

Cornell Chronicle

Volume 15, Number 28

Thursday, March 15, 1984

Robot-Control Languages Developed Here

Grant Helps to Make Robots' Arms More Like Humans'

Teaching industrial robots' arms to behave more like human arms is the goal of a major research initiative now underway in the Department of Computer Science, with funding from the National Science Foundation.

A three-year NSF grant totaling \$785,000 will help programming specialists in Computer Science, working with electrical and mechanical engineers in the Cornell Manufacturing Engineering and Productivity Program (COMEPP), to develop robot-control languages for general-purpose programmable robots.

"Currently, it is very difficult to program a robot to perform even simple tasks," according to Dean B. Krafft, the Computer Science research associate who, together with Computer Science Professor John E. Hopcroft and Associate Professor Alan J. Demers, is conducting the project called A Program of Research in Robotics. "While it is fairly easy to step a robot

through a simple sequence of motions, it is much harder to teach the robot to deal with such problems as 'compliant motion' and how to handle unforeseen situations."

While industrial robots are finding success in such activities as welding and spray painting, and robot arms can handle point-to-point tasks reasonably well, the compliant motion required when an object in a robot arm comes in contact with the object being assembled is not so simple.

A human supervisor might tell a human factory worker, "Connect the two flanges with a bolt and tighten the bolt," and the human could learn the routine — if tedious — task immediately. Programming a robot to accomplish the same task requires dozens or even hundreds of separate instructions in robot language such as "move end point of manipulator from x to y" and "close grip at given rate while moving endpoint." After much trial and error, the

robot can be "taught" its task — and not much else.

"Simple special purpose tools can accomplish a job," Krafft explains. "But we are interested in general purpose programmability. Ultimately, how much robots are used will depend on their adaptability and reprogrammability."

The researchers will begin by analyzing the many details that are taken for granted when a human undertakes a task — recognizing an object, for example, then reaching, grasping and turning. They will then teach the system how to perform each individual task for a wide class of objects. After that, the system must still be taught how to combine these separate steps into complete, continuous activity.

"Our eventual goal is to develop a system where the user would specify a task, for example assembling a flashlight, by simply showing the system the pieces of the flashlight and drawing a diagram of how

the pieces go together," according to Krafft. "The system itself would then develop all the individual steps necessary for the robot to perform the assembly."

The Cornell researchers will use a PUMA 560 robot arm and a VAX 750 computer to simulate an industrial workplace. The robotics project, a new venture at Cornell, draws on the Computer Science Department's strengths in programming methodology, programming environments, programming language design and implementation, distributed processing and concurrency as well as theory and algorithm design.

"We believe that robot programming is not fundamentally different from computer programming in general," says Krafft. "The major problem in programming is bridging the gap between an informal, high-level English description of a task and a formal, low-level executable program to perform that task."



Nick and Becky Collins with their children Aaron, Kyla (on Becky's lap) and Daria (on Nick's lap), and Cherry, their guinea pig.

Faculty in Residence: 2

The Collins Family Provides 'More-than-Study' Perspective

This is the second in a three-part series about the Faculty-in-Residence program.

By BARBARA JORDAN-SMITH

"One tends to lose touch with the real world here and with them living right across the street you're reminded that there's more to life than studying and papers."

The "them" Margaret Cahill, a freshman in Industrial and Labor Relations, is referring to are the Collinses—Nick, adjunct assistant professor in psychology; Becky, his wife; their children, Aaron, 15, Daria, 6, Kyla, 2 1/2, and Cherry,

their guinea pig, age unknown.

The Collinses are participating in the Faculty-in-Residence program and they live in a university-owned home located at 319 Wait Ave. For those who don't know where 319 Wait Ave. is, it's the house directly across from Balch Hall. Another landmark to use when looking for the house is Louie's Lunch Wagon, which parks near it.

The Faculty-in-Residence program is designed to provide an opportunity for faculty and students to get to know one another in non-traditional surroundings. The ultimate

Continued on Page 9

Linowitz to Speak Here

Sol M. Linowitz, U.S. Ambassador at Large for Middle East Negotiations in 1979, will discuss the current situation in the Middle East and prospects for the future in a public lecture scheduled for 3:30 p.m. Thursday, March 22, in the Moot Court Room of Myron Taylor Hall.

Described by The New York Times as a "favorite troubleshooter of presidents," Linowitz is a 1938 graduate of the Cornell Law School and has been a university trustee since 1966.

He will be giving the Law School's prestigious Irvine Lecture for 1983-84: "A Lawyer Looks at the Middle East."

Currently a senior partner in the international law firm of Coudert Brothers, Linowitz was chairman of the Presidential Commission on World Hunger when he was named by President Carter as Ambassador at Large for Middle East Negotiations in 1979.

He has been United States representative to the Organization of American States and the Inter-American Committee for the Alliance for Progress and co-negotiator on the Panama Canal Treaties of 1977.

Linowitz has also served as general counsel and board chairman of Xerox Corp.

Agricultural Economics Group Will Meet Here

About 2,000 people are expected to attend the 75th annual meeting of the American Agricultural Economics Association here this summer.

AAEA's meeting, Aug. 5-8, will be held in conjunction with the Northeast Agricultural Economics Council and the Association of Environmental and Resource Economists. The faculty in the department of agricultural economics in the State College of Agriculture and Life Sciences will be hosts.

The AAEA was proposed at Cornell in 1909 and came into being one year later at Iowa State University, which will be host to the 1985 AAEA meeting. Today, the association has some 5,500 members.

Several professional sessions are scheduled during the Ithaca meeting, with topics to include: implications of electronic marketing for agriculture; government's role in milk pricing then and now; credit policy risk and interest rate risk in agricultural finance; renewable resource use in developing countries; and U.S. agriculture in an unstable world economy.

The invited address during the AAEA meeting will be delivered by Jeffrey Frankel, a member of the senior staff of the President's Council of Economic Advisors. He will emphasize topics in international finance, pointing out what agricultur-

al markets have in common with financial markets — competitive, market-clearing trade in a homogenous storable commodity. Frankel, who is on leave from the department of economics at the University of California at Berkeley, will speak on Aug. 6.

Other scheduled to speak during the conference are C.B. Baker, president-elect of the AAEA and a member of the faculty in the department of agricultural economics at the University of Illinois, and Vernon Ruttan of the department of Agricultural and applied economics at the University of Minnesota.

Prior to the meeting, on Aug. 3 and 4, a workshop on "Realizing Your Potential as an Agricultural Economist in Extension" has been scheduled. George R. Campbell of the department of agricultural economics at the University of Wisconsin-Madison is coordinating the workshop which includes formal addresses, informal subject matter discussion groups, and an extension economics ideas fair.

Following the AAEA meeting, from Aug. 8-10, a short course on the macroeconomics of agriculture, with special emphasis on international trade, has been arranged by G. Edward Schuh of the department of agricultural and applied economics at the University of Minnesota.

Distinguished Group Here for Debye Symposium

A distinguished international group of lecturers, including four Nobel laureates, will gather here Thursday, March 22, for a symposium celebrating the 100th anniversary of the birth of Peter J.W. Debye.

Sponsoring the symposium is the Department of Chemistry, where the winner of the 1936 Nobel Prize in chemistry was chairman from 1940 to 1950, and the Cornell Section of the American Chemical Society.

The symposium will be conducted in 200 Baker Laboratory beginning at 8:45 a.m. Speakers include:

— Mansel Davies, professor extraordinary, University of Amsterdam and Louvain, "Peter Debye: Roots and Achievements in Europe — A Summary," 9 a.m.;

— Linus Pauling, emeritus professor of

chemistry, Stanford University, and Fellow, Linus Pauling Institute of Science and Medicine, "The Nature of Bonds Formed by Atoms of Transition Metals," 9:50 a.m.;

— E. Bright Wilson, emeritus professor of chemistry, Harvard University, "Extraction of Barriers to Internal Motion and Other Information About Reaction Paths from Spectroscopic Data, with Malonaldehyde as an Example," 11 a.m.;

— Mark Kac, professor of mathematics, Rockefeller University, "Is There a Quantum Langevin Equation?" 2:05 p.m.;

— Paul J. Flory, emeritus professor of chemistry, Stanford University, "Recent Investigations on the Configurations of Chain Molecules," 2:55 p.m.;

— Manfred Eigen, senior scientist, Max Planck Institute for Biophysical

Chemistry, Göttingen, "Experiments on Biogenesis," 4:00 p.m.;

The speakers will be introduced by S. Kay Obendorf, professor of design and environmental analysis and chairman of the Cornell Section of the American Chemical Society; Harold Scheraga, Todd Professor of Chemistry; and Roald Hoffmann, Newman Professor of Physical Science and Chairman of the Department of Chemistry.

Evening speakers at a 7:30 p.m. banquet in the Main Ballroom of the Statler Inn will be E.G. Jefferson, chairman and chief executive officer of E.I. du Pont de Nemours Co., who will give a brief talk entitled "Peter Debye, An Industrial Perspective," and Hans Bethe, Anderson Professor of Physics Emeritus, whose talk is

entitled "Physics in Germany in the 1920s and 30s."

Before joining the Cornell faculty in 1940, Debye served as the founding director of the Kaiser Wilhelm Institute, now known as the Max Planck Institute for Physics. He was awarded the Nobel Prize for his studies of molecular forces and x-ray diffraction techniques.

Debye was named professor emeritus in 1952. Some 20 institutions awarded him honorary degrees and numerous scientific societies and academies elected him to membership. He was the recipient of the Priestly Medal of the American Chemical Society and the National Medal of Honor. He died Nov. 2, 1966, in Ithaca at age 82.

Further information on the symposium can be obtained from The Department of Chemistry.

Comment

'If the university has the duty to pay faculty and staff, why should faculty and staff pay the university?'

Editor, Cornell Chronicle:

I was pleased to read in the Chronicle (March 1) about the new construction projects intended to improve campus parking. The article did not give the new rate schedules, but I have learned that the proposed U-sticker fee would be increased from \$144 to \$204 - a 42 percent increase in one year, with future increases in the offing.

As I understand it, the basic reason for the increase is the administration's relatively new policy of having faculty and staff pay for the major part of construction and maintenance costs of roads, parking lots, a new parking garage, and other capital improvements related to the parking garage, and other capital improvements related to the parking and traffic system. The administration has decided that the faculty and staff should pay not only for all the new construction projects, but also for a \$250,000 per year reduction in the university contribution.

If the university has the duty to pay the faculty and staff, why then should the faculty and staff be compelled to pay the university? It is like charging us rent for our offices and classrooms. Why not install coin-operated heaters and telephones for our offices? And to add insult to injury, we have to pay for these facilities after taxes.

Ideally, parking should be free for all faculty and staff with the close-in parking delegated to those who need it most as determined by a priority system similar to the present system. At the very least the administration should provide funds for these new construction projects without raising parking fees.

Because of the extreme time pressures involved with trying to be both professional

researchers and teachers at the same time, over 80 percent of the faculty find it necessary to use close-in parking. No matter how high the parking fee, most professors would have to pay it in order to maintain the quality of their work.

It is unfair of the administration to take advantage of the faculty in this way. The main effect is a loss of respect of the administration by the faculty. Another effect is an overall lowering of quality of Cornell because those faculty who are forced out of close-in parking will have less time available for their creative work.

If the administration feels it is significantly improving a fringe benefit, then the proper approach is to reduce projected pay increases accordingly. Then, at least, the money doesn't go to the IRS. It appears that Cornell now has an administration so involved with operations and budget that it has lost sight of more important goals such as faculty morale and quality.

Jay Orear
Department of Physics

Plan must address daily travel needs of 25,000 campus users, including faculty, staff, students, guests and visitors.

Editor, Cornell Chronicle:

A primary goal of the Cornell administration is to build and maintain a quality university that serves the diverse needs of its faculty, students and staff.

The recent addition of various new research and academic facilities (Mudd, Corson, Academic II and Geology buildings) enhances the quality of Cornell but also adds to the traffic congestion already on campus.

To meet future needs and demands, a transportation master plan has been proposed, which was discussed last week at several campus locations. This plan was developed by the Committee on Transportation Services, which is made up of faculty, students and staff.

A new plan must meet many demands. It must address the daily travel needs of more than 25,000 campus users, including faculty and staff, students, non-university personnel employed on campus, guests and visitors. A new garage, the refurbishing of existing parking space and the initiation of

new public transit services are part of this plan. The creation of many new public transit routes are the result of cooperation between the university and local government to reduce traffic countywide. All members of the university community must also help to reduce traffic congestion on campus.

Recommendations have been made to raise parking fees. However, the present annual charge of \$144 is only 33 percent more than the original fee of \$108, established 15 years ago.

The proposed schedule of fees would have a "U" permit at \$204 next year, well under \$1 per day. Such fees help regulate a scarce resource, convenient parking. They are also used to maintain and improve lots and roadways and to create some additional parking spaces. It is important to note that the parking garage will be paid for primarily through fees charged to those without permits.

It would be ideal if arrangements could be made to pay for parking with pre-tax dollars. But current Internal Revenue Service guidelines do not allow this. The university is currently studying a flexible compensation program, which would include a flexible spending account. When the IRS releases its new guidelines, I am hopeful that parking fees may be included as a benefit that can be paid out of pre-tax dollars and may be included in the university's new flexible compensation program.

I hope this explanation offers a more balanced perspective of the administration's objectives and the campus transportation and parking program.

William G. Herbster
Senior Vice President

People

Karl J. Niklas, a Cornell paleobotanist, has been awarded the first George Gaylord Simpson Prize from the Peabody Museum of Natural History at Yale University for his research accomplishments in evolutionary biology. The prize includes a \$500 award. The Cornell scientist was honored for his study of how the cupules (seed-bearing organs of some of the earliest flowering plants) are aerodynamically

adapted to pollination by the wind. Niklas' work, as described in his paper — "Airflow Patterns Around Early Seed Plant Ovules and Cupules: Implications Concerning Efficiency in Wind Pollination" — was cited as "not only a major contribution to our understanding of plant evolution, but it also establishes a whole new field of endeavor — experimental paleobotany." Niklas is an associate professor of botany in the State College of Agriculture and Life Sciences and a member of the section of plant biology in Cornell's Division of Biological Sciences.

Ferdinand Rodriguez, professor of chemical engineering and a researcher in polymerization and properties of polymer systems, has been named a Fellow of the American Institute of Chemical Engineers (AIChE). A member of the faculty of the Cornell College of Engineering since 1958, Rodriguez was elected to the honor, which recognizes a lifetime of achievement within the chemical engineering profession, for his contributions to chemical engineering education as a professor and author. Rodriguez has written more than 90 technical publications, including the textbook "Principles of Polymer Systems," which is now in its second edition. He also serves on the editorial advisory board for the Journal of Applied Polymer Science.

Cornell Chronicle

Editor, Randall E. Shew. Staff writers, H. Roger Segelken, Robert W. Smith, Barbara Jordan-Smith, Martin B. Stiles. Photographers, Sol Goldberg, Charles Harrington. Circulation Manager, Joanne Hanavan.

(USPS 456-650)

Published weekly during the academic year and once each in June and August. Distributed free of charge to Cornell University faculty, students and staff by the University News Bureau. Mail subscriptions, \$13 per year. Make checks payable to Cornell Chronicle and send to Editorial Office, 110 Day Hall, Ithaca, N.Y. 14853. Telephone (607) 256-4206.

Second-Class Postage Rates paid at Ithaca, N.Y.

POSTMASTER: Send address changes to the Cornell Chronicle (USPS 456-650), Cornell University, 110 Day Hall, Ithaca, N.Y. 14853.

It is the policy of Cornell University actively to support equality of educational and employment opportunity. No person shall be denied admission to any educational program or activity or be denied employment on the basis of any legally prohibited discrimination involving, but not limited to, such factors as race, color, creed, religion, national or ethnic origin, sex, age or handicap. The university is committed to the maintenance of affirmative action programs which will assure the continuation of such equality of opportunity.

Minority Education Subcommittee Report: Some Comments About References to Africana Studies and Research Center

Center Faculty: Not Involved In Any 'Review' of the Center

The Africana Studies and Research Center last week issued a news release concerning the part of the report of the Subcommittee on Minority Education that dealt with the center. This is the text of that release:

This is to announce that we, the faculty of the Africana Center, will not become involved with any person or official of the university about issues of continuity or change at the Africana Center where the basis of such discussions would be the recommendations about the Africana Center contained in the Trustee Subcommittee Report on Minority Education at Cornell. The basis for our decision is partly procedural.

It is important for the public to understand that the faculty and staff of the Africana Center were never informed of, nor engaged in, the "review" of the center conducted by the trustee committee. The Africana Studies and Research Center is an academic unit of Cornell University and there exists the appropriate procedures and protocol within the university for the discussion of matters related to the center. Besides being beyond the purview of the charge given the trustee committee, we hasten to point out that every conceivable procedure for approaching the center was violated.

In the absence of consultation the trustee subcommittee has obviously based its recommendations on a predetermined agenda. We view the subcommittee's actions as contemptuous, not merely disrespectful.

The result has been to turn the center into a 'fishbowl' that is subject to the whims of public discussion and conjecture. While we hope that the subcommittee did not mean to be consciously malicious, we seriously doubt that it would have felt free to show such disdain for contact with center personnel if our faculty had been composed of members of the majority population. The manner in which the subcommittee conducted its surreptitious 'review' constitutes an intrusion into an academic unit that is dangerous, unprecedented, and a threat to the integrity of all academic components at Cornell University.

For these reasons we are recommending to the Board of Trustees, and seeking the support of President Rhodes, Provost Kennedy, and Joseph B. Bugliari, dean of the faculty, that the section of the trustee subcommittee report on minority education

that involves the Africana Studies and Research Center be expunged.

In rejecting the trustee subcommittee March 1, 1984, report as a package we wish to amplify on two general concerns relating to process and philosophy.

A. PROCESS

1. Recalling the subcommittee's original position in the earlier (26 January 1984) version of the draft report that "with respect to a primarily academic program such as the Africana Center, specific recommendations can best be developed within the university community," this reversal of that process creates a stigma in subjecting this academic unit to a process unusual and unacceptable in terms of conventionally recognized academic procedures.

2. To add insult to injury none of the Africana Center faculty were interviewed by the subcommittee, an extraordinarily unusual (not to mention unwise) procedure which speaks for itself.

3. Not least, the process of initially detaching these March 1 recommendations from the original Jan. 26 draft report and then releasing them on their own, lends a very political flavor to the subcommittee's approach in terms of the attendant unusual publicity as well as the more limited time made available for invited reactions.

4. But it is not simply that aspects of the process are questionable; it is rather that the entire process is invalid.

B. PHILOSOPHY

1. We resent the implication that it is the Africana Center's fault why majority students are presumed reluctant to participate or why majority faculty feel isolated from center activities. What is more we question the implication that a solution lies essentially in the drastic restructuring *cum* relocation of the center with no onus placed on majority perceptions, institutions and interests. This is a classic case of blaming the victim, evading the critical issue of majority responsibility, commitment and accountability in a climate of eroding minority educational concerns.

2. It needs to be emphasized that historically racial projections and inclusiveness, not racial separatism, were the rationale for the center's creation and mission. By this we mean that it was because of the separation and/or exclusion of black world interests and experiences from the mainstream of academia why the center was created, to bring these into inclusion and recognition. The recognition of the

black experience as a valid field of academic enquiry for minorities and non-minorities, within the context of a pluralistic (as opposed to assimilationist or separatist) framework underpins the center's justification and mission.

3. There is implicit confusion in the subcommittee's thinking on the issues of decision-making, integrity and racial separatism. The former does not necessarily

connote the latter and the two should never be confused. Decision-making integrity has been justifiable on the distinctive academic needs of a non-traditional, multidisciplinary, newly emerged and still consolidating field of studies. The subcommittee's proclaimed interest in enhancing the center's structural centrality will more likely have the consequence of promoting its structural marginality.

Gibbs: 'Misunderstanding of Way The Subcommittee Has Worked'

James Lowell Gibbs Jr., co-chairman of the Cornell University Board of Trustees' Subcommittee on Minority Education has responded to criticisms of the committee and its recommendations from faculty members at the Africana Studies and Research Center.

Here is the full text of Gibbs' statement:

"Recent reports and statements may have given the community the impression that the Subcommittee on Minority Education made its recommendations, both in late January and last week, without any discussions with faculty members from the Africana Studies and Research Center. This is a misunderstanding of the way in which the subcommittee has worked and will continue to work.

"Since the subcommittee was formed in January 1983, we have sought the opinions and insights of all members of the campus community. In May 1983 we provided an opportunity for interested faculty members to address the subcommittee. We invited Prof. James Turner, director of the Africana Studies and Research Center. He accepted our invitation and he spoke with the subcommittee on May 28, 1983. The day before, two other faculty members from the center appeared before the subcommittee. While it is true that the subcommittee did not discuss its specific recommendations with the faculty of the Africana Center, neither did the subcommittee discuss its recommendations with any particular person, groups, programs or offices prior to the release of the draft report.

"The subcommittee invited Prof. Turner to meet with us again at our most recent hearings on March 5, 1984. We had set aside an hour to meet with him, but his office canceled his appointment that morning. We offered to meet with him several other times during the afternoon, but he was unable to meet with us.

"In an effort to inform him of changes being considered, a copy of the proposed new draft of the Africana Studies section of our report was delivered to his office that

same morning. No other program or office received copies of recommendations prior to their public release. The community did not learn of these changes until after a news conference that ended at 7:15 p.m. that day.

"Our purpose in holding the hearings last May was to get the views of the campus community before formulating our own statement of the issues. We stated our views in the January 1984 draft report. The issues in the new section on the Africana Center that we released on March 5 are unchanged from January. We have now placed before the campus community our views of how these issues ought to be addressed.

"It has been stated recently that recommendations regarding academic matters at the Center or in the university are 'beyond the purview of the charge' given to the subcommittee. The second of three points in the charge to the subcommittee calls for it 'to suggest ways of improving the education of minority students at Cornell.' The draft report issued in January contains commentary and recommendations on academic issues in several sections, including a five-page discussion titled 'Curriculum' in Section IV.F.

"Since the news conference on March 5, the subcommittee has released the entire revised text so that the campus community will have the opportunity to respond before the report is considered by the Board of Trustees on March 23. We would welcome comments on the new section on the Africana Studies and Research Center. It is our hope that those comments will focus not on our procedures, which we believe have been open and direct, but on the substance of our recommendations.

"Comments on the new section on the Africana Center may be submitted to the subcommittee in care of Janet Smith-Kintner, 309 Day Hall. Those responding should indicate, as have all other before, whether we have permission to make the comments available to the public."

Several Permanent Changes Made in Fall Calendar

Several permanent changes in the fall academic calendar have been announced by Provost W. Keith Kennedy.

They entail eliminating final examinations on Saturday and Sunday at the end of the term as has been the practice recently. This is accomplished by starting class instruction on the Thursday before the Monday Labor Day Holiday each fall starting 1984.

Classes will be held on Labor Day as in the past with the day continuing to be a legal holiday for most of the university employees.

In order to eliminate starting fall term registration and orientation earlier than has been scheduled already, two of four days of orientation will be conducted on the Saturday and Sunday after Labor Day.

In addition the starting time for examinations during finals, starting this spring, will be 9 a.m. instead of 8 a.m. each day as in the past.

The changes are the result of numerous suggestions by both students and faculty, according to Kennedy.

Revised academic calendar schedules for 1984-85 through 1988-89 are available through the Dean of Faculty Office in 315 Day Hall.

The changes do not affect either the 1984 spring calendar or the Spring calendars already published through 1988-89.

Cancer Research Funds to Support Nutritional Sciences Research

The Division of Nutritional Sciences has been awarded \$565,633 from the National Cancer Institute to study dietary protein and cancer, and \$25,000 from the General Mills Co. of Minneapolis to support research that focuses on dietary fats and cancer.

Both projects are part of Cornell's diet, nutrition, and cancer research program directed by T. Colin Campbell, professor of nutritional biochemistry.

Experimental animal research on dietary protein and cancer has been conducted for 14 years in Campbell's laboratory, including the last eight years in the Division of Nutritional Science in the State College of Human Ecology and the State College of Agriculture and Life Sciences, both at Cornell. The research is designed primarily to evaluate how higher levels of dietary protein increase cancer risk on the

cellular and molecular level, says Campbell.

"In previous work, research has shown that as the intake of protein is increased, liver cells previously transformed by a chemical carcinogen, appear to grow more rapidly than neighboring cells," Campbell said. "Although these cells are not yet fully cancerous, they are thought to lead eventually to liver tumors."

One effect of changing the level of protein intake, either up or down, has been to vary the amount of the chemical carcinogen that attacks the cell's genetic material to initially transform the cell.

"Even so, the main effect of dietary protein appears to be in how it subsequently modulates the growth of the transformed cells destined to become cancerous," Campbell says.

Bulletin of the Faculty

February 8, 1984

The Speaker, Russell D. Martin, called the meeting to order at 4:34 p.m. Since a quorum was not present at that time, he called for comments from the Dean of the Faculty, Joseph B. Bugliari.

1. ANNOUNCEMENTS

Dean Bugliari: "Thank you very much, Russell. I just have a few brief statements. First, I would like to express my most sincere thanks to the Computer Services people for the programs that they put on for the faculty in January. I think they went very well. They were well attended; in fact, we didn't have enough spots for everybody that wanted them. I want to give my special thanks to Gordon Galloway and Agelia Velleman and Steve Sather, who were the most instrumental people in putting on those programs. We will try to do more. I'm trying to figure out now when we can get the facilities. We may try to do something early in the summer, and we surely will do it again next year and give you a lot more notice next time so that people can arrange their schedules to come.

"Second, I'd like to remind you that in the material we sent out with the call to this meeting, there was a little piece of information about the blood pressure screening clinics, and when I talked to the person who asked me to put that in there, she indicated that she thought faculty people were more prone to blood pressure problems than the average population. You might want to take advantage of it. Seriously, about ten years ago, I went to the doctor for the first time in a long time for something else, and he took my blood pressure, and he said, 'Do you know you have high blood pressure?' I had no idea I had high blood pressure. I now take half of one little pill and one other little pill a day. Now, it's 120/78. I'd suggest that you take advantage of the service. It doesn't cost anything. It's given in a number of different buildings, and you might find out you have something like I did. I hope not, but at least find out if you do.

"Thirdly, some of you may have noticed that in the Chronicle, the Dean of Students' office is handing out ID cards for spouses of students, and the question has been raised, 'Should we do the equivalent for the members of the faculty?' We are working on that issue. It is not as simple as it first sounds. In the meantime, I think one of the issues is access to the library for your spouse. That, apparently has been solved already. Any spouse wishing to borrow books can apply under the Visiting Readers' Program and obtain a card to take out books. This card must be renewed every twelve months. Spouses can get library cards at the Circulation Desk at Olin.

"Finally, I would like to report that one of the most important things we are doing this semester is reviewing the appeals procedures - the Stein Committee procedures. We have reached a point now where we have a first draft and that is being circulated to get comments from a number of different people. Ideally, we will try to bring that to the next meeting of the FCR in March, but I cannot guarantee that we will be ready by then; we will clearly be ready to do it by the April meeting. That will be a very important meeting, and we'll get the material out to you well ahead of time, and give you a chance to look it over, and raise questions with the Committee people."

Speaker Martin: "The next item was to be the presentation of a resolution on the Student-Academic Staff Grievance Procedure, that being a resolution coming from the Committee on Freedom of Teaching and Learning and to be presented by Professor Thorp. Although we do not yet have a quorum present, we can put the resolution on the floor and debate it, if you wish, and hope that we might get a quorum later. Professor Thorp, do you wish to do that?"

2. STUDENT-ACADEMIC STAFF GRIEVANCE PROCEDURE

Professor James S. Thorp, Electrical Engineering, stated: "On behalf of the Committee of Freedom of Teaching and Learning, I would like to present the following resolution."

WHEREAS, discussion and consideration of amendments has taken place between the "Conference Committee" of the Student Assembly and the FCR Committee on Freedom of Teaching and Learning with respect to the Student-Academic Staff Grievance Procedure,

THEREFORE, BE IT RESOLVED, that in view of endorsement by the Student Assembly, the Student-Academic Staff Grievance Procedure, adopted by the Faculty Council of Representatives on April 13, 1983, be amended as follows:

(additions boldfaced; deletions in parentheses)

Purpose:
This procedure provides a means whereby any student (of) registered at the University (1) (at Ithaca) who has reason(able evidence) to believe himself or herself to be the victim of legally

prohibited discrimination (2) or of discrimination on the basis of sexual or affectional orientation by an academic staff member or assistant in the execution of his or her designated academic responsibilities, can seek redress of such grievance. This procedure encourages informal resolutions, but provides also for more formal steps to protect students from illegal discrimination (or sexual harassment) by academic staff and assistants, while guarding against the possibility of injustice resulting from false and malicious charges.

Definitions for this Purpose:

Student: For application of this procedure, Student will refer to anyone registered in the University (at Ithaca), whether part time or full time, extramural or regular, graduate or undergraduate.

Academic Staff: In the application of this procedure, academic staff will be considered to include all those who exercise any authority or power over the student's academic work; i.e., not only professors of all ranks, and lecturers, instructors, extension/research personnel, librarians and other academic staff, but also graduate and undergraduate students who may be acting as teaching or research assistants.

Administration of Procedure:

This procedure will be administered by the University Ombudsman.

General Provisions:

1) Any party to a grievance shall have the right to be accompanied at any conference or hearing by an advisor (who is a member of the Cornell community.) Any administrative expense in conducting the hearing shall be borne by the University. If the aggrieved wishes to retain counsel, he or she shall bear the expense of such representation. If the advisor is an employee of the University, the advisor will be allowed reasonable time to perform his/her function as an advisor without loss of pay.

2) All conferences and hearings shall be private and not open to the public. All records shall be treated as confidential and returned after the last step of any formal case to the Office of Equal Opportunity.

3) The aggrieved may appeal recommendations or decisions at each step.

4) No student shall be discriminated against or otherwise adversely treated because of filing a grievance. If any individual claims discriminatory treatment for initiating or participating in, or giving evidence in, any grievance, the claim will be heard immediately at Step Two of this procedure.

5) The deadlines described in the procedure are recommendatory and presume normal operating conditions. However, the parties in the grievance procedure should be permitted reasonable flexibility given the unusual nature of the academic schedule, calendar, and vacation periods of the University.

6) Information on the existing legislation and policies of the University relevant to the grievance may be obtained by the parties from the Dean of the Faculty.

First Step:

Within a time appropriate to the incident or situation, the aggrieved shall make a complaint to the Ombudsman's Office, which shall provide counseling if necessary. It shall keep a record of the circumstances, including time, date and place of the occurrence, nature of the grievance, and the relief requested. Within a reasonable time (e.g., 10 days) of the receipt of the complaint, the Ombudsman's Office shall try to arrange a resolution of the complaint.

Second Step:

If the grievance is not resolved at the first step, the matter shall be promptly (e.g., 3 days) referred by the Ombudsman's Office, with a written complaint made by the aggrieved, to the department chairperson or division director (3), who shall investigate the matter and ascertain the facts. The Office of Equal Opportunity shall also be notified in writing at this stage (3). The chairperson shall arrange a conference with the aggrieved within two weeks in an effort to resolve the complaint. The accused may or may not elect to be present but the chairperson must provide the accused with an opportunity for a personal hearing.

Third Step:

If the matter is not resolved at the second step, it shall be referred to the Dean of the College. Within two weeks, the Dean shall either review the matter and make a decision as to the disposition of the grievance, or impanel an advisory board of three persons whose responsibility shall be to find fact in the case and make a recommendation for a solution of the problem. If an advisory board is to be established, members shall be selected as follows: one student to be chosen from a list of three students submitted by the Dean of Students, one academic staff member to be chosen from a list of three academic

staff members submitted by the Dean of the Faculty, and a third member, either academic staff or student, chosen from a list of three further names submitted by the Dean of the College. Both parties will indicate their preferences within each list in numerical order, and the candidate from each list with the least total points will be designated as a panel member. If all three candidates from a list are tied, which can happen only if they are ranked in reverse order by the two parties, the one ranked second by both parties will be designated as a panel member. Other ties will be settled by coin toss.

(As promptly as possible (e.g., 10 days) after its selection, the panel shall hold a conference of the parties and attempt to use its good offices to bring about a settlement between them. Failing this, it shall make a statement of its findings of fact together with recommendations and transmit them to the Dean of the College, with copies thereof to the parties and to the Dean of the Faculty. The Dean of the College shall review the recommendations of the panel and issue a decision to the parties with a copy to the Dean of the Faculty. The College Dean shall alert the pertinent department chairperson to any results that are relevant to the chairperson's duties.)

If the matter is not resolved at the second step, it shall be referred to the Dean of the College and a fact finding panel consisting of three persons

becomes the point of referral in Step Two, with the Dean of the Faculty then being the point of referral in Step Three. Also, if the academic staff member's responsibilities are under the direction of a higher ranking academician (e.g., teaching assistant supervised by a faculty member) the grievance should be reviewed first at that level, before proceeding to the department or division chairperson.

(3) "In the event the grievance alleges a violation related to Cornell's policy forbidding sexual harassment, the Office of Equal Opportunity will be notified to assist in the investigation and, where appropriate, any subsequent action."

Letter from Michael J. Montgomery to W. Keith Kennedy, December 22, 1981.

Speaker Martin: "Thank you. Are there questions for Professor Thorp before we put it on the floor for discussion?"

Professor Thorp: "Perhaps I should explain. In April, 1983, the FCR amended the then existing Student-Academic Staff Grievance Procedure. It came to the FCR from the Freedom of Teaching and Learning Committee that worked for a year modifying legislation that had been adopted, I think, in 1977. The modifications we are specifically trying to deal with are issues of sexual harassment, and those problems were brought to the Committee by the Women's

'The modifications we are specifically trying to deal with are issues of sexual harassment.'

representative of a cross section of the Cornell community, selected from a list compiled by the Ombudsman. The members will be selected by the Ombudsman and all parties to the grievance will have the right to request the Ombudsman to remove any person from the panel that he/she feels would be unable to be impartial. Within two weeks after appointment of the panel the Dean and the panel shall hold a joint hearing and issue separate reports of their recommendations for resolving the grievance. If these recommendations concur, the Dean's decision will be final and binding. If the reports are not in concurrence, the matter will go to the Provost who will hold a final hearing and issue a decision which will be final and binding upon all parties to the grievance.

(1) Excluding the Medical School

(2) Categories as of January 1984 include but are not limited to: age, race, color, creed, religion, national or ethnic origin, and sex. The prohibition includes sexual harassment defined as follows:

Unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature constitute sexual harassment when (1) submission to such conduct is made either explicitly or implicitly a term or condition of employment or academic status; (2) submission to or rejection of such conduct by a person is used as a basis for an employment decision or an academic decision affecting that person; or (3) such conduct has the purpose or effect of substantially interfering with a person's work or academic performance or of creating an intimidating hostile, or offensive working or learning environment.

Brochure: Sexual Harassment, Cornell University Office of Equal Opportunity, July 1983

(2) Categories as of November, 1976 include, but are not limited to age, race, color, creed, religion, national or ethnic origin, and sex. The prohibition includes sexual harassment, as defined by EEOC guidelines in the following way:

Unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature...when (1) submission to such conduct is made either explicitly or implicitly a term or condition of an individual's employment, (2) submission to or rejection of such conduct by an individual is used as the basis for employment decisions affecting such individual, or (3) such conduct has the purpose of substantially interfering with an individual's work performance or creating an intimidating, hostile, or offensive working environment.

"While the EEOC guidelines are stated only in the context of employment, sexual harassment of students by academic staff and/or assistants has been held to present an analogous and equally intolerable situation. A federal court has declared such harassment to violate Title IX of the Education Amendments of 1972."

Letter from Michael J. Montgomery to W. Keith Kennedy, December 22, 1981.

(3) In the event the academic staff member is the division or department chairperson, a copy of the complaint will be delivered to the Dean of the College, and the Dean of the College then

Affairs Committee of the Student Assembly. So, when the FCR adopted the amendments in April of '83, it was assumed that there would be no trouble in getting Student Assembly ratification. Unfortunately, on May 10, 1983, the Student Assembly approved the procedure only conditionally. The conditions were that they had some amendments they wanted to discuss with the Committee, and their conditional approval was to last only until March 1. Without a quorum here today, I guess we'll lapse back to the original procedure on March 1. Our Committee met with a study committee from the Student Assembly throughout the fall and we have finally reached agreement on the amendments that are contained herein. I might point out that the amended procedure was adopted by the Student Assembly on January 24.

"The main changes are that in the Purpose, we no longer refer to sexual harassment independently. It has been removed; it is now officially legally prohibited, and the footnote covers that, and the words 'discrimination on the basis of sexual or affectional orientation' were added. In General Provision #1, there is an insertion having to do with administrative expenses. There was a similar phrase in the 1977 legislation. It was removed by the Committee last year because it was felt it encouraged legal intervention. When the Student Assembly saw it removed they became concerned that the University would attempt to charge them for the proceedings - for the lights, for opening the building or something. As much as we tried, we couldn't convince them that the University wouldn't do that, so we re-inserted the sentence about administrative expense. But if that is re-inserted, then the next sentence must be included again, because we can't have the University suddenly being responsible for paying for legal fees.

"The main suggestion from the Student Assembly concerns the Third Step. The entire Third Step was removed and a substitute was provided. The main concern in the past was that the dean of the college had a choice of impaneling an advisory board. The Student Assembly had the impression that deans were closer to the faculty and they wanted the dean to be forced to impanel the Committee, and if the Panel and the dean agreed - fine; but if they didn't agree, they wanted the final decision to be in the hands of the Provost. We have spoken to the Provost, and he is willing to accept this task if it ever comes to pass.

"Lastly, there are some difficulties with the old footnotes. Essentially, the old footnotes have been removed and replaced with modern, current footnotes which you can look at in some detail."

Speaker Martin: "All right. The floor is open for discussion."

Professor Norman Vrana, Electrical Engineering: "I know you said this, Jim, but I just want to make sure that the footnote is a legally worded document. There's nothing in it that you put in it."

Professor Thorp: "You're referring to the old footnote 2. The new footnote 2 is a direct quote

from the brochure on sexual harassment published by Cornell University. We have been assured by Joan Egner that this is, in fact, law. This replaces the old '2' which speaks only about employment and then has a paragraph underneath saying it should be applied to an academic situation. I don't have any personal knowledge, not being a lawyer, but we checked and were told that it did."

Speaker Martin: "We're one short a quorum. We will hope that we get one more person to fulfill the quorum so that we can take action on this today."

"The Chair next calls on Vice President Barker, who will present an item for discussion pertaining to the proposal for the establishment of a Theory and Simulation Science and Engineering Center."

3. THEORY AND SIMULATION SCIENCE AND ENGINEERING CENTER

Robert Barker, Vice President for Research and Advanced Studies: "My role up here is going to be very brief. It's principally to introduce Ken Wilson. I hope you've received and read the draft document which is here for discussion today. My role in creating this is to try to be helpful to the group of faculty, which is really very large, that have expressed interest in this and to try to make sure that the right bases are touched at the right time. In getting ready something which could be brought here, it was necessary to be sure that faculty in the many different disciplines have at least had a chance to have some input to the proposal, and very many have. I think if you want to know what this is all about, you should look at page 3 of the document. There are objectives, and the first one really almost says it all: to create the scientific and intellectual environment and provide the computing resources to bring together from many disciplines faculty who share a common interest in theory and computer simulation and their application to important unsolved problems in science and technology. What is proposed here is the creation of a center which would intersect many parts of the University - a very important issue - and it's on the floor today for discussion. Ken Wilson is going to describe to you what is intended by the proposal, and then Tom Everhart and Bob McGinnis will say just a few words. We hope to do this in about 15 minutes and leave the rest of the time for discussion. Ken."

Professor Kenneth Wilson, Physics and Nuclear Studies: "Cornell, as you know, has a history of successful interdisciplinary centers, such as the Materials Science Center, the Submicron Facility, and the most recently formed Biotechnology Institute and CISER, and the list goes on and on. And once again, we find ourselves in the position of trying to provide national leadership in an area which requires intense cross-disciplinary interaction."

"Now, to build a center which involves a fair amount of effort requires, first of all, that there is some strong intellectual need for cooperation across disciplines. In this particular case, throughout the sciences and engineering and even beyond that the people engaged in theoretical studies have a very common need to talk to each other. For instance, Dave Caghey from Mechanical Engineering came over to Newman Laboratory - Nuclear Studies - and was talking to Peter Lepage, and they found they were doing exactly the same thing, using multi-grid techniques to solve laws of nature. They weren't working with the same laws of nature, but that didn't matter very much. And this is true throughout many scientific and engineering disciplines, especially as they come to consider the use of computer and the application of the computer to very complex problems, much more complex than one can do by hand. The problems that arise, whether it's over in the Engineering College or over in Newman Laboratory or over in the Chemistry building are very similar and also very difficult, and we have to build a cooperative effort on a rather massive scale to deal with these problems."

"The next thing that often underlies the building of the Center is the need to bring in resources to the University to deal with the problem across disciplinary boundaries. This is true of most of the centers that we have today, and in the case of the Theory Center, the need is to bring in computing resources on a fairly massive scale, and it is difficult for any individual department either to attract the funding or donations required, or to manage the systems if they come in. We hope that the Theory Center will have sufficient strength both to be able to bring in the necessary computing sources, and to manage them, or at least to arrange for their management once they're brought in."

"Finally, we have a traditional orientation of support from government and private foundations, but in the area that the Theory Center is concerned with, it's an area of critical importance to private industry, both the computing industry itself and the private industrial users of computing. That means the opening up of a

totally new source of resources for our operations. It also means considerable pressure on Cornell to service the needs of private industry, and there is a great deal of parallelism between what they need and what we need ourselves just for our own research and training. But we need an institution the size of the Center to act as a buffer to have sufficient strength and sufficient inertia so that we can get the resources we need from industry without being captured by them. It is extremely difficult for one department to go head-to-head with Exxon Corporation. The Center, however, should cover a sufficiently broad range of applications so as to be much better matched to companies like Exxon, and at the same time, have a sufficient structure so that it can balance the pressures from outside against internal needs. One of the main differences, by the way, between the Theory Center, as we're conceiving it, and the Biotechnology Institute is that we imagine the Theory Center will have interactions with a wide range of companies with a wide range of sizes. That's based on our past

'We find ourselves in the position of trying to provide national leadership...'

experience where we are already dealing with IBM at one end of the scale and Floating Point Systems, which started out as a garage operation when we first were dealing with them. In fact, one of the consequences of our dealing with them is that there is now a marketing agreement between those two companies."

"The title of the Center is the Theory and Simulation Science and Engineering Center. That means, I think, that we had imagined the central focus of that Center is in Science and Engineering. The problems of large-scale computation and large-scale simulation, however, extend beyond just science and engineering. We have discussed arrangements with CISER to make sure that members of that organization who need the kinds of facilities we intend to have can participate, and I expect there will be participation from other parts of the University. But I believe that we will have to structure things so that the core of the operation is in science and engineering so that we don't get overbalanced by needs from all other parts of the University and thereby lose the primary focus. That raises the whole issue of exactly what are the requirements for membership in the Center which is not very well addressed in the document. We can discuss that here, and I expect that it will be refined in the course of committee discussions, and before a final document is brought for a vote."

Dr. Barker: "It would now seem appropriate to hear from the Engineering side as to how they see this proposal."

Thomas Everhart, Dean, College of Engineering: "It's a pleasure to address this body today, and I should say that I speak for a large number of faculty in the College of Engineering who are quite interested in this Center. In fact, we surveyed the faculty just this last week. A questionnaire was sent out on Thursday just to make sure we weren't overestimating the number who would be interested, and from over 90 that were contacted, 51 responded. The others were probably out of town, and I think their lack of response means it is in a pile of papers on their desk they haven't gotten to, or it's in a mailbox and hasn't been seen yet. Of those who responded, 60% expressed very strong interest, and all the rest, save one, expressed some interest, which means they would be involved in a peripheral way. So, we estimate at least 35 to 50 people in our College would be involved in a significant way, and it would probably affect the working relationships and have a peripheral effect on at least 50 more, which means about half of the faculty in one way or another."

"It seems to me that in thinking about this proposal we have to look at the times, and right now is a time of great change in science and in engineering. Some of the discussions going on about small computers being introduced on campus, for example, are one sign of that. The driving force behind this change is really the advent of the integrated circuit; the fact that so much information processing can be carried forward so inexpensively. That trend is continuing. So, we're in a rapidly changing situation that will continue to change rapidly, but we are at a point where many things that were not possible just a few years ago have become possible now; unless we explore them and work on them quite hard now, we will not be able to take advantage

of the next generation of capability which will be coming all too soon."

"Those of you who have been following the political scene will know it's a time of great need in the country. The country has not been productive in the sense that we have great deficits in our budget at the federal level, and we have deficits in our exports versus imports to other nations. So, we are really running at a loss in this nation, and the way to get over that is for the nation to become more productive. In the future that means a greater reliance on the intellectual power of the nation and a quicker transfer of information that is learned and developed - generated, if you will - in the universities to the industrial sector, so that goods and services based on that will bring in more income and, therefore, raise the tax base. That's helpful in the State of New York, but for many of us, it's even more important at the national level, for that is where much of our research support comes."

"Finally, I think it's a time of great opportunity because with these changes that are taking place, and with the rather unique Graduate School structure at Cornell - there's a much more hospitable environment for cross-disciplinary interactions at this University than at many other universities. That was clear to me when I first became associated with Cornell five or six years ago, and I think it has been clear as I have watched the internal workings of the University. This University really has the opportunity to become a national center in this area and take an even more commanding lead than it has already in some of these activities. That is one reason, I think, that the faculty in the College of Engineering are so strongly supportive of this Theory and Simulation Science and Engineering Center. It will surely benefit our colleagues, but more than that, it will give us closer ties with colleagues in other parts of the University and benefit the University as a whole."

Professor Robert McGinnis, Director, CISER: "Actually, Bob Barker asked me to say, 'Amen' on behalf of CISER, so I say, 'Amen'. I would add one or two remarks to this. On behalf of the participating social scientists, a very enthusiastic 'Amen' to the notion. I'm reminded of the fact that the highest placed social scientist in the National Science Foundation visited CISER last fall, and in a presentation to the assembled social scientists we number about 170 faculty members - his major single piece of advice to us was 'take a physicist to lunch.' I think his advice, incidentally, was very sound for a variety of reasons that I won't go into - and most of my colleagues agree. I think the TSSEC proposal presents the even nicer opportunity for physicists to take us to lunch, and that's what we're looking forward to. This is not a venture for the entire membership of the Institute, but I am constantly hectoring by colleagues of mine involved in simulation and projection modelling of social processes - one involving some 750 equations - who are simply being put out of business by the cost and complication of working even on our 3081 Mainframe. I believe that for theoretical social scientists such as these - I'd count twenty of them probably - I think this represents an enormous breakthrough just in the hardware that's proposed. I think it represents a much more profound breakthrough by way of what Bob Barker alluded to - the fascinating opportunities for interdisciplinary collegiality, not simply between economics and sociology, but I would hope between economics, sociology, physics, chemistry and engineering. I'm very enthusiastic. Thank you."

Speaker Martin: "Are there any questions for our four speakers?"

Assistant Professor Mary G. Randel, Romance Studies: "We're not going to vote on anything, is that correct?"

Speaker Martin: "There's no voting. No, this is just for discussion."

Professor Randel: "I wondered if there would be any comment about commitment of University resources to the program? What sort of University contribution is envisaged?"

Dr. Barker: "I think the principal University contribution perceived at this stage is that interested faculty would be contributing their time, which is supported by the University salary structure. The major funds needed for equipment, facilities, for additional support staff should come from external sources. In the long term it will be difficult to assure that no University resources have been assigned to this project, but the intent is to attract external funds. On the other hand, I think we have to look at the alternative: if we do not do something like this, the drain may be much more on University resources."

Professor Randel: "I just wanted to be clear about the fact because I'd read about a large 'facility', and I was curious but not necessarily against it."

Professor Toby Berger, Electrical Engineering: "Have there been any informal contracts

with the major federal agencies that you mentioned? Also, are you aware of what other major academic institutions are doing?"

Professor Wilson: "In Science and Government Report, which is a rag put out by Daniel Greenberg - he has his own views on things - he had a long interview with the head of the National Science Foundation which included one paragraph with praise by the head of the National Science Foundation of this proposal for the Science and Engineering Center, at the end of which he says, 'I am eagerly awaiting this proposal.'"

"In the federal budget of the NSF there are two initiatives one on super computer access and the other is on interdisciplinary engineering centers addressing national problems, and he wants to use by words in explaining the reasons for proposing initiatives on interdisciplinary centers. Now, as to what other universities are doing, there are a number of places where people are realizing that they have to get together on this issue, so you'll find people coming up with a proposal for a supercomputing institute, a vector processing institute. What you do not see, as far as I'm concerned, is anything where there is going to be a center with a primarily intellectual focus as opposed to just getting together so you can have a computer. And, especially, I don't see anything else that will have the thrust of activity that we can put together here at Cornell, where we can bring in a huge range of engineering disciplines, all the basic sciences, plus the developments in agriculture, probably eventually veterinary medicine, developing the cooperative theme as McGinnis has emphasized with the economic and social sciences as well. As far as other sources of support, the basic computing support that we're thinking about derives from a project we've had going here for five years, the so-called Array Processor Project. While we've got the basic money to buy the computers for the Array Processor Project from the National Science Foundation or from our local funds which basically trace back to the NSF, we've gotten a lot of help with that project from private industry - grants from IBM, grants from Floating Point Systems, and I've gotten grants from Exxon and Schlumberger-Doll Corporation, and we have a big donation of equipment from Floating Point Systems going on to the next stage in one of our innovative projects. I see every sign that once we're off the ground with the administrative structure that would interact with industry, we're going to start getting major private grants and donations to go along with whatever we can get from NSF, and, in fact, we'll be in perfect position to play the matching money game, which is how to get large sums of money."

Speaker Martin: "Do we have other questions? If not, we can back up. We do now have a quorum. The first item is to act on the minutes of November 9 and December 14. Are there any corrections to those sets of minutes? There being none, they stand approved as distributed."

"Now, we can go back to the motion that was presented by Professor Thorp. For the benefit of those who came in to help make our quorum, the motion is in regard to amending the resolution on the Student-Academic Staff Grievance Procedure. Is there any further discussion on that? Any questions from those who came in after Professor Thorp's presentation? There being none, we'll proceed to vote."

On the vote call, the resolution amending the Student-Academic Staff Grievance Procedure was adopted.

Speaker Martin: "Now, we have the President and the Provost both here. Would you be willing to take questions if there are any? Do you have any questions for President Rhodes or Provost Kennedy? No response I think they're anxious to get out. Is there any further business to come before the FCR?"

Dean Bugliari: "Can I say one thing, Russ? Hopefully, this proposal on the Theory and Simulation Center will be back next month for a vote. In the period of time between now and at least the next couple of weeks while we're sending it back to the Committee for final touches, if you happen to come up with anything that you think is a problem, please either direct it to Bob Barker, Ken Wilson, Tom Everhart or myself. If you really have a serious problem, I hope we would find out about it before our next meeting so that we will not be forced to go to still another one to resolve it. We had this discussion so that if there were questions, we could answer them. If something comes up between now and at least the next couple of weeks, please let us know so we can try to iron it out before we come back to vote. Or you can contact the CAPP Committee. Ken Robinson is Chairman, and they'll be looking at this, too. Any input you have, we'd like to have."

There being no further business, the meeting was adjourned at 5:16 p.m., as that old Ithaca sunset illuminated the sky. Respectfully submitted,

Francine A. Herman, Secretary

Calendar

All items for publication in the Calendar section, except for Seminar notices, must be submitted (typewritten, double-spaced) by mail or in person to Fran Apgar, Central Reservations, 532 Willard Straight Hall at least 10 days prior to publication. Seminar notices should be sent to Barbara Jordan-Smith, News Bureau, 110 Day Hall, by noon Friday prior to publication. Items should include the name and telephone number of a person who can be called if there are questions, and also the subheading of the Calendar in which it should appear (lectures, colloquia, etc.). ALL DEADLINES WILL BE STRICTLY ENFORCED.

*—Admission charged.

Announcements

Willard Straight Hall Administrative Board
Applications are now available at the Straight Desk for the 1984-85 school year for new Board members. The Board is responsible for policy-making, budget development and new program and service development. Deadline for applications is March 16.

Thursday

Mar. 15, 4 p.m. Schoellkopf Hall Robison Room. Special meeting of the Association of Cornell University Emeritus Professors. Social hour with wine and cheese. Speaker: President Frank H.T. Rhodes. All Emeritus Professors invited as well as spouses.

Creating the Possible

A weekend personal development program that supports participants to create new possibilities in their personal lives, relationships, and work. Led by Let Davidson, Ph.D. Saturday, March 31 and Sunday, April 1, 9 a.m.-7 p.m. each day. For more information and registration call 272-4131. Pre-registration deadline is March 23. Co-sponsored by Transformation Workshops and CRESPI.

Ag Day 1984

Plants and animals take over the Straight Memorial Room on Monday, March 19 as AgPAC sponsors AG DAY 1984 from 9 a.m. 4 p.m. Increase your awareness of the importance of agriculture in our lives by visiting displays and activities designed by student organizations and clubs of the College of Agriculture and Life Sciences. Want to milk a cow, eat and drink, see farm machinery and talk plants? Do all that and more on AG DAY 1984. It's not just for Aggies.

Intramural Box Lacrosse (Men, Women)

Deadline on entries is Mon., Mar. 19 at 4 p.m. in the Intramural Office, Helen Newman Hall. Minimum of 10 to enter. Teams consist of 6 players. Players must supply their own sticks. Play starts Sun., Apr. 8 in Lynah Rink. Please specify your preferred day of play when entering. (1st, 2nd, 3rd choice) Monday thru Thursday, Friday, only if necessary. Each team will play one Sunday, to be decided by the Intramural Office. An entry fee of \$30 due with your roster to enter. Checks only payable to "Dept. of Phys. Ed. & Ath., Intra. Div."

Intramural Horseshoes (Men, Women, Co-ed)

Deadline on entries is Wed., Mar. 21 at 4 p.m. in the Intramural Office, Helen Newman Hall. Minimum of 2 to enter. Straight elimination tournament. Play starts Mon., Apr. 9 or Mon., Apr. 16 at Jessup Field. An entry fee of \$2 due with your roster to enter. Checks only payable to "Dept. of Phys. Ed. & Ath., Intra. Div."

Blood Mobile

The Tompkins County Red Cross will hold a bloodmobile from 10 a.m. to 3:45 p.m. Wednesday, March 21, in the cafeteria at the College of Veterinary Medicine's Research Tower. Appointments can be made by calling 273-1900. Walk-ins are welcome. Sponsored by the College of Veterinary Medicine.

Dance

Thursday

Mar. 15, 8 p.m. *Anabel Taylor One World Room. Square Dance with music by the Horseflies, Beth Grupp, caller. Admission \$2.50 to benefit Centerpeace. For more information, call Centerpeace at 256-5187.

Saturday

March 17, 8:15 p.m. *Ithaca Ballet Spring Performance in Alice Statler Auditorium. Tickets are available at the Statler Box Office, Williams Shoes, Carey's Luggage and Convenient Food Mart.

Sunday

March 18, 3 p.m. *Ithaca Ballet Spring Performance in Alice Statler Auditorium. Tickets

are available at the Statler Box Office, Williams Shoes, Carey's Luggage and Convenient Food Mart.

Monday

Mar. 19, 8 p.m. Straight Memorial Room. Cornell Contra Dance Club sponsoring a Contra and Square Dance. All welcome.

Every Tuesday

Anabel Taylor One World Room, 8-11 p.m. Israeli Folkdancing. 8-9 p.m. instruction; 9-11 p.m. requests. All welcome.

Every Sunday

Straight North Room, 7:30-10:30 p.m. Cornell Folkdancers. Teaching 7:30-8:30 p.m.; requests 9-10:45 p.m. For Wednesday night dancing information call 257-3156.

Exhibits

Herbert F. Johnson Museum "Figures from Rodin's 'Gates of Hell': Sculpture from the B.G. Cantor Collection," through Sun., Apr. 1. "A Process of Design: Drawings and Sketches by Le Corbusier" through April 22. "Irene Whitton: Incunabula of a Bridge-Kotaro-Takuma Project." Through April 22.

Olin Library

"Medieval Illuminated Manuscripts in Facsimile." Superb reproductions of sumptuous manuscripts—secular treatises on herbs, astronomy and ornithology, literary texts, Books of Hours, from the 6th to 16th centuries in Western Europe. Hours: 8 a.m.-5 p.m. Monday through Friday, through May 1.

Films

Unless otherwise noted films are under sponsorship of Cornell Cinema.

Thursday

Mar. 15, 4:30 p.m. Uris Hall Auditorium. "Albert-Why?" (1977), directed by Josef Rodl, with Fritz Binner. Co-sponsored by German Literature Department.

Mar. 15, 8 p.m. Uris Hall Auditorium. Films from the Third World Newsreel presented by Filmmaker Christine Coy, including "To Love, Honor, and Obey." Co-sponsored by Women's Studies, Young Filmmakers/Video.

Friday

Mar. 16, 7:30 p.m. Uris Hall Auditorium. "Eboli" (1980), directed by Francesco Rosi, with Gian-Maria Volonte, Irene Pappas, Lea Massari. Co-sponsored by Arts College Pentangle Program.

Mar. 16, 8 p.m. *Anabel Taylor Auditorium. "THX-1138" (1971), directed by George Lucas, with Robert Duvall, Donald Pleasance.

Mar. 16, 11:30 p.m. *Uris Hall Auditorium. "The Maltese Falcon" (1941), directed by John Huston, with Humphrey Bogart, Peter Lorre, Mazy Astor. Co-sponsored by English Department.

Saturday

Mar. 17, 10 a.m.-12 noon Uris Hall Auditorium. California based Super 8 filmmaker Paula Gladstone (The Dancing Soul of the Walking People) will show some films and host a workshop on Super 8 filmmaking. Sponsored by Independent Filmmakers at Cornell (IFMAC).

Mar. 17, 7 p.m. *Uris Hall Auditorium. "The Maltese Falcon."

Mar. 17, 8 p.m. *Anabel Taylor Auditorium. "THX-1138" (1971).

Mar. 17, 8 p.m. Risley Music Room. Risley Residential College Free Film Series: "Lot in Sodom" a short study in cinematic techniques and "Salome" the 1923 version with sets and costumes by Rombova based upon the Beardsley drawings.

Mar. 17, 9:30 p.m. *Uris Hall Auditorium. "Moses and Aaron" (1975), directed by Jean-Marie Straub and Danielle Huillet, with Gunter Reich, with Louis Devos. Co-sponsored by Ithaca Opera.

Sunday

Mar. 18, 2 p.m. Johnson Museum Lecture Room. "The Other Side #6-France." French Avant Garde Cinema. Co-sponsored by American Federation of Arts.

Mar. 18, 8 p.m. *Uris Hall Auditorium. "The Spirit of the Beehive" (1975), directed by Victor Erice, with Ana Tonent, Isabel Telleria. Co-sponsored by Romance Studies.

Monday

Mar. 19, 7 p.m. *Uris Hall Auditorium. "Lord of the Flies" (1963), directed by Peter Brook, with James Aubrey, Tom Chapin. Co-sponsored by English Department.

Mar. 19, 9 p.m. *Uris Hall Auditorium. "I Vitelloni" (1956), directed by Federico Fellini, with Franco Fabrice, Alberto Sardi. Limited to Film Club members only.

Tuesday

Mar. 20, 4:30 p.m. Rockefeller D. Southeast

Asia Program Film Series: "Miracle of Bali: Recital of Music and Dance." Illustrates a wide range of Balinese music and dance performances.

Mar. 20, 8 p.m. *Uris Hall Auditorium. "On Guard" (1983), directed by Susan Lambert, with Mystery Carnage. Shown with: "Farewell to Charns." Co-sponsored by GAYPAC.

Wednesday

Mar. 21, 8 p.m. Anabel Taylor Auditorium. "Gentlemen's Agreement." Sponsored by Hillel.

Mar. 21, 8 p.m. *Uris Hall Auditorium. "Destroy, She Said" directed by Marguerite Duras, with Michael Lonsdale.

Thursday

Mar. 22, 8 p.m. Uris Hall Auditorium. "Todos Santos Cuchumatán: Report from a Guatemalan Village." Interviews with the villagers and footage of their work and celebrations give insight into the current political response of the Indian people to the policies of the Guatemalan government. Sponsored by Committee on U.S.-Latin American Relation and the Latin American Studies Program.

Friday

Mar. 23, 7 p.m. *Statler Auditorium. "Women in Love" (1970), directed by Ken Russell, with Alan Bates, Oliver Reed, Glenda Jackson.

Mar. 23, 10 p.m. *Statler Auditorium. "Aguirre, the Wrath of God" (1973), directed by Werner Herzog, with Klaus Kinski, Guy Guerra.

Saturday

Mar. 24, 8 p.m. *Uris Hall Auditorium. "Aguirre, the Wrath of God."

Mar. 24, 10 p.m. *Uris Hall Auditorium. "Women in Love."

Sunday

Mar. 25, 2 p.m. Johnson Museum Lecture Room. "The Other Side #7: Austria, Holland, Greece 1960-80." Avant Garde. Free and open to the community.

Mar. 25, 8 p.m. *Uris Hall Auditorium. "Viridiana" (1961), directed by Luis Bunuel, with Silvia Pinal, Francesca Rabal.

Lectures

Thursday

Mar. 15, 12:20 p.m. 102 West Ave. Southeast Asia Luncheon Seminar: "The Languages of Social Change in Indonesia," Joseph Errington, Assistant Professor, Anthropology Department, Yale University, New Haven, CT, and an SEAP Falcon Alumnus.

Mar. 15, 2-6 p.m. Goldwin Smith D. "The Political Iconography of the New World," a Symposium. Welcome: Enrico M. Santi, Cornell University. Keynote Address: Bernadette Bucher, Fordham University: "West of Eden: Semiotics of the Conquest." Lectures: "Icons of Persuasion: Preaching and Politics in Colonial Peru," Rolena Adorno, Syracuse University. "Icons of Domination in Highland Peru," Billie Jean Isbell, Cornell University. "The Political Iconography of the New World: The Foundation Myth in Catholic, Protestant and Native Icons," Mercedes Lopez-Baralt, University of Puerto Rico and Cornell University. All lectures will be in English and illustrated by slides. Sponsored by The Department of Romance Studies in conjunction with The Cornell Society for the Humanities, the Latin American Studies Program, The Women's Studies Program, and the College of Arts and Sciences.

Mar. 14, 4 p.m. Goldwin Smith Temple of Zeus. Stephanie Vaughn will read from her fiction, followed by an open reading and reception. Sponsored by the English Department.

Friday

Mar. 16, 12:15 p.m. Uris Hall 153. "Food and Health Problems in Northern Italy from the Seventeenth to the Nineteenth Century." Professor Rosalba Davico, University of Turin, Italy. This brown-bag seminar is part of the Food & Foodways Series of the Western Societies Program.

Mar. 16, 4:30 p.m. Goldwin Smith 225. "The Commentary of Martinus Capella Attributed to Eriugena," Professor Michael Herren, Department of Classics, York University, Ontario. Sponsored by Quodlibet.

Monday

Mar. 19, 4:30 p.m. James Law Auditorium. The fourth lecture in the 1983-84 James Law Distinguished Lecturer Series will feature Joseph P. Whalen, M.D., Professor and Chairman, Department of Radiology at the Cornell University Medical College and Radiologist-in-Chief, The New York Hospital. He will speak on "Medical Imaging Frontiers: Ultrasound, CT Scanning and NMR."

Mar. 19, 4:30 p.m. 101 Bradfield Hall. "A Comprehensive Approach to Modeling Agricultural Production," by C.T. de Wit, Professor, Department of Theoretical Production Ecology, Agricultural University, Wageningen, The Netherlands.

March 1984						
S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

erlands, and A.D. White Professor-at-Large.

Tuesday

Mar. 20, 4:30 p.m. Goldwin Smith Hollis E. Cornell Auditorium. "Sex-Bias and Economics," Amartya Sen, Professor of Political Economy, Oxford University, and A.D. White Professor-at-Large.

Wednesday

Mar. 21, 7:30 p.m. Uris Hall 202. Women's Studies presents "Incest: Impact on Adult Female Survivors." Participants: Mickey Goldstein, MSW; Karen Dashiff Gilovich, MS; Louise Miller, Coordinator, Child Sexual Abuse Project. Co-sponsored by Psychology Dept., Tompkins County Task Force for Battered Women, Child Sexual Abuse Project and Women's Studies Program.

Thursday

Mar. 22, 4:30 p.m. Goldwin Smith Hollis Cornell Auditorium. University Lecture: "Apostasy in Prose: Some Reflections on the Emergence of Modern Drama," James W. McFarlane, Herbert F. Johnson Visiting Professor, University of Wisconsin.

Mar. 22, 4:30 p.m. Goldwin Smith Room 24. German Literature presents "On the Afterlife of the Classical Theatre Mask in Europe," Professor Moshe Barash, History of Art, Hebrew University of Jerusalem. Co-sponsored by History of Art Department and The Society for the Humanities.

Meetings

Wednesday

March 21, 4:30 p.m. Collyer Room, Malott Hall. The annual meeting of Faculty Tennis Club members.

Every Thursday

Goldwin Smith Kaufmann Auditorium Cornell Concert Commission general meeting. All welcome.

Every Sunday

Uris Hall 202, 4:30-7 p.m. Lesbian and Gay Political Action and Discussion Group.

Every Tuesday

Straight Loft IV, 4:45 p.m. Third World Student Programming Board.

Music

Two Contemporary Music Programs

Two programs of contemporary music will take place Saturday, March 17, and Monday, March 19, at Barnes Hall. Both events, which are being presented as part of the 16th Festival of Contemporary Music at Cornell, begin at 8:15 p.m. and are free and open to the public.

On Saturday, the Cornell Contemporary Ensemble, directed by Fred Cohen, will have soprano Christine Schadelberg as guest artist in its major work, "Miss Donnithorne's Maggott," a music-theatre work by British composer Peter Maxwell Davies. The production is directed by James Cassaro, with costumes by Ellen MacAvoy and lighting by Ralph Dressler.

Eliza E. Donnithorne was the name of the woman on whom Charles Dickens modeled "Miss Havesham of Tatis House" in his "Great Expectations." Miss Donnithorne was born around 1827 and resided at Cambridge Hall. At age 29 she became engaged to a naval officer, who failed to show up on their wedding day. According to historian J.S. Ryan's account, "How did (Miss D.) bear the blow? Well, it appears to have completely prostrated her, and it is to be feared, to some extent, affected her reason. Her habits became decidedly eccentric after that wedding day, on which there was no wedding, for she never again left the house." Thus, says the author of the text, Randolph Stow, "Miss Donnithorne's Maggott" is a base and cowardly slur on the reputation of an unfortunate lady. It suggests she had a habit of going berserk, though in fact no one knows what she did in the extraordinary privacy of her own home."

Also featured on the Saturday program are Ithaca composer Ann Silsbee's Journeys (1983), the first performance of this version for flute and percussion, an arrangement of J.S. Bach's Prelude and Fugue No. 9 in E Major made by Fred Cohen, and Four Pieces for Clarinet and Piano, Opus 5 by Alban Berg. Co-sponsors, with the music department, are the Cornell Council of the Creative and Performing Arts and Graduate Activities Funding Commission.

Music of Greek composer Theodore Antoniou will be presented in Barnes Hall Monday evening (March 19). The works to be heard include Six Likes (1967) for solo tuba player David Unland, Three Likes (1973) for solo clarinetist Mark Simon, Epilog, after Homer's Odyssey (1963) and

Conductor's Improvisation (1971). Antoniou will conduct the last two. In Epilog, Robert Link will be narrator and Patrice Pastore will sing the soprano solo in original Greek. In the last, 11 instrumentalists improvise under the composer's leadership.

Greek-born Antoniou, who studied extensively in Athens and in Germany, was awarded nine scholarships from different sources for study. He has received numerous awards, such as the Richard Strauss Prize from the city of Munich, commissions from the Fromm and Koussevitzky Foundations, and from Munich for the 1972 Olympic Games, and a Guggenheim grant. He has conducted many orchestras in Europe and America. Teaching assignments have been in Athens, Stanford University, the Universities of Utah and Pennsylvania and Philadelphia College of Performing Arts. He is assistant director of contemporary activities at the Berkshire Music Center, and since 1979, professor of composition at Boston University.

He refers to his work as "abstract program music." Although many of his more than 70 compositions have a neo-folkloristic character, he uses avant-garde ways of expression. With these techniques and his imaginative sense of sound possibilities, Antoniou achieves an original expression in terms of sound structure and virtuosity. This concert is funded by Meet The Composer, Inc.

Violin, Viola and Piano

Cornell violinist Sonya Monosoff and guest artists Kim Kashkashian, viola, and Robert Levine, piano, will present a free public concert at 8 p.m. Sunday, March 18, in Barnes Hall.

Their chamber music program includes duos for various combinations of instruments: Sonatina, Opus 100 by Dvorak and Sonata No. II by Ives, both for violin and piano; Marchenbilder by Schumann and Sonata (1939) for viola and piano; Duo for violin and viola (1946) by Villa-Lobos.

Kashkashian and Monosoff collaborated last fall in the Brahms Festival at Cornell. Kashkashian, acknowledged as one of the leading violists of her generation, has won top prizes in the Munich and the Tertis International Viola Competitions, as well as other awards. During the last two seasons she has made solo appearances with orchestras in Munich, Berlin, Vienna, London and New York, and performed at such festivals as Mostly Mozart, Spoleto, Salzburg and Marlboro. A graduate of the Peabody Conservatory, where she studied with Walter Trampler and Karen Tuttle, she is now on the faculty of the New School of Music and Mannes College in New York.

Pianist Levin, who appeared at Cornell last year in collaboration with Malcolm Bilson, has been heard throughout the United States and Europe as soloist and in chamber music concerts. He studied piano with Louis Martin and composition with Stefan Wolpe in New York and worked with Nadia Boulanger in Fontainebleau and Paris. After graduation from Harvard, he was head of the theory department at Curtis Institute of Music from 1968 to 1972. Since then, he has been a professor at SUNY Purchase and a member of the American Conservatory in Fontainebleau. As a performer, Levin has been associated with the Boston Chamber Players, New York Philomusica and L'Ensemble of New York. He has recorded for Candide, CRI, Deutsche Grammophon, Nonesuch and Turnabout. He is the author of numerous articles and textbooks.

Monosoff has been a professor in the Cornell Department of Music since 1972. Recipient of an Artist Diploma from the Juilliard Graduate School, she was a member of the New York Pro Musica under Noah Greenberg and founder-director of the Chamber Music Players of New York. She made the first recordings of the 17th century violin sonatas of Heinrich Biber for Cambridge Records, and her recording of Bach sonatas received Best Recording of the Year Award from Stereo Review in 1970. Her recording of the Bach sonatas has also been released by the Smithsonian Institution. Recently, she has presented master classes, concerts and lecture-recitals in Israel and Italy, in addition to performances in this country. For the past two years she has participated in the annual Vivaldi Festival at Venice's famed Teatro Fenice. She is a member of the Cornell Amade Trio, which is playing in New York this week.

Keuka College Chorale

The Keuka College Chorale, an 18-member women's choral group from Keuka College, will perform in a free public concert at 8:15 p.m. Tuesday, March 20, in Sage Chapel.

Under the direction of David Conte, assistant professor of music, the Chorale will present a

program of Gregorian chants, motets by Mendelssohn, Kodaly and Faure, folk songs, glees and madrigals.

Conte received his doctorate in composition from Cornell, where he is also acting director of the Cornell Chorale this term. He studied composition with Nadia Boulanger, Aaron Copland and Karel Husa, and is the recipient of a Fulbright scholarship and grant from New York State's "Meet the Composer" program. He has taught at Cornell and the Interlochen Center for the Arts, Interlochen, Michigan.

Members of the Chorale are chosen by audition. The group undertakes a spring tour every year, as well as presenting several concerts throughout the year at the college and in conjunction with special events at Keuka.

Academy of St. Martin Octet

The Academy of St. Martin in the Fields Octet from Great Britain will perform in concert at 8:15 p.m. Wednesday, April 4, in Statler Auditorium.

Tickets for the concert are on sale at the Lincoln Hall Ticket Office which is open from 9 a.m. to 1 p.m. Monday through Friday, telephone (607) 256-5144. The group is scheduled to perform Sextet in C major, Op. 36 by Johannes Brahms; Canzone a 8 by Giovanni Gabrieli and Octet in E flat major, Op. 20 by Felix Mendelssohn.

The group, which consists of the principal string players from the Academy of St. Martin in the Fields Orchestra, was formed to perform large scale chamber works. The octet's programs include nearly the whole span of chamber music from works by Mozart and Boccherini to those of Schoenberg and Martinu. The Mendelssohn Octet, which will be heard at the April 4 concert, is often featured in their concerts.

A reviewer from The Washington Post recently referred to the group as "an ensemble of rare suaveness and delicacy." She went on to write of their performance of the Mendelssohn Octet: "...these qualities made the Mendelssohn Octet a thing of pure delight. Where the music was intended to be 'Con Fuoco,' (with great vigor and speed) theirs was a Mendelssohnian fuoco without lumps or edges or other uncomfortable things. The third movement scherzo was a concoction of froth, light and agility, and, throughout, they projected an almost orchestral sonority."

The Academy of St. Martin in the Fields Octet has toured Germany, Spain, Switzerland, Norway and Yugoslavia and their two successful tours of North America have taken them to all major music centers.

The full Academy of St. Martin in the Fields Orchestra is scheduled to appear at Cornell as part of the 1984-85 Bailey Hall Concert Series.

Saturday

Mar. 17, 8:15 p.m. Barnes Hall. Davies "Miss Donnithorne's Maggot"; Cornell Contemporary Ensemble directed by Fred Cohen (Contemporary Music Festival). Sponsored by Cornell Council of the Creative and Performing Arts.

Mar. 17, 8:30 p.m. *Goldwin Smith Kaufmann Auditorium. Cornell Folk Song Club presents folksinger Priscilla Jerdman in Concert. Tickets are available at the Ithaca Guitar Works in Dewitt Mall and the Commons Coffeehouse in Anabel Taylor Hall.

Sunday

Mar. 18, 4 p.m. Barnes Hall. Chamber Music: Robert Levin, piano; Sonya Monosoff, violin, kim Kashkashian, viola.

Mar. 18, 7:30 p.m. *Bailey Hall. Honegger's "King David" Cornell University Chorus and Glee Club, Cayuga Chamber Orchestra; Robert Lurtsema, narrator; conducted by Karel Husa.

Mar. 18, 8-11 p.m. The Commons Coffeehouse at Anabel Taylor. The Bound for Glory radio show live on WVRB-FM 93. Featuring North Fork Alliance (bluegrass).

Monday

Mar. 19, 8:15 p.m. Barnes Hall. Lecture-Becital: Theodore Antoniou, guest composer. Chamber music (Contemporary Music Festival).

Wednesday

Mar. 21, 3:30-5 p.m. Anabel Taylor Alternative Library. Philosophy and Science - Recordings of Fritjof Capra (The Tao of Physics) and Freeman Dyson.

Religious Announcements

Friday

Mar. 16 Anabel Taylor One World Room. Following Shabbat Services, there will be a Shabbat Dinner sponsored by Hillel. Dinner will be at 6:30 p.m. Reservations must be made and paid for in the Hillel Office, G-34 Anabel Taylor Hall, by no later than the day before at 6 p.m. Cost: \$3.50 for affiliates; \$5 for nonaffiliates. At 8 p.m., there will be a guest speaker (to be announced).



Soprano Christine Schadelberg will perform as Miss Donnithorne in a music-theatre work by British composer Peter Maxwell Davies titled "Miss Donnithorne's Maggot" at 8:15 p.m. Saturday, March 17, in Barnes Hall. The work will be performed by the Cornell Contemporary Ensemble, directed by Fred Cohen. The production will be directed by James Cassaro, with costumes by Ellen MacAvoy and lighting by Ralph Dressler. The performance is being presented as part of the 16th Festival of Contemporary Music. Music of Greek composer Theodore Antoniou will be presented at 8:15 p.m. Monday, March 19, in Barnes Hall. This concert is also being held in celebration of the festival.

Saturday

Mar. 17, 9 p.m. Anabel Taylor Edwards Room Purim Party.

Monday

Mar. 19, 8 p.m. Anabel Taylor Founders Room. Nachemia Lev-Tzion, Hebrew University lecturing on "Political Islam vs. Political Zionism." Sponsored by FCI.

Tuesday

Mar. 20, 8 p.m. Anabel Taylor Founders Room. Danny Seidman, spokesperson for Shalom Achshav (Peace Now) and original founder of the Cornell Chavura lecturing on "Is Anti-Zionism - Anti-Semitism?"

Religious Services

Friday

Mar. 16, 5:30 p.m. Anabel Taylor Chapel. Erev Shabbat Services (Reform Minyan).

Mar. 16, 5:30 p.m. Anabel Taylor Founders Room. Erev Shabbat Services (Conservative/Egalitarian Minyan).

Mar. 16 Erev Shabbat Services (Orthodox Minyan). Call 272-5810 for information.

Saturday

Mar. 17, 9:15 a.m. Anabel Taylor Edwards Room. Shabbat Services (Orthodox Minyan).

Mar. 17, 10 a.m. Anabel Taylor Founders Room. Shabbat Services (Conservative/Egalitarian Minyan).

Mar. 17, 7 p.m. Anabel Taylor Edwards Room. Purim Services (Orthodox Minyan).

Mar. 17, 7 p.m. Anabel Taylor Founders Room Purim Services (Conservative/Egalitarian Minyan).

Mar. 17, 7 p.m. Anabel Taylor Chapel. Purim Services (Reform Minyan).

Sunday

Mar. 18, 11 a.m. Sage Chapel. Interreligious Service Speaker: Sue Anne Morrow, Associate Chaplain, Princeton University, Princeton, NJ.

Sunday

Mar. 25 University Recess - No Chapel Speaker.

Baha'i

Call 272-5728 or 273-8014 for location of services.

Catholic

Anabel Taylor Chapel, Mass every Monday through Friday at 12:15 p.m.; Anabel Taylor Auditorium, Mass every Saturday at 5 p.m.; Anabel Taylor Auditorium, Mass every Sunday at 9:30 a.m. & 5 p.m. Sacrament of Reconciliation by appointment in Anabel Taylor G22. 256-4228.

Christian Science

Anabel Taylor Founders Room. Every Thursday, 7 p.m. Christian Science Organization at Cornell Testimony meeting.

Episcopal (Angelical)

Anabel Taylor Chapel. Every Sunday 9:30 a.m. Holy Eucharist, Sunday School and Nursery. Coffee Hour follows the service in the Founders Room.

Korean Church

Anabel Taylor Chapel. Every Sunday 1 p.m. Bilingual worship Service.

Lutheran

The Lutheran Church, 109 Oak Ave. Every Sunday, 10:45 a.m. Worship Service. Sunday School, 9:30 a.m. Nursery available. Coffee Hour follows the service in the Fellowship Room. Holy Communion, first Sunday of the month.

Muslim

Anabel Taylor 218. Monday through Thursday, 1 p.m. Anabel Taylor Edwards Room, Friday at 1 p.m. Protestant

Anabel Taylor Chapel. Every Sunday, 11:15 a.m. Protestant Cooperative Ministry Worship Service.

Seminars

Applied thermatics: "Some Dynamics of the QR Algorithm," Michael Shub, Queens College, CUNY, 4 p.m. Friday, March 16, 165 Olin Hall.

Applied Mathematics: "Bifurcations and their Picard-Fuchs Equations," Jan A. Sanders, Vrije Universiteit, Amsterdam, and Michigan State University, 4:30 p.m. Monday, March 19, 205 Thurston Hall. Cosponsored by Theoretical and Applied Mechanics.

Applied Mathematics: "Rigorous and Useful Bounds on Regular Motion of Hamiltonian Systems," Ian C. Percival, Queen Mary College, London, 4 p.m. Friday, March 23, 165 Olin Hall.

Astronomy and Space Sciences: "A Decade of Variable Positron Annihilation Radiation from the Galactic Center," Marvin Leventhal, Bell Laboratories, 4:30 p.m. Thursday, March 15, 105 Space Sciences Building.

Astronomy and Space Sciences: "Non-Linear Solar System Dynamics," Ian Percil, Queen Mary College, 4:30 p.m. Thursday, March 22, 105 Space Sciences Building.

Biochemistry: "Regulatory Factors Controlling Adenovirus and Cellular Transcription," Joseph Nevins, Rockefeller University, 4:30 p.m. Friday, March 16, 204 Stocking.

Biochemistry: "Nuclear Yeast Genes that Promote Expression of Specific Mitochondrial Genes," Thomas D. Fox, 12:20 p.m. Monday, March 19, 125 Riley Robb.

Biochemistry: "The Development of a Cloning System in the Cyanobacterium Anacystis nidulans R2," Lou Sherman, University of Missouri, 4:30 p.m. Friday, March 23, 204 Stocking.

Boyce Thompson Institute: "Characterization and Reconstitution of H+ ATPases from Plant Cell Membranes," Roger M. Spanswick, 3:15 p.m. Wednesday, March 21, Auditorium, Boyce Thompson Institute.

Chemical Engineering: "Role and Significance of Cell Motility and Chemotaxis in Microbial Population Dynamics," Douglas A. Lauffenburger, University of Pennsylvania, 4:15 p.m. Tuesday, March 20, 145(A) Olin.

Ecology and Systematics: "Centrifugal Evolution and Punctuated Equilibrium," William L. Brown Jr., 4:30 p.m. Wednesday, March 21, Morison Seminar Room, Corson Hall.

Education: "Knock, Knock. Who's There? How Science Writers Perceive Their Audiences," Carrie Koplanka-Loehr, 4:30 p.m. Monday, March 19, Stone Hall Lounge.

Floriculture and Ornamental Horticulture: "Computer Applications in Floriculture Production Management," Charles Kruger, Yoder Bros., 12:15 p.m. Thursday, March 15, 37 Plant Science Building.

Floriculture and Ornamental Horticulture: "Commercial Horticulture, California Style," Daryl David, Coop. Extension Agent Ulster County, 12:15 p.m. Wednesday, March 21, 37 Plant Science Building.

Design and Environmental Analysis: "Kevlar: Special Properties and End Uses," Steven Dinh, 4:30 p.m. Tuesday, March 2, 317 Martha Van Rensselaer Hall.

Continued on Page 8

Calendar

Continued from Page 7

Food Science: "Genetic Manipulation of Yeasts," C.J. Panchal, Labatt's Brewery, 4:30 p.m. Thursday, March 22, 204 Stocking Hall.

Geological Sciences: "Recent Results from the Kiglapait Intrusion, Greenland," S.A. Morse, University of Massachusetts, 4:30 p.m. Tuesday, March 20, 205 Thurston Hall.

JUGATAE: "Insects on Film: A Historical and Contemporary Look at Photography in Entomology," Joe Ogradnick, 4 p.m. Monday, March 19, 100 Caldwell Hall.

Materials Science and Engineering: "Fundamentals of Fracture," R. Thomson, NBS, 4:30 p.m. Thursday, March 15, 140 Bard Hall.

Materials Science and Engineering: "Melting Behavior of Type IV Elements at High Pressure," W. Bassett, 4:30 p.m. Thursday, March 22, 140 Bard Hall.

Mechanical and Aerospace Engineering/Operations Research and Industrial Engineering: "R.C. Wilson, University of Michigan, 4:30 p.m. Thursday, March 15, 282 Grumman Hall.

Mechanical and Aerospace Engineering: "The Computerization of Science," Kenneth G. Wilson, 4:30 p.m. Tuesday, March 20, B-17 Upson.

Mechanical and Aerospace Engineering/Operations Research and Industrial Engineering: "Effects of Financial, Marketing, Accounting Considerations on Automation Decisions," L. Joseph Thomas, 4:30 p.m. Thursday, March 22, 282 Grumman Hall.

Microbiology: "Genetics and Mechanism of Chromosomal and Plasmid Mediated Tetracycline Resistance," Stuart Levy, Tufts University School of Medicine, 4:30 p.m. Thursday, March 22, 124 Stocking Hall. Cosponsored with Vet. Microbiology.

Natural Resources: "Environmental Contaminants: A Physiological View," Barnett Rattner, Patuxent Wildlife Research Center, 4 p.m. Thursday, March 15, 304 Fernow.

Neurobiology and Behavior: "Extracellular Matrix and Selective Synapse Formation at the Neuromuscular Junction," Joshua Sanes, Washington University Medical School, 12:30 p.m. Thursday, March 15, Morison Seminar Room, Corson & Mudd Halls.

Neurobiology and Behavior: "The Control of Nerve Growth and Regeneration as Revealed in Compartmentalized Cultures: Or, a Step Towards the Reconstruction of a Perfectly Good Rat," Robert Campenot, 12:30 p.m. Thursday, March 22, Morison Seminar Room, Corson & Mudd Halls.

Neurobiology and Behavior: "Neuronal Basis of Hormonally-Mediated Changes During Insect Metamorphosis," Janis Weeks, University of Washington, 3:30 p.m. Monday, March 19, Morison Seminar Room, Corson & Mudd Halls.

Operations Research: "Mathematical Aspects of Ecological Management," Simon A. Levine, 4:30 p.m. Tuesday, March 20, 315 Upson Hall.

Organic/Inorganic Chemistry: "Recent Developments in Bioorganic Chemistry," D. Arigoni, ETH Zurich, Switzerland, 4:40 p.m. Monday, March 19, 119 Baker Lab.

Ornithology: "The Reproductive Strategies of Arctic Seabirds," David Nettleship, Canadian Wildlife Service, 7:45 p.m. Monday March 19, Stuart Observatory, Lab. of Ornithology, Sapsucker Woods.

Psychology: "Use of Monoclonal Antibodies to Study Corpus Luteum Formation and Function," William Hansel, 4:30 p.m. Tuesday, March 20, G-3 Veterinary Research Tower.

Plant Biology: "Localization and Characterization of Auxin Transport Carriers," Mark Jacobs, Swarthmore College, 11:15 a.m. Friday, March 16, 404 Plant Science Building.

Plant Biology: "Leaf Development and Assimilate Partitioning," Robert Turgeon, 11:15 a.m. Friday, March 23, 404 Plant Science Building.

Plant Pathology: "Regulation of Gene Expression During Fungal Development," William Timberlake, University of California at Davis, 4:30 p.m. Tuesday, March 20, 404 Plant Science Building. Cosponsored by the Biotechnology Program.

Plasma Studies: "Magnetic Field Reconnection," B. Sonnerup, Dartmouth, 4:30 p.m. Wednesday, March 21, 282 Grumman Hall.

Poultry Biology: "Disorders of Immune Regulation in Autoimmune Thyroiditis," Joe Kite, SUNY Medical School at Buffalo, 4:30 p.m. Thursday, March 22, 300 Rice Hall.

Psychology: "Neurophysiology of Sound Lo-

calization in the Owl," Masakazu Konishi, California Institute of Technology, 3:30 p.m. Friday, March 16, 202 Uris Hall.

Psychology: Robert H. Wurtz of the National Eye Institute at Bethesda will speak on a topic to be announced at 4 p.m. Friday, March 23, in 202 Uris Hall.

Remote Sensing: "Classifying Cultural Features with Synthetic Aperture Radar," Floyd M. Henderson, SUNY Albany, 4:30 p.m. Wednesday, March 21, 110 Hollister Hall.

Theoretical and Applied Mechanics: "Robotics Research at AT&T Technologies," B. Sung Kim, 4:30 p.m. Wednesday, March 21, 205 Thurston Hall.

Toxicology: "Nutritional Modulation of Pancreatic Carcinogenesis in the Rat," B.D. Roebuck, Dartmouth College, 12:20 p.m. Friday, March 23, 100 Savage Hall.

Vegetable Crops: "Atrazine Resistant Chenopodium album (common lambsquarters) in New York State, Anne L. Westman, 4:30 p.m. Thursday, March 15, 404 Plant Science Building.

Vegetable Crops: "The Effect of the Midge Predator (Aphidoletes aphidimyza) on Aphid Population on Tomatoes and Bell Peppers," Richard H. Meadow, 4:30 p.m. Thursday, March 22, 404 Plant Science Building.

Theater

Thurs. through Sat.

Mar. 15-17, 8:15 p.m. *Risley Theatre. An evening of one-acts: "Grimm City Psalm" an original play by Sharon Singer; "The Tapestry" an original play by Cynthia Talbot; and "A Full Moon in March" by William Butler Yeats. Tickets \$2 at the door and Willard Straight Ticket Office. For more information call 256-5365.

Thurs. through Sat.

Mar. 15-17, 8:15 p.m. *Lincoln Drummond Studio. Theatre Cornell presents Thornton Wilder's "Our Town," a poignant study of life and death; and the priceless value of the smallest of life's events. Tickets are available only at the Theatre Cornell box office. It is open Monday-Friday from 1-6 p.m. and may be reached by calling 256-5165.

Sunday

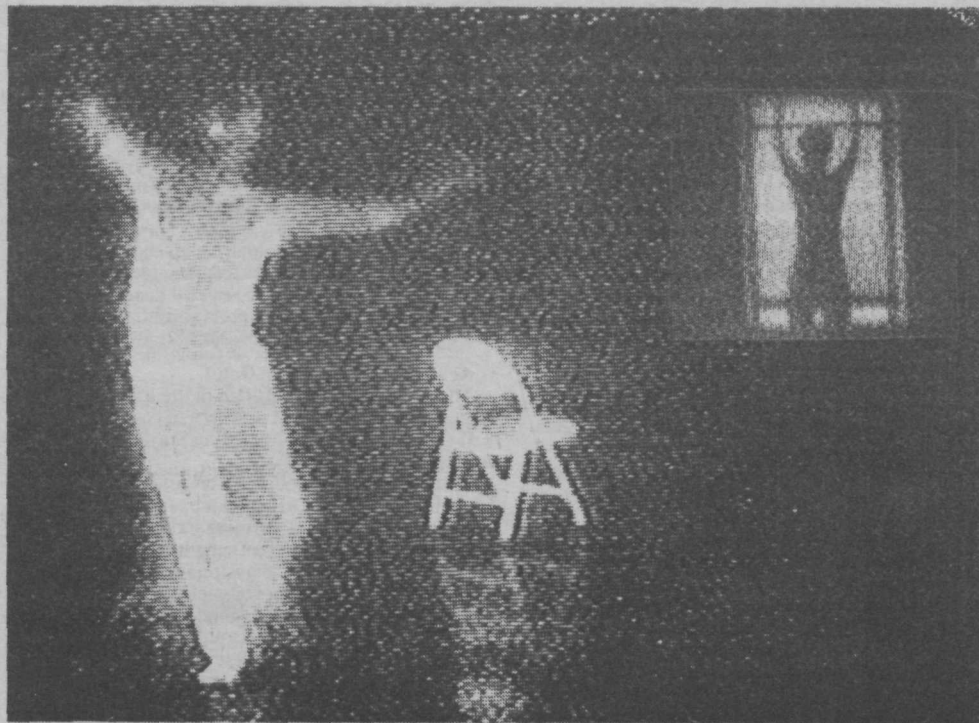
Mar. 18, 2:30 p.m. *Lincoln Drummond Studio. Theatre Cornell presents Thornton Wilder's "Our Town." Matinee is followed by another in our series of post-performance discussions with the members of the production. The Discussion Series is offered free, and the public is invited to attend.

Mar. 18, 7 p.m. *Risley Theatre. An evening of one-acts: "Grimm City Psalm" by Sharon Singer; "The Tapestry" by Cynthia Talbot; and "A Full Moon in March" by William Butler Yeats.

Graduate Bulletin

Graduate Study at Cornell (formerly entitled **Guide to Graduate Study**), the handbook outlining policies and procedures governing graduate study, is now being revised. If you have any suggestions as to how this publication could be made more useful or helpful please contact Margo Quinto, Sage Graduate Center, 6-4884. Friday, March 16, is the final date for course change or drop without paying a special processing fee of \$10.

Commencement is May 27. The deadline for submitting your thesis is May 18, but if you plan to attend graduation and would like to receive your diploma on the 27th and have your name in the commencement program, stop in the Graduate School immediately and fill out the Provisional Degree and Diploma form. This must be done before March 30.



Dancer/choreographer Lonna Wilkinson will present a multi-media dance concert at 8:30 p.m. Friday and Saturday in Willard Straight Hall Theater.

Computer Program LEAN Helps 'Move People Toward Fitness'

At work, in schools, supermarkets, and even in our living rooms, computers are clicking away, but now they are also doing their "byte" in kitchens and gyms.

Cornell Cooperative Extension is using a computer program called "LEAN" (Learn about Eating, Activity, and Nutrition) to help people "move toward fitness." Individuals work directly with a computer to learn about their energy balance — dietary intake and energy output — and to tailor a diet to meet their specific needs.

Prompted by the computer, an individual inputs his or her height, weight, desired weight, wrist size, age, sex, and food and activity list for a one or three-day period. LEAN then calculates calorie and nutrient values for foods consumed, determines energy expended, and determines whether a person is in the weight range considered healthful for that person.

LEAN also informs the user of any nutrient intake that is less than two-thirds of the recommended dietary allowances and suggests foods that are good sources of those nutrients.

"LEAN is a personalized, computerized energy balance program that helps a person maintain, gain, or lose weight using exercise as well as diet," says Martha Mapes, a senior Cooperative Extension associate in the Division of Nutritional Sciences, a joint unit of the State College of Human Ecology and the State College of Agriculture and Life Sciences.

In addition, the software is programmed to determine what percent of the day's calories consumed were from fat and protein. The American Heart Association (AHA) points out that, for example, most Americans consume 40 percent or more of their calories from fats. Because that much fat may contribute to cardiovascular diseases, the AHA recommends that no more than 30 percent of one's daily calories be from fats. USDA recommends that fat be limited to 35 percent.

"Foods high in fats, American favorites, add calories twice as fast as foods high in protein and carbohydrates," Mapes points out. "Yet, to figure out manually how many of your calories are from fats would take hours."

After digesting the numbers, the com-

puter informs the user how to modify his or her diet or activities to reach the desired weight and calculates how long it would take to reach that goal.

The program also points out activities which require the most and least energy, and identifies foods highest in calories. If, for example, climbing stairs, walking, and calisthenics were listed as activities, the program would point out that the steps and walking actually burn off more calories than the calisthenics — 5.7, 3.8, and 3.7 calories per minute, respectively.

"One should think of a computer program as a helpful adjunct to learning about oneself," Mapes says. "It can offer an important incentive to change one's lifestyle."

LEAN is part of "Moving Toward Fitness," a four-year food and fitness program for youths and adults from Cornell Cooperative Extension. It is available in New York state through any county office of Cornell Cooperative Extension.

Cornell Cooperative Extension helps people put knowledge to work by providing research-based information from Cornell University.

Barton Blotter

Nearly \$1,000 worth of jackets, a watch and a pen were reported stolen in eight separate incidents of theft in Barton Hall shortly after midnight Saturday during a fraternity sponsored dance, according to the morning reports of the Department of Public Safety for the week March 5 through 11.

During the seven-day period a total of 21 thefts involving losses of \$3,126 in cash and valuables were reported. These included five wallets with a total of \$114 in cash stolen.

Other thefts involved a \$500 bicycle, a rug and telephone worth \$440 taken from Sheldon Court; a \$450 computer with software; \$375 in tools taken from Academic Building II; and a \$60 periodic table from Baker Laboratory.

Four persons were referred to the Judicial Administrator on charges of harassment, stealing a parking permit, failure to comply at a traffic booth and public exposure.

The Week in Sports

Spring Sports Season Will Mush Its Way In This Weekend

The Cornell spring sports season officially gets underway this weekend as two teams kick off their campaigns. The men's tennis team begins its season at home with a match on both Friday and Saturday, while the men's lacrosse team opens its schedule with a road game at Adelphi on Saturday.

The Big Red men's tennis team will entertain Rochester on Friday and Penn State on Saturday, with both matches being held at the Indoor Tennis Bubble. Friday's match begins at 4 p.m., while Saturday's event is scheduled for 11 a.m. Cornell will be looking this season to continue the success it has enjoyed each of the last two years under head coach Steve Medoff. The squad went 12-7 overall last spring and 2-7 in the tough Eastern Intercollegiate Tennis Association, and last year marked the first time that the Red has put together back-to-

back winning seasons since 1961-62.

Two of the top six singles performers are gone from the 1983 team, but juniors Dave Merritt and Mike Rytting are both two-year starters who will lead the squad.

Merritt was Cornell's number one singles performer last spring and he had an overall record of 13-5, in addition to a 6-3 mark in the Eastern Intercollegiate Tennis Association. In his two years on the team, the Fort Washington, Pa., native has had an overall record of 29-8. Rytting performed at the number two singles spot last season and was 13-6 overall. Merritt and Rytting also made up the Big Red's number one doubles unit, as the duo went 8-7.

Two sophomores who saw a great deal of action as rookies a year ago were James Connolly and Mark Bonnett, who competed at number five and six, respectively, and

had records of 9-9 and 12-6 overall. Another returnee who is being counted on is junior Duffy Myero, who was 1-1 in singles play and 8-4 as a doubles performer.

Cornell leads the series with Rochester, 13-4, and has defeated the Yellowjackets each of the last six years. The Big Red also holds an 8-0 advantage against Penn State, but the two schools have not faced each other since 1964.

On paper, the Cornell men's lacrosse team has quite a challenge in store for itself in 1984. Eleven of 23 lettermen are gone from last year's 8-4 team (which made

it to the quarterfinals of the NCAA playoffs), including three All-Americans and four of the Big Red's top six scorers. There are important starters to replace in all areas of the squad. At the same time, however, Cornell has key returnees back at every position. Last year's varsity "B" team was one of the best at Cornell in several years and many of the players from that squad will also contribute this spring. Although there is some unproven talent on the team, the Big Red has the potential to compete for an 11th consecutive Ivy League title, and a third straight trip to the NCAA.

Faculty-in-Residence

Continued from Page 1

goal is for students to learn that faculty are real people and to refresh the memories of faculty as to what the life of an undergraduate is like.

The Collinses, who are responsible for Balch and Comstock Halls, began participating in the program this past fall.

"It's been working very well," Nick said. "We're enjoying it. We see a lot of students in a variety of situations and settings. I especially enjoy being around a broad spectrum of students from all the undergraduate colleges majoring in almost anything you can think of."

"Interacting informally with the students on almost a daily basis is very enjoyable," Becky said. "It's a rejuvenating experience. It's also been excellent for the children. There's a student who's been teaching Daria some Spanish; another is very close to them and comes over often and takes them to her room. It's a nice way for all of us to branch out and grow."

The programs offered by the Collinses in their home include a Faculty Forum Series, to which faculty members are invited to meet with students informally, study breaks, brunches and crafts. They also go to several activities held in the dorms.

Becky's crafts program has turned out to be one of the most popular activities with the students.

"It's a nice break from academics," Cahill said. "We made Christmas ornaments during study week and it helped relieve the tension. It was a good reminder that not everybody in the world had a paper due or a final coming up."

"Several of the students have often commented that it's nice to produce something that isn't stressful to do," Becky said. "There's also a lot of conversation going on while they're working on projects and they'll talk about their professors or how they feel about a particular test coming up. Usually it's a mixture of students who normally aren't together."

According to Nick and Becky, their one concern about participating in the program was how the children, especially Daria and Kyla, would adjust. However they soon found out they had nothing to worry about.

"I like this house better than our other house because this one has an attic," Daria said. "I hope we can make a toy room up there so we can have a separate TV room for Mommy and Daddy to watch the news in. I like the students but sometimes they're too noisy and they wake me up. But they play with me a lot and take me to their rooms."

Kyla agreed with everything her big sister said. And added that Cherry likes it there too.

Aaron, who is on the basketball team at Ithaca High School says that the only change in his life is that he now has to take the bus to school instead of being able to walk.

"Becky and I are constantly being reminded about what it was like to be a college student," Nick said. "We've noticed that there are times when a certain amount of tension builds up in them. They're trying to balance so many different things in their lives. We've observed that the stress students have isn't all academic."

"We've also learned that there are times during the semester when you just can't plan activities. There are peaks and valleys in an academic calendar and you really have to work around those, which is something I'd forgotten from when I was in college," Becky said.

Nick and Becky both agree that they want to continue in the program for another year.

"In the beginning we spent a lot of time getting to know the Residence Life Staff we are working with and finding out who to call for what," Nick said. "There were a lot of things we wanted to do that we just didn't have the time to do. For example, we wanted to arrange a 'Faculty, Families and Friends' cookout here at the house."

"There are a lot of faculty and non-faculty families living in the neighborhood along with the students and we thought it would be nice for all of us to get together. By the time we got organized enough to do it the semester had gotten into full swing and the weather was getting unpredictable."

Aaron, Daria and Kyla also said they wouldn't mind staying with the program for another year.

Job Opportunities

Continued from Page 11

terpersonal skills.

Minimum Starting Salary: \$10,000/annual equivalent

Job Number: C104

Position: Office Assistant, GR17

Department: Architecture, Art & Planning - Registrar's Office

Description: Enter student information system data into computer; assist in updating permanent record cards; aid in distribution of registration materials to students; act as office receptionist when needed. Monday - Friday, 29 hours/week, to be arranged.

Requirements: H.S. education or equivalent. Medium typing. Extremely accurate typing with medium speed; some experience with data entry; good spelling; detail oriented; good interpersonal skills; knowledge of Xerox 860 desirable.

'State of Gay America' Subject Of Virginia Apuzzo's Talk Today

Virginia Apuzzo, executive director of the National Gay Task Force (NGTF) will speak on "The State of Gay America: From the Grassroots to Washington" at 8 p.m. today in Ives 120. The lecture is free and open to the public.

Apuzzo's visit is being sponsored in conjunction with "We Are A People! : Gay People at Cornell's 15th Anniversary Celebration". In addition to the lecture, Apuzzo will conduct an open discussion on "Religion in the Lives of Gay People" at 4 p.m. today in the Commons Coffeehouse at Anabel Taylor Hall. During her visit she will also hold a regional press conference, confer with leaders of Cornell's gay community and attend Gay People at Cornell's 15th Anniversary Birthday Gala in the Herbert F. Johnson Museum of Art.

The "Religion in the Lives of Gay People" discussion is part of the "Thursday Forums" cosponsored by Cornell United Religious Work and the Center for Religion,

Ethics and Social Policy. According to Ingrid Olsen-Tjensvold, assistant director of CURW, "in sponsoring the (Forum) series, we hope to bring live issues in front of the campus community to stimulate conversation about them. The issue of religion in the lives of gay people is certainly a very important and a very vital issue."

As guest of honor at GayPAC's Birthday Gala, after her speech in Ives, Apuzzo will join Cornell and Ithaca dignitaries, the area gay community and its friends and supporters, and gay student groups from across the state in saluting GayPAC's 15 years of service.

Gay People At Cornell's 15th anniversary began last May with the annual May Gay activities and will continue through May 1 of this year. Founded in May 1968 as the Student Homophile League, GayPAC is the oldest gay student organization outside of New York City.

National Agriculture Day Marked Here with Events Next Monday

National Agriculture Day will be observed on campus March 19.

Organized by the Positive Action Council (AgPAC), a student organization in the New York State College of Agriculture and Life Sciences at Cornell, the national theme is "Agriculture: America's Heartbeat."

Displays and demonstrations have been designed to help foster an appreciation for the agriculture industry by recognizing the vital role that it plays in America, according to student organizers. On-farm computer systems, research, and innovations developed at Cornell will be highlighted this year, along with other aspects of agriculture in New York State, such as the dairy, poultry, potato, and apple industries. Cows, chickens, horses, sheep, and insects

will be displayed in the Memorial Room of Willard Straight Hall. Outside, in front of Willard Straight, several pieces of farm equipment will be exhibited.

These activities, scheduled from 9 a.m. to 4 p.m., are open to the public free of charge.

In addition to the Monday events, AgPAC will sponsor a square dance Friday, March 16, from 8 p.m. to midnight in the Livestock Pavilion on campus, and a Sunday brunch in the Big Red Barn starting at 12:30 p.m. March 18.

Edgar King, deputy commissioner of agriculture for New York State, and a graduate of the College of Agriculture and Life Sciences, will speak at the brunch.

Tickets for the square dance can be obtained at the door.

Minimum Starting Salary: \$9,492/annual equivalent
Job Number: C106

Temporary

In addition to regular, part-time opportunities, Temporary (less than six months) positions, both full-time and part-time, are available. Although many openings are clerical, there are often positions offered in other areas. As Temporary openings do not always appear in this listing, please contact Staffing Services for more information.

*Position: Temporary Technician, T-2

Department: Physiology

Description: Carry out all functions associated with the study of transfer of inorganic ions and large molecules across mammary glands. Collect and analyze samples; calculate and record data; laboratory maintenance. Full-time, tem-

porary until 9/30/84.

Requirements: Bachelor's degree or equivalent in animal science or biological sciences. Chemical analysis experience desirable; ability to use spectrophotometer and perform data calculations. Familiarity with gamma counters, liquid scintillation counter, microcomputers and calculators helpful.

Minimum Starting Salary: \$4.80/hour
Job Number: T112

Academic

Please contact department directly.

Position: Assistant Professor (Grape Enomologist)

Department: NYS Agricultural Experiment Station - Geneva, NY
Job Number: A092

March 15, 1984

Please Post

Number 11

Cornell University

University Personnel Services

Day Hall

Ithaca, New York 14853

607/256-5226

Please Note:

Job Opportunities is a publication of Staffing Services and is distributed each Thursday through the Cornell Chronicle. Applications for employment can be submitted through the mail. Application forms

are available by the posted Job Opportunities listing at 130 Day Hall. For more information on jobs listed, contact Staffing Services, 130 Day Hall, (607) 256-5226.

Employee Transfer Applications: Employees who wish to transfer to other jobs within the University should complete a separate Employee Transfer Application form for each position and submit them to Staffing Services. Individuals with official University layoff status will be given preference in referrals.

In response to the Employee Survey, individual copies of Job Opportunities will be available for all employees; complete job posting will be published Thursday of each week in the Chronicle. Consequently, the list will no longer be published in its previous form.

This listing is also available on CUINFC, Cornell University's computerized information service, along with campus bus,

movie, dining facility and library schedules. Each regular Cornell employee is entitled to a free computer account. For further CUINFO details, contact the Information and Referral Center at 256-6200 or Computer Services.

Selected job announcements are broadcast on Channel 13 television each Tuesday at 9:30 a.m. and 7:15 p.m. and each Friday at 11 a.m. and 5:15 p.m.

New vacancies are listed for two weeks in Job Opportunities.

*Asterisks identify jobs that were not listed last week.

Full-time jobs are 39 hours per week unless otherwise indicated. Jobs listed as SO, U1 and U2 are represented by bargaining units.

*Asterisks identify jobs that were not listed last week.

Job Opportunities

Cornell University is an equal opportunity, affirmative action employer.

Administrative/Professional

*Position: Vice President, Finance and Treasurer

Department: Senior Vice President

Description: Serve as principal financial officer of the University providing leadership to assure effective policies and programs in asset and liability management; financial operations and financial information and control; and also development of capital and financial plans.

Requirements: Bachelor's degree. Requires broad-based experience as financial executive. Proven managerial competence and thorough knowledge of and experience in one or more areas of finance. Excellent communication skills.

Job Number: P117

*Position: Physician

Department: University Health Services

Description: Internist - Patient population comprises students, faculty and staff.

Requirements: M.D. Must be Board Certified or eligible.

Job Number: PT114

*Position: Director of Lab Operations

Department: Equine Drug Testing - Roosevelt/Yonkers Raceway

Description: Operate a field drug testing laboratory at Roosevelt and Yonkers Raceways. Supervise and train five technicians. Responsible for the analysis of blood and urine samples by thin layer chromatograph and gas chromatograph. Five days per week (Sat., Sun. & Holidays included).

Requirements: M.S. or equivalent in chemistry, biochemistry or toxicology. Extensive experience in isolation, purification and identification of drug and drug metabolites. Thin layer chromatography, gas chromatography and supervisory experience essential.

Minimum Starting Salary: \$20,000

Job Number: PT111

*Position: Research Support Specialist III

Department: National Submicron Facility

Description: Supervise and operate silicon processing facilities, including thermal processing furnaces, dual e-gun evaporator and reactive ion etchers for the purpose of providing a user research resource to scientists from Cornell and across the country. Carry out research with these systems, assist in report and article writing and maintenance of system. Oversee two staff members and several graduate students.

Requirements: Master's degree or equivalent in electrical engineering, materials science, physics, or related field. Some silicon device and circuit fabrication work experience.

Minimum Starting Salary: \$15,500

Job Number: PT112

*position: Research Support Specialist III (Repost)

Department: Clinical Sciences - Theriogenology

Description: Provide technical support in biomedical engineering for a research group specializing in reproductive biology. Duties will involve the design and production of electronic equipment as well as computer and microprocessor-aided data acquisition systems and programming.

Requirements: Master's degree or equivalent in electrical engineering. Electronic equipment design and troubleshooting. Computer programming. Some experience in bioengineering would be useful.

Minimum Starting Salary: \$15,500

Job Number: P088

*Position: Senior Research Support Specialist (Repost)

Department: Agricultural Economics

Description: Responsible for the planning, conducting and reporting research on the economic, financial and technical aspects of alternative biotechnology products and processes relevant to agriculture and the food industry. Position funded until 9/30/87, extension based on continued funding.

Requirements: M.S./Ph.D. in economics or agricultural economics. Course work in biological sciences or chemistry helpful. Knowledge and demonstrated use of computers, economic theory, quantitative methods and techniques of risk analysis required.

Minimum Starting Salary: \$15,500

Job Number: P491

*position: Coordinator, Office Information Systems

Department: Graduate School of Management

Description: Coordinate the computerization of the External Affairs manual office information systems. Responsible for the analysis, design and implementation of new and/or existing systems. Evaluate, select and oversee software installations. Perform and manage statistical analysis, including report generation.

Requirements: Associate's degree or equivalent. Experience in development of office automation. Knowledge of computer word processing, data base management and statistical analysis preferred.

Minimum Starting Salary: \$12,500

Job Number: PT118

*Position: Assistant Coordinator of Education

Department: Johnson Museum

Description: Assist the Coordinator of Education in planning, development, implementation and evaluation of museum's education programs.

Requirements: Bachelor's degree or equivalent in museum education or a related area. Previous teaching experience in museum education and/or art related programs is necessary. Good interpersonal and communication skills required. Ability to work independently. Willingness to work flexible hours.

Minimum Starting Salary: \$12,500

Job Number: PT116

*Position: Student Insurance Representative

Department: University Health Services

Description: Supervise all activities relating

to the processing and payment of medical insurance claims for 8,500 students and their spouses; athletic medical coverage for 1,500 intercollegiate athletes.

Requirements: Associate's degree or equivalent. At least five years experience in insurance, medical or health-related offices. Good with numbers. Supervisory skills essential. Ability to communicate well and explain medical insurance policy clearly. Ability to work with subscribers, physicians, medical support staff, other insurance companies and different university staff. Knowledge of medical terminology and procedures. Send cover letter and resume by March 23, 1984.

Minimum Starting Salary: \$12,500

Job Number: PC115

Position: Manager, Employee Benefits

Department: University Personnel Services

Description: The Manager will participate in the development and implementation of the flexible compensation program, supervise a staff of 10 and administer, analyze and communicate the benefit programs for the University's 8,000 faculty and staff employees.

Requirements: Bachelor's degree, graduate level course work desirable. At least five years progressive personnel management experience; a thorough knowledge of government laws and regulations relevant to the administration of benefits programs, e.g., ERISA and TEFRA; experience bidding and analyzing funding of insurances; demonstrated excellent communication skills. Send cover letter and resume to Staffing Services by March 20, 1984.

Minimum Starting Salary: \$15,500

Job Number: P104

Position: Manager, Materials

Department: Facilities and Business Operations

Description: Manage multi-million dollar construction material warehouse and general stores. Insure inventory control, planning and University-wide shipping and receiving. Evaluate and maintain effective warehouse management operating policies and procedures. Supervise, train, evaluate performance of staff. Prepare management reports as needed.

Requirements: Bachelor's degree, business administration preferred. 3 - 5 years experience in warehouse management with inventory control, planning and supervisory experience necessary. Computerized inventory experience helpful. Send cover letter and resume to Staffing Services by March 20, 1984.

Minimum Starting Salary: \$15,500

Job Number: P106

Position: Assistant to the Controller

Department: Controller's Office

Description: Provide executive staff assistance to University Controller, provide financial analysis capability, oversee design and preparation of quarterly reports, act as financial systems consultant to departments and colleges.

Requirements: Bachelor's degree, M.B.A. desirable. At least four years progressive staff experience, ability to work independently, dem-

onstrated excellent oral and written communication skills, competence in systems design and understanding of computer operations. Experience in higher education helpful. Send cover letter and resume to Staffing Services by March 20, 1984.

Minimum Starting Salary: \$15,500

Job Number: P105

Position: Editor/Manager

Department: Publications, Geneva Experiment Station

Description: Edit scientific manuscripts for publication; prepare news releases, write and edit special brochures; advise and consult with faculty; prepare copy and assist in designing exhibit material; work with reporters and freelance writers.

Requirements: Master's degree or equivalent. Experience in journalism/communications, preferably in agricultural journalism. Substantial editing and writing experience; strong background in computerized word processing and phototypesetting; demonstrated progressive managerial experience necessary.

Minimum Starting Salary: \$15,500

Job Number: PT107

Position: Systems Programmer II

Department: Materials Science Center

Description: Develop and maintain the MSC Prime computer system software in support of the research programs of the Materials Science Center through the multi-user Computing Central Facility in Thurston Hall.

Requirements: Bachelor's degree or equivalent in physical sciences, engineering or computer science, or equivalent. Ability to design and operate complex software systems, experience in FORTRAN, assembly language and structured languages.

Minimum Starting Salary: \$12,500

Job Number: PT102

Position: Research Support Specialist I

Department: Plant Pathology

Description: Design, conduct, analyze and report on experiments to determine the nature of resistance in conifers to canker diseases; assist others in the program with design and execution of their experiments.

Requirements: Master's degree or equivalent in biology, botany, plant pathology or microbiology where completion of an independent research project was a requirement for the degree.

Minimum Starting Salary: \$12,500

Job Number: PT103

Clerical

All applicants interested in positions requiring typing must take an official university test. Tests are given Mondays and Wednesdays at 8:10 a.m., Room 337, Statler Hall. Please contact Staffing Services for an appointment.

*Position: Administrative Aide, GR20

Department: University Registrar

Description: Provide administrative and ad-

vanced word processing support for University Registrar and Vice Provost for Undergraduate Education. Process diplomas; manage daily operations of the office system component of University Registrar's minicomputer system; type correspondence, manuscripts; make travel arrangements; maintain calendar; answer telephone; handle special projects as assigned.

Requirements: Associate's degree or equivalent. Heavy typing. At least two to three years administrative and/or secretarial experience. Knowledge of word processor or computer. Excellent organizational, interpersonal and communication (written and oral) skills; discretion in dealing with confidential matters.

Minimum Starting Salary: \$11,180

Job Number: C119

***Position: Stockkeeper, GR19**

Department: Chemistry

Description: Maintain stockroom computerized inventory data base. Enter data from sales tickets, receipts and orders; adjust price and other data fields as necessary; act as stockroom clerk to dispense labware and chemicals.

Requirements: Associate's degree or equivalent. Medium typing. Working knowledge of computer operation. Programming skills desirable. Knowledge of accounting desirable. Good human relations skills. Extremely accurate typing.

Minimum Starting Salary: \$10,595

Job Number: C115

***Position: Secretary, GR18**

Department: Environmental Health

Description: Under the general supervision of the Administrative Aide, assists in maintaining the office, personnel radiation dosimetry and radioisotopes inventory records; typing; copying; collating; filing; answering telephone.

Requirements: H.S. education or equivalent. Medium typing. Some secretarial experience. Accuracy extremely important. Knowledge of word processor desirable. Familiarity with algebra helpful.

Minimum Starting Salary: \$10,000

Job Number: C118

***Position: Senior Circulation/Reserve Assistant, GR18**

Department: Graduate School of Management

Description: Control and process reserves (full-time responsibility in the first months of the academic term). Alternate with other staff in overseeing part-time staff and in serving at the circulation desk; provide general reference and information service. Oversee the library on Saturdays. Perform selected technical processing functions. Search on RLIN. Monday - Saturday, 39 hours per week.

Requirements: Associate's degree or equivalent experience. Medium typing. Previous library or office experience desirable. Good organizational, interpersonal and communication skills.

Minimum Starting Salary: \$10,000

Job Number: C1110

***Position: Office Assistant, GR18**

Department: Graduate School

Description: Entries on CRT; processing forms related to graduate student records; answering inquiries both on the telephone and in person; assisting in course enrollment and at receptionist desk; handing out and receiving forms; reading and coding application letters.

Requirements: H.S. education or equivalent. Light typing. Knowledge of college setting helpful. Strong organizational and communication skills. Ability to work independently. CRT experience desirable.

Minimum Starting Salary: \$10,000

Job Number: C111

***Position: Office Assistant, GR17**

Department: Traffic Bureau

Description: Issue parking permits and bus passes; process violation forms for Cornell community members and visitors; answer inquiries relating to campus parking, traffic rules and related matters.

Requirements: H.S. education or equivalent. Light typing. Strong communication skills. Knowledge of campus parking program and traffic rules. Aptitude for figures. Some familiarity with microcomputers or data processing systems. Good public relations.

Minimum Starting Salary: \$9,492

Job Number: C113

***Position: Office Assistant, GR17**

Department: Media Services (Printing)

Description: Assist in completion of printing jobs and act as receptionist for Media Services Printing. Duties including answering telephone; processing mail; typing; collating, stapling and operating various paper handling devices (cut-

ter, folder, drill, shrink wrapper). Other duties as assigned.

Requirements: H.S. education or equivalent. Light typing. Some experience in commercial print shop, copy center or service-oriented business. Strong organizational, interpersonal and communication skills.

Minimum Starting Salary: \$9,492

Job Number: C116

***Position: Accounts Assistant, GR16**

Department: Statler Inn

Description: Type purchase orders for the School of Hotel Administration and Statler Inn. Assist with accounts payable responsibilities; serve as receptionist and provide clerical support for Statler Accounting Department. Monday - Friday, 10:00 a.m. - 8:00 p.m.

Requirements: H.S. education or equivalent. Medium typing. Some office experience. Knowledge of accounting, bookkeeping.

Minimum Starting Salary: \$9,040

Job Number: C117

Position: Secretary, GR19

Department: Director's Office, Geneva Experiment Station

Description: Provide secretarial support for the Business Office and the Assistant to the Director. Prepare various forms; assist in grant correspondence, budget data and computer input of various information relating to finances.

Requirements: Associate's degree or equivalent in secretarial science or accounting. Heavy typing. Secretarial experience. Knowledge of CRT and accounting. Experience with Cornell's policies and procedures desirable.

Minimum Starting Salary: \$10,595

Job Number: C108

Position: Secretary, GR18

Department: Human Development and Family Studies

Description: Provide secretarial support to five faculty members. Duties include heavy typing of correspondence, articles and class materials; provide telephone coverage; travel arrangements and appointment scheduling.

Requirements: H.S. education or equivalent. Medium typing. Strong typing skills. Ability to work under pressure. Experience with word processing desirable. Good interpersonal skills.

Minimum Starting Salary: \$10,000

Job Number: C105

Position: Library Aide, GR18

Department: Mann Library

Description: Pre-order searching of monographs; process incoming book announcements, publishers catalogs, book lists; assist with preparation of order to be placed with external vendors; handle departmental subscriptions; process blanket orders and monographs in series.

Requirements: H.S. education or equivalent. Some college course work desirable. Foreign language reading ability helpful. Light typing. Knowledge of card catalog, RLIN system and tools of book trade. Ability to work with little supervision, set priorities and keep a large quantity of material well organized.

Minimum Starting Salary: \$10,000

Job Number: C103

Position: Office Assistant, GR17

Department: Controller's (Accounting)

Description: Serve as Controller's Office Receptionist at East Hill Plaza. Answer telephone console and refer calls; greet visitors and direct to appropriate area; assist in accounts payable two hours per day; process deposit tickets; typing. Other duties as assigned.

Requirements: H.S. education or equivalent. Medium typing. Previous receptionist experience. Some accounting or bookkeeping experience.

Minimum Starting Salary: \$9,492

Job Number: C107

Position: Library Aide, GR16

Department: Mann Library

Description: Shelves library materials and performs related collection management duties. Works at the Circulation and Reserve Desks; preventive maintenance on photocopy machines. Various clerical duties as assigned. 39 hours, Monday - Friday (8:00 - 5:00); one evening per week, occasional weekends.

Requirements: H.S. education or equivalent. Some college. Desirable. Light typing. Some library/office experience. Strong organizational skills. Ability to do detailed work accurately.

Minimum Starting Salary: \$9,040

Job Number: C102

Department: Media Services - Printing (Statutory)

Description: Operate Xerox Model 9500 duplicator, producing various short-run duplicated materials. Operate paper handling devices such as power cutter, folders, drill and collators.

Requirements: H.S. education or equivalent. Familiarity in printing operation/copy center or on Xerox Models 9400/9500.

Minimum Starting Salary: \$4.92/hour

Job Number: S105

Technical

Applications for Technical positions should include the following information:

- Scientific/technical courses completed;
- Lab techniques and/or equipment (knowledge of)
- Special skills (e.g. knowledge of computer language)

***Position: Laboratory Equipment Technician, GR24**

Department: Mechanical & Aerospace Engineering

Description: Advise, instruct and assist technicians, students and staff in proper use of machine shop facilities (e.g., safety, selection of appropriate machine methods and materials, set up, and design changes); assist in teaching manufacturing related labs; maintain shop facilities; some machining for the Technical Services Facility.

Requirements: Associate's degree or equivalent in mechanical technology. Training in engineering, manufacturing and/or computers preferred. Several years experience in a machine shop using small tool room lathes and/or Bridgeport milling machine. Knowledge of basic electronics; interest and ability to use computer software, computer-operated machine tools and other modern manufacturing equipment. Good oral communication skills.

Minimum Starting Salary: \$14,075

Job Number: T113

***Position: Technician, GR18**

Department: Equine Drug Testing & Research Program

Description: Perform routine analysis of horse blood and urine in the field lab at Vernon Downs, Vernon, NY. Fridays, Saturdays, Sundays and Holidays, 1:30 p.m. - 10:00 p.m., five days per week.

Requirements: Associate's degree or equivalent experience. Experience with thin layer chromatography and general laboratory procedures.

Minimum Starting Salary: \$10,000

Job Number: T111

***Position: Research Assistant I or II**

Department: Boyce Thompson Institute - Contact Department Directly (see below)

Description: Assist in chemical synthesis of oligonucleotides and structural analysis of DNA molecules.

Requirements: B.S. or M.S. in analytical or organic chemistry; research experience preferred in nucleic acid or protein chemistry and familiarity with HPLC, column chromatography and gel electrophoresis.

Hiring Range: \$12,000 - \$14,000

CONTACT DEPARTMENT DIRECTLY: Dr. A. A. Szalay, Boyce Thompson Institute, 257-2030, Extension 315

Position: Research Equipment Technician, GR24

Department: Biochemistry/CHESS

Description: Design specialized x-ray diffraction apparatus; produce mechanical drawings; oversee the production, assembly, testing and use of final parts.

Requirements: Bachelor's degree or equivalent in engineering or physical science. Experience in creative design, metal working and mechanical skills essential. Experience with electronic instrumentation and computer programming desirable.

Minimum Starting Salary: \$14,075

Job Number: T102

Position: Technician, GR18

Department: Avian & Aquatic Animal Medicine

Description: Provide technical assistance in varied biological research procedures. Prepare media for mycoplasmal and viral cultures; collect blood and other tissue samples from chickens and other lab animals; process samples for testing; prepare, inoculate and harvest chick embryos and embryonic fluids for virus isolations; prepare medium and reagents for serological tests.

Requirements: Associate's degree in biology or equivalent. Familiarity with lab procedures and aseptic techniques. Laboratory experience helpful.

Minimum Starting Salary: \$10,000

Job Number: T101

Position: Animal Technician, GR20

Department: DCS - Mastitis Control, Earlville, NY

Description: Conduct mastitis surveys on dairy farms; collect milk samples, determine abnormal milk secretions; check milk machine installations. Observe and record environmental and management conditions. Advise dairymen on sanitation, milking procedures and other aspects of herd management including care of equipment and supplies. Assist with simple lab work, general housekeeping.

Requirements: H.S. education or equivalent. Course work in agriculture and animal husbandry helpful. Some dairy farm experience.

Minimum Starting Salary: \$11,180

Job Number: T091

Position: Research Aide, GR19 (Repost)

Department: Food Science

Description: Assist in research project on the genetics of dairy streptococci. Maintain stock culture collections, plan experiments and analyze data; construct, isolate and analyze plasmid DNA and bacterial strain using genetic and molecular techniques, and maintain laboratory equipment and supplies.

Requirements: Bachelor's degree or equivalent in biological sciences with course work in microbiology, biochemistry and genetics. Some research experience in microbial genetics and molecular biology. Experience with plasmid DNA isolation and analysis, restriction enzymes, gel electrophoresis, mutagenesis and genetic transfer techniques.

Minimum Starting Salary: \$10,595

Job Number: T455

Part-time

***Position: Assistant Director, Cornell Tradition Fellowship Program**

Department: Financial Aid - Student Employment

Description: Responsible, in conjunction with the Program Director of Student Employment, for the administration of the Fellowship components of the Cornell Tradition. Coordinate the application and nomination process for the freshmen/transfer and academic year fellowship components of the Cornell Tradition. Responsible for the organization and implementation of the Summer Fellowship Program. Maintain records of expenditures; provide demographic and descriptive information on applicants and recipients required for reporting purposes. Part-time, 20 hours/week, will become full-time in July, 1985.

Requirements: Bachelor's degree or equivalent; Master's degree preferred. Several years experience in financial aid, student employment or related field.

Minimum Starting Salary: \$12,500/annual equivalent

Job Number: PT113

***Position: Secretary, GR18**

Department: Vice President for Research & Advanced Studies

Description: Provide general office support to office of V.P. for Research and Advanced Studies. Primary duties consist of typing; filing; travel arrangements; collecting/distributing mail; copying documents. Other duties as assigned. Monday - Friday, 4 hours/day flexible.

Requirements: H.S. education or equivalent. Business or secretarial school preferred. Medium typing. Two to three years secretarial experience in a corporate or university setting. Must have excellent spelling and grammar. Good interpersonal skills. Ability to handle confidential materials with discretion essential. Ability to work independently.

Minimum Starting Salary: \$10,000/annual equivalent

Job Number: C114

Position: Secretary, GR18

Department: Cooperative Extension, New York City

Description: Type letters, reports, memorandums and educational materials. Maintain confidential program records and maintain files of memos, letters and reports. Answer telephone, take messages and general receptionist duties. Operate copying and adding machines. Purchase supplies and office equipment; travel to lower Manhattan and other field offices as required. Provide other assistance as needed. 21-25 hours per week, flexible.

Requirements: H.S. education or equivalent. Medium typing. One year secretarial or office experience. Strong organizational and in-

Continued on Page 9

General Service

Position: Duplicating Machine Operator, SO17

Brief Reports

Dr. Whalen to Deliver James Law Lecture

"Medical Imaging Frontiers: Ultrasound, CT Scanning and NMR" will be the topic for Dr. Joseph P. Whalen in the fourth lecture in the 1983-84 James Law Distinguished Lecturer Series at 4:40 p.m. Monday, March 19, in the James Law Auditorium.

The lecture by Dr. Whalen, professor and chairman of the Department of Radiology at Cornell Medical College and radiologist-in-chief at New York Hospital, is open to the public at no charge.

Listed in J. Pekkanen's "The Best Doctors in the U.S.," Dr. Whalen has been associated with both the Cornell University Medical College and The New York Hospital since 1968. Prior to 1968, he was assistant, then associate professor of radiology at the State University of New York Medical College at Syracuse.

Dr. Whalen maintains broad ties with the medical community through his work as consultant to The Rockefeller University Hospital, the Department of Diagnostic Radiology at Memorial-Sloan Kettering, and other medical facilities. He is a member of the Radiological Society of North America, the Association of University Radiologists, the American Roentgen Ray Society and the American College of Radiology and is certified by the National Board of Medical Examiners and the American Board of Radiology.

In addition, he sits on the editorial boards of many professional journals including The American Journal of Roentgenology and the Journal of Continuing Education in Radiology.

EAP Counselors Aid Victims Of Sexual Harassment

In the March 1 Chronicle article on sexual harassment information about the Employee Assistance Program was inadvertently omitted.

The Employee Assistance Program is available to help Cornell faculty and staff deal with the stress created by sexual harassment at the workplace. EAP counselors will help victims develop strategies for dealing with their situation and treat all conversations confidentially. To reach EAP call 273-7494.

Hecklers May Join Debate As Irish Team Visits

Heckling from the audience will be encouraged when the Cornell University and Irish National parliamentary debate teams square off at 7:30 p.m. Tuesday, March 20, in Room 110 of Ives Hall.

Topic of the debate, free and open to the public, "Government at its best is government at its least." The three-member team from Ireland will take the opposing stand, with Cornell's team in support.

True parliamentary debate is based on humor, wit, and analysis, with the full house getting into the act.

This visit of the Irish National Parliamentary Debate Team is sponsored by the Cornell Parliamentary Debate Society.

Social Psychotherapist Golton Will Lecture

Margaret A. Golton, author and social psychotherapist, will give public lectures and meet with students and faculty here April 9-12.

Golton's interest in brain research includes her own theory on personality and behavioral change. She has written two books — "Unlock Your Potential: Know Your Brain and How It Works" and "Your Brain at Work: A New View of Personality and Behavior."

Golton's first lecture at Cornell, "The

Psychological Laser: A New View of Personality and Behavior and Its Implications for Education," is set for 4 p.m. Monday, April 9, in Ives Hall, Room 110. The following day, at 10 a.m. in the Martha Van Rensselaer Hall Amphitheatre, she will conduct a "think tank" dealing with "designing global society." Both events are open to the public free of charge.

Divestment Issue On Student Ballot

University students will vote next Monday and Tuesday on divesting Cornell's holdings in corporations invested in South Africa, as part of the Student Assembly balloting. The referendum was called by the Divestment Political Action Committee (DPAC), a new student group recently formed to promote divestment.

The referendum reads, "RESOLVED THAT: Cornell University should immediately undertake a program of divesting its holdings from corporations with investments in the Republic of South Africa."

Referendums are non-binding and are conducted mainly to get a sense of community opinion.

Retrospective Planned On Three Mile Island

"Three Mile Island—5 Years Later" will be the subject of a film and discussion scheduled for 8 p.m. Tuesday, March 20, in Anabel Taylor Hall Auditorium. The free event is being sponsored by the Office of Eco-Justice and Ecology House at Cornell.

The film, "The Nuclear Summer," is a documentary by local filmmaker Pat Maxam which deals with the effects of the accident, both physical and emotional, on the surrounding area. In particular, according to the program sponsors, the film deals with the possible effects on newborn infants and on small farm animals, and discusses government and management integrity.

Louise Bradford, who has worked for Three Mile Island Alert as an intervener to the Nuclear Regulatory Commission since 1980, will lead a discussion on the situation in Harrisburg since the accident. She will also be discussing recent charges against Metropolitan Edison concerning falsification of data on cooling systems tests. According to the program sponsors, a grand jury has cited Metropolitan Edison with 11 counts charging it with, among other things, systematic destruction of records over a period ranging from October 1978 to March 1979.

Plots Are Available To Rent For Summer

Garden plots located on Warren Farm, Ellis Hollow Road and near Cornell Quarters are available for rent during the summer through the Cornell Garden Plot Committee.

Large plots (20 x 50 feet) are \$8 for the season and small plots (20 x 25 feet) are \$5. They are available to members of the Cornell community and are distributed on a first-come, first-served basis.

Interested gardeners can sign up for a plot by sending a self-addressed, stamped envelope to: Cornell Garden Plots, P.O. Box 843, Ithaca, NY 14851. No money should be sent at this time.

Those who sign up in advance will receive information concerning distribution times. Those who do not sign up in advance can go to the Auditorium of Martha Van Rensselaer Hall at 1 p.m. Saturday, May 12, at which time leftover plots will be distributed.

The land for the gardens is being donated by the New York State College of Agriculture and Life Sciences.

Day-Long Symposium For Science Teachers

"Contemporary Applications of Chemistry" is the theme of a day-long symposium for secondary schools science teachers, scheduled for Friday, April 6.

The symposium, the first of its kind in Tompkins County, is sponsored by the Cornell Section of the American Chemical Society in cooperation with area schools. The program of lectures, demonstrations and tours is planned by faculty members from Ithaca College and Cornell and by science teachers from local high schools. Chairman of the ACS Cornell Section is Kay Obendorf, associate professor of design and environmental analysis in the College of Human Ecology.

In the portion of the symposium at Warren Road BOCES facility, Carl Schofield, senior research associate in the Cornell Department of Natural Resources, will speak on the effects of acid rain on natural systems. After an hour of classroom demonstrations, Cornell Professor of Chemical Engineering Ferdinand Rodriguez will discuss his research specialty, polymeric materials, with a demonstration using polarized light.

Cornell Vice President for Research and Advanced Studies Robert Barker will talk about biotechnology. A tour of Cornell's nuclear reactors for teaching and research will be conducted by Howard Aderhold, reactor supervisor at the Ward Laboratory of Nuclear Engineering, and Bingham Cady, professor of nuclear science and engineering.

Agricultural Production Is Lecture Subject

Dutch ecologist C.T. de Wit will discuss the problems and potentials of agricultural production in the future in a public lecture scheduled for 4:30 p.m., Monday, March 19, in Room 101 Bradfield Hall.

De Wit will be at Cornell March 18 through 24 in his capacity as one of the university's Andrew D. White Professors-at-Large. In addition to his public lecture, which is titled "A Comprehensive Approach to Modeling Agricultural Production," he will meet informally with students and faculty and take part in several seminars.

He will conduct the weekly seminar of the Department of Agronomy at 4 p.m. Tuesday, March 20, in 135 Emerson Hall. He will hold office hours through the Department of Agronomy in Bradfield Hall. Appointments may be made by calling 256-4540.

De Wit is co-recipient of the 1984 Wolf Prize in Agriculture awarded by the Wolf Foundation in Israel, considered one of the top awards in agriculture in the world.

De Wit is professor of theoretical and production ecology at the State Agricultural University of the Netherlands at Wageningen. His work in the field of computer simulation has made major contributions toward the understanding of agriculture and ecological systems, such as crop growth. He has also studied energy-labor relationships in agriculture and agricultural production in various countries, including Israel, Indonesia and Africa.

Field Ornithology Course Begins in April

The Laboratory of Ornithology will offer a six-week, non-credit course in field ornithology, beginning April 11.

Teaching the course, which is designed for those with a beginning interest in birds, will be Stephen W. Kress, biologist for the National Audubon Society and laboratory associate at the Laboratory of Ornithology. The course will emphasize the identi-

SAGE CHAPEL

Princeton Chapel Official Will Talk

The Rev. Sue Anne Steffey Morrow, assistant dean of Princeton University Chapel, will speak at the 11 a.m. Sage Chapel Service on Sunday, March 19. Her sermon topic will be "Tell Me What Your God Looks Like."

Morrow is a graduate of Skidmore College and holds a Master of Divinity degree from Union Theological Seminary in New York City. An ordained elder in the United Methodist Church, Morrow has held pastoral positions in Pennsylvania and Illinois, and served as Dean of Admissions at Duke Divinity School in Durham, N.C. She has been at Princeton since 1981.

Music for the service will be provided by the Sage Chapel Choir under the direction of Donald R.M. Paterson, university organist and choirmaster. Stephen May serves as assistant conductor and accompanist.

fication and behavior of spring birds which migrate through Ithaca and the vicinity.

The course, which continues through May 19, includes Saturday field trips to visit nearby bird watching habitats each weekend and an optional weekend trip to the salt marsh habitat of Brigantine National Wildlife Refuge in southern New Jersey. During Wednesday evening meetings at the Laboratory of Ornithology, participants will view slides and listen to tape recordings of local birds.

Enrollment fee for the course, including field trips, is \$70. The fee for participating in lectures only is \$35. Laboratory members receive a 10 percent discount. Registration is at the Laboratory of Ornithology, 159 Sapsucker Woods Road. For further information call 256-5056.

Women's Studies Seeks Board Nominations

The Women's Studies Program is seeking nominations and self-nominations of Cornell students and staff and residents of the Ithaca area to serve on its executive board, effective July 1.

Students, staff and community members who wish to nominate themselves or others should contact the Women's Studies Program, 332 Uris Hall, 256-6480 for details. Nominations will be open until April 13. New board members are selected by the existing board.

Women's Studies, a permanent program in the College of Arts and Sciences, aims to encourage the development of teaching and scholarship about women and sex roles for both women and men. Policy is set by the executive board composed of members of the Cornell and Ithaca communities who have an interest in women's studies.

Author Will Lecture On 'Apostasy in Prose'

James W. McFarlane, the Herbert F. Johnson Visiting Professor at the University of Wisconsin at Madison, will lecture here at 4:30 p.m. Thursday, March 22, on "Apostasy in Prose: Some Reflections on the Emergence of Modern Drama." The lecture will be held in Hollis Cornell Auditorium of Goldwin Smith Hall.

McFarlane is a past dean of European studies and pro-vice chancellor of the University of East Anglia in Norwich, England.

He is the author of "Ibsen and the Temper of Norwegian Literature" and the editor and translator of "The Oxford Ibsen," an eight-volume work. He is also the editor of "Modernism," published by Penguin and "Henrick Ibsen," one of the Penguin Critical Anthologies.

The lecture is sponsored by the University Lectures Committee.