large at Cornell from 1978-84.

He has authored numerous books on issues relating to international economics and politics. Noteworthy titles include: *On Ethics and Economics* (Basil Blackwell, 1987), *Poverty and Famines: An Essay on Entitlement and Deprivation* (Clarendon Press, 1981) and *The Political Economy of Hunger*

(Clarendon, 1990).

Sen is a member of various academic panels and societies and has served as president of the Econometric Society (1984), the International Economic Association (1986-89), the Indian Economic Association (1989) and the American Economic Association (1994).

Among his honors and accolades are more than 20 honorary doctorates, the Alan Shawn Feinstein World Hunger Award and the Jean Mayer Global Citizenship Award.

CALENDAR

October 26 through November 2

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 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.

Oct. 29, North Room, Willard Straight Hall: Balkan dance taught by Ed Abelson, 7:30 p.m.; open dancing and requests, 8:30 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.

• "The Marquese Collection of American Medals," through Nov. 5.

• "Art in Bloom: Botanical Illustration and the Artist's Interpretation," drawings from the permanent collection and the Cornell Library, on view through Dec. 31.

• "Master Prints From Upstate New York Museums," Oct. 28 through Dec. 31. This exhibition presents a selection of European and American prints from the 15th century to the present, organized by and presenting works from six art museums in Buffalo, Rochester, Syracuse, Utica, Albany and the Johnson Museum.

• "Akira Kurosaki Woodcuts," Oct. 28 through Dec. 31. This exhibition reflects Kurosaki's knowledge of early ukiyo-e methods and his personal, modern vision.

• "Ukiyo-e Prints and Woodblocks," Oct. 28 through Dec. 31. To accompany the works by Kurosaki, this exhibition, drawn from the permanent collection, includes works by Hiroshige and Hokusai, masters of the traditional ukiyo-e print.

• Gallery Talks: Oct. 29, "The American Landscape" with Thomas Somma, Ithaca College.

• 12 O'Clock Sharp: Thursday Noontime Gallery Talk: Matthew Armstrong, associate curator of painting and sculpture, will discuss "The Marquese Collection of American Medals," Nov. 2.

• On Nov. 2 from 12:15 to 1:15 p.m. and 3:30 to 4:30 p.m., Jim Hardesty will give a demonstration of the art of Chinese brush painting. Co-sponsored by the East Asia Program.

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

"Drawn From Architecture: Three Centuries of Perspectives, Elevations, Plans, Sections and Details From Beginning to CAD," an exhibition of architectural drawings and prints selected from the collection of Judith York Newman '57. Newman will give a talk Oct. 27 at 4 p.m. in the gallery. Le Corbusier, Mies Van Der Rohe, Frank Lloyd Wright, Sir Christopher Wren and Richard Meier are among those represented. On view through Oct. 28, Monday through Friday, 8 a.m. to 5 p.m.

Mann Library

Learn about the scope of the Department of Fruit and Vegetable Science's activities, from research and teaching through extension, 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

"Images Unseen," student work, through Nov. 4.

Van Rensselaer Gallery, E-124 MVR

Through Nov. 2, freshman design and environmental analysis student work.

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, 10/26

"Safe" (1995), directed by Todd Haynes, with Julianne Moore and Xander Berkeley, 7 p.m.

"The Glass Shield" (1994), directed by Charles Burnett, with Michael Boatman, Lori Petty and Ice Cube, 9:45 p.m.

Friday, 10/27

"Safe," 6:15 p.m.

"The Secret of Roan Inish" (1995), directed by John Sayles, with Jeni Courtney, Eileen Colgan and Mick Lally, 7:30 p.m., Uris.

"Desolation Angels" (1995), directed by Tim McCann, with Michael Rodrick and Jennifer Thomas; director McCann will visit, 8:45 p.m.

"Tales From the Hood" (1995), directed by Rusty Cundieff, with Clarence Williams III, Joe Torry and Wings Hauser, 9:45 p.m., Uris.

"The Tangler" (1959), directed by William Castle, with Vincent Price, Judith Evelyn and Patricia Cutts, midnight.

Saturday, 10/28

"Safe," 7 p.m.

"The Secret of Roan Inish," 7:30 p.m., Uris.

"The Glass Shield," 9:45 p.m.

"Tales From the Hood," 9:45 p.m., Uris.

"The Tangler," midnight.

Sunday, 10/29

"The Secret of Roan Inish," 4:30 p.m.

"Manhattan by Numbers" (1994), directed by Amir Nadieri, with John Wodja, 7 p.m.

Monday, 10/30

"Cat People" (1942), directed by Jacques Tourneur, with Simone Simon and Kent Smith, 7:30 p.m.

"Arachnophobia" (1990), directed by Frank Marshall, with Jeff Daniels and John Goodman, 9:30 p.m.

Tuesday, 10/31

"Vampyr" (1931), directed by Carl Theodor Dreyer, with Julian West, Sybille Schmitz and Maurice Schultz, 7 p.m.

"Jaguar" (1955), directed by Jean Rouch, 7:30 p.m., CTA Film Forum.

"Manhattan by Numbers," 9 p.m.

Wednesday, 11/1

"The Isabel Arrived This Afternoon" (1950), directed by Carlos Christensen, 7 p.m.

"Ali: Fear Eats the Soul" (1974), directed by Rainer Werner Fassbinder, with Brigitte Mira and El Ben Salem, 9:30 p.m.

Thursday, 11/2

"Theremin: An Electronic Odyssey" (1994), directed by Steven Martin, with guests Robert Moog and Eric Ross, 7 p.m.

"Ali: Fear Eats the Soul," 9:45 p.m.

graduate bulletin

• CoursEnroll: Pre-enrollment for Spring '96.

All course pre-enrollment will be on-line and electronic through Bear Access through Nov. 10. A graduate student must obtain consent from the committee chairperson for the pre-enrollment course selections and then receive an electronic "adviser key" (password) from the chairperson or graduate field office. There are no course pre-enrollment paper forms to be filed with the Graduate School. As in the past, during the first three weeks of the spring semester, course "add and drop" can be done.

• **Thesis/Dissertation:** The thesis/dissertation submission deadline for a January 1996 degree is Jan. 12, 1996. 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 that deadline may be earlier than the Graduate School's.

• **Fellowships for 1996-97:** Applications are available in the Graduate Fellowships Office, Sage Hall, for:

National Science Foundation Graduate Fellowships and NSF Minority Graduate Fellowships. Applicants for these three-year awards must be U.S. citizens and incoming students in the biological, physical or social sciences. Annual stipend of \$14,400, tuition payment of \$8,600; Cornell provides remainder of tuition. Deadline is Nov. 6. Application for NSF fellowships can also be

European Studies

"Parliamentary Institutionalization in New Democracies: European Comparative Perspectives," Ulrike Liebert, government, Oct. 27, 12:15 p.m., 153 Uris Hall.

Law School

Irvine Lecture: "Human Rights in Developing Countries," Amartya Sen, Harvard University, Oct. 27, 4 p.m., Moot Court Room, Myron Taylor Hall.

Messenger Lectures

"Shakespeare's Sonnets: The Shapes of Content," Helen Vendler, Harvard University, Oct. 26, 4:30 p.m., Hollis Cornell Auditorium, Goldwin Smith.

Music Department

Guest composer William Kraft will lecture Oct. 27 at 1:25 p.m. in 301 Lincoln Hall.

Russian Literature

"The Demolition of New Babylon: Apocalyptic Subtext in 'The Storm' by A. Ostrovsky," Oleg Proskurin, Moscow State Pedagogical University, in Russian, Oct. 31, 3:30 p.m., 177 Goldwin Smith.

Science & Technology Studies

"Ethical Debate on Human Gene Therapy: Origins and Trajectory," Marc Speyer-Ofenberg, S&TS, Oct. 30, 12:15 p.m., 609 Clark Hall.

Southeast Asia Program

"Thoughtful Subalterns: Minds and Voices in a Malay Novel," Virginia Hooker, the Australian Na-



David Appleby

John Sayles' *The Secret of Roan Inish* will play at Cornell Cinema this week. Check the Films listing for details.

made electronically through these methods:

• via the Internet and World Wide Web at the following address <<http://www.fastlane.nsf.gov>>

• via e-mail by requesting that forms be returned to you via e-mail. Send message to: stisserve@nsf.gov. To receive procedures on getting information, enter in the body of the message: get nsf9564

Howard Hughes Medical Institute Pre-Doctoral Fellowships in the Biological Sciences. Annual stipend of \$14,500 and \$14,000 cost-of-education allowance; five year award. Deadline is Nov. 3.

Ford Foundation Predoctoral Fellowships for Minorities. Award of \$12,000 stipend plus \$6,000 tuition, renewable up to three years. Cornell provides remainder of tuition. No more than 30 semester hours of graduate study. Dissertation level fellowships with higher stipends are also available. Deadline is Nov. 3.

lectures

Africana Studies & Research Center

"Africa 95: Reflections on the British-Based Festival of African Arts," Salah Hassan, AFRC, Oct. 30, 12:15 p.m., Hoyt Fuller Lounge, 310 Triphammer Road.

Architecture, Art & Planning

"Save Our Parks: The Work of the New York City Parks Council," Charlotte Hahn, Parks Council of New York, Oct. 27, 11:15 a.m., 157 E. Sibley.

Chemistry

Baker Lectures: Graham R. Fleming of the University of Chicago presents a lecture series on "Ultrafast Spectroscopy" at 11:15 a.m. in 115 Baker on Oct. 31 and Nov. 2.

Cornell Campus Club

"Master Prints From Upstate New York Museums," Nancy Green, curator of prints, drawings and photographs, Johnson Museum of Art, Nov. 2, 10 a.m., Johnson Museum.

Development Economics Workshop

"On Maximizing Behavior," Amartya Sen, Harvard, Oct. 26, 5:45 p.m., G-90 Uris Hall.

music

Department of Music

• Oct. 27, 8:15 p.m., Barnes Hall: The Cornell Contemporary Chamber Players, with guest composer William Kraft, will perform. The concert will include a world premiere, *Wyang 4 g* by Anthony Davis, the composer who wrote the opera *Malcolm X* and is commissioned to compose a work for the 1996 Olympics. The New York premiere of Robert Palmer's *Sonata for Flute and Piano* will be performed by Jennifer Mellits, flute, and William Cowdery, piano. This program also highlights guest composer William Kraft conducting his own exotic work *Settings From His Pierrot Lunaire*. The concert includes Leo Brouwer's composition *Elogio de la Danca*, a composition for solo guitar which will be performed by Dominic Frasca. Other featured artists include Julie Harr, flute; Barbara Rabin, clarinet; Lisa Hegyi, violin; Benjamin Tavenner, viola; Elizabeth Simkin, cello; Michael Overman, percussion; and Jennifer Hartsell, piano.

• Oct. 31, 8:15 p.m., Barnes Hall: The department's first student chamber music concert will include *Madchen, die von harten Sinnen* (Alan Florendo, baritone) and *Phobus eilt mit schnellen Pferden* (Lisa Diamond, soprano) by J.S. Bach, joined by Stephanie Vial, cello, and William Cowdery, harpsichord. Ken Chan will play *20 Variations on a Theme of Corelli, op. 42* by Sergei Rachmaninoff. In the second half, Diamond and Florendo will sing songs by Wolf, Ives and Mozart, accompanied by Cowdery.

Continued on page 6