



## Winter Sun Shines on Barnes Hall



## Manure to Methane Facility Designed

A full-scale demonstration facility designed to produce methane from cow manure has been developed by Cornell researchers, who say the process also removes 90 percent of the odor from the waste material being treated.

This raises hope that farmers may be able to produce on their own farms a much-needed fuel using cow waste as a renewable source of energy. Simultaneously, it will reduce the pollution potential of the waste which, after yielding methane, retains nutrients useful for crop production.

Methane, like natural gas, is a clean-burning fuel. In fact, natural gas is 99 percent methane. A typical waste-generated gas consists of 60 percent methane and about 40 percent carbon dioxide along with traces of other gases.

Such a mixture of gases, called biogas, has many potential

uses. It can be used to heat farm homes and buildings, produce hot water for milking equipment, cool milk, dry crops, run power generators, and fuel mobile units within a confined area.

"We are now testing a waste digester with the potential of producing a fuel that can be used as a substitute for natural gas at a cost competitive with conventional fuels," says William J. Jewell, agricultural engineer at the State College of Agriculture and Life Sciences.

The system was developed by a team of researchers led by Jewell, climaxing five years of research evaluating the technical, economic and practical feasibility of this technology for dairy farms and beef feedlots. In full operation since early this fall, the facility is located at the college's Animal Science Teaching and Research Center at Harford.

The demonstration unit consists of a large trench, 5 feet deep and 40 feet long, covered with a rubber-like material. The flexible cover balloons above ground as methane, generated from the manure in the trench, increases and fills it. The 55-foot-long balloon looks like a stranded whale on a beach.

This trench-type digester holds and processes 40 tons of manure in a continuous operation. All the daily manure from 65 cows, amounting to four tons (about 8,000 pounds), goes into the digester by gravity at one end of the trench, and about the same amount of processed waste flows out the other end.

Describing the digester as simple, inexpensive and efficient in design, construction and operation, Jewell says the system is designed to operate automatically with little maintenance or labor. At today's prices, the equipment and materials would cost less than \$10,000. The installation costs are additional.

The Cornell digester now produces about 2,000 cubic feet of methane a day. That's about \$6 worth of energy based on the current price of propane gas, or about \$2,200 worth of fuel a year, Jewell notes. Part of the gas, however, is used to keep the digester operating at a 95-degree temperature, a critical part of the system because methane-forming bacteria in the waste thrive at this temperature in the absence of oxygen.

This bacterial process, called anaerobic digestion or anaerobic fermentation, stops when the digester cools down to 50 degrees F. Right now, about 30 percent of the gas being generated is used to keep the digester warm and working, and more gas

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## Colleges Costs, Income Analysis Is Released

Provost W. Keith Kennedy has released a special analysis, prepared by the University Controller, of the costs and income associated with each of Cornell's colleges, research centers, and public service programs.

In describing the figures, colloquially known as a Responsibility Center Analysis (RCA), Kennedy said, "The responsibility center figures provide a useful analytic tool but are not the basis for budget decisions and the unrecovered costs shown by the various units are not deficits. As an academic institution we expect to use gifts and endowment income to help meet program costs."

The Responsibility Center Analysis has been performed annually since 1973-4. Because the system has been under development during this period, results have not been previously released.

In preparing the analysis, all support costs are prorated to the

primary academic units and all income (other than unrestricted gifts and investment income) is attributed to these units. Unrestricted gift and investment income provide the resources for meeting the difference between income and expense of those units whose income is insufficient to meet all expenses.

Controller John S. Ostrom, who has taken the lead in developing the analysis and in working with the colleges' offices to determine the manner in which costs and income are best assigned, stated "Though cost accounting remains more art than science, the RCA provides a considered representation of the income and costs of each of the University's major units. Work is continuing to refine the figures and strengthen the concepts on which the analysis is based."

Details of the Responsibility Center Analysis and the concepts underlying its preparation will be provided in a future Chronicle.

## Hiring Minorities and Women Tops Goals

An analysis of 1977-78 academic appointments of minorities and women at Cornell University in comparison to goals has recently been completed and reveals that goals in both areas were surpassed by substantial margins.

The goal for minority appointments last year was seven and 22.3 appointments were made, according to W. Donald Cooke, vice president for research. For women, the goal was 50 and 68 appointments were made.

(The fractional .3 appointment figure occurs because not all appointments are full time for a full year, Cooke explained. For example, an individual on a half-time appointment for one term is 0.25 on a full-time equivalent basis.)

Overall in all units, the minority goals and FTE appointments broke down this way—professorial: goal - 5, appointments - 8; instructors: goal - 0, appointments - 2.3; lecturers: goal - 0, appointments - 4.3; research associates: goal - 0, appointments - 5.2; extension associates: goal - 1, appointments - 0.5; librarians: goal 1, appointments - 2.

The female goals and FTE appointment statistics were as follows—professorial: goal - 18, appointments - 14; instructors: goal - 0, appointments - 3.3; lecturers: goal - 8, appointments - 18.2; research associates: goal - 5, appointments - 11; extension associates: goal - 7,

appointments - 13; librarians: goal - 12, appointments - 8.3.

Cornell was somewhat more successful in 1976-77, Cooke said. That year, the goal for minorities was eight and 33.2 FTE appointments were made. For women, the goal was 50 and 80.1 appointments were made.

In 1977-78, in 18 of 22 audited academic ranks the goal for minority appointments was exceeded and in one other it was equaled, Cooke said. In three cases, goals for minority individuals were not attained.

"However, in all cases the goals and the number of appointees was small," Cooke observed.

He explained that the 18 affirmative action units established 56 individual "goals" for the various academic ranks. "With 34 of these goals, auditing was eliminated because the expected number of appointments was so low that a zero goal resulted and no minority individuals were appointed," he said.

For appointments of women, 56 "goals" were established also. Only 15 of these were eliminated for auditing because of the low number of expected appointments, the ensuing zero goals and the fact that no female was appointed.

Of the remaining 41 situations, goals were exceeded in 27 cases and equaled in seven.

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## Rhodes: Lack of Guideline Delays Budget Planning

Cornell's efforts to develop the 1979-80 budget, including the decision on how much tuition will increase, are being delayed because the federal government has not clarified how its wage and price guidelines will be applied to academic institutions, according to President Frank Rhodes.

The guidelines also have raised questions about whether the 22 percent tuition increase for the Medical College, approved by the board at its October meeting, should be allowed to stand, Rhodes said.

Speaking at his monthly news conference on Nov. 17, Rhodes said the administration hoped to present a preliminary budget to the Board of Trustees at its mid-January meeting.

The administration has completed a survey of academic costs at peer institutions, which has been circulated among the college deans and which will be used in determining how budget reductions will be made.

The Deans' Council, the Priorities Committee of the Campus Council and the Budget Committee of the Faculty Council of Representatives all have been involved in budget considerations, Rhodes added, and the administration hopes to present the preliminary budget to the FCR Budget Committee before taking it before the trustees.

In other matters, Rhodes said the administration will seek authorization from the Trustee Executive Committee at its Dec. 12 meeting to hire an architect for the new \$14.2 million biology building planned for Lower Alumni Field. The building, which will house the Sections of Neurobiology and Behavior and Ecology and Systematics (now located at Langmuir Laboratory), is a "number one priority," he added.

He said he is on record as favoring a mid-semester break in the fall term and hoped that those involved in calendar formulation would "look creatively" for a way to work it in.

Cornell discussions with the State University of New York concerning the University's responsibilities for the administration of the statutory units are going well, he said, but any changes may require legislation rather than simply a memorandum of understanding between SUNY and Cornell as originally envisioned.

As the cold weather approaches, Rhodes said, energy conservation will assume greater importance on campus. Novel sources of energy such as reactivating the electric plant in Fall Creek Gorge or burning wood to supplement oil and coal are being investigated, he added.

### Publication Schedule

Next week's Chronicle (Dec. 7) will be the final issue of the fall semester. Publication is scheduled to resume Thursday, Jan. 18.

# Summer Session Seeks New Dean

Provost W. Keith Kennedy has asked that nominations for a new dean of the Summer and Extramural Division be submitted to him by Dec. 18.

The new dean will replace Martin Sampson, who plans to relinquish his administrative

duties at the end of the 1979 summer session.

The dean is the chief academic and administrative officer of the summer and extramural division. The programs administered by this division will include Summer Session, as well as Cornell Alum-

ni University, continuing education and non-degree programs, and the Conference Office.

"Nominees or applicants should hold a tenured or non-tenured professorial position at Cornell and should be capable of providing the leadership necessary to ensure appropriate academic quality and growth of the division's programs and to ensure that the division remains self-supporting," according to Don Randel, vice provost, who will be working with Kennedy and others in the selection of the new dean.

"The dean will be responsible for planning, together with the college deans and others, the academic programs of the division and for ensuring that they form a coherent part of the University's academic program as a whole. The dean will coordinate the use of facilities and make necessary arrangements for housing, dining, budgeting and evaluation. The appointment will be full-time for a three-year renewable term," according to Randel.

"The new dean should begin to work with Dean Sampson at least through the summer of 1979 so as to gain the benefit of his valuable experience," he said.

A 1939 graduate of Cornell, Sampson joined the faculty in 1941. He earned a master of science degree in engineering at Cornell in 1945. In July 1968 he was named director of Summer Session and Extramural Courses and became dean in December 1970.

# Gurowitz Explains Policy On Holiday Decorations

With the approach of the holiday season, William D. Gurowitz, vice president for campus affairs, has reminded the campus community of the policy governing holiday decorations.

University Senate legislation, which continues in effect, states that Cornell cannot sponsor or provide direct support for the display of religious symbols, Gurowitz said, although groups seeking to sponsor displays using religious symbols have access to campus display areas, subject to regular procedures.

Display areas normally available to all campus groups are available for the display of religious symbols. Senate legislation defines display areas as areas traditionally used for dis-

play by private groups and not areas where only University departments have been permitted to display materials, he said.

Any area which gives the impression that a symbol is associated with the University should not be used for the purpose of display. Individuals are not prohibited from having private displays in their own offices or living quarters.

Stars displayed at Christmas time are considered religious symbols, according to the legislation. Decorated trees, however, are not considered religious symbols unless the decorations include such religious symbols as stars.

"The legislation requires that any decisions concerning application of the guidelines be made by my office," said Gurowitz. Any related questions should be addressed to his office, 313 Day Hall.

Gurowitz also requested, in conjunction with Cornell's energy conservation program, that permissible decorations be nonelectrical.

# Workshop Set on Soil Inventories

Thirty-five planners, soil scientists and others from the United States and overseas will attend a workshop at Cornell University December 11-15 to discuss the role of soil inventories in international development.

President Frank H.T. Rhodes and David L. Call, dean of the New York State College of Agriculture and Life Sciences, will open the session at 9 a.m. in Statler Hall on Dec. 11. The Soil Resource Inventories Research Group in the Department of Agronomy is sponsoring the workshop.

Participants will present papers on the use of soil surveys and maps, land-use maps, and resource inventories and their adequacy in meeting the needs of planners in the agricultural development of countries around the world.

# Methane Facility Tested

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might be needed in winter months. Since the digester is purposely set up outdoors without a shelter — an item requiring additional investment — gas consumption is likely to go as high as 40 to 45 percent.

"This is one of the unknown factors we want to find out this winter," Jewell says. "Even if the digester uses a large proportion of the gas, the net amount of usable energy will be more than enough to meet the needs for arm residences and for some of

the critical farm operations. A farmer would end up having \$1,000 to \$1,500 worth of net energy a year."

The designs now being tested are in the development stage, Jewell points out, and therefore no working plans for the system will be available to farmers until current experiments are completed at the end of next summer. When the final blueprint is drawn, the digester could be installed with no special skill on the part of the farmer. Says Jewell: "It will be more like a do-it-yourself job."

# Academic Appointments Surpass Goals

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in seven other cases, goals were not attained.

In minority appointments, the two most successful situations were instructors at the Africana Studies and Research Center, where the goal was zero and 2.33 FTE appointments were made, and lecturers in humanities in the College of Arts and Sciences, where the goal was zero and three FTE appointments were made.

The cases where minority goals were not attained were professorial appointments in the humanities, extension associates in cooperative extension and professorial appointments in engineering. All had goals of one appointment and none were made.

The two most successful situations in female appointments were instructors in architecture, where the goal was zero and two FTE appointments were made, and research associates in agricultural sciences, where the goal was two and 3.75 FTE appointments were made.

tained in professorial appointments in social sciences in agriculture, professorial appointments in business and public administration, instructors in human ecology and professorial appointments in veterinary medicine, all of which had goals of one female appointment and none were made; research associates in physical sciences in the Arts College, which had a

goal of one and 0.25 FTE appointments were made; professorial appointments in social sciences in the Arts College, with a goal of two and one appointment made; extension associates in cooperative extension, where six was the goal and three appointments were made, and libraries, which had a goal of 12 librarians and made 8.3 FTE appointments.

# Actual Appointments Compared to Established Goals

	Female Appointments				
	Estimated No. Appts. (1)	Goals	Actual No. Appts.	Corrected Goals (2)	No. Females Appointed
Professorial	180	31	183.3	28	30
Instructors	33.5	3	26	1	3.8
Lecturers	90.3	24	61.7	20	33
Research Assoc.	145	14	126.9	11	21.8
Extension Assoc.	45	14	60.5	19	24.4
Librarians	21	16	28.5	21	16.5
	515	102	487	100	129

	Minority Appointments				
	Estimated No. Appts. (1)	Goals	Actual No. Appts.	Corrected No. Minorities	Appointed
Professorial	180	8	183.3	6	15
Instructors	33.5	1	26	0	3.1
Lecturers	90.3	4	61.7	1	10.6
Research Assoc.	145	3	126.9	2	18
Extension Assoc.	45	3	60.5	4	2.5
Librarians	21	2	28.5	2	3
	515	21	487	15	52

(1) All positions and appointments based on Full Time Equivalents on an annual basis. For example if an individual was appointed on a half-time basis for one term, the appointment would be 0.25 FTE.

(2) In setting goals, deans would estimate the number of appointments to be made for the following year. In many cases these numbers were different than the actual number of appointments. The corrected goals compensate for such errors.

# Job Opportunities

The following are regular continuing full-time positions unless otherwise specified. Please do not inquire at individual departments. An equal opportunity employer. Individuals on lay-off status will be given preference in referrals.

(\* ) indicates new this week.

## CLERICAL POSITIONS

- Admin. Aide, A-18T (Maint. & Svc. Ops.)
- Admin. Aide, A-18 (Univ. Counsel & Secy of the Corp.)
- Admin. Clerk, A-16 (Sponsored Programs)
- Admin. Secy., A-15 (Business & Public Adm.)
- Admin. Secy., A-15 (Neurobiology & Behavior)
- Head Account Clerk, A-15 (Purchasing)
- Admin. Secy., A-15T (University Development)
- Admin. Secy., A-15 (Personnel)
- Admin. Secy., A-15T (Chemical Engineering)
- \* Admin. Secy., A-15 (National Astronomy & Ionosphere Ctr.)
- \* Admin. Secy., A-15 (Mech. & Aero. Engineering)
- Principal Clerk, A-14T (Design & Project Mgmt.)
- Principal Clerk, A-14 (A&S Admissions)
- Dept. Secy., A-13 (Engineering Dean's Office)
- Dept. Secy., A-13 (Univ. Development)
- \* Dept. Secy., A-13 (Business & Public Adm.)
- \* Dept. Secy., A-13 (University Development)
- Corres. Secy. I, A-13T (University Development)
- Library Asst. II, A-12 (U.Libraries, Physical Sciences)
- \* Clerk, A-9 (Public Affairs Records)
- \* Acct. Clerk III, NP-12 (Vegetable Crops)
- Stat. Clerk IV, NP-10 (Physical Biology)
- Admin. Secy., NP-8 (Dean's Office, Ag.)
- Records Clerk III, NP-8 (Diag. Lab, Equine Drug Test.)
- Stat. Typist, NP-7 (Coop. Ext. Admin., Ext. Field Office)
- \* Steno II, NP-6 (NYSSILR)
- Steno II, NP-6 (Div. of Nutritional Sciences)
- Steno II, NP-6 (Agronomy)
- Steno I, NP-5 (Ag. Economics)

## SERVICE & MAINTENANCE POSITIONS

- Control Mechanic (Maint. & Svc. Ops., Union)
- Refrigeration Mechanic (Maint. & Svc. Ops., Union)
- \* Carpenter (Maint. & Svc. Ops.)
- Sr. Exp. Mach., A-21 (LASSP)
- Asst. Manager II, A-20 (Graphic Arts Services)
- Experimental Machinist, A-19 (Lab Nuclear Studies)
- \* Copy Prep. Specialist, A-15 (Graphic Arts Services)
- Short Order Cook I, A-14 (Dining Services)
- Custodian, A-1.3 (Bldgs. & Grounds)(3)
- \* Dishmachine Op., A-13 (Statler Inn)
- Kennel Worker I, NP-5 (DCS - Animsl Care)

## TECHNICAL POSITIONS

- Sr. Product Controller, A-21 (Computer Services)
- Sr. Computer Operator, A-21 (Computer Services)
- Programmer I, A-19 (Computer Services)
- Computer Operator II, A-19 (Computer Services)
- Synch. Op. Tech., A-19 (Lab Nuclear Studies)
- Sr. Tech. Aide, A-19 (Computer Services)
- Lab Tech, A-19 (Materials Science Center)
- Sr. Lab Tech, A-18 (Neurobiology & Behavior)
- Sr. Lab Tech., A-18 (Biochem., Mol. & Cell Biology)
- Computer Operator I, A-17 (Computer Services)
- Tech. Aide II, NP-11 (Biomedical Communications)
- Lab Tech. II, NP-11 (Vet Microbiology, Baker Inst.)
- Lab Tech. II, NP-11 (Plant Pathology)
- \* Lab Tech. I, NP-8 (Avian & Aquatic Animal Medicine)
- Lab Tech. I, NP-8 (DCS-Mastitis Control, Kingston Lab)
- Res. Tech. I, NP-8 (Plant Pathology)
- Lab Tech. I, NP-8 (Div. of Nutritional Sciences)
- Sr. Arch. Engr. II, CPO7 (Design & Project Mgmt.)
- Sr. Res. Supp. Spec., CPO6 (Elect. Engineering)
- Comp. Tech. Admin. III, CPO6 (Computer Services)
- Sr. Comp. Staff Spec., CPO6 (Computer Services)
- Comp. Tech. Admin. II, CPO5 (Computer Services)
- Life Safety Svc. Mgr., CPO5 (Life Safety Svcs. & Ins.)
- Res. Supp. Spec. III, CPO5 (Elec. Engineering)
- Elec. Engineer II, CPO5 (Design & Project Mgmt.)
- Applications Programmer II, CPO4 (Computer Graphics)
- Res. Supp. Spec. II, CPO4 (Mat'l Science & Engr.)
- Comp. Tech. Admin. I, CPO4 (Computer Services)
- Res. Supp. Spec. I, CPO3 (Div. of Nutritional Sciences)
- Appl. Programmer I, CPO3 (Vet Computer Resource)
- Res. Supp. Spec. I, CPO3 (Agronomy)
- Res. Supp. Spec. I, CPO3 (Animal Science)
- Res. Supp. Spec. I, CPO3 (Natural Resources)
- Res. Supp. Spec. I, CPO3 (Programmer)(Mat'l Science Ctr.)
- Appl. Programmer I, CPO3 (Computer Services)(3)
- Admin. Spvr., CPO3 (Media Services)
- Res. Supp. Spec. I, CPO3 (Food Science & Tech., Geneva)
- Curatorial Asst., CPO2 (Lab of Ornithology)

## ADMINISTRATIVE POSITIONS

- Editor (University Press)
- Promotion Manager (University Press)
- Asst. University Counsel (University Counsel)
- Director of Utilities (Utilities)
- Exec. Staff Asst. IV, CPO8 (V.P., Finance & Planning)
- Sr. Administrator I, CPO7 (Media Services)
- Develop. Officer II, CPO6 (University Development)(2)
- Assoc. Administrator, CPO6 (Media Services)
- Admin. Manager II, CPO5 (Utilities)
- Admin. Manager II, CPO5 (Cornell Plantations)
- Dining Manager II, CPO5 (Dining Services)
- Budget Analyst III, CPO5 (Finance & Business)
- College Registrar, CPO4 (Hotel Administration)
- Editor II, CPO4 (Media Services)
- \* Admin. Manager I, CPO4 (STS Program)
- Dining Manager I, CPO4 (Dining Services)
- Regional Director I, CPO4 (Public Affairs, NYC)
- Admin. Spvr. II, CPO3 (Coop. Extension Admin.)
- Accountant I, CPO2 (Accounting - Endowed)
- \* Dining Spvr., CPO2 (Food Science)
- \* Dining Spvr., CPO2 (Dining Services)
- Dining Spvr., CPO2 (Dining Services)(3)
- Dining Spvr., CPO2 (Statler Inn)
- Res. Admin. I, CPO2 (Res. Life & Int'l Student Aff.)
- Admin. Spvr. I, CPO1 (Publications, Geneva)

## PART-TIME AND-OR TEMPORARY POSITIONS

- Temp. Svc. Clerical (Admissions Office, temp. ft)
- Temp. Svc. Clerical (Hum. Dev. & Fam. Studies, temp. ft)

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## Everhart Recommended For Engineering Deanship

The appointment of Thomas E. Everhart as the new dean of the College of Engineering at Cornell University will be recommended to the Executive Committee of the University's Board of Trustees on Dec. 12, Cornell President Frank Rhodes has announced.

Everhart is chairman of the Department of Electrical Engineering and Computer Sciences at the University of California in Berkeley. He will succeed Acting Dean Andrew Schultz Jr., who has held the position at Cornell since former Dean Edmund T. Cranch left earlier in the year to become president of Worcester Polytechnic Institute in Worcester, Mass.

Rhodes said that if trustees approve, the Everhart appointment will be effective Jan. 1, 1979.

"Thomas Everhart brings to his new position a great variety of experience in both physics and engineering, including an impressive list of research activities," Rhodes said. "He has had experience as a visiting professor in three other countries and has served as a technical consultant to some of the nation's leading corporations. He combines this with an outstand-

ing administrative record. We are sure he will be a great asset to Cornell."

Everhart, who is 46, has been on the faculty at Berkeley since 1958. He received a bachelor's degree in physics from Harvard College in 1953, and a master's degree in applied physics from the University of California at Los Angeles in 1955. He was a Marshall Scholar at Cambridge University in England from 1955 until 1958 when he received a doctorate in engineering from Cambridge.

He has worked extensively in industry both on leave and as a consultant on the development of microwave electron tubes, on electron beams as applied to semiconductor analysis and fabrication, on the application of electron beams to semiconductor analysis and on problems of electron optics and electron physics.

Much of this work has been done at the Westinghouse Research Laboratories, Ampex Research and Development Laboratories, Hughes Research Laboratories and Watkins-Johnson Company.

Among his numerous fellowships and honors is a John Simon Guggenheim Memorial Fellowship for 1974-75.

## Rhodes Elected to Board Of Carnegie Foundation

President Frank Rhodes has been elected to the Board of Trustees of the Carnegie Foundation for the Advancement of Teaching, it was announced in New York City last week by Allen Pifer, foundation president.

Rhodes is one of five new trustees. The others are William R. Dill, dean of the graduate school of business administration at New York University; Mary Patterson McPherson, president of Bryn Mawr College; Robert O'Neil, vice president of Indiana University, and Adele Simmons, president of Hampshire College.

The Carnegie Foundation for the Advancement of Teaching was established by Andrew Carnegie in 1905 to provide pensions for retired college teachers and to conduct studies in the field of higher education. The principal activity of the foundation is the operation of the Carnegie Council on Policy Studies in Higher Education.

In addition to the election of new trustees, the foundation announced several other changes.

Retiring from the board are John Kemeny, president of Dartmouth College; Sister Candida Lund, president of Rosary College; Joseph Platt, president of Claremont University Center; Pauline Tompkins, former president of Cedar Crest College, and Sidney J. Weinberg Jr., partner in Goldman Sachs and Co.

In addition, Robben W. Fleming, president elect of the Corporation for Public Broadcasting, and Elias Blake Jr., president of Clark College, were elected chairman and vice chairman of the foundation.

## Financial Aid Forms Available

Applications for need-based financial aid for students for fall 1979 and spring 1980 will be available on Dec. 15 at the Office of Financial Aid, 203 Day Hall, according to Robert Walling, director.

The applications are to be used by continuing undergraduates, professional master's candidates (except master of engineering), law school students and graduate students. The deadline for filing is March 1, 1979 for all but graduate students, whose due date is April 16, 1979.

It will not be possible to request an extension of the due date, Walling said.

Award announcements are normally sent to the student's home address in mid-June or early July. Late applicants may receive later notification as well as possible denial of aid or larger loan or job values, according to Walling.

A separate application is required to apply for financial aid for the 1979 Summer Session at Cornell. The summer application will be available at the financial aid office on Dec. 15 and is due to be returned by March 1, 1979.

Profile

## Eck's Axis Aligns with God

Orbiting the sun at a distance of approximately nine light-minutes, the planet Earth's axis is aligned with the star Polaris. You can find it easily. It is the little, blue pearl in a string of nine. On the side of Earth which faces Polaris, there is a nation featuring 50 states and in one of these states known as New York, there is a great university named Cornell. And among the schools which serve this university there is the Center for Radiophysics and Space Research, which is in turn served by a staff of renowned professors who are further served by a supporting staff of many and diverse talents. One of these talents is photography and there, on the third floor of the Space Science building, is Herman J. Eckleemann. He is easy to find, his axis is aligned with God.

A soft-spoken, heavyset man of kind and gentle countenance, "Eck" speaks many languages. He speaks "Electronics," having received his E.E. degree from Cornell in 1949. He speaks "Photography," for that is his adopted profession, and he speaks "Christianity," for he is also a graduate seminary trained and an ordained minister, the founding pastor of The Faith Bible Church at 429 Mitchell Street where on Sundays a full house has come to hear him. This is his chosen language and it flows from his lips in a music that makes his eyes dance like firelight. It was in this language that Eck co-authored a book, *Genesis One and the Origin of the Earth*, with Robert C. Newman. It was published in 1977.

In electronics he holds a patent on a solid state circuit design and his knowledge in this field has been useful in making the transition to scientific photography. It began in 1957 when Eck first started doing photographic "favors" for the Space Science Department where he had been employed by Cornell as a Research Associate. That was when the Space Science Department was still in Phillips Hall. By the time the Space Science building was built in back of Rockefeller Hall, Eck was doing photography full time. In this capacity he processes color, makes all the slides for lectures within the department, does "custom" printing in black and white as well as color, photographs all the students in Space Science, and reproduces photographs made by scientists from all over the world.

Long exposures made through some of the largest telescopes on earth sometimes reach Eck's lab. For example, the largest of these might be a 14 inch by 14 inch glass plate which had been exposed as long as seventy hours through a giant telescope. These plates, as well as everything else



Herman Eckleemann

in his lab, are given the delicate treatment they deserve

Around the campus he often uses one of the three versatile Exakta cameras which he has been able to save from oblivion. These were manufactured before 1945 and offer features not found today in even the most modern cameras. In addition to the Exaktas, there is a Nikon F and 3 lenses, a Konica and 5 lenses, a Speed Graphic and a Crown Graphic with assorted lighting and copying equipment

With all the facets of Herman Eckleemann's life, perhaps the brightest of all are his wife, Emily, and their five children, Ruth Ann, John Mark, Paul Frederick, Samuel David, and Daniel. They help him keep his feet on the ground while his head is in the University.

Russ Hamilton

## Parking Restricted During Off-Hours

The Office of Transportation Services and the Committee on Transportation Services wish to remind community members that parking restrictions are in effect on several campus lots during evenings and weekends. These restrictions have been posted to help accommodate the needs of various University units, employees and handicapped individuals who work and/or use campus facilities during the eve-

ning and need convenient and accessible parking in various campus locations.

Those lots restricted for use by U permit holders from 7 a.m. to 10 p.m. daily (Monday through Sunday) are Lincoln, Morrill, Baker Courtyard, Statler and one bay each at Fernow and Newman-Savage. The lot between Ives and Barton Hall is restricted Monday through Fri-

day only from 7 a.m. to 10 p.m. The southwest Barton lot is restricted to Statler permits daily 5 p.m. to 10 p.m.

Holders of U permits, Night U permits, floating and temporary U permits are encouraged to park in these restricted lots. This will make parking available for other community members seeking scarce interior campus parking.

Community members who have special evening parking needs are reminded to inquire at the Traffic Bureau concerning parking to suit their individual needs. The Special Request Appeals Board, a student, faculty and staff board of the Campus Council Committee on Transportation Services, handles all special parking requests that require a variance from existing regulations.

## Gold Named Visiting Scholar

Thomas Gold, director of the Center for Radiophysics and Space Research and the Wetherill Professor of Astronomy, has been appointed a Phi Beta Kappa Visiting Scholar for 1978-79. Gold originated, with others, the steady-state theory of cosmology and has been a pioneer in research on pulsars.

As a participant in the Visiting Scholar Program, Gold will travel to six colleges and universities where he will meet with students and faculty and present public

lectures. His lectures will cover such topics as: pulsars and the evidence for very dense matter; the Moon; Mars; the race towards gravitational collapse.

The Phi Beta Kappa Visiting Scholar Program was begun in 1956 to enable undergraduates to meet and talk with established scholars in diverse disciplines.

## Water Research Funds Available

Gilbert Levine, director of the Center for Environmental Re-

search, has announced research support from the Office of Water Research and Technology, USDI Annual Allotment Program for fiscal year 1980, starting Oct. 1, 1979. Preproposals are requested by Jan. 2, 1979, in the areas of pollution in surface and ground waters, protection of water quality against pollution, water resources planning and management, and water conservation. Further information may be obtained by calling 6-7535.

## Winter Parking Regulations

Parking on main roads and in campus parking lots is prohibited from 3 to 6 a.m. effective Dec. 1 to April 1, to allow the Department of Buildings and Grounds Care to clear the campus in the event of snow. Dormitory lots and the Research Park airport parking bay are the only areas exempt from the restrictions.

Cornell employees, students and users of State fleet vehicles who must park on campus overnight must request permission in advance from the Department of Public Safety.

Violators will be subject to ticketing and towing at the owner's expense.

CORNELL CHRONICLE

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*Chronicle Comment is a forum of opinion for the Cornell community. Address comments to Elizabeth Helmer, Managing Editor, Chronicle, 110 Day Hall. Letters submitted for publication must be typed, double space, no more than 600 words in length. The Chronicle must adhere to this limit because of space and financial restrictions. The deadline is Monday noon. Letters addressed to someone other than the editor, personal attacks against individuals or unsigned letters will not be printed.*

## Responsibility in Investment Asked

*Editor:*

The following resolution was unanimously adopted by the Centre for Religion, Ethics and Social Policy (CRESP) Board of Directors at their meeting on Nov. 8.

Whereas the Committee on Investment of the Cornell Board of Trustees has deliberated for some months and will be making recommendations to the Board in early December; and whereas the Centre for Religion, Ethics and Social Policy has sponsored the Cornell Corporate Responsibility Project for a year and one-half and has found its research to be, not only objective and thorough, but supportive of the case for divestment; the Board of Directors of CRESP urges Cornell University to divest itself of its holdings in corporations that do business in South Africa.

Cornell is in an excellent position to turn the divestment question into a positive opportunity which will have a beneficial impact on the whole of the University. A decision to divest would make Cornell a leader in the movement towards responsibility in investments. In regards to the case for divestment, we concur with the statement that Prof. Michael Latham has made on this subject. Support of any kind for as illegitimate and repressive a government as South Africa is morally intolerable. The University is not and can not maintain "moral neutrality" on this question. Investments, as capital and money, encourage economic processes and developments. All investments are a statement, a position that encourages or discourages certain kinds of economic (and political) phenomena. Despite the assertions that corporations are a positive force for change in South Africa, we feel that the evidence indicates that real change (rather than temporary "accommodations") can never take place in this way, and that corporate investments overall strengthen the white controlled government and economy of South Africa. Black leaders of South Africa, such as Steven Biko, who have opposed this oppressive regime, have consistently favored divestment. The aspirations and basic rights of nineteen million South Africans should not and cannot be denied indefinitely. This situation makes any investment in South Africa a dubious proposition.

Furthermore, the question of divestment from South Africa must be placed in a larger context of the University's investments as a whole. This is a difficult decision, and the Board of CRESP is clearly not advocating action which we believe might be financially devastating for the University.

Reinvestments must be considered simultaneously with divestment. There is a concern voiced in other quarters of the University about the general profitability of the University's investment portfolio. This re-evaluation of profitability should be joined with a movement toward divestment in order to seek a new and responsible set of investments that all members of the Cornell

community can affirm. We would like to suggest a fund be established specifically to solicit alumni and other contributions to defray the costs associated with divestment-reinvestment (brokerage costs, reinvestment research, etc.). The creation of such a fund would be a powerful and visible statement of Cornell's commitment to a moral investment policy. We believe that this challenge would be met by the alumni and other concerned friends of Cornell. In this context, we note as an example the new community and worker-owned steel mill that may be opening in Youngstown, Ohio. In addition to its community-based form of ownership, this plant (Youngstown Sheet and Tube) will meet all the EPA standards and will not accept Defense Department contracts. Closer to home, some reinvestment might take place here in Ithaca, in particular this capital would be vital towards the economic viability of the area, and of particular help to enterprises in the minority community. For Cornell to reinvest in enterprises such as this would be a dramatic and forceful step toward the enhancement of a responsible economic life in this country and abroad. Although we believe that divestment and a responsible and creative reinvestment will strengthen Cornell, more important is the impact these actions will have when combined with similar moves by other universities and institutions (notably the churches) on the specific situation in South Africa

and in general upon business practices as a whole.

As a part of the heightened awareness and concern for the University's investments, we urge that the Board of Trustees develop an open and systematic means for ongoing Cornell community input on the question of investments. The one meeting called at short notice by the Investments Subcommittee was a good beginning, but it was not at all adequate in terms of timing or process. Before any final decision is made, we would hope that at least one additional public meeting of the subcommittee would be arranged in which further input and dialogue might be able to take place. Critical exchange is at the heart of the intellectual life of a university. For the Board to act on so important an issue without engaging in such exchange is antithetical to the very mission of the University.

In order to ensure this commitment to responsible investment policy, the Board of Trustees might establish a permanent body representing the diverse elements of Cornell. This body would specifically be empowered to advise, with a veto capability, on the ethical dimensions of proposed and ongoing investment decisions of the University.

*Philip Snyder  
Coordinator, CRESP  
Peter Costanza  
Co-Chairperson  
Board of Directors*

*On behalf of the CRESP Board*

## 'Honesty, Mutual Respect Lacking in Cornell Family'

*Editor:*

An unfortunate incident occurred last Saturday evening which leaves me disappointed and saddened about "campus life" at Cornell.

After having spent an exciting and fulfilling day being introduced to Cornell (admissions interview, campus tour, football game), my daughter, Crista, with friends from Sigma Pi, attended a rum party at Barton Hall. She put her jacket on a coat hook to the right of the entrance of the hall where several other jackets were hung. Feeling uncomfortable about leaving her expensive jacket unattended, fifteen minutes later she went to check on it and discovered it gone. Crista was horrified. She notified the "chaperones" at the door, searched the hall and checked the other coat areas, but to no avail. The jacket was gone. Crista then reported the incident to the Department of Public Safety and left the party feeling disappointed and frustrated, as well as cold. When we returned the next morning to find out what could be done, Sgt. Marc Whitney told us there is little hope of getting the jacket back; that the report is filed as "inac-

tive"; that between 150 and 300 coats are stolen each year! I am astonished to hear that thievery is an everyday occurrence at Cornell. Do Cornellians have any respect for each others' personal property? For each other? For themselves?

It is unlikely that anything will be done to get Crista's jacket returned, but something should be done about instilling a feeling of honesty and mutual respect among the students. I can only hope that you might be inspired by my letter to let other Cornellians know that they are part of a "family," and that it is very difficult to divorce what is apparently the values of a few from the student body as a whole.

*Mrs. Robert J. Carmody  
Glenhead, N.Y.*

## Purcell

Hazel Becker Purcell died Sunday, Nov. 19, 1978, at The New York Hospital. She was the wife of Robert W. Purcell, former chairman of the Cornell University Board of Trustees.

The funeral service for Mrs. Purcell will be private. Plans for a memorial service are incomplete. Memorial contributions in memory of her may be made to The New York Hospital, 525 East 68th Street, New York, N.Y. 10021 (attention of H. Mefford Runyon) or to the Cape Vincent Community Library, Cape Vincent, N.Y. 13618.



## Judicial Subpoena Policy To Be Considered Today

Whether the judicial administrator should have the power to issue subpoenas to uncooperative witnesses looms as a key issue when the Campus Council today considers recommending changes in the campus judicial system.

Up for vote at its second meeting of the month, are seven recommendations (see Nov. 9 Chronicle page 2) by the Campus Council's Codes and Judicial Committee. They are based on a study of the final report by the President's (Corson) Committee to Review the Judicial System, known as the Bugliari report.

The council's action would constitute recommendations to the president.

Today's council meeting is at 4:45 p.m. in 701 Clark Hall. All meetings are open to the public. Other items up for consideration are a council logo, how long tapes of council meetings should be retained, and a progress re-

port from the Committee on University Relations with intelligence Agencies. The committee conducted a public hearing on the subject Nov. 15.

At a public hearing, Nov. 16, on the judicial system there was considerable opposition to the Bugliari reports recommendation that the judicial administrator should be given subpoena powers. Joseph B. Bugliari, a lawyer, argued that his committee generally felt the subpoena power is needed for the defendant whose innocence hangs on the testimony of a witness unwilling to testify.

Others argued that it would be impossible to live in a dormitory or in the Cornell community at large after having been forced to testify.

Judicial Administrator Dale A. Grossman said she did not feel the power was necessary but that she would use it if she had to.

## Two Hockey Contests At Home This Weekend

After splitting two games last weekend, Cornell's hockey team will open the ECAC and Ivy League portion of the season with two games at Lynah Rink this coming weekend. The Big Red, winner of the Ivy League the past two years, will begin defense of its Ancient Eight crown at 7:30 p.m. Friday against Brown, a team that finished second in 1977-78 with a league record of 7-4-1. On Saturday, also at 7:30, the skaters entertain Yale in another Ivy contest.

Cornell defeated Queen's University, 7-3, last weekend, but lost to Waterloo, 5-4, on a short-handed goal with 1:09 left in the game. Big Red coach Dick Bertrand said, "We know what

we have to work on. We've got to tighten up in our defensive zone and finish off our plays offensively around the net."

Bertrand had praise for the defensive work of seniors Dave Mitchell and Rob Gemmell, who paired up as one unit on the blue line, and the play of newcomer Doug Berk, a center from the defunct University of Pennsylvania team. Berk scored two goals against Waterloo.

Co-captain Lance Nethery, a senior center, and sophomore wing Brock Tredway are on top of the scoring parade for the Big Red. Nethery has three goals and three assists, while Tredway has two tallies and four assists. Berk and freshman Dean Baerg each have a pair of goals.

## Job Opportunities

*Continued from Page 2*

- \* Secretary-Office Mgr. (Wesley Foundation, CURW, perm. pt)
- Admin. Secy., A-15 (Asst. Treasurer, perm. pt)
- \* Editorial Asst., A-14 (Business & Public Admin., perm. pt)
- Steno II, NP-6 (Dept. Clinical Sciences, perm. pt)
- Steno II, NP-6 (Rural Sociology, temp. ft)
- Steno II, NP-6 (Hum. Dev. & Fam. Studies, perm. pt)
- Bldg. Maint. Worker I, NP-7 (Animal Science, perm. ft)
- Temp. Svc. Svc. (Campus Store, casual)
- Temp. Svc. Tech. (Plant Pathology, temp. pt)
- \* Temp. Svc. Tech. (Lab Nuclear Studies, temp. ft)
- \* Temp. Svc. Tech. (Lab Nuclear Studies, temp. ft)
- Temp. Svc. Tech. (Biological Sciences, perm. pt)
- Res. Tech. III, NP-12 (Ag. Engineering, temp. pt)
- \* Lab Tech. II, NP-11 (Ag. Microbiology, temp. pt)
- Res. Tech. II, NP-10 (DCS-Mastitis Control, 1 yr., pt)
- Res. Tech. II, NP-10 (Veterinary Pathology, temp. ft)
- \* Lab Tech. I, NP-8 (Biochem., Mol. & Cell Bio., perm. pt)
- Lab Tech. I, NP-8 (Food Science, 1 yr., 30 hrs. week)
- Programmer I, A-19 (Computer Services, temp. pt)(2)
- Sr. Res. Aide, A-18 (Psychology, perm. pt)
- \* Admin. Clerk, A-16 (Design & Proj. Mgmt., perm. pt)
- Jr. Lab Tech., NP-6 (Neurobiology & Behavior, temp. ft)
- Programmer I, A-19 (Psychology, temp. pt)
- Systems Programmer III, CPO5 (Computer Svcs., 1 yr.)
- Systems Programmer II, CPO4 (Computer Svcs., 1 yr.)
- Regional Director, CPO4 (U. Develop. Cleveland, pt)
- Systems Programmer I, CPO3 (Computer Svcs., 1 yr.)
- Res. Supp. Aide, CPO2 (B&PA, temp. pt)
- ACADEMIC-FACULTY POSITIONS (Contact Dept. Chairperson)
- \* Non-Tenured Position (Women's Studies Program)
- Assoc. Director, Cooperative Extension (College of Human Ecology)
- Research Associate III, CPO5 (NYSSILR, NYC)
- Research Associate III, CPO5 (Agric. Engineering)
- Asst.-Assoc. Profs.-Organizational Behavior (B&PA)
- Asst.-Assoc. Profs.-Marketing (B&PA)
- Asst.-Assoc. Profs.-Finance (B&PA)
- Professor-Finance (Business & Public Admin.)
- Virologist (Veterinary Diagnostic Lab)
- Radiologist (Clinical Sciences)
- Lecturer (Learning Skills Ctr., COSEP-Chemistry)
- Extension Assoc. II, CPO4 (NYSSILR, Albany)
- Asst.-Assoc. Prof. (Agricultural Engineering)

## Dance Group To Perform Student, Faculty Works

The Cornell Dance Program will present studio performances of new student and faculty works on Friday, Dec. 1, and Sunday, Dec. 10, at 8:15 p.m. and on Monday, Dec. 11, at 4 p.m. at Helen Newman Hall. The performances are free and open to the public.

Among the works being shown is "Chairs," a new piece for three dancers choreographed by faculty member Jane Desmond, using sound composed by Desmond at the ZBS Foundation for Experimental Audio Work in Fort Edward, N.Y. Dance Program Director Peggy Lawler will show a new piece for five dancers. Twelve dancers will perform a new work by Instructor Joyce Morgenroth.

These three pieces have been the result of a new Rehearsal and Performance course currently of-

ferred. Instructor Janice Kovar has choreographed a piece for her Dance Fundamentals students which will also be performed. Student works from Joyce Morgenroth's Theatre Arts 200 Dance and Movement for Theatre class, and from Peggy Lawler's Composition Classes will also be shown.

The programs will be as follows:

Friday, Dec. 1, 8:15 p.m.: "Chairs;"

Sunday, Dec. 10, 8:15 p.m.: Composition class work, "Chairs," Lawler's piece, Morgenroth's piece;

Monday, Dec. 11, 4 p.m.: Composition class work, Kovar's Fundamentals piece, Lawler's piece.

A public reception will follow the Monday afternoon performance.

## Concerts Will Feature Songs and Band Music

Three concerts, two sponsored by the Department of Music and one by the Faculty Committee on Music, will take place at the University in the first week of December.

At 4 p.m. Sunday (Dec. 3) Joanne Ball, mezzo-soprano, and Richard Goodman, baritone, will present a song recital in Barnes Hall with the assistance of pianists Clifford Earle and William Cowdery. They will do songs by Weber, Brahms, Grieg, Schumann, Quilter, Vaughan Williams, Ireland, Finzi and Husa. Ball is a part-time voice teacher in the music department; Goodman is a visiting professor of civil engineering, on leave this term from the University of California at Berkeley. Admission to the concert is free.

The University Symphonic Band will perform publicly in the Memorial Room of Willard

Straight Hall at 4:45 p.m. Monday (Dec. 4). Marice Stith will direct the student wind ensemble in Alfred Reed's Russian Christmas Music and other works by Walter Piston, Peter Mennin, Clifton Williams, W.F. McBeth and John Barnes Chance.

Spanish soprano Victoria de los Angeles, star of opera and concert stage, will appear in Bailey Hall Thursday (Dec. 7) at 8:15 p.m. Her program consists of Italian, French, German and

Spanish songs. In her career, which spans more than 30 years, Miss de los Angeles has sung in every great opera house in the world, and she is one of the most recorded artists. Tickets for her recital, the third event of the 1978-79 Bailey Hall concert series, are available at the Lincoln Hall ticket office, 9 a.m.-1 p.m.

## Memorial Talk To Focus On Jewish Identity in Art

An authority on Jewish and medieval art will deliver the second Col. Yonatan Netanyahu Memorial Lecture at 8 p.m. today in Kaufmann Auditorium of Goldwin Smith Hall.

Bezalel Narkiss, director of the Institute of Fine Arts at the Hebrew University of Jerusalem, will speak on "Jewish Identity in Art." The illustrated lecture is free and open to the public.

Narkiss is professor of art history at the Hebrew University

and is spending this academic year as a fellow of the Institute for Advanced Study at Princeton University.

He was editor of the Encyclopedia Judaica. He now edits the Journal of Jewish Thought, and directs the compilation of the Index of Jewish Art, a project of the Israel Academy of Sciences and Humanities to catalog the iconography of all extant Jewish art.

Narkiss's many publications include an edition of the medieval Spanish "Golden Haggadah" and Hebrew Illuminated Manuscripts.

His lecture is sponsored by the Col. Yonatan Netanyahu Memorial Fund for Jewish Studies, established by Cornell to honor the memory of Col. Netanyahu, who was killed in July 1976 while leading the Israeli commando unit which freed 103 hostages at Entebbe Airport in Uganda. Col. Netanyahu's father, Benzion, is professor, emeritus, of Judaic studies at Cornell.

The fund, which has brought numerous gifts to Cornell, supports the expansion of the Program of Jewish Studies within the College of Arts and Sciences.

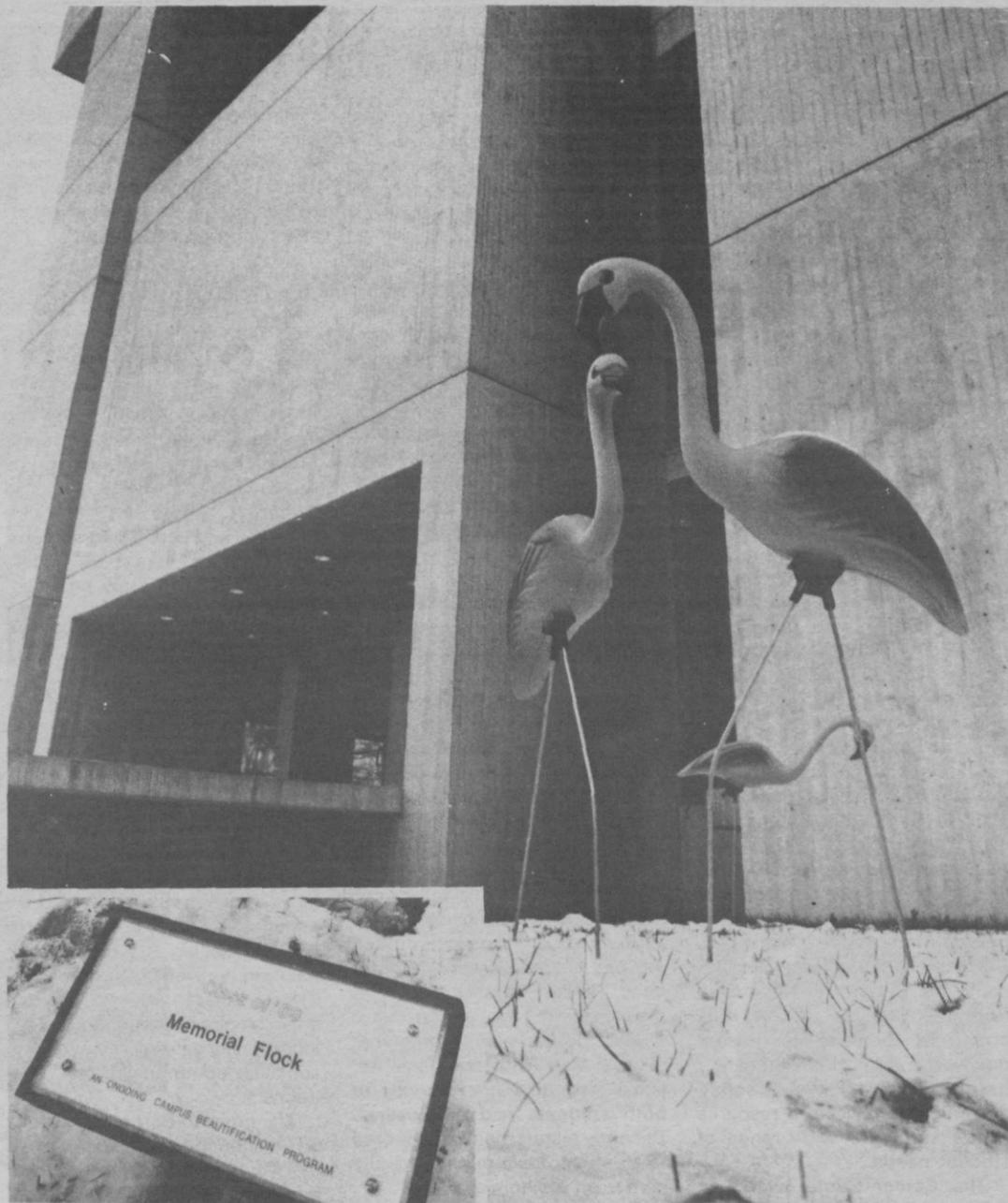


## Two Extra Performances Scheduled

The experimental theater production of "Vietnam Revisited" has been scheduled for two additional weekend performances at 8:15 p.m. Friday and Saturday, Dec. 1 and 2, in Drummond Studio.

"The production has been so successful that, in spite of the fact that an extra performance was given during the last week of the nine-performance run of the play, people have complained that they were unable to see the show. It is for their benefit that the extra performances will be given," according to the theatre arts publicity department.

Tickets are available at the Willard Straight Box Office (256-5165), which is open from 3 to 6 p.m. Monday through Friday.



## A Beautification Project

These flamingos appeared in the middle of last week on the east lawn of the Herbert F. Johnson Museum of Art, appropriately labeled as a beautification project of the Class of 1969. They disappeared as mysteriously as they appeared, leading museum employees to believe that they disliked the snow and headed south.

## Spanish Soprano To Sing at Bailey

Spanish soprano Victoria de los Angeles will perform at 8:15 p.m., Thursday, Dec. 7, at Bailey Hall. Tickets for the performance on sale at the Lincoln Hall ticket office.

The performance, which is the third of the Bailey Hall concert series, will include four groups of songs in Italian, French, German

and Spanish.

De los Angeles has performed in most major musical capitals of the world with such conductors as Sir Thomas Beecham, Pierre Monteux, Sir John Barbirolli and Herbert Von Karajan.

Her mastery of the German lieder, French art songs, and the songs of her own country include

more than 1,000 songs and more than 50 complete and different recital programs.

Her operatic repertoire ranges from, among others, "Carmen" to "Marriage of Figaro" and from "Meistersinger" to "La Traviata."

She attended the Conservatorio de Musica, Barcelona, and completed a six-year course in only three years, graduating with full honors before she reached the age of 20.

In December 1977, Donald Henahan, music critic for the New York Times, wrote, "What should you have in a recital? Refinement, grace, perception, gentleness, dramatic intensity, name it, the soprano had it. Giving a recital is either easy or it is impossible and Miss de los Angeles made it look easy."

## Exiled Poet To Recite, Speak in Russian, English

Joseph Brodsky, Russian exile poet, will speak, and recite his poetry, at Cornell at 8 p.m. Tuesday, Dec. 5, in the Hollis E. Cornell Auditorium of Goldwin Smith Hall. The title of his talk, which will be given in English, is "Poetry in Russia and America Today." Brodsky will also recite some of his poetry in Russian; some of his poems will be read in English translation. There will also be a question-and-answer period and discussion period.

Brodsky, while still a resident of Leningrad, and a leading Russian poet, was accused by Soviet prosecutors of being a 'parasite,' illegally unemployed; and after a sensational trial was sentenced to exile in the north of Russia. Later his exile was commuted, and he was evicted from the country. He has been living for several years in the United States.

Brodsky's poetry is complex, emotional, religious, and philosophical. It ranges from reflections and dramatic monologues to satirical comedy,

and love poetry.

Brodsky's visit is sponsored by the Council on Performing Arts, the Russian Literature Department, and the Committee on Soviet Studies.

## Athletics Director Is Sage Convocation Speaker

Dick Schultz, director of athletics and physical education, will be the speaker at the Sage Chapel convocation at 11 a.m. Sunday, Dec. 3. His topic will be "Running the Great Race of Faith."

Before coming to Cornell, Schultz was assistant to the president at the University of Iowa. He was head basketball coach and baseball coach at Iowa from 1960 to 1976 and was the first person in the university's sports history to direct two major sports programs.

Schultz was a football, basketball and baseball coach at Humboldt (Iowa) High School from 1950 to 1960. He was also



athletic director there.

He earned his bachelor's degree from Central College in 1950 and his master's from Iowa in 1962.

# Career Center Reorganized, Expanded

Thomas Devlin, formerly director of Career Services at the University of Pittsburgh at Johnstown, has been appointed the new director of the Career Center. He will report to John Munschauer, who became director of Cornell University Career Development Services, a new position, in August.

Munschauer, who had been the director since 1946, continues his counseling activities at the Career Center and is focusing on the development of a career education program for liberal arts students and another for Ph.D.s who need to find career alternatives other than teaching.

The second major change has been the merger of the Health Careers Office with the Career Center. The plan is an outgrowth of last year's study of career services by a working group under D. Hywel White, Cornell professor of physics.

This is not the first period of growth and expansion in the history of the Career Center. In 1933, the Cornell University Placement Service was established and opened an office in Willard Straight Hall and a branch office in New York City. Since then, the service has become the Career Center, moved from the Straight to Day Hall, and from there to its present quarters in Sage Hall. The center has grown over the years from a placement service to a resource center serving a wide range of student needs.

The Career Center works in cooperation with the other career counseling and placement ser-

vices on campus; most notably, it acts as a coordinating service for the various colleges during fall and spring recruiting seasons when employers visit the campus to interview students.

In addition to direct placement functions, the center also has a library of information on careers and graduate study which contains more than 12,000 separate items. A variety of career planning services are available to students and alumni, including advising, career information programs, assistance with job hunting techniques, and special programs designed to meet the problems encountered by minorities and women.

Another major area of concern is preprofessional advising, which is provided for students contemplating graduate school in law and management as well as medicine, dentistry, and veterinary medicine. Also located in the center is the Educational Placement Service and the credentials service of the Health Careers Evaluation Committee.

Since July, large number of pre-med, pre-vet and pre-dental students have been using the center regularly and overcrowding has become a serious problem. Devlin says that he is pleased with the center as a whole, but is also "somewhat disillusioned with the facilities, since they do hinder service to both students and employers." Recently a staff member counted 410 students coming into the center on a single day.

Devlin has spent a good deal of time trying to find space for

office staff. Two staff members now work in a small space that was previously part of the men's room, while another works in a corner of the mail room. In an effort to assess the needs of the

Career Center, Devlin has asked employers and graduate admissions people who visit to complete a brief evaluation. The great majority of respondents have rated the physical accom-

modations as "poor."

Both Munschauer and Devlin are working with Ian Stewart of the provost's staff to find larger, more desirable quarters on campus.

## To Improve US-Japan Relations

# Toyota Funds Language Study

A \$68,000 grant from the Toyota 20th Anniversary Celebration Fund to the University is expected to improve and enhance Japanese-American business and economic relations, according to Eleanor H. Jorden, the Mary Donlon Alger Professor of Linguistics at Cornell.

The grant will support a project for the development of a curriculum of Japanese language study for businessmen and economists in the United States. Jorden, the author of the most widely-used Japanese language textbook in the world, "Beginning Japanese," will direct the year-long project.

"Linguistic and cultural problems are a serious barrier in U.S.-Japanese communication. No one is 'reading the other's signals' very well," Jorden said. "This project will go beyond basic language instruction to the kind of specialization needed in specific communications situations."

The grant to Cornell is part of a \$1 million program established by Toyota to promote closer relations between the United States and Japan. The fund was set up to mark Toyota's 20th year in the United States. The \$1 million was contributed by Toyota Motor Sales, U.S.A. Inc., importer of Toyota cars and trucks.

Eighteen grants were made from among more than 450 institutional proposals to Toyota, Jorden said. Cornell received the only language grant, though others made language proposals.

It is Jorden's plan to develop written and audio-visual educational materials for a three-part course of study that will be available to colleges and universities, business organizations and businessmen.

The first level, basic orientation, is described by Jorden as "survival training." It will cover contrasts between Japanese and American patterns of behavior and their reflections in language, business etiquette, effective use of an interpreter, and such Japanese "ritualized" language as apologies, expressions of gratitude, greetings and farewells.

The second phase of instruction will provide "functional competence," Jorden said. "It will be a series of lessons on situations that face the American businessman in Japan in which the greatest need for Japanese language competence exists," she said.

Examples she gave are telephoning, making appointments, introductions, asking and giving directions and dealing with invitations. Notes accompanying the teaching material will include a detailed discussion of the circumstances under which the material is used in Japanese society.

Finally, the course of study will cover specialized competence, advanced business-oriented vocabulary, within the framework of the language patterns covered in the second part.

"There will be a strong emphasis on Japanese-American contrasts, making it possible for the materials to be easily adapted for reverse use by Japanese businessmen interested in studying American

behavior patterns," Jorden said.

She pointed out that in Japan a special school with professional staff was established to teach English to Japanese businessmen prior to their transfer to the United States, but comparable arrangements have yet to be made for American businessmen going to Japan.

Jorden joined the Cornell faculty in 1969 and has been instrumental in the development of Cornell's Full-Year Asian Language Concentration (FALCON) Program in Japanese since its inception in 1972. FALCON is designed to accelerate the learning of spoken and written Japanese.

In addition to "Beginning Japanese," written in 1962 and now in its 20th printing, Jorden is the author of numerous other

works, including "Reading Japanese," published in 1976 and now in its second printing.

At the 1977 Linguistics Institute, sponsored by the Linguistic Society of America, Jorden was invited to teach the courses on Japanese sociolinguistics and Japanese language pedagogy. This year she was one of two Americans invited by the Japan Foundation to participate in the first International Conference on the Japanese Language in Japan.

A graduate of Bryn Mawr College, Jorden earned her master's and Ph.D. degrees at Yale University. Before joining the Cornell faculty, she was chairman of the Department of East Asian Languages at the Foreign Service Institute of the Department of State.

## Mark Pledges \$750,000 For Law Professorship

Henry Allen Mark, a 1935 graduate of the Law School, has pledged \$750,000 through a trust program to establish a professorship of law in his name, according to Roger C. Cramton, dean of the school.

"Al Mark is a dedicated and public-spirited lawyer who has provided the Law School with advice and support for many years," Cramton said. "This gift is another demonstration of his support and concern for legal education and Cornell."

"Gifts of this kind are essential to the continued excellence of the Cornell Law School," he said.

The Law School has announced gifts totaling more than \$3 million as part of the five-year Cornell Campaign for \$230 million which began in 1975. The campaign total exceeded \$126 million in October.

Mark retired in 1974 from the New York City law firm of Cadwalader, Wickersham & Taft where he had been a partner for 21 years. He holds an undergraduate degree from Williams College.

Mark established the Henry A. Mark Memorial Scholarship in the Cornell Law School in honor of his father in 1959. He served as president of the Cornell Law Association from 1971 to 1973, and has been a member of the Advisory Council for the Law School for many years.

Now a resident of Washington, Conn., Mark was mayor of Garden City, N.Y. from 1965 to 1967 and from 1961 to 1965 he served as a trustee of the village. He is now a member of the Washington (Conn.) Planning Commission.

## Steel Foundation Pledge To Upgrade Winter Lab

The Inland Steel-Ryerson Foundation has made an unrestricted pledge of \$50,000 to the College of Engineering, according to Andrew Schultz Jr., acting dean of the college.

The \$50,000 pledge will be applied to the technical upgrading of the experimental facilities at the George Winter Laboratory, Schultz said.

More than 35 research projects that deal with the performance of structural components and systems displaying elastic and inelastic behavior have been conducted in this laboratory over the past decade. In addition, most of the experimental work on the development of light gage steel codes—standards—was completed for the American Iron and Steel Institute in this Cornell facility.

"New experimental research activity in structural engineering requires improving the instrumentation and loading systems currently in use in the Winter Laboratory," according to Arthur H. Nilson, chairman of the college's Department of Structural Engineering. "It is essential

to upgrade the facility so that it can continue to serve as one of the major university structural engineering experimental facilities in North America."

The facility located in Thurston Hall was named in honor of George Winter upon his retirement in May 1975. Winter was renowned for much of the pioneering code work on light-gage steel undertaken in the laboratory, as well as for the general development of the Department of Structural Engineering which attained national eminence during the period of his chairmanship.



## Faculty Promoted

### Albright

Louis D. Albright was recently elected associate professor, with tenure, in the Department of Agricultural Engineering in the State College of Agriculture and Life Sciences.

Albright received his degrees at Cornell and was an assistant professor at the University of California at Davis for two years before assuming the same post here in 1974.

His research is concentrated on management and use of energy in agricultural buildings, and environmental controls for livestock housing.

### Clermont

Kevin M. Clermont has been elected associate professor of law with tenure in the Cornell Law School.

A member of the Cornell faculty since 1974, he is becoming a national figure in the field of civil procedure, according to Law Dean Roger C. Cramton.

He earned the bachelor of arts degree in geophysics at Princeton University in 1967, and the juris doctor degree at Harvard Law School in 1971, having spent the year between those programs as a Fulbright Scholar studying economics in France. He clerked a year for then United States District Judge Murray I. Gurfein, Southern District of New York, before joining the New York City law firm of Cleary, Gottlieb, Steen & Hamilton in 1972.

He came to Cornell as an assistant professor and was promoted to associate professor without tenure in 1977.

Clermont is a co-author of a leading casebook on civil procedure. He teaches courses in civil litigation and professional responsibility, as well as federal courts and advanced civil procedures.

### Devine

The University Board of Trustees has elected Marjorie M. Devine professor in the Division of Nutritional Sciences. The promotion became effective Nov. 1.

Currently Devine is the coordinator of the undergraduate program and associate director for academic affairs in the division, a joint unit of the State College of Human Ecology and the State College of Agriculture and Life Sciences.

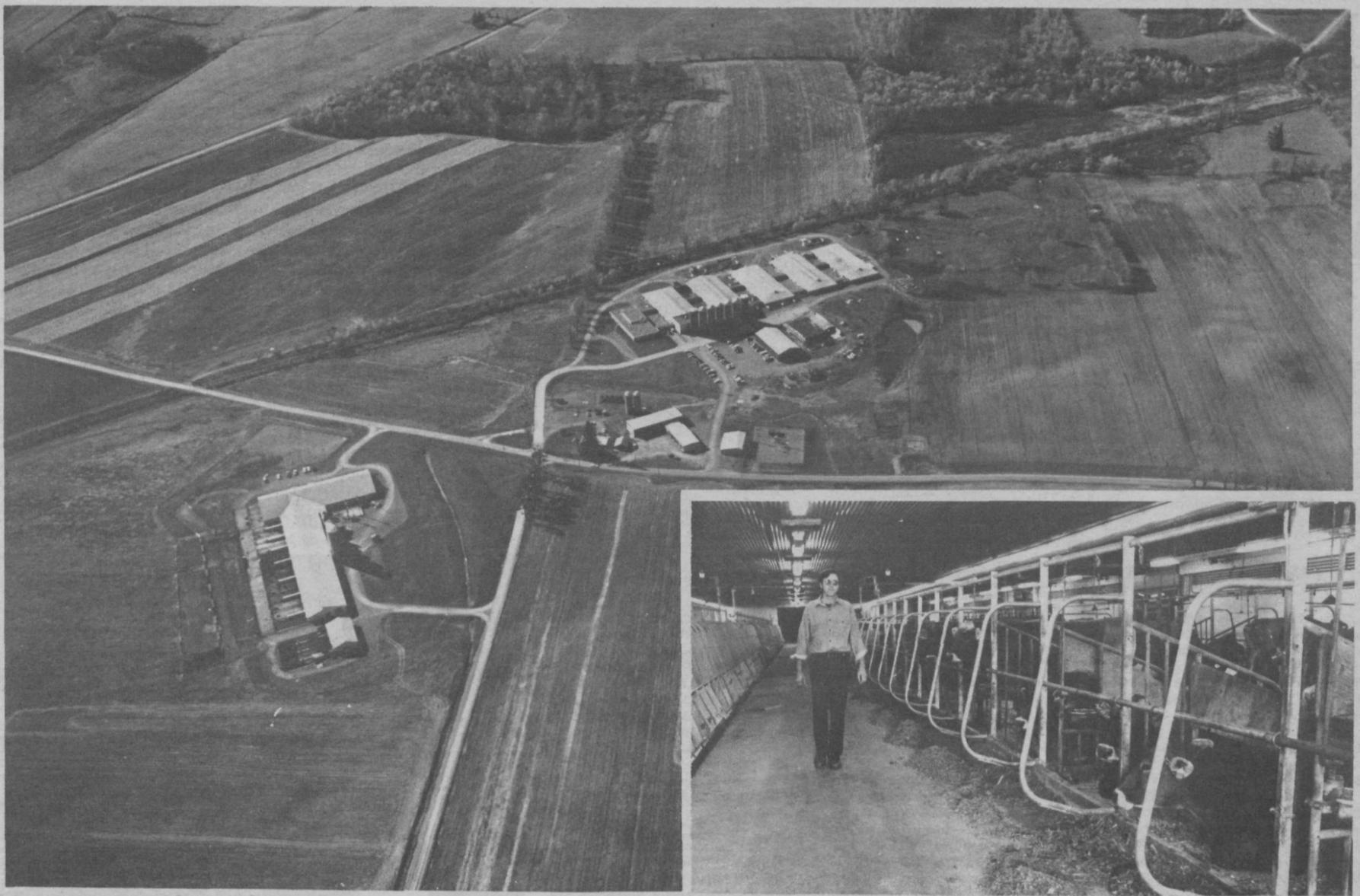
Devine has established a national reputation as a leader in the field of nutrition education. At Cornell she teaches more than 600 students in the popular introductory course in nutrition and has developed a training program for graduate teaching assistants. In 1977, she was awarded the Chancellor's Award for Excellence in Teaching from the State University of New York.

### Shapiro

Astrophysicist Stuart Shapiro has been elected associate professor of astronomy in the College of Arts and Sciences at Cornell University, effective Nov. 1.

Shapiro, 30, is best known for his work on black holes, the dynamics of star clusters, and relativistic astrophysics.

He received his A.B. degree from Harvard University in 1969 and his master's and Ph.D. from Princeton University in 1971 and 1973, respectively. He joined the Cornell faculty as an instructor in 1974 and was promoted to assistant professor in 1975.



An aerial view of the T&R Center takes in the beef barns (left) and the dairy barns. Sheep are kept in a separate facility on the far side of the valley. Ted Sobel (inset) research associate in agricultural engineering, walks through a tie-stall dairy barn, one of several arrangements for housing cows at the center.

# Farming Is a Science at T&R Center

## FEATURE

An average farmer in Central New York couldn't handle it — 2,500 acres, 850 dairy animals, 450 beefers, 900 head of sheep — but Cornell's Animal Science Teaching and Research Center in Harford is not a typical farm.

"Some farmers who come here say we're not being practical — they could never afford our computerized feed handling and distribution system or our oxidation ditch for converting manure into an odor-free liquid.

"We have to explain that one of our main purposes is research. The cost of the information we're obtaining is infinitesimal when put in terms of tons of hay or silage or pounds of milk produced in New York State," said Sam Slack, professor of animal science and coordinator of the T&R Center.

Most people recognize the T&R Center, located off Route 38 about 5 miles North of Dryden, by the dairy buildings (which include seven tall silos, three bunk silos and a hay barn as well as five barns for housing and milking the animals and doing related research), but the farm actually stretches from valley wall to valley wall.

Beef animals and sheep joined the dairy herd at the T&R Center last winter. They are housed in separate buildings designed for efficient handling of the animals as individuals and in groups of various sizes.

The transfer of stock to the T&R Center reflects an effort to move livestock away from the central campus where space is at a premium and where encroaching suburbia has made

waste utilization — with its large land requirements — a problem, Slack said.

Swine were originally scheduled to move to the T&R Center, Slack added, but increasing costs have made it more feasible to upgrade their current facilities on Pine Tree Road.

Research at the T&R Center ranges from synchronizing estrus cycles in cattle to developing linerless milking machines to harnessing wind and methane produced from manure to decrease the electricity needs of

the farm.

In many projects animal scientists cooperate with agricultural engineers, agronomists, entomologists, natural resource specialists, food scientists, plant breeders and others from the College of Agriculture and Life Sciences who are interested in large animals, land usage, cropping practices and environmental quality studies.

Some of the projects require high technology, but one of the most successful undertakings at the T&R Center has been the calf

hutch, a simple shelter made from three and a half sheets of 4-by-8 plywood attached to a small fenced exercise area which T&R Center researchers adopted for conditions in the northeast.

Some newborn calves are randomly assigned to the hutches as soon as they are dry — even in the dead of winter — where they grow up remarkably free of disease. More than 200 calves have been raised in the hutches and only two have died — compared with a mortality rate of 15 percent and more in traditional rearing situations on New York dairy farms. Mortality in the T&R Center's indoor nursery is less than 5 percent.

As is standard practice on most dairy farms, T&R Center calves are all fed by hand from buckets rather than being allowed to nurse from their mothers.

Other researchers at the center are beginning to investigate ways of using the steep side hills so common in Central New York more effectively and also of using tree species, particularly aspen, as a forage crop for cattle.

Because teaching is an important function of the center, the major breeds of dairy and beef cattle and sheep raised in New York State are kept there. But undergraduates and graduate students from a variety of departments within the college — not just those who plan to be animal scientists — visit the facility regularly as part of their coursework, Slack said.

The T&R Center even touches the lives of Cornellians who never venture off the main campus. Dairy products sold at the Dairy Store in Stocking Hall and served in most campus eateries and the beef and lamb sold at the Cornell Meat Market in Morrison Hall get their start 16 miles away at the T&R Center.

Connie Bart

## University Libraries Christmas and Intersession Schedule

DATE	OLIN	URIS	MANN	AFR	BPA	ENG'G	ENT	FINE ARTS	HOTEL	ILR	LAW	MATH	MUSIC	PHYS SCI	VET
Dec. 23 (Sat)	9A-5P	closed	closed	closed	9A-1P	closed	closed	8A-12M	closed						
Dec. 24 (Sun)	closed	closed	closed	closed	closed	closed	8A-6P	closed							
Dec. 25 (Mon)	closed	closed	closed	closed	closed	closed	closed	closed							
Dec. 26 (Tues)	closed	closed	closed	closed	closed	closed	8A-12M	closed							
Dec. 27 (Wed)	9A-5P	closed	9A-5P	closed	closed	closed	closed	closed	closed	closed	8A-5P	8A-5P	closed	8A-12M	closed
Dec. 28 (Thurs)	9A-5P	closed	9A-5P	closed	closed	closed	closed	closed	closed	9A-4P	3A-5P	8A-5P	closed	8A-12M	closed
Dec. 29 (Fri)	9A-5P	closed	9A-5P	closed	closed	closed	closed	closed	closed	9A-4P	8A-5P	8A-5P	closed	8A-12M	closed
Dec. 30 (Sat)	9A-1P	closed	closed	closed	closed	closed	closed	8A-12M	closed						
Dec. 31 (Sun)	closed	closed	closed	closed	closed	closed	8A-6P	closed							
Jan. 1 (Mon)	closed	closed	closed	closed	closed	closed	closed	closed							

Intersession: January 2, 1979 (Tuesday) -- January 21, 1979 (Sunday)

DATE	OLIN	URIS	MANN	AFR	BPA	ENG'G	ENT	FINE ARTS	HOTEL	ILR	LAW	MATH	MUSIC	PHYS SCI	VET
Monday-Friday	See Below	8A-5P	8A-5P	9A-5P	8A-5P	8A-5P	9A-12P 1P-5P	8A-5P	8:30A-5P	8A-5P	See Below	8A-5P	9A-5P	8A-12M	See Below
Saturday	9A-1P	9A-1P*	9A-1P	closed	closed	closed	closed	closed	closed	closed	See Below	closed	closed	8A-12P	See Below
Sunday	closed	closed*	closed	closed	closed	closed	closed	closed	closed	closed	See Below	closed	closed	8A-12P	See Below

Exceptions to Above Schedule:

**Olin Library:** Jan. 2-19 -- M-Th, 8A-10P (Open 5P-10P for study purposes only)

Fri 8A-5P  
Sat 9A-1P  
Sun closed

Jan. 20 -- Sat 9A-5P  
Jan. 21 -- Sun 6P-10P

\***Uris Library:** Jan. 20 -- Sat 9A-5P  
Jan. 21 -- Sun 6P-10P

**Law Library:** Jan. 2-7 -- Tues-Fri, 8A-5P  
Sat & Sun, closed

Jan. 8-10 -- Mon-Wed, 8A-5P

Jan. 11 --- RESUME REGULAR HOURS

**Vet Library:** Jan. 2-7 -- Tues-Fri, 8A-5P  
Sat & Sun, closed

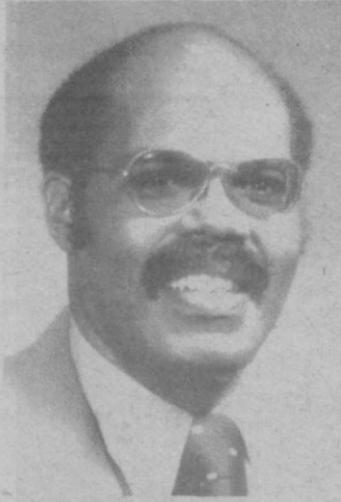
Jan. 8-21 -- Mon-Thurs, 8A-5P, 7P-10P

Fri 8A-5P  
Sat closed

Jan. 14 --- Sun 7P-10P

Jan. 21 --- Sun 7P-11P

# Equal Opportunity Officer Is Appointed



Michael J. Montgomery

Michael J. Montgomery, affirmative action officer at Miami (Ohio University since 1975, has been named Cornell's new executive director of the Office of Equal Opportunity, it has been announced by W. Keith Kennedy, University provost.

Montgomery, who will assume his position on Jan. 1, 1979, will be responsible for all aspects of the programs mandated by state and federal legislation and programs of the University pertaining to equal opportunity, affirmative action, status of women, Title IX and the handicapped.

Offices which have been overseeing these programs are being combined into a single unit for equal opportunity, for which

Montgomery will be the executive director. The consolidation of offices was prompted by the retirement of Ramon E. Rivera, affirmative action officer at Cornell since 1971.

In commenting on the realignment of the several units, Montgomery observed that women, while a majority in the population, are a minority in the work force and that "the overall picture in working with minorities, including women and racial minorities, is one of the key factors to deal with in increasing affirmative action efforts."

"We are delighted to have someone with Mr. Montgomery's background joining our staff," said Alison Casarett, vice provost

and equal opportunity officer at Cornell. "His breadth of experience makes him particularly valuable in the expanded scope of this new job."

In his affirmative action position at Miami, Montgomery directed a university-wide human relations program to gain understanding of affirmative action goals. He also taught courses in criminal justice studies in Miami's Department of Political Science.

Montgomery, who holds bachelor's and master's degrees from the University of Cincinnati, was director of human relations and affirmative action for the Greenhills-Forest Park City School District in Cincinnati for

three years before assuming his position at Miami.

He previously spent two years as probation officer with the Hamilton County Juvenile Court in Cincinnati.

Montgomery was president of the Oxford, Ohio, branch of the National Association for the Advancement of Colored People, and public relations director of the Ohio Conference of NAACP branches. He was news director of a television series, "NAACP Presents," a weekly public service program shown on WLWT-TV in Cincinnati.

## New Grants, Contracts Received

The Office of Sponsored Programs announces the following new grants and contracts for sponsored programs for the Ithaca and Geneva units of the University from October 1, 1978 through November 8, 1978. This list does not include renewals or continuations.

Armbruster, G., Nutritional Sciences, Evaluation of Microwave Coffeemaker, Amana Refrigeration, Inc., 1 month, \$770.

Armbruster, G., Nutritional Sciences, Development of Microwave Oven Cooking Test Protocol, Dow Chemical Company, 4 months, \$2,875.

Ashcroft, N.W., LASSP, Astrophysical Materials Science — Theory, NASA, 12 months, \$65,000.

Bandler, D.K., Food Science, Program to Increase the Acceptability of Fresh Fluid Milk, NYS, 12 months, \$30,000.

Beamish, E.E., Education, Occupational Education Staff Development for Two Year Colleges, NYS, 12 months, \$66,215.

Bowman, S.J., Architecture, Artists in Residence, National Endowment for the

Arts, 7 months, \$1,500.

Bowser, B.P., Grad School, Graduate and Professional Fellowship Program, Office of Education, 12 months, \$85,800.

Brown, D.R., Business and Public Administration, Public Health Special Project Grant, Health Resource Administration, 9 months, \$21,852.

Brown, T.L., Natural Resources, Public Attitudes Toward Black Bear in the Catskills, NYS, 12 months, \$8,200.

Casarett, A.P., Grad School, Modern Foreign Language Training, Office of Education, 18 months, \$55,651.

Coleman, J.E., Classics, Excavation and Study of Archaeological Site at Alambra, Cyprus, National Endowment for the Humanities, 36 months, \$750.

Cross, W.E., Africana Studies Research Center, 4th Conference on Empirical Research in Black Psychology, NIH, 12 months, \$7,530.

Davies, P.J., Genetics, Development and Physiology, Role of Fruits in the Induction of Whole Plant Senescence, USDA, 24 months, \$40,000.

Doris, J.L., Human Development and Family Studies, HEW Region II Resource Center on Child Abuse and Neglect, Office of Human Development Services, 12 months, \$240,299.

Duttweiler, M.W., Cooperative Extension, Participation in Great Lakes Sea Grant Network, Office of Sea Grant, 12 months, \$5,970.

Everhart, W.H., Natural Resources, Inventory of Wetlands and Urban Wildlife Habitat in NYS, NYS, 12 months, \$49,860.

Gillespie, J.H., Microbiology, Molluscan Cell Culture Workshop, Office of Sea Grant, 3 months, \$500.

Haas, J.D., Nutritional Sciences, Ultrasonic Assessment of Nutritional Status, NIH, 24 months, \$103,174.

Harwit, M.O., Center for Radiophysics and Space Research, Far Infrared Spectral Line Observations from GP Kuiper Airborne Observatory (C-141), NASA, 12 months, \$83,500.

Hutchens, R.M., Industrial and Labor Relations, Analysis and Correction of Non-reporting in Household Surveys, Department of Labor, 12 months, \$24,240.

Kammen, M.G., Center for the Humanities, Challenge Grant, National Endowment for the Humanities, 12 months, \$78,000, when matched.

Levine, G., Center for Environmental Research, Annual Allotment FY 79, Department of Interior, 12 months, \$110,000.

Long, F.A., W. Lynn, E. Thorbecke, W. Whyte, Science, Technology and Society, Technology Choices in Developing Countries, NSF, 12 months, \$124,015.

Long, F.A., G.E. Schweitzer, Science, Technology and Society, Science, Technology and Industrialization, Department of State, 12 months, \$79,070.

Maxwell, W.L., Operations Research and Industrial Engineering, Subgrant with University of Michigan Under Their NSF Grant DAR76-16709, University of Michigan, 12 months, \$20,364.

McCarty, R.E., Biochemistry, Transport of Glycolic Acid, USDA, 24 months, \$40,000.

Ostrander, E.R., Program of Urban and Regional Studies, Solution Oriented Evaluation Study, New Haven Redevelopment Agency, 12 months, \$7,084.

Podleski, T.R., Neurobiology and Behavior, Soluble Nerve Factors Regulating Muscle Maturation, NIH, 12 months, \$42,800.

Press, N., Johnson Art Museum, Museum Education Exchange, Office of Education, 12 months, \$5,000.

Roelofs, W.L., Geneva Experiment Station, Sex Pheromones of Scale Pests, USDA, 24 months, \$60,000.

Ruoff, A.L., Material Science and Engineering, Ultrapressure Materials Science Work, NASA, 12 months, \$200,000.

Saltzman, S., Program of Urban and Regional Studies, Regional Economic Impacts of Conservation, Brookhaven National Laboratory, 10 months, \$18,000.

Schofield, C.L., Natural Resources, Fish Management of Acidified Waters, NYS, 12 months, \$40,000.

Tingey, W.M., Entomology, Plant Glandular Trichomes: A Mechanism for Combatting Insect Stress, USDA, 24 months, \$80,000.

VonBerg, R.L., Chemical Engineering, Desalting by Freeze Concentration — Development of A Minimum Cost Process, Department of Interior, 36 months, \$199,624.

Werbizky, T., Program of Urban and Regional Studies, Cornell Preservation Planning Workshop Survey Project, NYS, 12 months, \$15,500.

Willson, H.R., Entomology, Insect Survey Program, NYS, 12 months, \$7,200.

Yoder, O.C., Plant Pathology, Role of Genotype and Ploidy Level in Adaptability of Brassica to Cell Culture Technology, U.S. Department of Agriculture, 24 months, \$60,000.

Zaitlin, M., Plant Pathology, Interactions of Plant Viruses With Their Hosts, USDA, 24 months, \$57,000.



Elisabeth M. Thorn



Grace A. Saatman

## War on Waste Waged: Employees Win Money

The University's War on Waste Committee met Nov. 20 and voted two cash awards and two honorable mention awards to Cornell employees for their money-saving ideas. This brings to 16 the number of awards given since the start of the War on Waste campaign in 1977.

The committee awarded \$100 to Elisabeth M. Thorn, executive staff assistant, Office of Land Grant Affairs, \$25 to Grace A. Saatman, administrative aide, Agricultural Experiment Station (Ithaca) and honorable mentions to Henry H. Stamm, supervisor, Buildings and Grounds Care, and Charles Elliott, director, Teacher Preparation Program, English Department. The winners will receive their checks and be introduced at the Administrative Council Luncheon Dec. 20 in Clark Hall.

Thorn suggested deducting New York State Tuition Assistance Program (TAP) grants awarded to children of Cornell employees from amounts paid out by the University under the Cornell Children's Tuition Scholarships. She estimated possible yearly savings of \$143,400 to the University.

Saatman suggested exempting Cornell employees visiting Washington, D.C. on business from the eight percent sales tax on lodging.

Stamm has submitted three ideas since Sept. 12. His award was for suggesting that crash bars be installed in Bradfield Hall since the present doorknobs are frequently broken. Elliott proposed that an informational package on University accounting procedures be assembled for new account users.

The winning ideas "won high praise" from evaluators, according to Joseph Leeming, the committee's chairman, and are either being implemented now or will be used in the future. An additional 14 ideas were reviewed by the committee, he said, and either found to duplicate previous suggestions or judged to have insufficient savings potential. They included ideas for reducing the number of posters on campus, recycling cardboard boxes, shortening campus bus routes and a simple departmental meeting schedule.

The War on Waste campaign began in February, 1977, shortly after Cornell won a \$2,500 prize in a nationwide energy-saving competition sponsored by the National Association of College and University Business Officers. The prize money is being used to finance the campus competition which is open to all Cornell students and employees. Entries should be sent to the War on Waste Committee, 122 Day Hall. All entries received will be evaluated by appropriate deans, directors or department heads and reviewed by the Committee at its next meeting in May, 1979.

## Financial Aid Promotes Two, Hires Two Others

May Hines, who joined the Office of Financial Aid in August as assistant director, has been

### —Catherwood—

M.P. Catherwood died Thursday, Nov. 23, 1978 in Sloan Kettering Hospital in New York City. From 1941-1947 he was Commissioner of Commerce for New York State and then from 1958-1971 he served in Governor Rockefeller's cabinet as Industrial Commissioner.

In between these key state assignments he served as dean of the ILR School for almost a dozen years. He took over as dean in 1947, early in the school's history — soon after the first dean, Irving Ives resigned to represent New York State in the United States Senate.

According to Present Dean Robert B. McKersie, under M.P.'s leadership the school developed its foundations in research, instruction and public service while at the same time growing in size and stature.

"A direct and forceful leader M.P. gave unstintingly of himself to the work of the school and to many assignments at Cornell. A 'no nonsense' approach to life characterized M.P. and those who visited him during the past several weeks were quickly engaged in discussions about development projects and other issues at ILR which continued to interest him."

No services are planned. Contributions can be made in care of the Memorial Sloan Kettering Cancer Center or to the Martin P. Catherwood Library Fund at the ILR School.

promoted to coordinator of special programs, according to Robert Walling, director of the office.

Walling also announced the promotion of Karen Robinson to assistant director from financial aid counselor, and the appointment of Doris Bluit and Dick Roberts as financial aid counselors. Roberts will work with graduate and professional school students.

In her new role, Hines is responsible for the administration of programs that involve aid for minority students: COSEP (Committee on Special Educational Projects), HEOP (Higher Education Opportunity Plan), EOP (Education Opportunity Plan) and BEOG (Basic Education Opportunity Plan).

"She is the main liaison in financial aid with Cornell's minority community, though her job is not a minority position per se," Walling said.

Hines came to Cornell after serving as director of financial aid at Broome Community College since October 1976.

A graduate of St. Augustine's College, Hines is enrolled in the counselor education program at Scranton University. She lives in Apalachin, N.Y.

Robinson, a counselor since December 1977, joined the financial aid support staff as department secretary in March 1975. She is a graduate of Ithaca College.

Bluit has been a counselor/teacher at George Junior Republic in Freeville, N.Y., and executive director of the Detroit YWCA. She is a graduate of George Williams College. Roberts is a doctoral candidate at Syracuse University where he earned his bachelor's and master's degrees.



## Two Seminars Planned On Campus Data Network

Computer Services has felt the need for improved data communications facilities because all interactive users of the 370/168 are several miles from the computer. As costs for interactive terminals decrease, faculty and staff are likely to obtain terminals for their offices. They, too, will require inexpensive links to time-sharing systems. Additionally, users of small computers that are tailored to particular applications periodically need access to programs, storage, computing time and expensive peripherals on other machines.

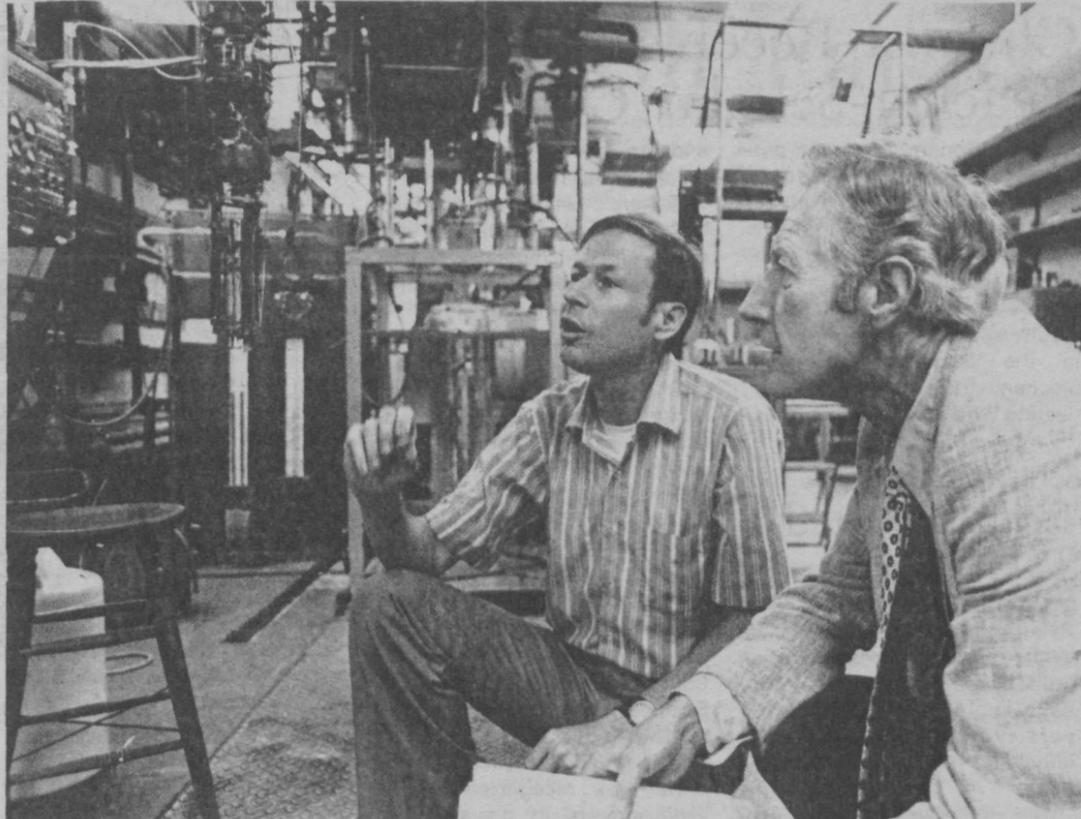
A study was made by Computer Services of ways to provide reliable, inexpensive and easy-to-use communications facilities at the Ithaca campus. A proposal was presented to the University Computing Board, outlining a possible approach, and the board encouraged further development.

To obtain a clearer idea of the requirements of the entire Cornell computing community, Computer Services is offering two seminars on the prospects for a data network on campus. The first from 3 to 5 p.m. on Tuesday, Dec. 5, will be addressed primarily to Computer Services users. The second, at the same time on Wednesday, Dec. 6, will be directed towards users of different computers who

wish to communicate with either the 370/168 or other computers on campus. Both seminars will be held in G-14 Uris Hall. They will cover much of the same background material, but the second will include information on an existing program for file transfer between machines and plans for a general architecture for inter-computer communications.

At each seminar, the first hour will be devoted to presentations on methods of data communications, existing facilities, basic costs, the packet network approach and implementation. Speakers will include Richard Cogger, Richard Alexander, Alison Brown and Michael Oltz of Computer Services. After a short break during which refreshments will be served, advice, suggestions, criticisms and comments on the proposed approach will be solicited.

Members of the Cornell computing community are encouraged to attend and make their requirements and preferences known. Anyone with ideas for discussion topics is asked to call Richard Cogger at 256-7566. Coming issues of the OCS Bulletin will provide additional information on these seminars.



Robert C. Richardson explains his low-temperature research to Cornell President Frank Rhodes. Richardson will give a public lecture and demonstration on low temperature phenomena in the style of the early nineteenth century natural philosophers at 8 p.m. tonight in Rockefeller A.

### 'Absolute Zero Temperature'

## Physicist to Warm Cold Topic

Robert C. Richardson, professor of physics and a pioneer in research at very low temperatures, will perform an hour of experimental demonstrations for the general public at 8 p.m. Thursday (Nov. 30) in Room A, Rockefeller Hall at Cornell.

Speaking on the topic "A World Without Disorder: Absolute Zero Temperature," Richardson will demonstrate some of the remarkable changes that occur in the properties of matter as one cools it to lower and lower temperatures.

Richardson will begin with

demonstrations of changes that occur in familiar materials when they are cooled to the temperature of liquid air or liquid nitrogen. Continuing to temperatures a factor of 100 below room temperature, he will demonstrate some of the behaviors of superfluids and superconductors, perform levitation with a superconducting magnet and transform "normal" helium into superfluid helium.

He will describe some of the unexpected new phenomena recently discovered at still lower

temperatures—within a few thousandths of a degree of absolute zero. Finally he will discuss some of the unsolved puzzles and the practical implications of research at very low temperatures.

Richardson has devised procedures to search for new phenomena and to examine properties of matter at milli-degree temperatures. He is perhaps best known for the 1972 discovery, with David Lee and Douglas Osheroff, of a remarkable new type of superfluid, the magnetic superfluid phases of liquid helium three. For this discovery, Richardson, Lee and Osheroff received the Simon Prize in Low Temperature Physics.

Richardson's lecture is the first in a new series sponsored by Cornell's Department of Physics. The presentations are intended for a general audience and do not assume a scientific background, according to Douglas B. Fitchen, chairman of the department. Students in the arts and humanities should find the talks both informative and entertaining, he said.

## Women Communicators Sponsor Job Workshop

"Have You Got Experience?" is the theme of a Communication Workshop to be held Dec. 9 at Martha Van Rensselaer Hall. The workshop will be sponsored by Cornell Women in Communication, Inc. and is open to all members of the Cornell and community. The workshop will explore methods of securing a summer internship.

Registration is at 11:30 a.m. and the workshop will continue throughout the rest of the afternoon. Speakers, including students, professionals and Career Center personnel will tell of their own experiences.

A short break in mid-afternoon will be followed by a roundrobin of workshops or resumes, interviews, portfolios and freelance internships.

Preregistration will be held at

Willard Straight Hall from 10 a.m. to 3 p.m. on Dec. 1, 4 and 5. A nominal fee will be charged: CWIC members, \$1.50; non-members, \$2.50; \$3 at the door.

## Dean Cooper Receives Lasker Award

Dr. Theodore Cooper, provost for medical affairs and dean of the Cornell Medical College, has received one of two special awards for public service from the Albert and Mary Lasker Foundation.

Cooper and Elliot L. Richardson, the former Secretary of Health Education and Welfare, were cited for work on a federally sponsored nationwide campaign to reduce the toll from high blood pressure among Americans.

The awards were announced last week along with the 1978 Albert Lasker Awards in medicine which went to three scien-

tists for work in new vaccines and three for research in brain chemistry.

The Lasker foundation has made only nine awards for public service in 33 years. Richardson and Dr. Cooper will share a \$15,000 cash prize.

Upon hearing of the award, President Frank Rhodes said "Dr. Cooper has been deeply involved in developing the National High Blood Pressure Education Program throughout his career and the Lasker Foundation's Public Service Award recognizes, in the most distinguished way possible, both his commitment to this and his success. The goal of the program is a very high and a very practical one. It is to raise the level of awareness among physicians and patients of the symptoms of stroke, kidney and heart disease and to improve the quality of medical care provided to victims of those diseases. The program is one of the most successful of its kind in America, and it has helped to bring about a dramatic decrease in the occurrence of these diseases. The

award is a great honor to Dr. Cooper. We are not only very happy for him at Cornell, we're also extremely proud of him and the recognition that this represents."

Before assuming his current position at Cornell, Dr. Cooper had served as assistant secretary for health in HEW. From 1968 until 1974, when he assumed his post at HEW, he was director of the National Heart and Lung Institute.

## 'East Meets West' Again At Society for Humanities

A specialist in the early modern history of Southeast Asia will present a colloquium in the series "Culture Impact: East Meets West" at 4 p.m. Friday at the Society for the Humanities.

Victor Lieberman, reader at Hatfield Polytechnic in England and a junior fellow at the society this year, will discuss "Europeans and the Unification of Burma, ca. 1530-1630" in room 201 of the Andrew D. White House.

His appearance is the fourth in the 10-part, year-long series of lectures and colloquia sponsored by the society concerning the impact of Asian thought and culture on the West. Lieberman will be the last speaker this semester.

Lieberman, whose essay on ethnic politics in 18th century Burma will appear in a forthcoming issue of "Modern Asian Studies," has published three

monographs on Southeast Asian history.

A graduate of Yale University, where he has also taught, Lieberman earned his Ph.D. in 1976 at the University of London's School of Oriental and Asian Studies.

## Land Use Law Expert To Give Two Seminars

Norman Williams Jr., an expert on American land use law, will be the featured speaker at two open seminars Friday, Dec. 1, sponsored by the Department of Regional Planning.

—At 9 a.m. in 208 W. Sibley Hall, he will hold a seminar on the subject of government controls to protect unique and fragile environmental areas.

—At 3 p.m. in 115 W. Sibley

Hall, Williams will discuss questions of growth control, exclusionary zoning, downtown revitalization and historic preservation.

He currently holds faculty positions at both the Vermont Law School and the College of Law at the University of Arizona. In 1975 he published a five volume treatise, "American Land Planning Law."



**Cornell  
United Way**

## United Way Thanks All For Time and Money

For all intents and purposes the Cornell segment of the Tompkins County United Way Campaign is now over. It has been a distinct privilege to be the chairperson this year; more so since I had the enviable opportunity to work with such dedicated volunteers. Publicly I wish to thank them all for both their efforts and their ability to keep smiling as things became hectic. At the present time, Cornell has raised \$212,673 which is 90.9 percent of our goal. Over the next few months, people on leaves, sabbatics, etc., will continue the trickle of monies arriving at the United Way office. If

by chance anyone did not receive a card or forgot to send it in but still wishes to contribute, your needed donation certainly will be accepted and greatly appreciated. It can be forwarded either to me or the Tompkins County United Way office. I believe the campaign went well and there is no doubt in my mind that "Thanks to you it works for all of us."

Jerry Luisi  
Chairperson  
Cornell United Way Campaign

# Chemist Receives Dreyfus Teacher-Scholar Grant

Bruce Ganem, assistant professor of chemistry, has been named recipient of a five-year Teacher-Scholar Grant from the Camille and Henry Dreyfus Foundation. These \$35,000 awards are presented annually to young faculty with exceptional promise in the fields of chemistry, biochemistry or chemical engineering who combine an interest

and an ability in imaginative teaching and research.

Ganem's scientific interests broadly encompass organic synthesis and biochemistry. In current projects, he and his research group are working towards the total synthesis of various new experimental antibiotics and anticancer agents as well as the design of chemical model systems for vitamins and coenzymes.

## Ornithology Lecture Slated

Cornell biologist Bob Rybczynski will speak on "The White-throated Sparrow as a Fruit Thief" at 7:45 p.m. Monday, Dec. 4, at the Cornell University Laboratory of Ornithology, 159 Sapsucker Woods Road.

His talk, part of the Monday night seminar series, is free and open to the public.

## Zaitlin Elected Society Fellow

Milton Zaitlin, professor of plant pathology at the State College of Agriculture and Life Sciences, has been elected a Fellow of the American Phytopathological Society.

He was recognized for his achievements in research and teaching in the field of plant pathology.



## One of Their Own ...

Richard J. Ferris, center, a 1962 graduate of the School of Hotel Administration and now president of UAL, Inc. and also president and chief executive officer of United Airlines, UAL, Inc.'s major subsidiary, discusses how he reached his current post with undergraduate students at the Hotel School. He spoke to more than 900 students at the school Nov. 17 as a guest lecturer in Dean Robert A. Beck's weekly class: Hotel Management Seminar.

## Graduate Bulletin

The final date for late change of course registration with \$10 processing fee is Dec. 8. As of Dec. 9 a petition is required in addition to the \$10 processing fee.

All graduate students are reminded that the Graduate School offices will be closed from Friday, Dec. 22 until 8:15 a.m., TUESDAY, Jan. 2. Any admission to Candidacy Examinations or Final Examinations to be held during the week of Jan. 1 should be scheduled by 4:15 p.m., Thursday, Dec. 21, in order to allow ample notification of the field concerned.

The deadline for completion of all requirements for a January degree is Jan. 12, 1979. There will be no extensions granted.

Applications for 1979-80 NDEA-Title VI (FLAS) Fellowships will be available by December 1. Applications for 1979-80 Continuing Cornell Graduate Fellowships will be available at the Fellowship Office, 116 Sage Graduate Center, beginning mid-December.

Applications for the following National Science Foundation Fellowship programs are available at the Fellowship Office, 116 Sage Graduate Center or by writing to the Fellowship Office, National Research Council, 2101 Constitution Avenue N.W., Washington, D.C. 20418. Deadlines are rapidly approaching!

1. NSF Graduate Fellowships deadline: Nov. 30.
  2. NSF Minority Graduate Fellowships deadline: Dec. 8
- Eligible graduate students who wish to apply for NSF Doctoral Dissertation Improvement Grants should contact the Office of Sponsored Programs, 123 Day Hall, 6-5014, for information.
- Other upcoming deadlines are:
- Nov. 30: DAAD Traineeships in Germany.
  - Nov. 30: German Marshall Fund Fellowships.
  - Nov. 30: NSF Graduate Fellowships.
  - Dec. 1: American Association of University Women (International Fellowships for Graduate Study).
  - Dec. 1: American Society of Civil Engineers (ASCF) Research Fellowships.
  - Dec. 1: Ammann Research Fellowship in Structural Engineer-

ing (ASCE).

- Dec. 1: Diuguid Fellowships.
- Dec. 1: East-West Center Graduate Study Award.
- Dec. 1: Oak Ridge Associated Universities Grants (for March 1979 appointment).
- Dec. 1: Sigma Delta Epsilon (Eloise Gerry Fellowship).
- Dec. 1: SSRC/ACLS Postdoctoral Research Abroad Grants.
- Dec. 1: U.S. Dept. of Labor Doctoral Dissertation Grants.
- Dec. 1: White House Fellowships.
- Dec. 5: Latin American/Caribbean Learning Fellowship for Social Change.
- Dec. 8: NSF Minority Graduate Fellowship.
- Dec. 15: American Association of University Women Doctoral and Postdoctoral Fellowships.
- Dec. 15: Dumbarton Oaks Center Grants.
- Dec. 15: Alice Freeman Palmer Fellowships-Wellesley College (applications due at the Fellowship Office, 116 Sage Graduate Center).
- Dec. 15: Philip Morris Marketing/Communications Competition.
- Dec. 15: Southern Fellowships Fund.
- Dec. 15: SSRC Postdoctoral Research Training Fellowships.
- Dec. 31: Arctic Institute of North America Grants.
- Dec. 31: National Gallery of Art Fellowships.
- Dec. 31: National Wildlife Federation/Environmental Conservation Fellowships.
- Dec. 31: National Wildlife Federation/American Petroleum Institute Fellowships.
- Dec. 31: Rhodes Fellowships for Women.
- Jan. 1: Business and Professional Women's Foundation Fellowships (for April 1979 award).
- Jan. 1: Lady David Fellowships for Study in Israel.
- Jan. 1: Amelia Earhart Fellowships.
- Jan. 1: Woods Hole Oceanography Institute Postdoctoral Awards.

- Jan. 2: Schimke Scholarship (Wellesley College).
- Jan. 2: Shaw Fellowship (Wellesley College).
- Jan. 12: Metropolitan Museum of Art Fellowships.
- Jan. 15: American Home Economics Association Fellowships.
- Jan. 15: Calgary Institute for the Humanities Postdoctoral Fellowship.
- Jan. 15: Andover Fellowships.
- Jan. 15: Chicago Mercantile Exchange Fellowships.
- Jan. 15: Coro Foundation Fellowships.
- Jan. 15: Josephine De Karman Fellowship (to request applications).
- Jan. 15: Ford Foundation Fellowship-Soviet Studies/ Arms Security and Control.
- Jan. 15: Fortescue Fellowship in Electrical Engineering.
- Jan. 15: Intercollegiate Study Institute Fellowships.
- Jan. 15: Kosciuszko Foundation Scholarship.
- Jan. 15: Lalor Foundation Postdoctoral Fellowship.
- Jan. 15: National Research Council-Canada Associateships.
- Jan. 15: Omicron Nu Fellowships.
- Jan. 15: Sigma Delta Upsilon Grant-in-Aid.
- Jan. 15: Smithsonian Institution Fellowships.
- Jan. 15: Society for the Psychological Study of Social Issues (SPSSI).
- Jan. 15: Transition Center Fellowships.
- Jan. 16: Ralston Purina Research Fellowships.
- Jan. 22: Herbert H. Lehman Graduate Fellowships.
- Jan. 24: Belgian American Educational Foundation Fellowships (applications due at Fellowship Office, 116 Sage Graduate Center).
- Jan. 31: DAAD Goethe Institute/Hochschulferienkurs/Short-Term Research Grants.
- Jan. 31: Josephine De Karman Fellowships.
- Jan. 31: Whitney Young Jr. Fellowships.

## Special Seminars

Agriculture and Life Sciences

AGRICULTURAL ENGINEERING ENERGY SERIES: "High Voltage Electric Power Transmission," S. Linke, 12:20 p.m., Friday, Dec. 1, Riley-Robb 400.

BIOMETRICS: "The Current Population Survey and Unemployment Statistics," Philip J. McCarthy, 3:45 p.m., Thursday, Nov. 30, Warren 345.

MICROBIOLOGY: "Microbial Aspects of Secondary Oil Production," Kenneth Anderson, St. Bonaventure University, 4:30 p.m., Thursday, Nov. 30, Stocking 124.

NATURAL RESOURCES: "Theoretical Ecology: How Useful Is It in Our Quest for Solutions to Applied Fish Management Problems?" Roy Stein, Ohio State University, 4 p.m., Thursday Nov. 30, Fernow 304.

PLANT PATHOLOGY: "Ecological Contrasts: White Pine Basal Canker and Beech Bark Disease," David R. Houston,

Northeast Forest Experiment Station, USDA-SEA, Hamden, Conn., 8 p.m., Thursday, Nov. 30, Plant Science 404.

VEGETABLE CROPS: "Breeding and Genetics of Lettuce and Endive," Richard W. Robinson, 4:30 p.m., Thursday, Nov. 30, Plant Science 404.

Arts and Sciences

ASTRONOMY: "Recent Radar Findings on the Moons of Jupiter and the Rings of Saturn," Steven Ostro, MIT, 4:30 p.m., Wednesday, Dec. 6, Space Science 105.

CHEMISTRY: "Molecular Probe Analysis by Laser-Excited Raman Spectroscopy," K.F.J. Heinrich, National Bureau of Standards, 4:40 p.m., Thursday, Nov. 30, Baker Lab 119.

Biological Sciences

BIOCHEMISTRY: "Gene and Genome Structure in Yeast," D. Botstein, MIT, 4:30 p.m., Friday, Dec. 1, Stocking 204.

## Bulletin Board

### Couples Get-Together

Cornell couples will have an opportunity to meet other student couples at a Dish-to-Pass Supper from 7 p.m. to 10 p.m., Friday, Dec. 1, at the International Living Center second floor lounge. Entertainment for the event, sponsored by the Cornell Student Wives Organization, will be folk singer and guitarist Eric Law. Those attending should bring a dish to pass and their own place setting. Beverages will be provided. There will be a 50 cents admission charge to non-members.

For more information, call Jacque Dunegan at 257-4609 or Iada Loomis at 257-3401.

### Campus Club Annual Tea

The Cornell University Campus Club will hold its annual Christmas Tea at the home of Mrs. Frank Rhodes, 603 Cayuga Heights Rd., from 2 to 4 p.m., Thursday, Dec. 7. All members

are invited to attend. Car pools are recommended as parking is limited.

### Formosan Culture Festival

The Formosan Club of Ithaca will sponsor a Formosan cultural festival on Saturday, Dec. 2, in Anabel Taylor Hall. The program will include cultural exhibits, live folk arts, Taiwanese gourmets, films and slides. The event is free and open to the public. Interested persons may call Ruey-Way Lin at 256-4877 for further information.

### 'Deciphering Health Costs'

"Deciphering Health Costs" is the title of the fifth session in The Focus on Health series held Tuesday evenings for Cornell married students and their spouses. The two-part discussion, sponsored by the Office of the Dean of Students, on various insurance plans and the proposed national health insurance amendment, will be held at 7:30 p.m., Tuesday, Dec. 5 at Brown Center, Hasbrouck Apartments (behind building 57).

ECOLOGY AND SYSTEMATICS: "Host Plant Selection by *Triphaba* spp. on Goldenrods: Congruence between Field and Lab Observations," Frank Messina, 12:15 p.m., Tuesday, Dec. 5, Martha Van Rensselaer 114.

NEUROBIOLOGY AND BEHAVIOR: "Some Problems in the Development of a 'Simple' Nervous System," John Hildebrand, Harvard Medical School, 12:30 p.m., Thursday, Nov. 30, Langmuir Penthouse.

PLANT PHYSIOLOGY: Niel Turner, CSIRO, Australia, 11:15 a.m. Friday, Dec. 1, Plant Science 404.

PHYSIOLOGY: "Visceral Blood Flow in Sheep," A. Dobson, 4:30 p.m., Tuesday, Dec. 5, Vet Research Tower G-3.

Centers and Programs

COMPUTER SERVICES: "Statistical Computing," 12:20 p.m., Tuesday, Dec. 5, Uris Hall G-14.

Engineering

CHEMICAL ENGINEERING: "Particle Behavior in Viscoelastic Liquids," J.J. Ulbrecht, SUNY, Buffalo, 4:15 p.m., Monday, Dec. 4, Olin Hall 145.

MATERIALS SCIENCE AND ENGINEERING: "Unidirectionally Solidified Oxide Eutectics," R.C. Bradt, Pennsylvania State University, 4:30 p.m., Thursday, Nov. 30, Bard 140.

MECHANICAL AND AEROSPACE ENGINEERING: "Structural Features within Turbulent Flows," Ja-es F. Keffer, University of Toronto, 4:30 p.m., Tuesday, Dec. 5, Grumman 282.

THEORETICAL AND APPLIED MECHANICS: "A Creep Plasticity Model for Structural Metals at High Temperature," David Robinson, Oak Ridge Lab, 4:30 p.m., Wednesday, Dec. 6, Thurston 205.

Human Ecology

GENDER ROLE CHANGES ALONG THE LIFE COURSE SERIES: "Moral Commitment and Unplanned Divestments; Retirement Planning for Those Years Alone," 4 p.m., Tuesday, Dec. 5, Martha Van Rensselaer 225.

Veterinary Medicine

MICROBIOLOGY/PATHOLOGY: "Metabolism of Anaerobic Parasitic Protozoa (Trichomonads)," Donald G. Lindmark, Rockefeller University, 12:15 p.m., Monday, Dec. 4, Vet Research Tower G-3.

# Vet Makes Rounds of Shellfish Farms



Dr. Louis Leibovitz, professor of avian and aquatic animal medicine, works with clam and oyster hatchery operators on Long Island to prevent disease outbreaks.

Shellfish farming—raising microscopic clam and oyster larvae in a controlled, sheltered environment then transplanting them to estuaries—has a lot going for it.

Shellfish are tremendously fertile; a single mating of a pair of oysters can produce 120 million to 140 million larvae. In nature only a small fraction of one percent of the larvae survive, but in the hatchery the larvae can be nursed through their critical first weeks and the yield of shellfish greatly increased.

Shellfish food, algae, can be free for the taking; it comes in with the bay water. And through management, shellfish can be bred for resistance to disease, greater tolerance to changes in the salt-content of their environment and other desirable traits that allow them to be transplanted to waters where natural populations are small or non-existent.

But there is a hitch. Whenever large numbers of animals are concentrated in a small area the chance for disease increases. With hatchery-reared shellfish larvae, the problem is compounded by a shared water supply that quickly spreads the disease throughout the hatchery.

Dr. Louis Leibovitz, professor of avian and aquatic animal medicine at the State College of Veterinary Medicine, has been working with hatchery operators on Long Island since 1973 to identify the causes of disease and to control it once it enters the hatchery.

His research, sponsored by the New York Sea Grant Institute, involves monthly testing of water at six major Long Island hatcheries for bacterial content and for the presence of certain chemicals, especially nitrogen compounds, associated with outbreaks of disease.

When Dr. Leibovitz began his

research, little was known about diseases of shellfish larvae. He isolated many species of bacteria—in the hatchery water, in algal cultures used as food sources, in the artificially fertilized spawn—and found that in high enough concentrations any of the bacteria could kill the shellfish larvae.

He also found that the number of bacteria entering the hatchery from bay water varies seasonally. The more organic material, especially dead algae, in the water, the more likely bacteria are to multiply in the hatchery.

"High total bacterial counts are the single greatest cause of larvae mortality in the hatcheries," Dr. Leibovitz said.

One group of bacteria, the vibrios, are a particularly serious problem for the hatchery operator. Epidemics of vibriosis in the hatcheries, caused by the bacteria, can kill an entire crop of shellfish larvae.

Dr. Leibovitz has determined that vibrios in bay water reach their peak concentration in spring or summer and that the peak is associated with a drop in the ammonia-nitrogen levels in bay water. Total bacterial counts and amount of suspended organic material also increase at this time.

When these signs of impending danger appear in his monthly samples, Dr. Leibovitz alerts the hatchery managers, who can take preventive steps—switch from bay water to purer supplies from salt water wells, filter existing water, use ultraviolet lights to reduce bacterial counts, cover holding tanks with opaque material to block out the sunlight which supports the algae on which the disease agents (as well as the shellfish larvae) feed, or simply shut down until the bay water becomes cleaner.

## Sponsored Programs Announces Funds Opportunities

Inasmuch as the Chronicle will publish its last issue of the calendar year on Dec. 7, the final update on calendar year funding deadlines will appear on that day. The Office of Sponsored Programs also reminds the Faculty that this office will be closed from Dec. 22 until Jan. 2, 1979. Please have all proposals whose deadlines fall within those dates submitted in time for proper review and mailing to the agencies.

The American Council on Education is inviting participation of member institutions in the 1979-80 AFP Fellows Program in Academic Administration and the Cooperative Personnel Exchange. Cornell is a member institution.

This year's AFP Fellows Program is designed to identify and

encourage faculty and staff members who exhibit high potential for academic administration.

The Cooperative Personnel Exchange (CPE) offers development opportunities to college faculty and staff.

Brochures describing the AFP and CPE programs are available in the Office of Sponsored Programs, 123 Day Hall.

The deadlines for the AFP and CPE require an early submission of intention to request designation as a nominee. Therefore, it is important to indicate intention to apply by Dec. 10.

The National Research Council (NRC) announces the Research Associateship Programs for 1979. These programs provide opportunities for basic and ap-

plied research to postdoctoral and senior postdoctoral scientists and engineers of unusual ability and promise. Opportunities for research are provided in the fields of atmospheric and earth sciences, chemistry, engineering, environmental sciences, life sciences, mathematics, physics and space sciences. The NRC administers the Research Associateship Programs on behalf of and in cooperation with selected federal research organizations, which have laboratories at about 65 geographic locations in the United States.

Appointments are awarded on a competitive basis. The competition is open to recent recipients of the doctorate and in some cases to senior investigators. Some programs are

open to non-U.S. citizens also. Approximately 250 new awards will be made in 1979. Stipends (subject to income tax) will begin at \$18,000. Grants will be provided for family relocation and for limited professional travel during tenure.

Postmark deadline for applications is Jan. 15, 1979. Awards will be announced in April. Further information concerning application materials and specific opportunities for research is available from the Associateship Office, JH 606-P, National Research Council, 2101 Constitution Avenue, N.W., Washington, D.C. 20418. A copy of the announcement can be seen at the Office of Sponsored Programs, 123 Day Hall.

The National Center for Health

Services announces that grant support is available for research projects undertaken in conjunction with the preparation for a dissertation.

Award may not exceed \$20,000 in total direct costs.

Grant application materials are available from: Director, Review and Advisory Services (Dissertation), National Center for Health Services Research, Room 7-50A, Center Building, 3700 East-West Highway, Hyattsville, Maryland 20782 (Telephone: 301-436-6920).

Deadline for submission of applications is Jan. 15, 1979. Some additional information is available from The Office of Sponsored Programs.

## Calendar

Continued from Page 12

1 p.m. SALAT-AL-JUMA (Friday prayer for Muslims). Anabel Taylor Edwards Room.

4:15 p.m. Coalition for the Right to Eat alternating business and learning exchange meeting. Anabel Taylor Forum.

7 & 9:30 p.m. \*Cornell Cinema presents "Turning Point." Statler Auditorium.

7 p.m. Cornell Dungeons and Dragons meeting. Upson 111.

7 & 9 p.m. \*Big Red Basketball Classic Tournament. Barton.

7:30 p.m. Pentangle II Free Film Series: "How Tasty Was My Little Frenchman" (Santos, 1971, Brazil); short: "Memories of the Cangaco" (Soares, 1971, Brazil). Uris Hall Auditorium.

7:30 p.m. Cornell Christian Fellowship meeting for prayer, singing and teaching. All welcome. Morrill 106.

8 p.m. Cornell Women's Varsity Basketball-Harvard. Helen Newman.

8 p.m. \*Cornell Folk Song Club end-of-the-semester dance. Band and caller to be announced. Martha Van Rensselaer Auditorium.

8:15 p.m. Department of Music Concert with Lynn Chang, violinist; Richard Kogan, pianist; Yo-Yo Ma, cellist. Works of Beethoven, Kodaly, Brahms. Barnes Auditorium.

8:15 p.m. \*Department of Theatre Arts presents "Keep Your Eye on Emily" by Georges Feydeau. Straight Theatre.

8:15 p.m. \*Risley Theatre presents "A Funny Thing Happened On The Way to The Forum." Stephen Sondheim's Tony Award winning musical comedy. Tickets available at Willard Straight and at the door. Risley Theatre.

9:30 p.m. "Hootenanny" with The Henry Family Band sponsored by the North Campus Union Program Board. North Campus first floor lounge.

9:45 p.m. \*Cornell Cinema presents "Dersu Uzala." Uris Hall Auditorium.

10 p.m.-2 a.m. Tammany Niteclub with live music and refreshments. Risley.

12 midnight. \*Cornell Cinema presents "Brewster McCloud." Statler Auditorium.

10 a.m.-4 p.m. Craft Fair and Bake Sale sponsored by members of Cornell University Married Student Housing with handmade knitted and crocheted articles, sheepskin hats, jewelry, macrame, batik, Chinese paintings, children's clothing, Christmas Ornaments and stockings. Many International baked goods and much, much more. Hasbrouck Apartments Brown Center.

2 p.m. Cornell Varsity Fencing-Yale. Barton.

4 p.m. Cornell Women's Varsity Basketball-Barnard. Helen Newman.

4:30 p.m. Catholic Sacrament of Reconciliation. Anabel Taylor G24.

5:15 p.m. Catholic Mass. All welcome. Anabel Taylor Auditorium.

7 p.m. Cornell Dungeons and Dragons. Upson 111.

7 & 9 p.m. \*Cornell Big Red Basketball Classic Tournament. Barton.

7 & 9:30 p.m. \*Cornell Cinema presents "Turning Point." Statler Auditorium.

7 & 9:45 p.m. \*Cornell Cinema presents "Dersu Uzala." Uris Hall Auditorium.

7:30 p.m. \*Cornell JV Hockey-Canton Tech. Lynah.

8:15 p.m. \*Department of Theatre Arts presents "Keep Your Eye on Emily" by Georges Feydeau. Straight Theatre.

8:15 p.m. Department of Music presents Cornell Symphony Orchestra conducted by Edward Murray, with soprano soloist, Jean Hakes. Works of Berg, Ravel, Mahler's Symphony No. 4. Bailey Auditorium.

10 p.m.-2 a.m. Tammany Niteclub with live music and refreshments. Risley.

12 midnight. \*Cornell Cinema presents "Brewster McCloud." Statler Auditorium.

5:15 p.m. Catholic Mass. All welcome. Anabel Taylor Auditorium.

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12 midnight. \*Cornell Cinema presents "Brewster McCloud." Statler Auditorium.

### Sunday, December 10

9:30, 11 a.m. & 5 p.m. Catholic Mass. All welcome. Anabel Taylor Auditorium.

9:30 a.m. Episcopal Eucharist Worship Service. Faculty, staff, and families welcome. Church School and nursery care. Coffee hour following service in Founders Room. Anabel Taylor Chapel.

10:45 a.m. The Lutheran Church Worship Service. Nursery care provided. Coffee hour following the service. Church School prior to service at 9:30 a.m. 109 Oak Avenue.

11:15 a.m. Protestant Church at Cornell. Anabel Taylor Chapel.

11 a.m. Sage Chapel Convocation: Constance E. Cook, Vice President, Land Grant Affairs, Cornell.

11:15 a.m. Protestant Church at Cornell. Anabel Taylor Chapel.

1 p.m. Medieval fighting practice. Risley front lawn, weather permitting.

1-2 p.m. Meditation as taught by the Living Master Sant Darshan Singh Ji. Straight Loft 2.

2 p.m. \*Cornell JV Hockey-Canton Tech. Lynah.

2 p.m. \*Cornell Cinema presents "Heidi." Co-sponsored with Ithaca Youth Bureau. Uris Hall Auditorium.

3:30 p.m. Society for Creative Anachronism meeting and medieval dance practice. All welcome. Risley Dining Hall.

8 p.m. \*Cornell Cinema presents "Stolen Kisses." Uris Hall Auditorium.

8:15 p.m. \*Sage Chapel Choir Christmas Program directed by Donald R.M. Paterson. Sage Chapel.

### Exhibits

Olin Library, History of Science Collections: "Thomas Bewick, 1753-1828: Wood Engraver and Artist of Natural History and British Rural Life. 150th Anniversary of His Death," through Nov. 30. Olin Library 215.

Olin Library, Department of Manuscripts and University Archives: Documents belonging to the collection of papers of Francois-Jules Harmand (1845-1921). Harmand spent many years in South-East Asia first as explorer, later as representative of the French Government. The exhibit includes hand-drawn maps, photographs and copies of diplomatic appointments and letters, through December.

Herbert F. Johnson Museum of Art: "William Baziotes: A Retrospective Exhibition," through Dec. 10; "Prints for Purchase," through Dec. 17; "Permanent Collection," through December.

Olin Library: "EQUUS: The Horse and Civilization." For 5,000 years the horse has served man at work, war, sports and pleasure, through December.

Uris Library: "Main Street, The Heart of the American Town." Photographs of Upstate New York by Milo Stewart for the New York State Council on the Arts, through Dec. 15.

Clark Hall Frist Floor: "A Kaleidoscope of Crystal Conceptions." Photography Exhibit by Jo Handelsman.

### Announcements

Bowling: Men, Women, Co-ed. The deadline on entries is Wednesday, Dec. 6 at 4 p.m. in the Intramural Office, Grumman Squash Courts Building. Play starts Monday, Jan. 22. Monday through Thursday evenings. Minimum of 6 to enter. Co-ed: equal number of men and women, four will constitute a team. There will be an entrance fee of \$61.20 due with your roster. Checks payable to Helen Newman Bowling. No refunds after the deadline. Bowling shoes available at Helen Newman Alleys for a slight fee. Specify your preferred day of play on roster.

Craft Fair and Bake Sale: Handmade such as knitted and crocheted articles, sheepskin hats, jewelry, macrame, batik, Chinese paintings, children's clothing, Christmas ornaments and stockings. Many international baked goods and much, much more. Sponsored by members of Cornell University Married Student Housing on Saturday, Dec. 9 from 10 a.m.-4 p.m. at Brown Center, Hasbrouck Apartments, next to building 59.

University Unions Holiday Craft Fair: Crafts for sale to include pottery, fiber, batik, leather, glass, etched fungus, puppets, toys and much more. Dec. 7, 8, 9 from 10 a.m.-6 p.m. Straight Memorial Room.

# Calendar

November 30 — December 10

All items for the Chronicle Calendar must be submitted by mail or in person to Fran Apgar, Office of Central Reservations, 32 Willard Straight Hall, at least 10 (ten) days prior to publication of the Chronicle.

\* Admission charged

Attendance at all events is limited to the approved seating capacity of the hall.

## Thursday, November 30

11:15 a.m. Baker Lecture Series: "Cryptates: The Chemistry of Macropolycyclic Inclusion Complexes and the Design of Molecular Receptors, Carriers and Catalysts. An Approach to the Chemistry of the Intermolecular Bond," Jean-Marie Pierre Lehn, Universite Louis Pasteur de Strasbourg, France. Baker 200.

12:15 p.m. Catholic Mass. All welcome. Anabel Taylor G19.  
12:15 p.m. Women's Studies Graduate/Faculty Colloquium Series: "The Impact of Uneven Development on Women: The Case of Arab Village Women in Palestine," Rachelle Taqqu, Hobart and William Smith College; Ithaca College. Uris Hall 494.

12:15 p.m. Rural Sociology 300 Film: "Controlling Interest." Operations and effects of multinational corporations in the agricultural sector around the world. Warren 32.

4 p.m. Natural Resources Seminar: "Theoretical Ecology, How Useful is it in our Quest for Solutions to Applied Fish Management Problems," Roy Stein, Ohio State University. Fernow 304.

4 p.m. Open Poetry and Prose reading. Newcomers welcome. Goldwin Smith Temple of Zeus.

4 p.m. General information meeting regarding graduate study in management. Sponsored by the Office of Admissions and Student Affairs of the Graduate School of Business and Public Administration. Malott 224.

4:30 p.m. Astronomy and Space Sciences Colloquium: "Far-Infrared Astronomy with a 102-cm Balloon-Borne Telescope," Giovanni Fazio, Center for Astrophysics, Cambridge, MA. Space Sciences 105.

4:45 p.m. Cornell Campus Council meeting. Clark 701.

7-9 p.m. Badminton Club meeting. Helen Newman Gym.

7 p.m. The Christian Science Organization welcomes students, staff and campus visitors to the weekly readings and testimonies meeting. Anabel Taylor Founders Room.

7:15 p.m. Marathon Series presents "Cigarette Smoking—Two Views," Roy Coats, M.D.; John Tell, slides and discussion. Martha Van Rensselaer 207.

7:30 p.m. Israeli Folk Dancing. Anabel Taylor One World Room.

7:30 p.m. Cayuga Bird Club meeting. The identification of Gulls and Diving Ducks will be discussed. Lyman K. Stuart Laboratory of Ornithology, 159 Sapsucker Woods Road.

7:30 p.m. International Students Association of Business and Public Administration Lecture: "The Multinational Corporation in the World Economy," Harry Magdoff, editor of Monthly Review. Malott Bache Auditorium.

8 p.m. Colonel Yonatan Netanyahu Memorial Lecture: "Jewish Identity in Art," Bezalel Narkiss, Hebrew University, Jerusalem, Israel and Institute of Advanced Study, Princeton University. All welcome. Sponsored by Program in Jewish Studies and Near Eastern Studies. Goldwin Smith Kaufmann Auditorium.

8 p.m. Physics Public Lecture Series: "A World Without Disorder, Absolute Zero Temperature," Robert C. Richardson, Physics, Cornell. Rockefeller A.

8:15 p.m. \*Risley Theater presents "A Funny Thing Happened On The Way To The Forum," Stephen Sondheim's Tony Award winning musical comedy. Tickets available at Willard Straight and at the door. Risley Theater.

8:15 p.m. Department of Theatre Arts presents "The House of Bernarda Alba" by Federico Garcia Lorca. Straight Theatre.

## Friday, December 1

9 a.m. Department of City and Regional Planning Seminar: "The Future of Land Use Controls in Protecting Critical Environmental Areas - Floodplains, Agricultural Lands and Other Open Spaces," Norman Williams, Jr., Vermont Law School. West Sibley 208.

12:15 p.m. Catholic Mass. All welcome. Anabel Taylor G19.

12:15 p.m. Women's Studies Friday Seminar: "Perspectives on Women in Literature: A Panel Discussion," E. Rudat, Mellon Postdoctorate Fellow, Cornell; B. Buettner, Ph.D. candidate, German Literature, Cornell; R. Levin, Ph.D. candidate, Comparative Literature, Cornell. I&LR Conference Center 1 Wenick, Sociology, Columbia. Co-sponsored by Rural Sociology and CRESPP. Warren 32.

1 p.m. SALAT-AL-JUMA (Friday prayer for Muslims). Anabel Taylor Edwards Room.

3 p.m. Department of City and Regional Planning Seminar: The Future of Land Use Controls in Our Urban Areas (With a Focus on Historical Preservation and Growth Control)," Norman Williams Jr. Vermont Law School. West Sibley 115.

4 p.m. Society for the Humanities Colloquium: "Cultural Impact: East Meets West Series," Victor Lieberman, Fellow, Society for the Humanities. "Europeans and the Unification of Burma, CA. 1530-1630," Andrew D. White House 201.

4:15 p.m. Coalition for the Right to Eat alternating business and learning exchange meeting. Anabel Taylor Forum.

5:30 p.m. Shabbat Services (Conservative). Anabel Taylor Founders Room.

5:30 p.m. Shabbat Services (Reform). Anabel Taylor Chapel.

6:30 p.m. Shabbat Services (Orthodox). Young Israel.

7 & 9:30 p.m. \*Cornell Cinema presents "Saturday Night Fever." Statler Auditorium.

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November 30, 1978

7 p.m. Cornell Dungeons and Dragons meeting. Upson 111.

7:30 p.m. Pentangle II Free Film Series presents "Iphigenia" (Cacoyannis, 1977, Greece). Uris Hall Auditorium.

7:30 p.m. Cornell Christian Fellowship meeting for prayer, singing and teaching. All welcome. Morrill 106.

7:30 p.m. \*Cornell Varsity Hockey-Brown. Lynah.

8:15 p.m. \*Department of Theatre Arts presents "The House of Bernarda Alba" by Federico Garcia Lorca. Straight Theatre.

8:15 p.m. \*Department of Theater Arts presents "Vietnam Revisited." Lincoln Drummond Studio.

8:15 \*Risley Theater presents "A Funny Thing Happened On The Way To The Forum," Stephen Sondheim's Tony Award winning musical comedy. Tickets available at Willard Straight and at the door. Risley Theater.

10-11:30 p.m. North Campus Program Board presents "Princeton Footnotes." North Campus first floor lounge.

10 p.m.-2 a.m. Tammany Niteclub with live music and refreshments. Risley.

10 p.m. \*Cornell Cinema presents "The Lacemaker." Uris Hall Auditorium.

12 midnight. \*Cornell Cinema presents "Where's Poppa?" Statler Auditorium.

## Saturday, December 2

8 a.m.-6 p.m. The Cayuga Bird Club will sponsor a trip to Derby Hill and Owego Harbor. The group will leave from the Cornell Dairy Barn. Those attending should bring a lunch and wear warm clothes.

9:15 a.m. Shabbat Services (Orthodox). Anabel Taylor Edwards Room.

10 a.m. Shabbat Services (Conservative). Anabel Taylor Founders Room.

10 a.m.-6 p.m. Formosan Cultural Festival free exhibits, live folkarts and Taiwanese Gourments. Sponsored by Formosan Club of Ithaca. Open to the public. Anabel Taylor One World Room.

1 p.m. Cornell Women's Varsity Swimming-Bucknell. Helen Newman.

1 p.m. Cornell Women's Varsity Gymnastic Invitational. Barton.

1:30 p.m. \*Cornell JV Hockey-Villanova. Lynah.

2 p.m. Cornell Varsity Fencing-Buffalo. Barton.

4:30 p.m. Catholic Sacrament of Reconciliation. Anabel Taylor G-24.

5:15 p.m. Catholic Mass. All welcome. Anabel Taylor Auditorium.

6 p.m. Cornell Folk Song Club dish-to-pass dinner followed by a workshop around 7:15 p.m. and singing after that. Come anytime. Free. Big Red Barn.

7 p.m. Cornell Dungeons and Dragons meeting. Upson 111.

7 & 9:30 p.m. \*Cornell Cinema presents "Saturday Night Fever." Statler Auditorium.

7:30 p.m. \*Cornell Varsity Hockey-Yale. Lynah.

7:30 & 9:45 p.m. \*Cornell Cinema presents "The Lacemaker." Uris Hall Auditorium.

8:15 p.m. \*Department of Theatre Arts presents "The House of Bernarda Alba" by Federico Garcia Lorca. Straight Theatre.

8:15 p.m. \*Department of Theater Arts presents "Vietnam Revisited." Lincoln Drummond Studio.

8:15 p.m. \*Risley Theater presents "A Funny Thing Happened On The Way To The Forum," Stephen Sondheim's Tony Award winning musical comedy. Tickets available at Willard Straight and at the door. Risley Theater.

9 p.m. North Campus Union Program Board presents "Casino Night." North Campus second floor lounge.

10 p.m.-2 a.m. Tammany Nitclub with live music and refreshments. Risley.

12 midnight. \*Cornell Cinema presents "Where's Poppa?" Statler Auditorium.

## Sunday, December 3

9:30 a.m. Episcopal Eucharist Worship Service. Faculty, staff and families welcome, Church School and nursery care. Coffee hour following service in Founders Room. Anabel Taylor Chapel.

9:30, 11 a.m. & 5 p.m. Catholic Mass. All welcome. Anabel Taylor Auditorium.

10:45 a.m. The Lutheran Church Worship Service. Nursery care provided. Coffee hour following the service. Church school prior to service at 9:30 a.m. 109 Oak Avenue.

11 a.m. Sage Chapel Convocation: Richard D. Schultz, Athletics, Cornell.

11:15 a.m. The Reverend William Gibson, Coordinator of the Cornell Eco-Justice Project of the Centre for Religion, Ethics and Social Policy (CRESPP) will speak at the Protestant Church at Cornell. Anabel Taylor Chapel.

12 noon. Cornell Relays. Barton.

1-2 p.m. Meditation as taught by the Living Master Sant Darshan Singh Ji. Straight Loft 2.

1 p.m. "Run Fr Yr Life" video program with "Run for Life" for beginning runners, narrated by Frank Shorter. At 2 p.m. "Marathon" a documentary of try-outs for the 1976 Olympics with Bill Rogers and company. North Campus Multipurpose Room.

1 p.m. Medieval fighting practice. Risley front lawn, weather permitting.

2 p.m. \*Cornell Cinema presents "The Red Pony." Co-sponsored by Ithaca Youth Bureau. Uris Hall Auditorium.

3:30 p.m. Society for Creative Anachronism meeting and medieval dance practice. All welcome. Risley Dining Hall.

4 p.m. Department of Music Song Recital with Joanne Ball, mezzo-soprano; Richard Goodman, baritone; William Cowdery, pianist. Works of Brahms, Schumann, Husa, Quilter, Vaughan Williams, Finzi, Ireland. Barnes Auditorium.

7:30-11 p.m. International Folk Dancing. Teaching for intermediates 7:30-8:30 p.m.; requests 8:30-11 p.m. Straight North Room.

8 p.m. \*Cornell Cinema presents "The Ruling Class." Uris Hall Auditorium.

8:15 p.m. \*Risley Theater presents "A Funny Thing Happened On The Way To The Forum," Stephen Sondheim's Tony Award winning musical comedy. Tickets Available at Willard Straight and at the door. Risley Theater.

## Monday, December 4

12:15 p.m. Catholic Mass. All welcome. Anabel Taylor G19.

4 p.m. Jugatae Seminar: "Effects of pH on Aquatic Insects," Sandy Fiance, Entomology. Caldwell 100.

4:45 p.m. Department of Music presents Cornell Symphonic Band conducted by Marice Stith. Works of Reed, Williams, McBeth, Respighi, Piston, Mennen. Straight Memorial Room.

5 p.m. Southeast Asia Film Series: "Buddhism: Footprints of

the Buddha." Open to the public. Morrill 106A.

5:45 p.m. \*Cornell JV Basketball-Hobart. Barton.

7:30 p.m. \*Cornell Varsity Basketball-Canisus. Barton.

7:30 p.m. America and World Community: "Holistic Approach to Nutrition and World Community," Paul Buck, Food Science. Anabel Taylor One World Room.

7:30p.m. Yiddish Conversation. Anabel Taylor 314.

7:45 p.m. Ornithology Seminar. Lyman K. Stuart Observatory, 159 Sapsucker Woods Road.

9 p.m. \*Cornell Cinema presents "The Man Who Knew Too Much." Film Club members only. Uris Hall Auditorium.

## Tuesday, December 5

10 a.m.-5 p.m. Emanuel Ben-Naeh Aliya Center will be in Hillel Office for information on Kibbutz Work/Study programs. Call 256-4227 for appointment.

12:15 p.m. Catholic Mass. All welcome. Anabel Taylor G19.

12:20 p.m. Cornell Women's Caucus. All welcome. Ives 118.

3:45-4:45 p.m. Zen Buddhist Meditation Group. Meeting for meditation. For more information call Tim Larkin at 539-7299. Anabel Taylor Edwards Room.

4:15 p.m. Food Science Seminar: "Advances in Membrane Technology - A Food Science Viewpoint," Robert Zall, Food Science. Stocking 204.

4:30 p.m. Animal Science 640 Wildlife Nutrition Seminar: "Comparative Nutrition With Emphasis on Primitive Mammals," Milton Scott, Poultry Science. Morrison 34S.

7-9 p.m. Cornell Badminton Club. Helen Newman Gym.

7:30 p.m. \*Cornell Varsity Hockey-St. Lawrence. Lynah.

7:30 p.m. Folk Dancing for Couples. Singles, beginners, all ages welcome. Martha Van Rensselaer Auditorium.

8 p.m. \*Cornell Cinema presents "I.F. Stone's Weekly" and "His Girl Friday." Uris Hall Auditorium.

## Wednesday, December 6

12 noon-1 p.m. "Run Fr Yr Life." Registration and testing. Cornell offers this non-competitive way to fun and fitness. Barton.

12:15 p.m. Catholic Mass. All welcome. Anabel Taylor G19.

12:30 p.m. Lutheran Eucharist Service. Anabel Taylor G15.

3:30-4:45 p.m. Special Agricultural Economics Seminar: "Food Policy Planning in Peru," Marco Ferroni. Warren 401.

5 p.m. Wilderness Reflections Committee meeting. Straight Loft II.

6 p.m. Advanced Hebrew. Anbel Taylor 314.

7 p.m. Herbert F. Johnson free films: "Frankenthaler: Toward a New Climate" and "Spirit Catcher: The Art of Betye Saar and Susan Weinberg, Artist." These are the last in a series of four programs on women artists, organized by the American Federation of Arts. H.F. Johnson Museum of Art.

7 p.m. Ithaca Friends (Quakers) meeting for worship. Everyone welcome. Those interested in finding out what Friends' meetings are all about are especially invited. Anabel Taylor Forum.

7:15 p.m. Bridge Club meeting. Hughes Hall Dining Room.

7:30 p.m. Chess Club meeting. Upson 111.

7:30-11 p.m. International Folk Dancing. Teaching for intermediates 7:30-8:30 p.m.; requests 8:30-11 p.m. All welcome. Straight Memorial Room.

8 p.m. Come find out about the Religious Society of Friends. Explore with us in weekly discussions. More experienced Friends will facilitate. Everybody welcome to come join in. Anabel Taylor Forum.

8 p.m. \*Cornell Cinema presents "The African Queen." Uris Hall Auditorium.

## Thursday, December 7

9-10:30 a.m. Professional Development Seminar for All University Student Services Staff: "Students and Personal Budgeting - Dimensions of the Problem," Office of Financial Aid. Straight Elmhurst Room.

12:15 p.m. Catholic Mass. All welcome. Anabel Taylor G19.

12:15 p.m. Women's Studies Graduate/Faculty Colloquium. Event has been cancelled.

12:15 p.m. Rural Sociology 300 Film: "My Country Occupied" (Guatemala). The story of a peasant woman as she journeys from country to city to country. Warren 32.

2-4 p.m. The Cornell University Campus Club will hold its annual Christmas Tea. All members are cordially invited to attend. Car pools are strongly recommended, as parking is limited. The tea will be held at the home of Mrs. Frank Rhodes, 603 Cayuga Heights Road.

4 p.m. Medieval Studies Lecture: "The Conversion of Sibilla, the Flaming Whore: An 11th Century Old English Cross Legend," Thomas D. Hill. Cornell. Sponsored by Quodlibet, free and open to the public. Goldwin Smith 246.

4 p.m. Open Poetry and Prose reading. Newcomers welcome. Goldwin Smith Temple of Zeus.

4 p.m. General information meeting regarding graduate study in management. Sponsored by the Office of Admissions and Student Affairs of the Graduate School of Business and Public Administration. Malott 224.

4:30 p.m. Astronomy and Space Sciences Colloquium: "Ultra-high Resolution Images of Mars from the Viking Orbiters," Joseph Veverka, Cornell. Space Sciences 105.

4:30 p.m. The Marathon Series presents "Testimony and Meditation," Father James Connolly, Alice Pempel and Surhenda Siddhu. Martha Van Rensselaer 207.

4:45 p.m. Cornell Campus Council meeting Clark 701.

7 p.m. The Christian Science Organization welcomes students, staff and campus visitors to the weekly readings and testimonies meeting. Anabel Taylor Founders Room.

7-9 p.m. Badminton Club meeting. Helen Newman Gym.

7:30 p.m. Israeli Folk Dancing. Anabel Taylor One World Room.

8 p.m. \*Cornell Cinema presents "Twelve Angry Men." Co-sponsored by Law School. Uris Hall Auditorium.

8:15 p.m. \*Faculty Committee on Music Concert with Victoria de los Angeles, soprano. Italian, French, German, Spanish songs. Bailey Auditorium.

8:15 p.m. \*Risley Theater presents "A Funny Thing Happened On The Way To The Forum," Stephen Sondheim's Tony Award winning musical comedy. Tickets available at Willard Straight and at the door. Risley Theater.

8:15 p.m. \*Department of Theater Arts presents "Keep Your Eye On Emily" by Georges Feyereau. Straight Theater.

## Friday, December 8

12:15 p.m. Catholic Mass. All welcome. Anabel Taylor G19.

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