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The Rockefeller University

news & notes

December 6, 1991 Volume 2, Number 13 The Rockefeller University

Baltimore resigns presidency; Wiesel succeeds him

See related stories, pages 2, 3, 4.

David Baltimore resigned Tuesday as president of the university, effective Dec. 31. The Board of Trustees accepted his resignation "with profound regret, but complete understanding of your decision," and elected Torsten Wiesel as president to serve until a successor has been found.

A joint trustee-faculty search committee is to be formed under the chairmanship of Trustee Roy Vagelos.

Baltimore cited a "climate of unhappiness among some in the university that could not be dispelled" that resulted from the controversy surrounding a paper published in the journal *Cell* in 1986. One of Baltimore's co-authors was accused of misconduct in the preparation of the paper; Baltimore, who was not accused of misconduct, was criticized for defending his colleague too vigorously.

"When I accepted the position of president of this institution," Baltimore said, "I did not anticipate that this matter would become such an extended personal travail. Trying to govern the university under these conditions has taken a toll on me and my family which I can no longer tolerate."

In accepting the presidency, Wiesel said: "This is an enormous responsibility which, under the circumstances, I humbly accept. The Rockefeller University is a unique institution and in the days ahead, I will need support and assistance from all of you as we attempt to realize our dreams of excellence in science and education carried out in a humane environment."

The resignation of Vice President for Academic Affairs James E. Darnell was also accepted by the Board effective Dec. 31. He continues as Vincent Astor Professor and head of laboratory.

Writing for the Board of Trustees, Executive Committee Chairman David Rockefeller and Chairman of the Board Richard Furlaud said to Baltimore: "We recruited you for this position because of the unique combination of talents you brought to the task. Clearly, we entered this relationship with great mutual respect and this has grown as we have worked together." The two cited Baltimore's achievements during his 17-month presidency—attracting new leadership, reforming the academic structure, increasing financial stability, diversifying the fund-raising base, charting new research directions, and recruiting faculty—and commented:

"Despite this excellent record of progress, we understand fully the reasons for your decision as explained in your letter. Clearly, you are acting with characteristic selflessness, courage, and dignity."

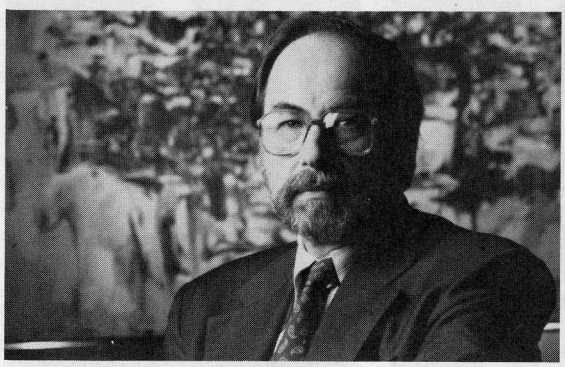
In his remarks to the campus, Wiesel promised a "smooth transition. I have always felt that the faculty and the students are the essence of the university and that the administration and the support staff should do whatever is necessary to further the objectives in research and training.

"As president, I hope to realize these objectives with the help of the excellent administrative staff under Fred Bohen's leadership, the support staff, and all other members of the university."

Baltimore, who heads a laboratory on the eighth floor of the Tower Building, told the trustees he will stay on as a professor here to continue his research efforts: "When I came here, I cut back on those efforts significantly, notably dropping a major research project in AIDS. I plan to reinitiate that project and expand others.

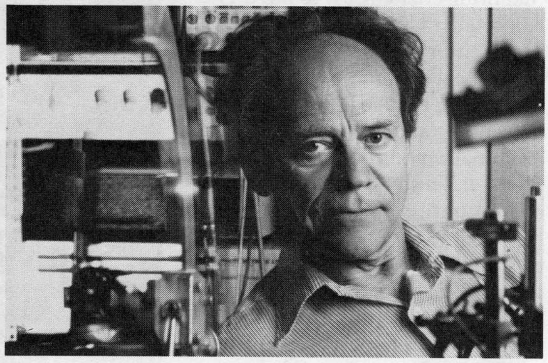
"I want you to know that I will do all I can to assure a smooth and successful transition and to serve the university in any way possible."

In concluding his address to the community, Wiesel said: "We face many challenges and are living in a difficult economic climate, but, as an optimist by nature, I believe the future is ours, and I hope I can count on your full support."



Robert Reichert

David Baltimore



Robert Reichert

Torsten Wiesel

Minority Open House attracts potential employees

Life science majors from 35 colleges in New York City and the tri-state area met at Rockefeller's second Minority Open House for students interested in positions as research assistants in science laboratories.

During the open house, which took place Nov. 21, from 1:30 to 4:30 p.m., attendees first met in Caspary 1A with Personnel Assistants Brenda M. Wilks and Mary Ann George, who discussed employment opportunities at the university and answered questions.

The guests then chatted with current research assistants and toured the campus and visited laboratories with them. Tour hosts included Erich Jarvis, a graduate fellow in the Nottebohm lab, and the following research assistants: Connie Cheung (Heintz lab), Brian Cox (Merrifield lab), Rose Ramlall (Friedman lab), Emanuel Valentin (Allfrey lab), and Ynolde Andrews and Renata Lee (Protein Sequencing Facility).

"As a result of the open house we're interviewing a number of fine candidates for research assistant positions," said Wilks. "The university is particularly concerned with attracting strong minority candidates to its laboratories, and events such as this one are opportunities to get the word out that Rockefeller is a great place to start a career in research."

Robert Reichert

Brian Cox *(left)*, research asssistant in the Merrifield lab, shows college students Christopher Reeves and Maria Elena Acosta around campus on Minority Open House day.

Holiday shopping comes to campus

Holiday shoppers shouldn't forget to add the Sweatshirt Shop to their list of stops. The shop offers sweatshirts and T-shirts (in a new range of colors), children's wear, pocket calendars, and other gifts—all with the RU emblem. The store will be open Tues., Dec. 10, 11:30 a.m. to 1:30 p.m., and Mon., Dec. 16 through Thurs., Dec. 19, 11:30 a.m. to 1:30 p.m.

Baltimore's resignation letter to trustees Rockefeller, Furlaud

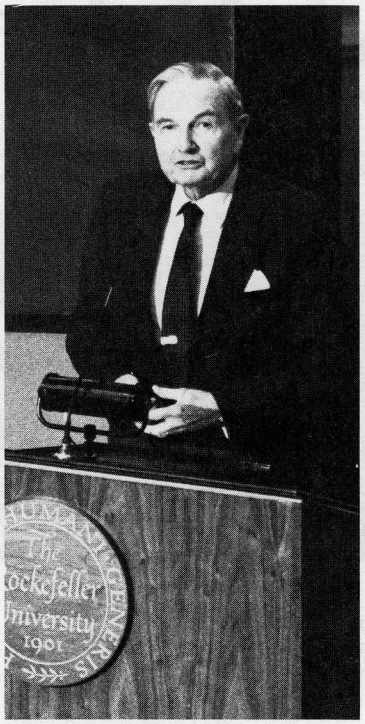
December 2, 1991

A little more than two years ago, I was honored to stand before you, the faculty and friends of The Rockefeller University to accept the presidency of this great institution and outline what I termed a "daunting challenge": to have The Rockefeller University enter the 21st Century as the world's premier biomedical research institution.

Pursuing that goal has required a demanding and difficult self-examination on the part of the Board of Trustees, the faculty, the administration and the staff. We have had to take stock of the enormous strengths of this great institution and determine how to build on them, and, at the same time, make an honest assessment of where the University needed to adapt to changing academic cultures and scientific currents.

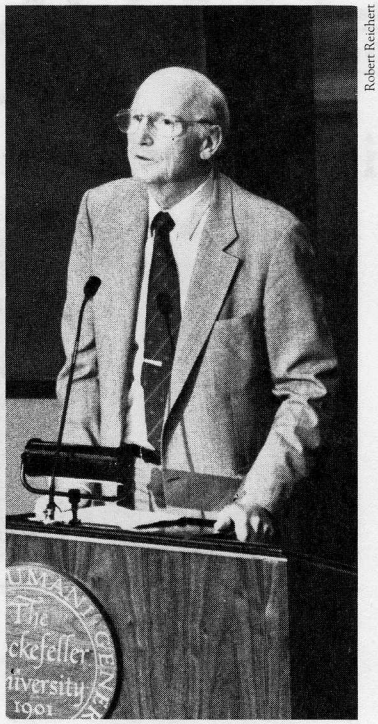
The process has not been easy but the progress we have begun to make in the last year has been rewarding. While maintaining our leadership and direction in traditional areas of focus, we have worked toward the more open, participatory academic culture needed to attract and develop the best and most talented young scientists in critical new fields of research. We have installed capable and creative new leadership in key administrative and faculty posts, and begun conducting intensive searches for new tenure track faculty members.

Moreover, as a result of the hard work of the Board, the faculty and the many friends of The Rockefeller University and in particular, the generosity of you, David, we have enjoyed over the last 15 months the most successful period of fund-raising in the University's history, with pledges totalling more than $40 million. This not only provided an outstanding head-start toward our goal of raising $250 million in private gifts and grants by the end of the decade, but it represented a major expansion of our fund-raising base.



Robert Reichert

David Rockefeller



Robert Reichert

Richard Furlaud

At the same time, by taking some painful but necessary steps together to deal with the realities of higher research costs in an environment of declining federal support, we have begun to solidify the University's financial posture without compromising the quality of our research activities.

In sum, we have made excellent progress over the last year in building on our strengths toward our ambitious goals. But much of the task of meeting this "daunting challenge" still lies ahead. It is therefore with a sense of enormous regret and deep personal disappointment that I must inform you and the Board of Trustees of my decision to step down as President of The Rockefeller University, effective December 31, 1991.

The reason I have decided to take this step is that the *Cell* paper controversy created a climate of unhappiness among some in the University that could not be dispelled. When I accepted the position of President of this institution, I did not anticipate that this matter would become such an extended personal travail. Trying to govern the University under these conditions has taken a toll on me and my family which I can no longer tolerate.

Therefore I cannot lead The Rockefeller University as effectively as I would like and as effectively as it deserves to be led. Accordingly, out of my enormous respect for the Board of Trustees and the faculty of this great institution, I have decided that the time has come for me to step aside as President to devote my full attention to research and teaching.

Although I will step down as President, I plan to stay on as a Professor, continuing my research efforts. When I came here, I cut back those efforts significantly, notably dropping a major research project in AIDS. I plan to reinitiate that project and expand others.

I want you to know that I will do all I can to assure a smooth and successful transition and to serve the University in any way possible.

To close on a personal note, I want to express my gratitude to both you, David and Dick, not only for the extraordinary involvement and direction you and the other Trustees have provided but also for the personal support you afforded me and my family during this difficult period. I look forward to the opportunity to continue to work with you both during this transition period and in the years to come.

Sincerely,
David Baltimore

Reply to Baltimore

December 2, 1991.

It is with profound regret, but complete understanding of your decision, that we will recommend to the Board of Trustees at its meeting tomorrow that your resignation as President of The Rockefeller University be accepted.

Speaking for the Board of Trustees, we can tell you that we share your deep disappointment at this development. What makes this especially difficult for all of us is that an outstanding performance is being cut short.

We recruited you for this position, because of the unique combination of talents you brought to the task. Clearly, we entered this relationship with great mutual respect and this has grown as we have worked together.

Your tenure as President has been characterized by creative thinking and bold action, including:

- Attracting new leadership to key administrative and faculty positions;
- Reforming the University's academic structure to make it more competitive in recruiting top biomedical research talent;
- Increasing the University's financial stability by making difficult, and not always popular, choices;
- Working to help diversify the fund-raising base at a critical juncture; and
- Beginning to chart new directions for biomedical research programs in areas of increasing interest and concern, and to recruit the new faculty needed to advance these programs.

Despite this excellent record of progress, we understand fully the reasons for your decision as explained in your letter. Clearly, you are acting with characteristic selflessness, courage and dignity.

We can assure you that the Board of Trustees will be unanimous in its desire that you continue your association with The Rockefeller University as a tenured Professor.

There is no question in our minds that your contributions to The Rockefeller University and to science will continue to be prodigious. We are honored that you will continue to be part of the University family, and we speak for all the members of the Board of Trustees in assuring you of our continued friendship and support.

Sincerely,
David Rockefeller
Richard Furlaud

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The Rockefeller University is an equal opportunity employer and has an affirmative action program to increase the employment of women and members of protected groups at all job levels.

Robert Reichert

It was standing room only at the university-wide meeting in Caspary Auditorium this Tuesday.

David Rockefeller's remarks to the community

Fellow members of The Rockefeller University community, this in many respects is a sad but also a happy day. These last weeks have been trying ones for all of us. I could not agree more with the statements Dick Furlaud made about Dr. David Baltimore and the remarkable contribution he has made to this university. We are proud of him as a graduate of the university. We asked him, as the Board of Trustees, to take on the responsibility for the presidency because we felt he had the qualities of leadership which it needed and that the program, which he introduced to the university and which was adopted by the board and approved by the Academic Council, was one we believe in very firmly. We have every hope and expectation that under the leadership of Torsten Wiesel those programs can be continued and enhanced.

I also want to say a few things as a member of a family that has been deeply involved with this university from the very beginning. I myself have now been a trustee—I hate to think that it could be possible—for 51 years. My father was a trustee for a very long time before that. My grandfather, who founded the university, was for a brief time, a member of the board himself. I'm happy to say that two of my children are currently active participants in the university. I think it's fair to say that of all the institutions with which the family has been identified over those many decades there is none of which we are as proud as The Rockefeller University. We're proud because of the quality of the people who from the very beginning—and this continues right up to this day—have made it the institution that it is. We have also felt—from the days of my grandfather—the contribution that this institution has made and will continue to make for the benefit of mankind throughout the world, is incomparable and there is nothing else we could have supported which would have made as important a contribution to the welfare of the world.

As I said in the beginning, these have been trying and difficult days. I would like to ask of all of you to try to forget any of the differences we have experienced in the past; and instead to remember the extraordinary achievements of so many people, many of them whom are represented here in the room today. The Rockefeller University has been, and I believe is and will continue to be, the leading research institution in the biomedical sciences in this country. You can certainly count on our family to continue to support the university in every way that we possibly can. But, the future will depend on all of you to give the university your full and unreserved support. I ask that of you, just as I tell you that you can count on the Trustees to give their ongoing and total support and I'm sure that Dr. Wiesel will as well.

There are major things that have to be achieved. The world of science has changed and the university has to adapt to these changes. We're going to continue to recruit the very best people of a quality comparable to what we've always had in the past and that process of recruitment is underway. It has to be accelerated and fully supported.

Furthermore, because the cost of scientific investigation is greater all the time and because we can only count on public support to a limited degree, particularly in view of the budgetary problems of our country, we're going to have to raise money from the outside. We've done a great deal, but there's much more to be done. Here too, we need your participation and support.

I would like to say to all of you, thank you for what you are, for what you represent, for what you've done for the university in the past. And, I would like to suggest that at this difficult, important moment, we all rally together to make sure that The Rockefeller University of the future will be even greater than it has been in the past. And, how grateful we are to have Dr. Wiesel as our leader in the days ahead.

Baltimore's letter to the university community

December 2, 1991

The last 17 months as President of The Rockefeller University has been a rewarding and exciting time for me. Grappling with the multiple issues presented by this complicated institution has been a continual challenge. It therefore saddens me that I feel I must resign the Presidency.

During my tenure as President, I have had help and friendship from many of you. Your support enabled me and the University to come to terms with difficult decisions and changing times. For this I will always be grateful.

One of my special pleasures has been the new scientific perspectives I have learned to appreciate through the tutelage of the faculty. It is therefore a pleasure for me that I will be continuing here as a Professor, examining the problems of differentiation, transcription, growth control and viral infection that have long interested me.

I look forward to being a colleague among you.

Excerpts from Wiesel's remarks to the RU community

December 3, 1991

It is a great honor for me to have been asked by the Board of Trustees to serve as president of The Rockefeller University.

The Rockefeller University is a unique institution and in the days ahead, I will need support and assistance from all of you as we attempt to realize our dreams of excellence in science and education carried out in a humane environment.

During David Baltimore's leadership, the university has been energized by a number of forward-looking initiatives in areas of recruitment and fund-raising. As president, I will continue and further develop these programs with all my energy. And I will count on all of you for your continued support, which is essential to achieving our ambitious goals.

As chairman of the Senate, I would also like to express to David Baltimore the faculty's sincere appreciation for all he has done during his tenure as president. We all recognize him as one of the great scientists of our time and we are delighted he will remain on our campus as a distinguished professor. It will be a pleasure to have him as a colleague and member of the faculty.

In the coming months, David Baltimore and I will work together to assure a smooth transition.

I have always felt that the faculty and the students are the essence of the university and that the administration and the support staff should do whatever is necessary to further the objectives in research and training. As president, I hope to realize these objectives with the help of the excellent administrative staff under Fred Bohen's leadership, the support staff, and all other members of the university.

Obviously this could not happen without the strong support of the Board of Trustees. I look forward to working with Dick Furlaud, the Chairman of the Board, with David Rockefeller, the Chairman of the Executive Committee, and with other members of the board.

We face many challenges and are living in a difficult economic climate but, as an optimist by nature, I believe the future is ours, and again I hope I can count on your full support.

Torsten Wiesel: a visionary scientist

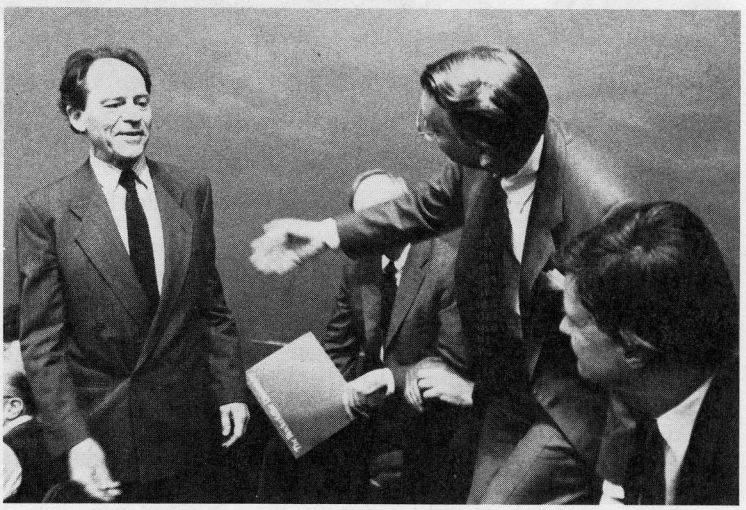
Rockefeller's new president-elect, Torsten N. Wiesel, is a neurobiologist whose discoveries have significantly shaped current understanding of how visual information is analyzed by the brain.

In 1981, he and his former associate, David H. Hubel of the Harvard Medical School, shared a Nobel Prize in Physiology or Medicine for their research on the visual cortex of the brain. They discovered that many cortical cells have a specific "orientation preference" and respond to lines of a particular angle. Cells that respond best to the same angle are organized into columns. Wiesel and Hubel also provided information about the cellular basis for the fusion of vision from two eyes.

The discoveries of Wiesel and his colleague have proved to be applicable to parts of the cortex governing other sensory networks, the control of movement, and certain higher functions. They have also had important clinical implications. In the 1960s and 1970s, he and Hubel demonstrated that physiological mechanisms necessary for normal vision are present at birth, and that normal visual experience is necessary for full development of visual capabilities. Their findings have led to more aggressive treatment of children born with cataracts, many of whom now are operated upon soon after birth.

Currently, Wiesel and members of his laboratory are focusing on the organization and development of the central nervous system, using the vertebrate visual system as a model for mechanisms that apply to the brain as a whole. They study the visual system from several vantage points: the analysis of the transformation of visual information along the visual pathway, influences on the development of the functional properties of cortical cells early in life, and factors that derange visual and cortical function. Their work is progressing on three levels: the molecular, the cellular, and the level of neural networks.

Wiesel was born in Uppsala, Sweden, on June 3, 1924. He received a medical degree from The Karolinska Institute, Stockholm, in 1954. Later that year, he became an instructor in the Institute's Department of Physiology, and Assistant in the Department of Child Psychiatry at Karolinska Hospital. In 1955 he was a fellow in ophthalmology at Johns Hopkins Medical School in Baltimore, and in 1958 was named assistant professor in ophthalmic physiology. In 1959 he joined the Harvard Medical School, and was appointed assistant professor of neurophysiology and neuropharmacology in 1960, professor of physiology in 1967, professor of neurobiology in 1968, and chairman of the Department of Neurobiology in 1973. He was named Robert Winthrop Professor in 1974.



Fred Bohen *(right)*, Executive Vice President and Chief Operating Officer, and William Griesar *(center)*, Vice President and General Counsel, congratulate Torsten Wiesel on his election to the presidency.

In 1983 he accepted a professorship at The Rockefeller University, where he organized a new laboratory of neurobiology and was named the Vincent and Brooke Astor Professor.

Wiesel is a member of The National Academy of Sciences and The Royal Society. He has received many awards in addition to the Nobel Prize. These include the Dr. Jules C. Stein Award presented by the Trustees for Research to Prevent Blindness, the Karl Spencer Lashley Prize of the American Philosophical Society, Columbia University's Louisa Gross Horwitz Prize, the Ledlie Prize from Harvard University, and numerous honorary degrees from such institutions as Harvard University, the University of Pennsylvania, New York University, the University of Bergen, and the Karolinska Institute.

Q: Son of RU secretary. A: Who scored on *Jeopardy?*

The familiar theme song played, the lights flashed, and game show host Alex Trebeck bounded onto the television screen. Sheila Rhyne, secretary in the E. G. D. Cohen lab, watched with pride as her son, Craig Rhyne, appeared at one of the podiums. The Fri., Nov. 22 episode of the popular trivia game show *Jeopardy* was about to begin.

Rhyne matched his wits against two other contestants, demonstrating an admirable grasp of trivia and commendable speed to the buzzer. "Who is Madonna?" he said, scoring the first points of the game, remembering to phrase this answer in the form of a question as the game requires. "Who is Roy Orbison?" he responded, doubling his score by correctly identifying the singer of a haunting tune.

However, the reigning champion, Josh Vincent, pulled ahead in the first half and continued to strengthen his lead. The Final Jeopardy question, "This element, whose name is from the Greek, would be Lucifer in Latin," was answered incorrectly by all three contestants, leaving Rhyne in second place. (The correct response was "What is phosphorous?") Rhyne won a trip for two to Mexico and an assortment of prizes, including watches, spaghetti, and various household products.

"I was very pleased with how Craig did," said Sheila Rhyne. "Actually, I think the elimination process—two rounds over a period of three months—was tougher than the show itself. Out of 14,000 people, only about 450 are chosen as contestants. That he qualified at all made me very happy."

Sheila Rhyne and the rest of the family traveled to Los Angeles to watch the taping Sept. 12. "They taped five shows in one day, starting at 10:30 a.m. and going until 7:30 or 8:00 p.m.," she said. "It took about one hour and fifteen minutes to tape each episode. Alex Trebeck had to keep repeating the questions. On T.V. it sounds like he pronounces foreign words perfectly the first time, but actually he makes a lot of mistakes."

Craig Rhyne has an undergraduate degree in drama and literature from Brandeis University and a master's degree in directing from Rutgers University, his mother said.

"Craig quotes Andy Warhol, saying that now he's had his 15 minutes of fame," Sheila Rhyne continued. "Actually, it was more like 22 minutes with commercials."

RU sends laureates to Nobel Jubilee

Rockefeller University Nobel laureates David Baltimore, Gerald M. Edelman, Joshua Lederberg, R. Bruce Merrifield, and Torsten Wiesel will attend the *Nobel Jubilee '91*, Dec. 4 to 11, in Scandinavia.

The jubilee, which celebrates the 90th anniversary of the first presentation of the Nobel Prize, is hosted by the The Nobel Foundation and the Stockhom Convention Bureau. The jubilee is intended to highlight some important areas of scientific research, strengthen international collaboration, and serve as a stimulus to Swedish and Norwegian intellectual life.

Among the events scheduled are conferences and symposia, visits to institutions of higher learning in Sweden and Norway, and a special concert. The Nobel Jubilee Week will close with the traditional banquet at the Royal Palace hosted by the king and queen of Sweden.

Library posts electronic messages

In this electronic age, where would the Rockefeller library post notices and information? On an electronic bulletin board, of course.

The library's new electronic bulletin board provides information on:

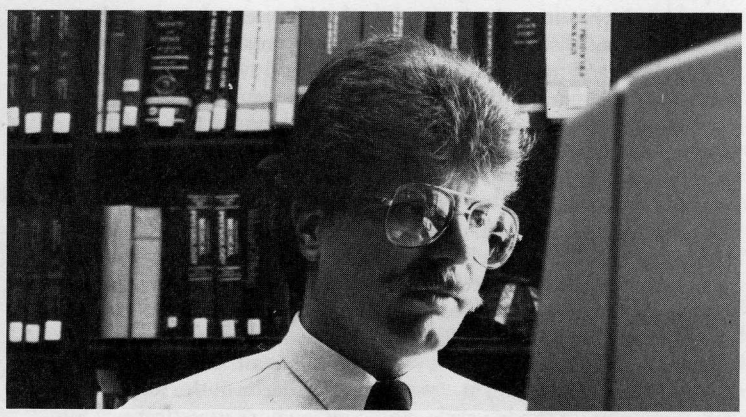
- the availability of bibliographic databases;
- how to access Cornell's and Memorial Sloan-Kettering's on-line catalogs;
- how to make book and journal donations;
- where library computer terminals are located;
- the library staff's telephone extensions.

Additional information and announcements will be posted by the library as they come up. Users can respond to notices by following the instructions available on-line.

The electronic bulletin board is available to users with Rocky2, Rocky8, RockyB, RockyJ, and library destinations. It is on the same menu as other options in the library system, such as the on-line catalog for Rockefeller's collection.

Typing "?" after selecting the bulletin board option will provide users with help. For more information, contact Douglas Many, x8906.

Robert Reichert



Douglas Many, systems analyst, checks for responses to notices posted on the library's electronic bulletin board.

Food Services offers gourmets (and gourmands) holiday fare

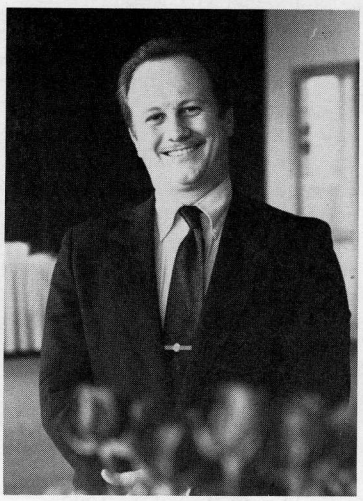
By Enid Goldberg

The university dining halls—decked appropriately with seasonal ornaments—will once again be laden with gustatory delights to tempt the most discerning palates. Offered simultaneously on the 17th floor dining room and the second floor cafeteria will be the annual Christmas luncheon, Wed., Dec. 11, from 11:30 a.m. to 2:00 p.m.

Diners will start with a delectable cream of mushroom soup, followed by delicately roasted Cornish hen with herb-bread stuffing and wild rice blend. A roll and butter, a choice of assorted cakes and pies, and a fountain beverage will round off the meal—a feast fit for Crachits and Scrooges alike. The Crachits among us will enjoy the plenteous fare; the Scrooges, the modest price—not a whit more than last year ($4.62 plus 38 cents tax in the cafeteria; the price of a coupon in the dining room).

Everyone, Cratchits and Scrooges, will enjoy the raffle surprise: a tray of holiday cookies. There will be fifteen winners—5 marked plates on the 17th floor, 10 in the cafeteria. Reservations are advised for those wishing to dine

Robert Reichert



Heath Braunstein

on the 17th floor (coupons only). It promises to be a sellout, so call ahead: x8889 or 8890.

Spotted briefly bustling around campus in a strange-looking red vehicle was the organizer of the feast, Food Services Director Heath Braunstein. We stopped him long enough to hear him say, "The entire Food Services staff wishes the university community a happy and healthy holiday season." And we thought we heard him add a faint "Ho, ho, ho," as he drove out of sight.

Christmas ball falls through cracks —in 20-year-old dance floor

The Christmas dance will not be held this year because the 20-year-old portable dance floor that has been used for that event is falling apart, according to David Lyons, Vice President for Business and Finance. Even before receiving this news, the Christmas Dance Committee was considering whether to hold the dance this year because it has been having difficulty selling enough tickets to break even. Nonetheless, the committee has not ruled out the possibility of a 1992 dance.

Food for thought

RU researcher investigates eating behavior and weight control

by Susan Blum

Even if you're not a scientist, if you spent last Thursday consuming turkey and candied yams with friends and family, you know that eating is a fundamental yet complex behavior. It is also susceptible to a wide variety of disorders, such as anorexia, bulimia, obesity, and obsessions with food and dieting.

Clearly, it takes scientific rigor to untangle the systems underlying the complex act of eating and to deal with these common medical problems. Among the Rockefeller researchers devoted to the subject is Sarah Leibowitz, who investigates how substances in the brain and the rest of the body interact to maintain normal appetite, energy balance, and body weight gain.

The neurochemicals she and her colleagues study include short-acting *neurotransmitters*, such as norepinephrine, dopamine, and serotonin, and longer-acting *neuropeptides*, such as neuropeptide Y, galanin, and the opioids. When she started her research 20 years ago, Leibowitz recalls, "there was no information at all about what the function of these brain substances might be." In fact, the neuropeptides she studies were not even identified until the 1980s.

Leibowitz's research has helped elucidate the role played by these substances in regulating both the physiological and behavioral aspects of eating. In the process, she has uncovered many surprises, including the actions of the neurochemicals on brain regions hitherto unsuspected of being related to the control of eating behavior, such as the paraventricular nucleus of the hypothalamus. Her research also furthered the understanding of the complicated interactions that exist between neurochemicals and circulating hormones. "Neurochemicals not only produce behaviors, but also stimulate the release of hormones into the blood," she reports. "Conversely, these circulating hormones feed back to influence neurotransmitters involved in the control of eating."

In the course of elucidating this interplay of neurochemicals and hormones, Leibowitz and her colleagues discovered how the substances help mediate preferences for the three major nutrient sources: fats, proteins, and carbohydrates. Using rats as their model animal system, they discovered that these preferences vary over the course of the day. Their findings have recently been confirmed in humans, as well.

At the start of the feeding cycle—night-time for rats and morning for humans—it is believed that a system of neurochemicals and hormones including norepinephrine, neuropeptide Y, and corticosterone prompts a preference for carbohydrates. (Recent experiments have tracked these relationships so closely that Leibowitz and her colleagues can now accurately predict how much weight an animal will gain from carbohydrate consumption by measuring the levels of norepinephrine and neuropeptide Y in discrete areas of an adult rat's brain.) Later in the feeding period, a different combination of hormones and neurochemicals helps terminate the preference for carbohydrates, while yet another induces a desire for fat.

Robert Reichert

Sarah Leibowitz studies the brain's regulation of eating behavior.

Sarah Leibowitz has noticed some striking similarities between the fields of music and science.

But within these rhythmic patterns, Leibowitz has found, there are differences—among individuals and, most distinctly, between the sexes. For example, she has found that though the craving for fat increases right after puberty in both sexes, adult males prefer their fat mixed with protein—a combination typified by a juicy steak. Women, on the other hand, prefer their fat mixed with carbohydrates—a mixture found in such tempting treats as ice cream and cake.

Leibowitz believes exaggerations of this normal food preference due to neurochemical abnormalities may help explain women's propensity to develop eating disorders such as anorexia nervosa and bulimia. Indeed, she reports, clinical researchers have discovered disturbances of the normal balances of neurotransmitters and hormones in patients with these eating disorders. Leibowitz and others have also found disturbed balances of hormones and neurochemicals in rodents with a number of other conditions, including obesity due to genetic factors or dietary overindulgence, as well as in loss of appetite in animals with tumors.

According to Leibowitz, the primary goal of her research is to determine which neurochemical system or set of systems is most closely related to which particular abnormal pattern of eating behavior and weight gain at different points of the life cycle. In search of the answers, she and her colleagues have used computer-assisted systems to monitor the eating behavior and neurochemical status of rats on a virtually minute-by-minute basis. This close monitoring has allowed them to identify three sub-populations in a particular rat species. Each of these groups shows a distinctive pattern of eating behavior and body weight gain as adults, which the scientists have been able to link to specific neurochemical and physiological traits. They are now tracking from birth the ages at which these differences develop.

In addition, their research with a particular strain of rat has disclosed distinctive markers present at birth—some behavioral, some physiological—that strongly predict distinctive eating-related characteristics at puberty and maturity, including obesity. Using molecular biological techniques, Leibowitz and her colleagues are attempting to relate these markers to the genes that control neurochemicals, hormones, and their receptors, to explore the possibility that these genes may be markers for diet-induced or genetically determined obesity.

One aim of this research is to better treat common eating-related problems such as anorexia, bulimia, and obesity. Most current drugs used for treatment act at least in part by modulating the neurochemical systems under study by the Rockefeller researchers. But these drugs are not entirely effective, or produce unwanted side effects, and Leibowitz is working with pharmaceutical companies to examine new compounds that may be more effective, such as substances that specifically block or enhance the action of neuropeptides.

All in all, there is plenty of food for thought in the Rockefeller researcher's investigations into eating behavior and body weight control.

Common culture links two fields

Music, science require drive, discipline, focus

By Mika Ono

Are there similarities between music and science? Rockefeller researcher Sarah Leibowitz is in a unique position to shed light on this question.

For many years Leibowitz, whose relatives include composer Samuel Barber, opera singer Louise Homer, and painter Winslow Homer, seemed destined to become a concert pianist. By the age of 20 she had studied at the Mannes College of Music, the conservatory at the College of Wooster, and the Academie fur Musik in Vienna. She had gone on concert tours and had taught piano for six years.

But instead of following the path which seemed to lie so naturally before her, Leibowitz decided to change her field to science. After a whirlwind of courses at New York University, she completed a B.A. in biopsychology and a Ph.D. in behavioral neurobiology. She has been working on the problems of the brain's regulation of behavior ever since (see story, previous page).

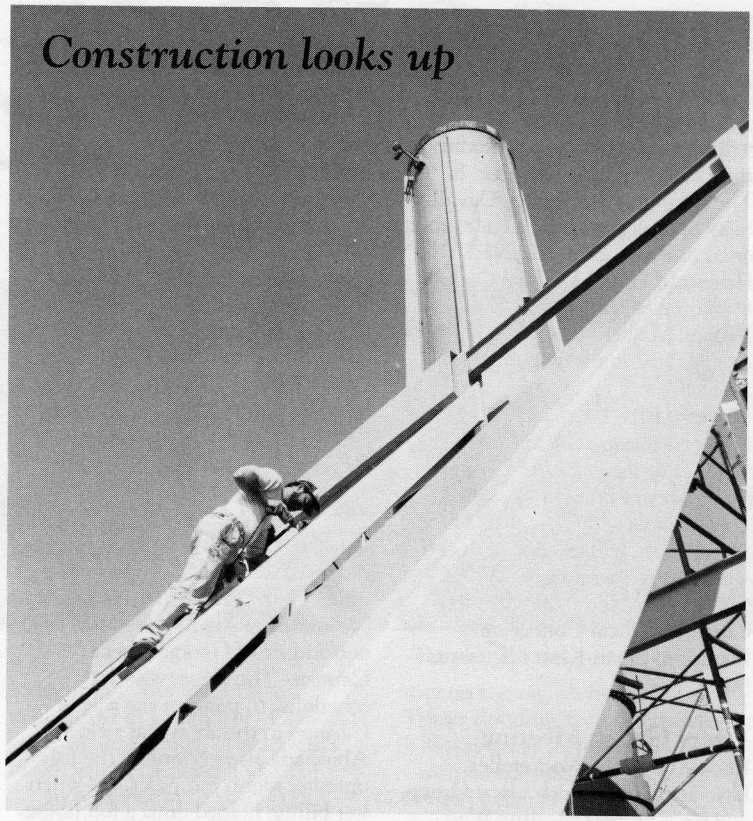
During the course of her involvement in music and science, Leibowitz has noted some striking similarities between the fields. Both tend to evoke a single-minded commitment from their practitioners, who work on their problems with "extreme discipline, focus, and concentration." In both fields communication is key: musicians perform before an audience; scientists publish their results. Because of the public nature of their work, musicians and scientists "become severe critics of their own creations," Leibowitz observes.

Moreover, science and music have a common culture which prizes imagination and the pursuit of truth. Leibowitz says both fields "involve the seeking of truth, which requires one to look beyond oneself, beyond what is known, and beyond what has already been published or performed. Music probes for the genuine feelings that lie deep within the human soul, while science searches for the truth within nature."

After many years of focusing on her work in the laboratory and on raising a family, Leibowitz has found new ways to combine music and science. At recent scientific conferences in Sweden, California, France, and Japan, she served a dual role as invited speaker and piano soloist.

"My training in music originally gave me the discipline, concentration, and spirit necessary for science," Leibowitz says. "Now my years in science have enabled me to think more analytically about music. I am more deeply aware of the complex interplay between the intellect and emotions that is integral to great music."

Construction looks up



Robert Reichert

A worker secures a window on the new lab building. Work continues to progress on schedule.

New laboratory building makes splash

Workers are using water sprayed from high-pressure hoses to wash the exterior of the new lab building.

"It's just water," emphasized James Metalios, Director of Physical Facilities. "No solvents, no chemicals." The three-week procedure will rid the limestone of dirt that lodged on it as it was transported to campus from Alabama.

Corners

Robert Reichert

Among the assets of the new lab building is a panoramic view of the Upper East Side

Potpourri

Sunday film

3 Women (1977, Robert Altman) will be shown in Caspary Auditorium at 7:30 p.m., Sun., Dec. 8. The film, starring Shelley Duvall, Sissy Spacek, and Janice Rule, is open to the Rockefeller, New York Hospital-Cornell Medical College, Memorial Sloan-Kettering, and Animal Medical Center communities. Admission is free.

Lunchtime film

PBS's 60-minute *Cajun Country: Don't Drop the Potato* which traces the history of French-speaking Louisianians will show Wed., Dec. 11, at noon, in Tower 305. It is free and open to members of the Rockefeller, New York Hospital-Cornell Medical College, and Memorial Sloan-Kettering communities.

Users Group Meeting

RockMUG, The Rockefeller University Macintosh Users Group, will hold its next meeting Wed., Dec. 11, in Caspary 1B, 11:30 a.m. to 12:45 p.m. The topic will be "Demonstration of the GeneWorks Sequence Analysis Package." Ron Eng of Intellegentics, Inc. will demonstrate the GeneWorks program and discuss its new features. Everyone is invited. Bring your lunch; drinks will be provided. Those who would like to help plan future meetings or want to be added to the mailing list should contact Rachael Kolb or Anthony Popowicz at x8925, or send e-mail to *rachael* or *tony*.

PC and UNIX workshops

Computing Services workshops resume next week with workshops for UNIX and IBM-type personal computers. This session of classes begins Mon., Dec. 9 and will run through Fri., Jan. 17. The UNIX courses will include an introduction to UNIX and electronic mail, an introduction to the vi editor (electronic mail only), UNIX for sequencers, and an overview of programs available for doing sequencing work. Personal computer courses include an introduction to Windows, and introductory- and intermediate-level courses in Microsoft Word for Windows and Wordperfect.

A full schedule and course descriptions are available in the users' area, Smith B7, and the Computing Services office, Smith B4. To register for workshops call x8925, or send electronic mail to Carol Calmer (*calmer*) or Christa Owens (*owens*). The workshops are free. They will be held in Flexner extension room 363.

Next week's computer workshops are:

Introduction to Windows: Dec. 9, 9:00 -11:00 a.m. (filled); Dec. 10, 9:00 - 11:00 a.m.; Dec. 11, 9:00 - 11:00 a.m., and 2:00 - 4:00 p.m.; Dec. 12, 9:00 - 11:00 a.m.; Dec. 13, 2:00 - 4:00 p.m.

UNIX for Sequencers: Dec. 12, 1:00 - 4:00 p.m.; Dec. 13, 9:00 a.m. - noon (filled)

Introduction to UNIX and Mail: Dec. 9, 1:00 - 4:00 p.m.

Introduction to the Vi Editor: Dec. 10, 2:00 - 4:00 p.m.

Soprano to the rescue

Andrea Abushady came to the rescue at the Amato Opera, Sun., Nov. 24, starring in her second performace of George Bizet's *Carmen*. The singer who was scheduled to perform the role of Carmen in the show was sick. Abushady also performed the role opening night, Sat., Oct. 26, when her billing helped draw a full house.

Appointments

Visiting Professors: Sanit Makonkawkeyoon, Cohn-Steinman lab; Vittorio Sgaramella, Lederberg lab.

Research Associates: Peter Verlander, Carter lab; Wenzhu Zhang, Chait lab.

Postdoctoral Fellows: Wei-Ming Leu, Chua lab; Hiroshi Takeshima, Blobel lab.

Guest Investigators: Constantin T. Craescu, Agosta lab; Sonia Soares, Tomasz lab; Eugene Storozynsky, Steinman lab.

Adjunct Faculty: Lee Babiss, Darnell lab; Theo Dov Golan, Carter lab; Claude H. Nash, Hayre lab; Yoshio Uchino, Wilson lab.

Departures

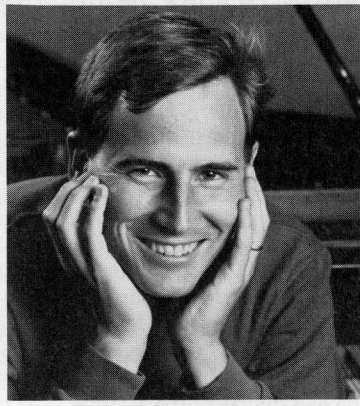
Research Associate: David Wade, Merrifield lab.

Postdoctoral Associates: Mary K. Baylies, Young lab; Gen Li, Roeder lab; Elias Lolis, Cerami lab; Ulrich Nielsch, Darnell lab; Jos Van Strijp, Cohn-Steinman lab.

Postdoctoral Fellows: Guy Adami, Darnell lab; Hillel Fromm, Chua lab.

Guest Investigators: Seiko Ishida, Baltimore lab; Clarice Izumi, Merrifield lab; Daniel Kessler, Darnell lab; Pedro Persechini, Cohn-Steinman lab.

Adjunct Faculty: Albert DiDonato, Manning lab; Michelle Ehrlich, Greengard lab; Arvi Freiberg, Mauzerall lab; Stanley Read, Zabriskie lab; Robert E. Shrock, Beg lab.



Pianist David Korevaar

Noon Recital

Pianist David Korevaar will perform an all Brahams program today (Dec. 6) at noon in Caspary Auditorium. Admission is free and open to the Rockefeller, New York Hospital-Cornell Medical College, and Memorial Sloan-Kettering communities. Korevaar is scheduled to present a recital in Alice Tully Hall, Lincoln Center, on Mon., Dec. 9.

Errata

In this section of the Nov. 22 issue of *News&Notes* Sheila Rhyne was misidentified working in the Joel E. Cohen lab. She works in the E. G. D. Cohen lab.

Looking back in time

This postcard—postmarked Aug. 6, 1939, 10:30 p.m., and mailed with a one cent stamp—shows what this neighborhood looked like over 50 years ago. Rockefeller is in the foreground, and a corner of Smith Hall is visible at the right edge of the scene. The building between Smith Hall and The New York Hospital has since been replaced by the New York Hospital's Payne Whitney Clinic. Professor E. G. D. Cohen shared the postcard with *News&Notes*. He received it from Ellen Cool Kwait, daughter of deceased Rockefeller physicist Rodney Cool.