Chronicle

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HONORING A PHYSICIST

The American Physical Society will name a new award for Hans Bethe, professor emeritus.

A VOICE FOR EMPLOYEES

Employee-elected trustee Cynthia Tkachuck begins her term on the board 5

The taste of champions



Jennifer Zdon/New Orleans Times-Picayune

Judges Marianne Gillette of McCormick and Co., left, and Robert Boushell of M&M Mars sip coffee flavored with the Cornell food product team's Stir-Ins during the Institute of Food Technologists' student product competition June 23 in New Orleans.

Stir-Ins bring victory for food science team

By Blaine P. Friedlander Jr.

NEW ORLEANS — Cornell food science students, who for months have baked, sifted, dipped, measured, tested and tasted their new product, had their dreams come true Monday night.

The Cornell team was named the winner of the Institute of Food Technologists' (IFT) product development competition for its Stir-Ins. The weekend competition was held in New Orleans at the IFT's annual convention.

It is the second consecutive year Cornell has won the competition, which comes with a \$1,000 prize. Last year the Cornell team unseated the four-year reigning champion, the University of Minnesota, with toaster-ready Pizza Pop-ups.

"We could hear it crunch! Yes!" said Kathryn Deibler, Cornell graduate student and team member, recalling the pivotal moment in Sunday's judging. "Then the judges asked if they could keep the red Cornell coffee mugs. Yes!"

The team's six months of preparation all came down to a day of judging, tasting and answering technical questions about the product it had produced and developed. Stir-Ins are pencil-shaped cookies wrapped in chocolate and topped with a flavoring, such as hazelnut, for stirring in coffee.

The IFT competition consisted of an oral presentation, a tasting session, a poster display and a detailed written report. The IFT Student Association names six universities each year to compete in the finals of the competition, sponsored by Mars Inc.

The Cornell team faced stiff competition from the five other finalists in New Orleans, including: the University of California at Davis, which en-

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'Spanish fly' is beetle's lure and an offering

By Roger Segelken

Studies at the Cornell Institute for Chemical Ecology (CIRCE) are showing just how resourceful male insects can be when they seek a mate.

In one species, the fire-colored beetle Neopyrochroa flabellata, the male entices the female by presenting her with a chemical offering, secreted from a gland in his head. Next, as described in the June 25 issue of Proceedings of the National Academy of Sciences (PNAS), the female samples and ingests the offering, and responds by yielding to the male's copulatory advances.

Much more of the chemical is transferred to the female beetle in the mating male's sperm package. And she, in turn, bestows the chemical on her eggs, which are protected by the chemical from predators. Without the chemical, fire-colored beetle eggs would be lunch for other insects.

"Protecting the eggs is clearly to the advantage of both parents," said Thomas Eisner, the Cornell biologist who led studies reported in PNAS. "The male's strategy is to woo the female with a 'teaser' of the chemical and to reward her with a massive nuptial gift if she accepts him for mating."

Describing the cleft-like organ in the male beetle's head where the enticing chemical appears, Eisner suggested that the insect is, in effect, saying: "I've got a lot more where this is from, but you can't have it until we mate."

And what is this enticing chemical, males of many species by now are wondering, and where can I get mine? According to the CIRCE biologists, the chemical is none other than cantharidin, or Spanish fly, the notorious aphrodisiac of human folklore.

Spanish fly and the insects that use it are the subjects of two related reports, prepared for CIRCE's series on "Defense Mechanisms of Arthropods" and published in the national journal. The authors are Eisner, the Jacob Gould Schurman Professor of Biology; Scott R. Smedley, a postdoctoral researcher in CIRCE; Daniel K. Youngs, professor of entomology at the University of Wisconsin, Madison; Maria Eisner, research support specialist at CIRCE; Braden Roach, a Cornell postdoctoral researcher at the time of the studies and now a staff scientist Continued on page 6

Plaza in front of campus' Day and Stimson halls will be reconstructed

By Jacquie Powers

The plaza in front of Day and Stimson halls is about to undergo a facelift that is designed to improve the safety of the area and beautify a major entryway to Cornell.

"The plaza serves as a front door to the university, both figuratively and literally," said Philip L. Cox, director of facilities management. "For several years we have been hoping to improve the landscaping in front of Day Hall to present the same sort of image to our visitors that we strive for with the rest of our magnificent campus grounds. In addition, safety concerns resulting from the uneven surface make this work a necessity."

The work on the two buildings facing East Avenue, which is expected to begin the second week of July and continue into the fall, will involve some disruptions in front of both buildings and the adjacent parking area.

Demolition and replacement of the basket weave concrete and brick pavement that forms most of the existing plaza, which has resulted in uneven walking surfaces, will be the first steps of the project. This work will be completed within a few weeks but will necessitate barring for a few days the front doors of Day Hall, the university's main administration building, and the basement entrance to Stimson Hall, which houses biological sciences and the university Ombudsman's Office.

The driveway to the Day Hall parking lot also will be repaved, and the parking lot and access to the Stimson Hall loading area will be closed for a few days. Alternative handicapped parking is being arranged in cooperation with the Cornell transportation office.

The plaza will be reconstructed from the area just north of the Harold D. Uris bench in front of Day Hall to the steps in front of Stimson Hall. To allow for pedestrian traffic, the work will stop short of East Avenue by about 18 feet. Reconstruction of this curb-side portion of sidewalk will be deferred for a year or more.

The loss of the Bradford pear trees during last November's storm left the plaza denuded, and new tree planter beds will be built, although actual tree planting will be delayed until fall. The two large katsura trees that flank the entrance to Day Hall will remain, but the other overgrown ornamental plantings along the northeast corner of the building will be removed. Granite benches and seating walls, harmonizing with the Uris bench, will be constructed to permit greater use of the plaza as a gathering area for visitors and staff. Improved lighting will be installed.

The renovation work will be done by university employees. Anyone with questions about the project can contact Jeffrey Lallas, project manager, at 255-8766 or < jnl3@cornell.edu>.

BRIEFS

■ Burned churches fund: The offices of Cornell United Religious Work have received a number of inquiries from individuals and organizations wishing to lend assistance to those churches that have been damaged or destroyed in a plague of recent fires. The National Council of Churches has announced an effort to raise \$2 million to aid these churches, which are predominantly African-American.

Contributions may be sent directly to: The National Council of Churches, 475 Riverside Drive, New York, NY 10115. Indicate "Burned Churches Fund" on the check. The fund is a cooperative effort of many different religious organizations, including the National Conference of Catholic Bishops and the American Jewish Committee.

It is also possible to contribute to this fund through individual religious organizations or through the NAACP. If you wish to make a contribution through the NAACP, you may send your check to: The National Association for the Advancement of Colored People, 970 Martin Luther King Jr. Drive, Suite 203, Atlanta, GA 30314. Indicate "Emergency Church Fund" on the check.

Also, there is an organized effort to assist local contractors in the communities that have been affected by these fires. To volunteer for a two-, five- or seven-day work camp, call Washington Quaker Workcamps at (202) 722-1461 or fax them at (202) 723-5376. A local effort to participate in a rebuilding project in Alabama in mid-August is being coordinated by Poplar Ridge Friends Meeting. Larry Fuffam is in charge of this effort, and he can be reached at (315) 364-8901. This group welcomes volunteers and financial support.

III Catherwood Web site honored: The Martin P. Catherwood Library of the School of Industrial and Labor Relations has been recognized as having one of the top library Web sites in the country by an Internet indexing service. It was selected as one of the 50 best sites of its kind in the Education-Libraries category by LYCOS-POINT, a Web rating service. The address of the Catherwood Library Web page is http:// www.ilr.cornell.edu/library/>.

■ English classes: Registration for free English classes sponsored by the Cornell Campus Club will take place today, June 27, from 7:30 to 8:30 p.m. in the One World Room, Anabel Taylor Hall. There is a \$5 registration fee. Classes begin July 1. For further information call Ann Marie Dullea at 277-2488 or Joan McMinn at 277-0013.

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Honored for her service



Joycelyn R. Hart, associate vice president for human relations, was honored for her 26 years of service to Cornell at a reception at the Herbert F. Johnson Museum of Art on June 16. Hart, who is retiring in July, is shown with President Emeritus Frank H.T. Rhodes, left, and Provost Don M. Randel. Hart joined Cornell's Ombudsman's Office in 1970, becoming the university's first associate vice president for human relations in 1987. During her tenure in that office, she provided leadership in developing programs in a number of human relations areas, including affirmative action and equal opportunity, racial and sexual harassment, and working families.

Steven Ames will chair museum's advisory council

Steven Ames, a private investor in New York and a longtime supporter of Cornell's art scene, has been named chairman of Cornell's Herbert F. Johnson Museum of Art Advisory Council.

The appointment was made by President Hunter Rawlings. Ames succeeds Richard Schwartz, who resigned to serve as vice chairman of the New York State Council on the Arts.

Ames, a 1963 Cornell graduate, formerly served as vice chair of the Johnson Museum's advisory council and as chairman of the council's program committee.

"I am deeply grateful to Steve Ames

for agreeing to be chairman of the Museum Advisory Council," said Franklin Robinson, the museum's Richard J. Schwartz Director. "His kindness and sensitivity to the people he works with, his profound love of art, and his openness to contemporary and new media have already endeared him to members of the council and to the Johnson staff.'

Robinson also acknowledged the leadership of the former chair: "Richard Schwartz's leadership has transformed the museum in many ways, from our governance to our outreach to collectors throughout the Cornell community. He has strengthened the museum's national stature. This director and museum were fortunate to have his leadership. The museum wishes him well with his new appointment."

Ames has been a major contributor to Cornell. He has endowed the position of the Ames Curator of Education, the museum's key education officer, and has supported the Center for Theatre Arts through the Ames Film Production Suite.

The museum's advisory council counsels the director on policies for the management of the museum's collections and helps foster relationships between the museum and its various constituencies.

Open-window periods changed for early retirement options

By Jacquie Powers

Thinking about retiring early? Better double-check your calendar, because there's been a change.

Employees of Cornell's statutory colleges will be allowed one open-window period for professorial and other professional personnel (overtime pay ineligible) and a separate open-window period for support staff (overtime pay eligible). Initially, the state had indicated there would be two open-window periods for all employees to retire.

While the state budget has not been passed, it appears the budget will include a reduction in funds for higher education, including the statutory colleges. The early retirement incentive program has been used to help offset

the need for layoffs in the colleges.

The program is available to members of the New York State Employees' Retirement System (NYSERS) and TIAA/CREF who are at least 50 years old and have completed a minimum of 10 years of service. Almost 1,000 statutory college employees at Cornell are eligible for the program, and 586 employees opted to participate in the five years the program has been available, according to John Hartnett, director of finance and business services for the statutory colleges.

Under the new guidelines, the open-window period for non-exempt employees begins July 1 and ends Sept. 28, 1996. The open-window period for exempt employees begins Oct. 3 and ends Dec. 31.

If an agreement to retire was reached

previously it will be honored, providing the date is within the open-window period. Exempt personnel who were planning to retire during the summer should contact the Statutory Employee Benefit Office at 255-4455 immediately to discuss the available options and select a new retirement date.

Declarations of interest in the incentive tirement program were to be filed by June 3. However, employees who have not filed a declaration of interest and now wish to do so in light of this additional information should contact the Statutory Employee Benefit Office immediately.

Each college is attempting to honor all retirement incentive requests, Hartnett said. Participation in the program must be approved by the dean or unit director.

Home Study Program renamed Distance Education Program

By Blaine P. Friedlander Jr.

To better reflect the future direction of the food industry, the Cornell Food Industry Management's Home Study Program is changing its name to the Distance Education Program, said George S. Hayward, director of the program.

The Distance Education Program has expanded its course offerings beyond the core of home study correspondence courses into workshops, videos, executive seminars and CD-ROM computer-based training.

Hayward said that some activities are currently conducted through the program's home page on the World Wide Web at http://distance-ed.arme.cornell.edu/>.

"The rapidly evolving Internet offers tremendous potential for delivering interactive training programs," Hayward said.

Although the name has changed, the program's mission remains the same: to meet the educational and training needs of the retail food industry managers and associates with cost-effective courses.

Currently, more than 40 written courses

are offered in the Distance Education Program's series, in such areas as business law, food store sanitation, accounting, customer relations and managing meat, produce, bakery, deli, seafood, floral and cheese departments.

Information about the Distance Education Program can be obtained by telephone at 255-3028; fax at 254-5122; through email at <distance-ed@cornell.edu> or by mail: Distance Education Program, 247 Warren Hall, Cornell University, Ithaca, NY 14853.

Board elects five at-large trustees and welcomes its new members

The Cornell Board of Trustees on May 24 unanimously elected two new at-large trustees, two new trustee fellows and re-elected three at-large members and four fellows. Board members also welcomed two alumnielected trustees, one faculty-elected trustee, one student-elected trustee and two trustees appointed by New York Gov. George Pataki.

In addition, the board unanimously re-elected Stephen H. Weiss as chairperson of the board and Ronald P. Lynch, Harold Tanner and Carol C. Tatkon as vice chairpersons, all for one-year terms beginning July 1.

Elected as at-large members of the 64-person board to four-year terms beginning July 1 were Paul F. Cole, Ann S. Bowers, Edwin H. Morgens, Dr. Samuel O. Thier and Lynch.

Cole is secretary-treasurer of the New York State AFL/CIO; Bowers is co-founder and human resources consultant for Enterprise 2000 of Palo Alto, Calif.; Lynch is managing partner of Lord, Abbett-& Co., an investment firm in New York City; Morgens is chairman of Morgens, Waterfall, Vintiadis, a financial services firm in New York

City; Thier is president of Massachusetts General Hospital

Elected as trustee fellows for four-year terms beginning July 1 were Richard A. Aubrecht, vice chairman, director and vice president of Moog Inc. of Orchard Park, N.Y.; Laura J. Clark, vice president of J.P. Morgan & Co. in Chicago; Michael W.N. Chiu, chairman and president of Prima Hotels and Prima Donna Development Co. of Los Altos Hills, Calif; Joseph H. Holland, an attorney and commissioner of the New York State Division of Housing and Community Renewal; and Roger J. Weiss, a founding partner and senior managing principal of the investment firm Weiss, Peck & Greer.

Robert J. Appel, general partner at Neuberger & Berman, a securities brokerage in New York City, was elected a trustee fellow to complete a two-year term July 1 through June 30, 1998. Fellows are fully participating board members, but they don't cast a ballot on matters requiring a formal vote.

Elected by the alumni body as trustees were Elizabeth G. Armstrong, a 1968 graduate of the College of Agriculture

and Life Sciences, and Robert T. Blakely, a 1963 graduate of the College of Engineering, who got his MBA from Cornell in 1965. Armstrong is director of medical education at Harvard Medical School. Blakely is senior vice president and chief financial officer of Tenneco Inc. of Greenwich, Conn.

S. Kay Obendorf, professor of textiles and apparel, recently was elected by university faculty members to a four-year term as faculty trustee beginning July 1. Julie Y. Chon, a junior in the College of Arts and Sciences majoring in government with a concentration in international relations, will become a student-elected member of the board effective the same date.

Pataki, who as governor is a trustee, appointed Jerold R. Ruderman to the board on Dec. 12, 1995, and James A. Ortenzio on Oct. 11, 1995, for terms expiring June 30, 1997 and 1998 respectively.

Ruderman is an attorney with Wilson, Elser, Moskowitz, Edelman & Dicker in White Plains, N.Y. Ortenzio is chief executive officer of the Greater New York Meat Institute of New York City.

Physics prize is named for Hans Bethe

By Larry Bernard

Nobel Prize winner Hans A. Bethe, Cornell professor emeritus of physics, has a new award named in his honor, given by the American Physical Society (APS). The APS will announce the award at a Cornell reception on July 2 on the occasion of Bethe's

90th birthday.



Bethe

Bethe isbeing honored for his "outstanding and numerous accomplishments in both astrophysics and nuclear physics," said Judy Franz, APS executive officer, who is scheduled to make the announcement

here. Bethe, who continues research in physics in his Cornell office in the Newman Laboratory of Nuclear Physics, is expected to attend the reception.

The Hans Bethe Prize, a cash award of \$7,500, is to be awarded annually, beginning in 1998, for outstanding work in theory, experiment or observation in the areas of astrophysics, nuclear physics, nuclear astrophysics or closely related fields. The intention is to recognize outstanding achievements in one of these areas by a scientist worldwide, according to the APS. The prize is endowed by donations from members of the Division of Nuclear Physics, the Division of Astrophysics and friends of Bethe. Cornell and Los Alamos National Laboratory have made major contributions to the endowment.

Bethe, whose description of the nuclear processes powering the sun earned him a Nobel Prize in physics in 1967, has been at Cornell for 61 years. He was head of the Theoretical Division at Los Alamos National Laboratory for the Manhattan Project, and he has played a leading role in the public debate about nuclear weapons, defense policy and the civilian control of nuclear power. He was one of the founders of the Federation of Atomic Scientists and was a member of the original board of directors of the Bulletin of the Atomic Scientists.

Bethe's career spans the evolution of nuclear physics. He has made contributions to almost all phases of the problems of nuclear interactions and nuclear forces; he produced the first major paper on the theory of order-disorder in alloys; and his 1947 calculation of the Lamb shift paved the way for the revolution in quantum electrodynamics.

Even today, Bethe continues to work at the forefront of research in astrophysics, on such diverse subjects as supernova explosions and the emission of neutrinos from thermonuclear reactions in the sun.

The APS is an organization of more than 41,000 physicists worldwide.



Frank DiMeo/University Photography

Franklin M. Loew, right, dean of the College of Veterinary Medicine, talks with John P. Wolff '90, a town of Ithaca board member who has expressed concerns about the new incinerator project, during Monday night's meeting in Morrison Hall.

Residents question and seek review of incinerator plans

By Roger Segelken

If foes and proponents of the planned veterinary medical waste incinerator agree on one thing, it is that construction of the facility is not necessarily a done deal – at least not in the form proposed in 1992.

Speakers from the audience of about 100 in the 4-1/2 hour Morrison Hall meeting June 24 quizzed Cornell and State University Construction Fund (SUCF) officials, consultants and state environmental regulators on an array of points. Among them:

 Meteorological and demographic assumptions used to computer-model the facility, which is designed to destroy both pathological waste (such as large animal remains) and regulated medical waste (including contaminated plastic implements).

• Effects on humans and the environment of dioxins – chlorine-based combustion by-products – even though stateof-the-art pollution scrubbers are incorporated in the 177-foot-high smokestack.

 The Veterinary College's commitment to recycling as much plastic laboratory and clinical waste as possible, and its due consideration of alternatives to incineration.

 The state's track record in monitoring similar incinerators at other medical facilities.

Mark Wysocki, a Cornell meteorologist, asked why the incinerator's computer-modeling was based on weather Additional public comment will be seriously considered when the project reaches the "draft permit" stage, said Raymond J. Nolan, environmental analyst for the DEC.

records from Syracuse and Albany, rather than on data from the university-operated weather station on Game Farm Road.

Lawrence Doucet, environmental consultant and engineer, said federal Environmental Protection Agency (EPA) and state Department of Environmental Conservation (DEC) procedures require that data from National Weather Service operations—such as in Albany, Buffalo and Syracuse—be used in the air-quality modeling. Use of any other data would render the EPA computer model invalid, he said.

Additional public comment will be seriously considered when the project reaches the "draft permit" stage, said Raymond J. Nolan, environmental analyst in the DEC's Division of Regulatory Services. Nolan said it would be possible to rescind the declaration of negative environmental impact issued by SUCF, the incinerator's sponsor and "lead"

agency, but that rescission would require relevant, new information.

Several speakers, including Ruth Mahr, president of the Forest Home Improvement Association, demanded an Environmental Impact Statement (EIS) to consider all impacts, as well as the availability of alternatives to incineration and alternative sites for the facility. Mahr, who has spent the last three months gathering data to fight the incinerator, argued that the project's title as a rehabilitation "was misleading and threw people off track."

SUCF's director of consultant design, Chris Marcella, said the label was appropriate five years ago, in early planning stages, when a \$500,000 retrofit of the existing incinerator seemed possible. He said that his agency is trying to overcome bureaucratic obstacles to renaming the \$2 million to \$3 million project what it is: new construction.

"We want alternatives (to incineration) laid out and costed out," Mahr said, "That bespeaks an environmental impact statement. Incineration tries to get the bugs out of petri dishes," the Cornell alumna said, "by putting dioxins in the air."

"I'm hearing things tonight that make me want to take a deeper look at this," said Veterinary Dean Franklin M. Loew, moderator for the informational meeting and dean since September 1995. "I can assure you this will not be the last meeting."

Those days of cloudy wine - and other drinks - may be over

By Blaine P. Friedlander Jr.

American consumers prefer their favorite cool beverages unclouded, like their weather, while drink makers hanker for a longer shelf life. Thanks to new Cornell research, cloudy wine may be a thing of the past.

"Consumers think that if beverages such as apple juice or beer are cloudy, something is wrong with them," said Karl J. Siebert, Cornell professor of food science at the Agricultural Experiment Station in Geneva. "Sometimes something might be wrong with a cloudy drink, like if a beer has been frozen, it could cloud or there might be a growth of a bad microorganism. But, generally, beverages like apple juice and beer are naturally cloudy."

Siebert and other Cornell researchers have been clarifying beverages for several years to give those drinks a longer consumer

shelf life. Scientists presented their research in this area in four talks at the 1996 Institute of Food Technologists' annual conference, June 22-26 in New Orleans:

· Siebert and Penelope Lynn, research technologist in food science, presented "Assessment of Haze-Active Polyphenols and Haze-Active Proteins in Beer" at the food chemistry protein session June 23.

· Aurea (Tina) Carrasco, graduate student in food science, and Siebert presented "The Relationships Between Instrumental and Human Visual Perception of Turbidity in Clear and Colored Samples" at the sensory evaluation session June 24.

· Lynn and Siebert were scheduled to present "Comparison of Adsorbents for Apple Juice Colloidal Stabilization" at the fruit and vegetable product session June 26.

· Immediately afterward, they also were to present "Assessment of Haze-Active

Polyphenols and Haze-Active Proteins in Wine and Grape Juice."

What the researchers are trying to find is how effective adsorbents are in removing haze-causing proteins or polyphenols. Beverage manufacturers have ultrafiltration at their disposal, but it is costly. Proteins and polyphenols bind together, and when each is distributed in a beverage more or less equally, the drink tends to become clouded.

"Manufacturers are looking for less expensive ways to clarify those beverages, and they want to know how stable their own product is before they bottle it. They don't want the problem of cloudiness down the road," Siebert said. "We are trying to see which of the haze-removing products works better."

In beer, wine and fruit juices, the proteins and the polyphenols interact to cloud the beverage. Removing either the protein

or the polyphenol - putting each out of balance - literally clarifies the situation, and from a marketing view, the product will last longer on the shelf, giving the consumer ample time to buy it. Juice manufacturers and wine makers prefer using bentonite to remove the haze-producing protein. Brewers prefer using silica gel to remove the haze-active protein, because it does not remove the foam-producing proteins, which the manufacturers like.

Leaving the proteins alone, drink and juice makers also could remove the polyphenols, rather than the proteins, by using the adsorbent polyvinylpolypyrrolidone, or PVPP.

For his research, Siebert receives funding from the New York State Apple Research Association; Sunsory Ltd., Osaka, Japan; and from Cornell's Center for Advanced Technology in Biotechnology.

Food engineers redefine the physics of microwave cooking

By Blaine P. Friedlander Jr.

The microwave oven is not just for popcorn anymore.

Consumers who want fresh microwaved foods to be crisp and taste better can look forward to improvement, thanks to new Cornell studies that show how moisture, heating rate and the food's porosity interact during microwave cooking.

"The microwave is grossly underused," said Ashim Datta, Cornell associate professor of agricultural and biological engineering. "Up to now, as scientists, we haven't really understood much of the physics which occur during the microwave processing of food. This research shows us the quantitative physics as to why microwaved food can be soggy and sometimes unappealing and also why sometimes excessive amount of moisture can be lost."

Datta, along with Haitao Ni, Cornell graduate student in agricultural and biological engineering, presented "Moisture Redistribution and Loss in Foods Under Intensive Microwave Heating" at the Institute for Food Technologists' annual convention in New Orleans on June 25.

In conventional ovens, foods such as baked potatoes are heated from an external source, the hot air, and cooked from the outside in. Researchers know that the surfaces of conventionally baked foods are generally hotter than the inside and that moisture escaping from conventionally

cooked foods is whisked away by heat as it reaches the surface. That "drying" process accounts for why baked potatoes are crisp and pie crusts are crumbly.

Previous research did not take into account the interrelationship between food structure (porosity) and the internal pressures that develop due to evaporation of water inside the food. Once internal pressure is figured into the water-vapor-time relationship, the whole engineering model of microwave cooking is turned on its ear, Datta said. Internal pressure causes a lot more moisture to reach the surface.

Combined with the fact that more moisture reaches the surface, the air inside a microwave oven stays at room temperature, preventing the moisture from being dried and making moisture accumulate near the food surface. This accounts for apparent sogginess, Datta said.

With time, the surface of microwaved food has more moisture than its interior, the reverse of what happens in conventional ovens. When the surface stays very soggy, internal pressure can "pump" water out of the food, causing food to lose excessive amounts of moisture, also leading to poor quality.

Through understanding the true physics of microwave cooking, companies can use this information to provide better tasting and better texture of food, as well as provide more convenience to consumers by promoting increased use of microwave cooking," Datta said.

From pollutant to flavor enhancer: A new role for sauerkraut brine

By Blaine P. Friedlander Jr.

Thanks to charismatic enzymes and environmental concerns, the brine from processed sauerkraut no longer may pose an ecological threat. Instead, it could cut the mustard as a popular flavor enhancer for a variety of beverages and foods, according to a Cornell scientist. Sauerkraut brine is the by-product in the fermentation of cabbage. When the brine is poured into sewers or other tributaries, it becomes a pollutant by robbing the water of oxygen. It has high biochemical oxygen demand and large amounts of lactic acid and salt, thus contributing to environmental degradation.

But Cornell scientists have found a solution to the pollution. By adding a yeast known as Candida wickerhamii, the brine's oxygenstealing organic matter is neutralized. The yeast uses most of the biochemical oxygen demand. After adding the yeast to the brine, a very useful enzyme, Beta-glucosidase, results, according to Yong D. Hang, professor of food science at Cornell's Agricultural Experiment Station in Geneva.

'Yeast loves the squerkraut brine," Hang said. "The yeast can assist the food processors in preventing environmental degradation and at the same time produce value-

Shyh-Liang Sim, graduate student in food science, and Hang presented their research in a poster session, "Optimization of b-Glucosidase production by Candida Wickerhamii from Sauerkraut Brine Using Response Surface Methodology" at the 1996 Institute of Food Technologists' annual conference June 25 in New Orleans.

The food scientists can add the b-Glucosidase enzyme to fruit pomace - the remains of processed fruit - to extract its exact fruit flavor. The resulting concentrate can add value to such products as apple juice by adding the exact flavors of other fruits. In fact,

Hang and his colleagues now are working with extracting flavor from concord grapes, the biggest variety of grape grown in New York. Specific fruit flavors can later be added to a wide variety of foods or beverages.

Previous efforts have been made to produce fruit flavors by using acid and heat, but the results were not always desirable, he said.

"Consumers always prefer natural flavors," Hang said. It is hard to extract natural flavors, and that is why they have been synthesized by chemical means. But with this type of method, Hang believes, it could become less expensive to extract natural flavors than to produce them artificially.

Stir-Ins bring victory continued from page 1

tered its Bagelrito, a salsa-chicken combination encased Bourbon Street, the team spent their competition-eve Saturin an edible wrap inside a bagel; and Kansas State University, with its Biscuit Bakes, which are uncooked breakfast biscuits with an omelet mixture encased inside. The other finalists were Iowa State and Michigan State universities and the University of Minnesota.

Cornell graduate student Sarah Douglas said most of the team members arrived in New Orleans Saturday.

"We felt nervous, tired - and we needed to dip some sticks with flavor," she said, describing the last-minute product preparation that still needed to be done before Sunday's competition.

In fact, the oral presentation squad immediately sought out the room where the judging would be done and rehearsed. They didn't want any surprises.

Team members were sensitive to the weather, as well. Although the competition was held indoors at the New Orleans Ernest N. Morial Convention Center, the Louisiana weather was humid. The temperature hit 90 degrees Saturday, with a relative humidity of 78 percent, which meant the cookie portion of the students' product could crumble. Stir-Ins absorb humidity - making them fall apart easily. To guard against that danger, Deibler kept the stirrers in her hotel room with, she said, "the air-conditioning cranked up and I froze."

Despite the lure of the city's jazz clubs and famous

day night dipping flavorant on the Stir-Ins that had survived the humidity and the long plane trip from Ithaca.

Cornell graduate student Dawn-Marie Norton had the job of getting a batch of the Stir-Ins, safe and unbroken, to New Orleans. Her main obstacle became a testy flight attendant. She had been told that the cooler containing the Stir-Ins would have to fit under her seat - but the impatient flight attendant grabbed the container and stuffed it into the overhead compartment, as Norton watched in horror. "This can't be happening," she thought. But, luckily, there were no Stir-Ins casualties.

Sunday morning found the students shoe-horned into a meeting room where a standing-room-only crowd at the IFT convention gathered to watch the oral presentation. Cornell was the fifth of six teams in the finals to make its presentation. Cornell food scientist Daryl Lund, the Ronald P. Lynch Dean of the College of Agriculture and Life Sciences, sat beaming like a proud father throughout the presentation, as did about a dozen Cornell food science faculty members including the team's adviser, Joseph Regenstein, professor

"The students have shown that they can apply their understanding of food science to produce solutions to realworld problems - problems that are quite complex," Regenstein said.

Student presenters Kathleen Kostival, Alison Edwards and Deibler recovered from a minor technical problem with the slide projector and showed the judges the basics of their work and their new product. Hours later, the team faced the taste-test portion of the judging. With well-preserved Stir-Ins, freshly brewed coffee and poise, the team faced the judges during a half-hour closed session. The only outsiders allowed in were camera crew members from NBC-TV's Dateline, which was filming a segment scheduled to be aired following the Summer Olympics.

The judges stirred; the students watched. No breakage. The judges stirred some more. Still no breakage. Yes!

The judges wanted to know how the students developed the cookie texture, how commercial packaging would protect the slim Stir-Ins cylinders and how the flavorant remained on the Stir-Ins tips. The product development team nailed the answers with well-prepared technical explanations.

Then one of the judges took a bite. The students had successfully worked through months of challenges to get their product to this point, and the whole contest came down to one judgmental bite.

Crunch. Yes!

Now the students will pursue a patent on the product, and as of Monday, several major food companies had expressed interest in bringing Stir-Ins to market.

Employee-elected trustee will present staff issues to the board

By Dennis Stein

Seething under a difficult supervisor at one point in her career at Cornell, Cyndy Tkachuck was losing it. Her supervisor was exacting and brusque. Her Cornell coursework was demanding. Her four young children at home were suffering from the tension. Tkachuck was floundering – until she began to consider there might be a flaw in her own attitude.

"I had been dwelling on all the negatives in my life," she remembers, "and I determined I had to change my thinking."

Her successful turnabout in outlook has opened many doors since. Beginning her career 23 years ago as a secretary clipping news stories and typing press releases in the old Cornell News Bureau, today grandmother Cyndy Tkachuck makes her own news. Now associate director of the annual fund in the Johnson Graduate School of Management, Tkachuck will assume the additional role of employee-elected trustee on the Cornell Board of Trustees July 1.

Tkachuck took advantage of university benefits to achieve personal goals and advance in job responsibilities. Initially enrolling in a few work-related Cornell courses, she went on to earn an undergraduate degree in English at Cornell in 1993 through the Employee Degree Program. "You can still move through the ranks here," she advises, "but it's more competitive now. You have to be determined and use what's available."

No stranger to leadership, Tkachuck has been involved in campus governance for six years, leading the Personnel Policy Committee for two years and chairing the Employee Assembly over the past two. During that time she dealt with and gained insight into various issues—health benefits, layoffs, Statler Club membership and the inclement weather policy—that directly impact staff.

The most valuable aspect of this experience, she explains, was the opportunity to talk with employees at all levels about their concerns and aspirations for themselves and Cornell. When elections for employee-elected trustee took place this past March, employees did not forget her; she received 74.5 percent of the ballots cast. Tkachuck, whose term runs for four years, succeeds current employee-elected trustee Franklin Henry, who did not seek re-election. Of the new trustee, Henry observes, "Cyndy has a lot of energy. Employees could not have chosen a better person."

Tkachuck is expected to be a strong advocate for employee concerns. Those familiar with Tkachuck's style characterize her as



Robert Barker/University Photography

Cynthia Tkachuck, associate director of the annual fund in the Johnson Graduate School of Management, sits in her Malott Hall office. Tkachuck begins her term as employee-elected trustee July 1.

someone who is not afraid to speak up. Though spunky, she explains, "Never burn your bridges – build alliances instead."

Echoing one of her campaign themes, Tkachuck decries employee apathy and states her desire to "shake up" the source. "Re-engineering is inevitable across campus," she acknowledges, "but we must identify the most fair and humane ways of accomplishing it. If we opt for more ruthless methods, all – including the institution—will suffer." To keep in touch with employee concerns, she welcomes comments and e-mail at <cyndy@johnson.cornell. edu>. Tkachuck meets regularly to discuss employee issues with her "kitchen cabinet,"

'Cyndy has a lot of energy. Employees could not have chosen a better person.'

> Franklin Henry, employee-elected trustee whose term ends July 1

an informal group of a half-dozen close colleagues and associates.

Tkachuck currently is strategizing how to effectively present staff issues to the Board of Trustees. But she is not starting out an unknown. She already has worked with several board members through her current duties at the Johnson School involving coordination of a volunteer alumni network and the reunion classes regional committee. And by attending the recent orientation sessions in New York City, Tkachuck has met the eight other new trustees, including ILR junior Julie Chon, new student-elected trustee, and S. Kay Obendorf, a professor in textiles and apparel, who will serve as the new faculty trustee. Through her committee assignments on Building and Properties, Alumni Affairs and Development, and Trustee and Community Communications, Tkachuck intends to put forth employee issues that might otherwise remain unknown to the board. The next full Board of Trustees meeting will be Oct. 25 and 26 in Ithaca.

And the difficult supervisor? Tkachuck now credits that supervisor – and her maternal grandmother – with playing pivotal roles in shaping her professional and personal life. By challenging Tkachuck, her supervisor unwittingly taught her how to be accountable, be quick on her feet and maintain a professional demeanor under stress. By setting a fiercely independent example, Tkachuck's grandmother intentionally instilled a sense of self-sufficiency to guide her offspring through tough times.

With outside interests ranging from swing and ballroom dancing to mountain biking and poetry writing, Tkachuck enjoys sharing her movie passions by contributing the "One-Minute Film Review" column to PawPrint. A native of central New York, Tkachuck resides in Cortland with her husband, Richard. She has four grown children – one of whom works at Cornell – and one grandson.

"I've been good to Cornell, and Cornell has been good to me," Tkachuck offers. After a moment's reflection she adds, "I want to make a difference – I have a vested interest in this university."

Researcher offers tips on improving tips for waiters and waitresses

By Darryl Geddes

Squatting next to a table when taking orders and introducing oneself to customers by name can earn a waiter or waitress a better tip, according to a Cornell researcher.

In the report "Seven Ways to Increase Your Server's Tips" published this month in the Cornell Hotel and Restaurant Administration Quarterly, Michael Lynn, associate professor of consumer behavior and marketing, identifies various techniques waiters and waitresses can employ to increase their tip take.

Restaurant managers, Lynn said, may want to implement some of the techniques to increase servers' incomes without raising wages and, therefore, curb costly staff turnover.

In one study, Lynn found that servers who squatted next to tables when talking with diners actually increased their tip from 15 percent of the bill size to 18 percent of the bill size

"Squatting brings the server's eye level down to the customers' eye levels, which creates eye contact and brings the server's face closer to the customers' faces," said Lynn, who has studied the effect of server posture on restaurant tipping. "Since research on non-verbal communication has found that more eye contact and greater proximity are associated with greater rapport and liking, and since consumers tip friendly servers more than they do less friendly servers, squatting down next to the table should increase a server's tip."

Other research has found that waitresses who intro-

'Most of these actions are innocuous enough that every manager should find several things to recommend to his or her wait staff, and the actions are varied enough that every server should find something he or she would be comfortable doing.'

- Michael Lynn

duced themselves by name to their customers received an average tip that was 53 percent greater than those received by waitresses who did not give their name.

"These server introductions are likely to make the server seem friendly and polite and are likely to make the customer feel more empathy for the server," Lynn said.

Drawing on research by himself and others, Lynn suggests other ways to increase tips. They include:

Drawing a happy face on the check: The happy face increased tips by 18 percent for female servers, but not so for male servers. When males included a happy face on the back of a check, the amount left for a tip decreased by 2 percent.

 Touching customers: A casual touch by the server increased tips by 42 percent. In the study, customers who were not touched left an average tip of 12 percent. Customers who were touched once on the shoulder left an average tip of 14 percent, and those who were touched twice on the palm of the hand when receiving change left an average tip of 17 percent. Subsequent research, Lynn notes, has demonstrated that casually touching customers increases the tips of both male and female servers and that the effect is strongest when servers touch the female members of dining parties.

• Writing "Thank You" on checks: In this study, the waitress received an average tip of 16 percent when nothing was written on the back of the check and an average tip of 18 percent when she wrote "Thank You." Adding her name to thank you produced the same level of tips as the thank you alone.

 Putting credit card insignia on tip trays: The use of tip trays decorated with credit card insignia was found to increase tip size by 22 to 25 percent, even when customers were paying cash. This finding is in keeping with existing research that shows that simply seeing these insignia increases consumers' willingness to spend money.

 Smiling: Researchers measured smiles and tips at a cocktail lounge in Seattle. Waitresses who smiled at customers increased tips by 140 percent.

Lynn notes, however, that not all tip-enhancing techniques are appropriate for every restaurant or server.

"Most of these actions are innocuous enough that every manager should find several things to recommend to his or her wait staff, and the actions are varied enough that every server should find something he or she would be comfortable doing," he said.

Advanced courses on Web pages now offered

acornell.edu

Academic Technology Services, a new division of Cornell Information Technologies (CIT), now is offering pilot courses on advanced World Wide Web topics. Classes will be taught on Macintosh computers, and previous experience with creating basic Web pages is assumed.

The first class being offered is "Tables" and will be held Tuesday, July 9, from 9 a.m. to noon. It will offer instruction on how to build basic tables in HTML (Hypertext Markup Language) and ways to use them. The class also will provide information about software programs that will help you create tables and references for further information.

"Using Forms to Your Advantage" will be held Tuesday, July 23, from 1 to 4 p.m. and will cover what forms are and how to build them, what CGIs (Common Gateway Interface) are, the implementation of an e-mail form on the Web, examples of what you can do with forms and CGIs on the Web, and references for further information.

"Making Sense out of Frames" will be held Friday, July 26, from 9 a.m. to noon. It will cover what frames are, how to build them in HTML, examples of good and bad usage, technical considerations when using frames and references for further information.

For information send e-mail to <cit_training@cornell.edu>; to sign up for any of these classes, register through the Web at http://cit-training/>. The CIT training staff recommends that you register as soon as possible because space is limited. The above courses require a deposit of \$25, which will be refunded after you attend the class.

CIT Service HelpDesk switches to summer hours

The CIT Service HelpDesk's summer hours are 8 a.m. to 5 p.m., Monday through Friday. The HelpDesk will return to its regular hours of 8 a.m. to 6 p.m., Monday through Friday, on Aug. 12. You can visit the HelpDesk at 124 CCC, reach it by telephone at 255-8990 or send e-mail to <helpdesk@cornell.edu>.

CIT publications no longer available on AppleShare

As of July 1, CIT's library of publications and documentation - on topics such as Bear Access, EZ-Remote and network services - no longer will be available on the CIT Public Volume I AppleShare file server. Due to increased use of the World Wide Web, most CIT publications are in the process of being moved to the Web, where they are keyword searchable. In addition, they are still available on the CIT Public FTP server <ftp.cit.cornell. edu>. You can obtain paper copies of CIT publications by visiting the HelpDesk or by sending e-mail to <cit pubs@cornell.edu>. To access documents via the Web, visit the CIT publications Web site at http:// www.cit.cornell.edu/cit-pubs/ pubs.html>.

This column was compiled and edited by Daisy Z. Dailey of CIT. Send questions or comments to <citnews@ cornell.edu>.



Adriana Rovers/University Photography

Sandy J. Cooper, right, an administrator in the Department of Consumer Economics and Housing, was presented with the first College of Human Ecology Professional Administrative and Staff Award by Dean Francille Firebaugh on June 20 in the auditorium of Martha Van Rensselaer Hall.

Spanish fly continued from page 1

at the Ithaca-based pharmaceutical-development firm Phyton Inc.; and Jerrold Meinwald, the Goldwin Smith Professor of Chemistry at Cornell.

The natural source of cantharidin is not fire-colored beetles but rather a group of beetles generally known as blister beetles. They owe their blistering reputation to cantharidin, which causes severe irritation of the skin when touched - and of the urogenital tract when swallowed. Because of its purported stimulative effect, cantharidin was one of the first natural compounds to undergo scientific investigation, beginning early in the 19th century when it was chemically isolated. In that century French entrepreneurs harvested thousands of blister beetles to produce Spanish fly aphrodisiac (although most of their beetles came from China and not Spain).

The medical literature, while skirting the question of Spanish fly's efficacy as an aphrodisiac, does chronicle an unfortunate side effect for human males: "erections douloureuses et prolongues," in the words of a French Foreign Legion physician who observed soldiers suffering painful, prolonged erections (or priapism) after eating frog-legs from amphibians that ate blister beetles. Cantharidin is not only painful but toxic, and as little as 20 blister beetles' worth can be fatal to humans, Eisner reported in a 1990 article in the journal Chemoecology.

Repeated tests in the Cornell laboratories demonstrated that male Neopyrochroa beetles without cantharidin are unlucky in love. When males that hadn't been fed cantharidin attempted to mate, the females checked their heads for the compound and, finding none, curled their abdomens and rebuffed their advances.

"Isn't it ironic that a compound with a misplaced reputation in human sexual behavior is actually used for a sexual purpose by insects?" said Eisner. "The male Neopyrochroa beetle is borrowing a defensive agent from another insect and is using it to buy access to the female - then rewarding the female's favor by endowing her and their offspring with the defensive agent."

Insect use of cantharidin as a defensive chemical is not unique to the Neopyrochroa beetles, Smedley noted. Some midges and males of other beetle species are attracted to cantharidin; they eat the compound, presumably for transfer to their mates at copulation.

"We aren't the first to prospect for useful compounds," said CIRCE-founder Eisner, who advocates "chemical prospecting" to explore and inventory undiscovered sources of potentially useful,

natural compounds.

"Here is a beetle that has become more intimately involved in chemistry, and it pays off for him. Insects' use of exogenous chemicals is almost certainly more widespread than we realize."

One mystery remains. The chemical ecologists admit that they are uncertain how Neopyrochroa beetles obtain cantharidin, although they suspect that the source is blister beetles. Newly emerged adult Neopyrochroa beetles do not contain cantharidin. But by the time adult beetles are caught in the field and subjected to mass spectrometry, they test positive for Spanish fly.

Human Ecology

recognizes staff

with new award

The College of Human Ecology recog-

Sandy J. Cooper, an administrator in the Department of Consumer Economics and Housing, is the recipient of the first College

nized three individuals at its first College

of Human Ecology Professional Administrative and Staff Award. Among other attributes, she was chosen for her "high ethical standards, her willingness to listen, her ability to solve a multitude of problems and

her critical role in supporting faculty as they

Two finalists also recognized were:

Department of Design and Environmental

Analysis, for her "radiant enthusiasm, her

cheerful demeanor, her efficiency in the

face of adversity and her unceasing work

in the Department of Consumer Economics

and Housing, for "her accessibility, her

warmth, her excellent memory and her ability

to generate an effective and supportive work

environment," among other attributes.

Patsy Sellen, an administrative assistant

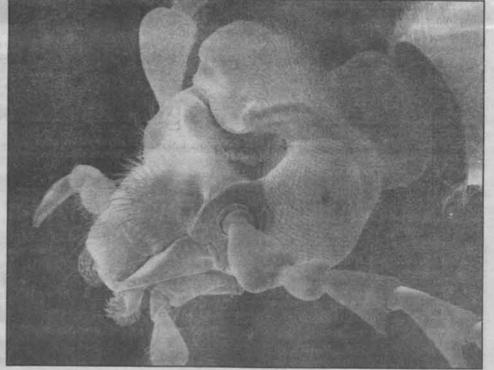
ethic," among other things.

· Judy Virgilio, an administrator in the

apply for grants.'

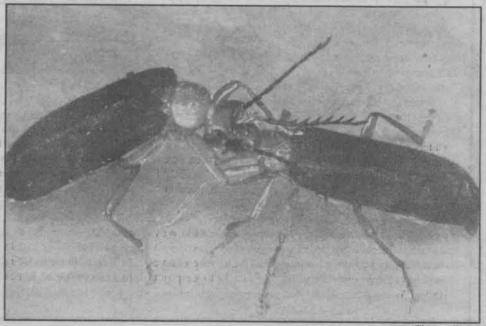
Staff Award presentation June 20.

"We don't think they get it from French chemists," Eisner said.



Maria Eisner

n-micrograph shows the head of a fire-colored beetle with its glandular cleft, the site of the cantharidin "tease" that attracts females. Below, a female fire-colored beetle, right, feeds from the cephalic gland of a male just prior to copulation.



Thomas Eisher

A Cornell-based journal promotes contemporary African art

By Jill Goetz

Scholars and collectors interested in African art have long focused their attention on traditional works - particu-

larly the wooden sculptures and ethnographic artifacts that may be seen in today's Western museums and are described in mainstream art history textbooks.

But contemporary artwork coming out of Africa and the African Diaspora communities in the West has been all but ignored and is only recently and gradually being given the attention it deserves, says Salah Hassan, an assistant professor of African and African-American art history at Cornell.



Hassan

"I am one of several art historians and art critics who have become dismayed with the state of the discipline, because it has focused mostly on the traditional and the so-called 'classical' African art, to the neglect of the contemporary - and, more specifically, the modernist and postmodernist - experience within African art," Hassan said.

To adjust that focus, Hassan and two of his colleagues, Okwui Enwezor, a New York City-based art critic and writer, and Olu Oguibe, an artist, art historian and critic based in the History of Architecture and Art Department at the University of Illinois at Chicago, have established a scholarly journal, Nka: Journal of Contemporary African Art, which takes its name from an Ibo (Nigerian) word meaning "creativity." The journal is published in conjunction with Cornell's Africana Studies and Research Center and edited collaboratively in New York City. Since establishing it in 1994, the editors have produced four issues of the journal.

To date, the journal has been funded by the Andy Warhol Foundation for the Visual Arts, the Cornell Council for the Arts and the Africana Studies and Research Center; the editors are seeking additional funding for the journal, which they hope to publish every four months.

There is a growing interest in the area of contemporary African and African Diaspora art and the modernist experience within this field," Hassan said. "Our journal serves as an urgently needed platform, filling a serious gap in the field. The only other magazine of African art in the United States, African Arts, has focused mostly on the 'traditional' forms; the only other related journals are the Hampton University-based International Review of African American Art, which focuses



The cover of Nka: Journal of Contemporary African Art, edited by Salah Hassan, assistant professor of African and African-American art history.

on African-American art and occasionally publishes essays on African Diaspora art, and the Paris-based Revue Noire, which serves more as a showcase and gallery of glossy color reproductions of contemporary African art works, with few critical or analytical writings. Other mainstream art periodicals have marginalized African and Diaspora arts in general, let alone the contemporary forms."

Currently Nka has a circulation of 3,000 copies per issue with more than 300 subscribers; it appears on specialty newsstands in the United States and some other countries, Hassan said. A brief look inside reveals the journal's broad scope, both artistic and geographical.

For example, the featured artists work in many media: from photography to painting, sculpture to printmaking, collage to mixed media. Though this has been true of African artists for many years, Hassan said, historical factors have limited such works' acceptability in the West - in

large part, he said, because many art critics have an inherent bias against modern art from Third World countries.

"Many people have a misconception about the nature of contemporary African art and culture," he said. "They have always thought of contemporary African culture as secondrate, as a distorted copy of Western culture. While it is true that African culture has assimilated elements from Western culture, these elements are themselves meaningful and have resulted in the continuous creation of new cultural products."

The 70 to 80 pages of each issue of Nka contain articles on artists working in countries like Zimbabwe, South Africa, Ethiopia and Algeria - but also England, France, Australia and the United States.

'Many African artists who live abroad, especially in major Western cities, see themselves as part of the broader African Diaspora community," said Hassan, who is from the Sudan. "These artists include African-American and Caribbean artists. Because of global movement of people, migration, intellectual and political exile, you cannot limit the discussion of modern African art to the continent."

Indeed, many of the advertisements that appear in Nka are for galleries in New York City, and many of the reviews cover exhibits and festivals from around the globe. Hassan has been a curator for several of them, including the recent major exhibition at the Whitechapel Art Gallery in London titled "Seven Stories about Modern Art in Africa," for which he co-authored a book with the same title. He also was curator for a show at the Herbert F. Johnson Museum in the spring of 1993, when he was a visiting scholar from the State University of New York at Buffalo. (He became an assistant professor at Cornell in 1994.)

This month Hassan is one of the curators and writers for "Images of Africa," a major festival of African arts in Copenhagen; he also is in the process of writing a book on the modernist experience in African art, funded by a grant from the Toyota Foundation. He will be curator for an exhibition of African women artists at the Johnson Museum in January of 1997.

In a 1995 issue of Nka, Hassan wrote, "Of all the categories of African art, modern art, especially that of Western-trained artists, has received the least attention from art historians and other scholars of African art. . . . Most Western museums still refuse to acquire or exhibit contemporary African work because they do not fit in or measure up to stereotyped standards of African art."

More recently, he said his hope for Nka: Journal of Contemporary African Art is that it will "create a shift within the paradigm of African art history . . . and make people pay attention to this modern and postmodern experience."

New book examines global perspectives of adolescent development

By Susan Lang

American adolescents are not the only ones who have a tough time making the tumultuous transition from childhood to adulthood. Nearly all societies describe this period



Hamilton

as filled with challenges, crucial decisions and important experiences.

To compare adolescent development worldwide and to look at the issues of adolescence with a universal perspective, the new book Social Problems and Social Contexts in Adolescence: Perspectives Across Boundaries (Aldine de Gruyter, 1996, \$24.95) brings together a series of scholarly papers from seven countries on adolescent issues. The book is edited by Stephen Hamilton, professor and chair of the Department of Human Development and Family Studies at Cornell, and Klaus Hurrelmann, professor and dean of the faculty for health sciences, University of Bielefeld, Germany.

The first section of the 299-page, 13chapter book, "Theoretical Approaches to Adolescent Development in Context," focuses on the global perspective of adolescent development, a sociological view of the social world of adolescents, a social psychological study of youth and a psychosocial analysis of adolescent identity. The second section, "Social Networks and Social Support," looks at the roles of significant others in the lives of adolescents and includes a chapter by Hamilton on mentors in the lives of adolescents. The final section, "Problem Behavior and Problematic Environments," focuses on adolescent behavior in view of personality, perceived life changes, gender, age, educational level, war and other dangerous environments, and includes a chapter on how youth cope with dangerous environments by James Garbarino, director of the Family Life Development Center at Cornell.

'Adolescence has both universal and culturally determined components, and these papers reveal both similarities and differences in adolescent development in the U.S. and in other countries," said Hamilton, also director of the Cornell Youth and Work Program in Cornell's College of Human Ecology, the only university research-based youth apprenticeship program in the country.

This book, which is an international collaboration in every sense, discusses adolescent phenomena and research in other parts of the world and encourages scholars to reach beyond the United States in their own research," he said.

United Way of Tompkins County to celebrate 75th birthday with picnic

By Ann-Marie Tutton

This Saturday, June 29, the United Way of Tompkins County will celebrate its 75th birthday, representing 75 years of service to our community.

Since its beginning in 1921 as the Ithaca Community Chest, the United Way of Tompkins County has embodied the spirit of "People Helping People." Under the leadership of the first board president, Robert H. Treman, the 1921 campaign raised \$54,910 to support 15 agencies.

In 1995, the United Way raised \$1,395,000 (\$473,251 by the campaign at Cornell) to support 39 agencies and town councils. None of this could have been accomplished without the hard work and dedication of thousands of local volunteers, the support of the United Way member agencies, and the generous contribution of both individual and corporate donors. All these people have worked together over the years as a family to keep our United Way strong and successful in its mission of supporting local human services.

In honor of the United Way's 75th birthday, a communitywide picnic is planned for this Saturday at Stewart Park's large pavilion, from noon to 6 p.m.

Billy Bob Jack's Restaurant will be serving its famous barbecue from 2 to 4 p.m.

Tickets - \$7 for steak and rib dinner, \$5 for steak dinner - are available at all local banks and credit unions, including the Tompkins County Trust Co. branch at the Cornell Campus Store, the ticket center at the Clinton House, Billy Bob Jack's Restaurant and at the United Way, 313 N. Aurora St. In addition, young people at the picnic can enjoy hot dogs, cotton candy and popcorn available from the good folks at ServRite.

For those who prefer vegetarian food, Curry in a Hurry will be on hand, and Ben & Jerry's will be selling its unbeatable ice cream.

Entertainment throughout the afternoon includes performances by the Ithaca Concert Band, the Senior Citizens' Line Dancers, the Latin Tops Junior Dancers from GIAC and the band Thursday Knights, playing "oldies"

At 3 p.m., Bill Heffner, the 1996 president of the United Way Board, will cut a special anniversary cake, courtesy of Wegman's supermarket.

All afternoon there will be fun for young and the young at heart. Special activities will be provided by Bobby K Entertainment and staffed by volunteers from local companies. The Ithaca Journal is bringing its paper toss game, and there will be balloons and lots more.

I invite the entire community to join us at Stewart Park this Saturday. Come for the barbecue, come for the fun and games or come for the entertainment. But please come.

This is your celebration too, because without the support of our community, the United Way would not have been able to reach this milestone.

Tutton is assistant vice president of marketing for the Tompkins County Trust Co. and chair of the 1996 United Way Marketing and Communications Committee. A version of this column appeared in The Ithaca Journal.



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.

Cornell International Folkdancers

Open to the Cornell community and general public, all events are free unless noted otherwise. Beginners are welcome; no partners are necessary. For information, call Edilia at 387-6547 or Marguerite at 539-7335 or send e-mail to David at <dhr1@cornell.edu>.

 June 30: Salsa and Merengue will be taught by Denise Alvarez-Weilmeyen, 7-8 p.m., request dancing 8-9:45 p.m., Willard Straight Hall.

 July 7: Ragtime dances from the USA will be taught by Marguerite Frongillo, 7-8 p.m., request dancing 8-9:45 p.m., Willard Straight Hall.

Summer Session

John Rossbach and the Wood Shed Quartet will perform an evening of American square and contra dancing featuring John Rossbach on guitar and Mac Benford on banjo, with caller John Kirk. July 5, 7:30 p.m., Arts Quad. Rain location: Memorial Room, Willard Straight Hall. Free and open to

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.

· Brown Bag Lunch Tours: Thursday Noontime Gallery Talks: On June 27 docent Pauline Halpern will lead a tour of The Gertrude W. and David J. Tucker Collection of American Art, 1870-1930. On July 11 join docent Eva Hoffmann for a walking tour of the outdoor sculpture at the Johnson Museum and nearby on campus. Bring your own lunch; beverages will be provided.

· Sunday Afternoon Artbreaks Special: On June 30 from 2-4 p.m., participants will meet at the Cornell Plantations for a walking tour, "Plants in Nature, Plants in Art." The walk will follow the paths that lead around Beebe Lake to the Johnson Museum. Refreshments will be served at the Museum. The tour is free, and registration is limited to 20. Please call 255-6464 to register.

. "The Gertrude and David Tucker Collection of American Painting," through July 7.

* "Prints of Darkness: Images of Death," through

 "Methods and Media: 20th Century Sculpture From the Collection," through Aug. 11

. "Class of 1951 Prints," through Aug. 11.

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, 6/27

"Anne Frank Remembered" (1995), directed by Jon Blair 7:15 p.m.

"The Brothers McMullen" (1995), directed by Edward Burns, with Jack Mulcahy, Edward Burns and Mike McGlone, 9:45 p.m.

Friday, 6/28

"The Gold Rush" (1925), directed by Charles Chaplin, with Charles Chaplin and Mack Swain,

"Clueless" (1995), directed by Amy Heckerling, with Alicia Silverstone, Stacey Dash and Paul Rudd, 9:30 p.m.

Saturday, 6/29

"Anne Frank Remembered," 7:15 p.m. "The Brothers McMullen," 9:45 p.m.

Sunday, 6/30

'Clueless," 7:30 p.m.

Monday, 7/1

"The Palm Beach Story" (1942), directed by Preston Sturges, with Claudette Colbert, Joel McCrea and Mary Astor, 7:15 p.m.

"Clueless," 9:15 p.m.

Tuesday, 7/2

"Arizona Dream" (1992), directed by Emir Kusturica, with Johnny Depp, Faye Dunaway and Lili Taylor, 7 p.m.

Wednesday, 7/3

"Tristana" (1970), directed by Luis Bunuel, with Catherine Deneuve and Fernando de Rey, 7:15

"Arizona Dream," 9:30 p.m.

Thursday, 7/4

"Hate," 7:15 p.m. "Arizona Dream," 9:30 p.m.

Friday, 7/5

"Toy Story" (1996), directed by John Lasseter,

"Hate" (1996), directed by Mathieu Kassovitz, 9:30 p.m.

"Toy Story," 7:30 p.m.

"Blood Simple" (1983), directed by Joel Coen with John Getz and Frances McDormand, 9:30

Sunday, 7/7

"Toy Story," 7:30 p.m.

"Until the End of the World" (1991), directed by Wirn Wenders, with Solveig Dommartin, William Hurt and Sam Neill, 7 p.m.

"Blood Simple," 10:15 p.m.

Tuesday, 7/9

"Chungking Express" (1994), directed by Wong Kar-wai, with Brigitte Lin Ching-hsia and Tony Leung, 7:15 p.m.

"Until the End of the World," 9:30 p.m.

Wednesday, 7/10

"Mississippi Mermaid" (1970), directed by Francois Truffaut, with Catherine Deneuve and Jean-Paul Belmondo, 7 p.m.

'Chungking Express," 9:30 p.m.

Thursday, 7/11

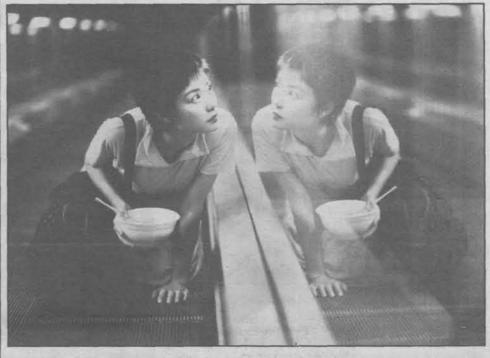
"Chungking Express," 7 p.m.

"Braveheart" (1995), directed by Mel Gibson, with Mel Gibson and Sophie Marceau, 9:15 p.m.

· July 26 closing: The Graduate School offices in Caldwell Hall will be closed on Friday, July 26, at noon for a staff retreat.

· August degrees: Aug. 23 is the deadline for completing all requirements for an August degree, including submitting the thesis/dissertation to the Graduate School.

· Publications on the Web: Several publications of the Graduate School are on the World Wide Web. These include application information, the Graduate School Catalog with a complete



Faye Wang appears in Wong Kar-Wai's "Chungking Express," a romantic comedy set in contemporary Hong Kong that tells two stories of young policemen trying to get over bad relationships and having crazy encounters with other women. The film will screen at Cornell Cinema July 9, 10 and 11.

description of the fields with the 1,600 faculty members and their research, the Guide to Graduate Study, the fellowship notebook, the booklet explaining the thesis/dissertation production process, and this weekly announcements column. Prospective applicants can request an application packet. The Graduate School's Web address is http://www.gradschool.comell.edu>.

Summer Session

"Founding Father: Rediscovering George Washington," Richard Brookhiser, author and senior editor of the National Review, July 10, 7:45 p.m., David L. Call Alumni Auditorium, Kennedy



Summer Session

All Summer Session events are free and open to the public

 June 28, 7:30 p.m., Arts Quad: Groovelily Band, high-energy dance band features Valerie Vigoda on electric violin and vocals. Rain location: David L. Call Alumni Auditorium, Kennedy Hall.

· July 2, 7:30 p.m., Proscenium Theatre, Center for Theatre Arts: The Steve Brown Jazz Quartet performs pieces from the new release, "Night Wave." 7:30 p.m.

 July 3, 7:30 p.m., Arts Quad: Cast in Bronze Mobile Carillon. Master carillonneur Frank DellaPenna plays 35 cast-bronze bells accompanied by keyboard, drums and bass guitar in an Independence Day celebration. The Cornell McGraw Tower chimes will join in for an antiphonal concert. Cancelled if heavy rain.

· July 8 and 11, 7:30 p.m., Proscenium Theatre, Center for Theatre Arts: Join John Hsu as he conducts the Apollo Ensemble in two performances of Haydn's symphonies.

Cornell Savoyards

'The Merry and Her Men," an entirely recycled comic operetta featuring Fred Ahl, Dan and Robin Booth, Judith Holliday, Scott Miller, Kristen Park and George Preston, will be performed June 29 at 8 p.m. in Barnes Auditorium. Admission is \$4 at the door. For information call 539-6063.



Sage Chapel

Sundays at 11 a.m. when the university is in session. Addresses by guest representatives of all faiths. University organist is William Cowdery.

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.

Weekend Masses: Saturday, 5 p.m. (As of July 1, the Saturday Mass will be eliminated); Sunday, 10 a.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

Sundays, 10:30 a.m., First Church of Christ Scientist, University Avenue at Cascadilla Park.

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.

Saturday Services: Orthodox: 9 a.m., Edwards Room, Anabel Taylor Hall.

Korean Church

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

Sundays, 9:30 a.m., and Thursdays, 7 p.m., St. Luke Lutheran Church, Oak Ave. at College Ave.

Room, Anabel Taylor Hall. Daily Zuhr, Asr, Maghreb

Friday Juma' prayer, 1:15 p.m., One World

and Isha' prayers at 218 Anabel Taylor Hall.

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



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 for a discussion meeting on Sundays at 7:30 p.m. and a step meeting on Tuesdays at 8 p.m. at the St. Luke Lutheran Church, 109 Oak Ave., Collegetown. For more information call 387-0587.

Health Education

Lunch-time Meditation: Guidance in diverse approaches including some gentle movement. Wednesdays through July 10, 12:15-1 p.m., Founder's Room, Anabel Taylor Hall.