

MEMORIAL STATEMENTS

Cornell University Faculty
2007-2008

Office of the Dean of Faculty
Ithaca, New York

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Preface

The University Faculty has always followed the practice of including within the faculty records a memorial resolution on the death of one of its members. The faculty modified this custom that was begun in the earliest days of Cornell University in 1938 as follows:

Upon the death of a member of the University Faculty, the President or Dean of Faculty shall formally notify the Faculty at the next meeting and those present shall rise in respect for the memory of the deceased member. The Provost shall then appoint a committee to prepare an appropriate memorial statement. Such statements shall not be presented in the form of resolutions, as in the past, but shall be annually collected, edited, and printed by the University in a memorial booklet, which shall be sent to members of the Faculty, to the families of the deceased members, and shall be filed with University records.

This booklet, prepared by the Office of the Dean of the University Faculty, contains articles in memory of those thirty-nine University Faculty members whose deaths were reported in the period from July 1, 2007 through June 30, 2008. The names of the committee members who prepared the statements are given at the end of each article.

Donald J. Barr

May 7, 1935 – January 24, 2008

Donald J. Barr, Professor Emeritus of Policy Analysis and Management in the College of Human Ecology, died January 24, 2008 in Ithaca, due to complications following a stroke.

Born May 7, 1935 in Geneva, Ohio, Barr earned a B.S. degree (1957) in Social and Earth Sciences at Miami University in Ohio, an M.A. degree (1959) in Sociology and a Ph.D. degree (1964) in Guidance and Counseling, both at Indiana University. Before teaching at Cornell, he taught at the University of Michigan and in elementary, middle, and secondary public schools in Ohio and Indiana. He led numerous workshops and educational programs for such organizations as the Telluride Summer Program and Childhood Program Development.

When he first came to Cornell in 1971, he was the Director of the College's Office of Counseling and Admissions. Later, he moved over to the Department of Human Service Studies (HSS), now called Policy Analysis and Management (PAM). He served a term as chairman of the HSS Department and after stepping down, he spent full time in teaching, outreach and scholarship in the Human Service Studies and Policy Analysis and Management Departments until retirement. He was widely in demand as an advisor to students because of his interest in helping them to succeed at Cornell.

Known as "Don" to all, Professor Barr published numerous articles and a handbook on the topic of power and the way it was used in teaching and in a variety of social programs. His many publications included Liberalism to the Test: African-American Migrant Farm Workers and the State of New York, Transforming Power: A

Thirteen-Week Program for Democratic Change in Your Community, and Educational Change for In-School Administrators.

But his great love was teaching, which he did at every level of formal education from elementary school right through the Human Ecology undergraduate program and into the graduate school as well as outside the university. His focus was always on education, the nature of power, racism and social justice and he found opportunities in the local Ithaca community beyond the University, as well as elsewhere in the United States, Canada and South Africa. For almost ten years, with Dr. James Turner, Don co-taught a course in the College of Human Ecology, Racism in American Society, which was widely recognized. Barr and Turner also taught an annual racism/multi-cultural training seminar for Ithaca School District staff and administrators.

Professor Barr's interest in teaching led him to participate in numerous workshops and educational programs for the National Teacher Corps, National Training Laboratories, the Summer Institute for the University of Victoria, UNICEF, and the National Executive Service Corps in New York City. Under the auspices of the NESC and local Boards of Education, Don co-taught a series of leadership seminars for public school principals in Schenectady, New York, New York City and Philadelphia. He also spent a summer in Durban, South Africa working with government officials and schoolteachers and principals on how to improve teaching in local schools.

Professor Barr's reputation for teaching excellence was recognized by his receipt of the National Danforth Teaching Award, the Human Ecology Distinguished Teaching Award, the Telluride Association through its Summer Program and the key to the City of Cincinnati for his work on empowerment in low-income communities.

Don was always especially interested in the anti-apartheid movement in South Africa. He was a leading faculty member in the movement at Cornell to stop investing in companies that operated in

South Africa, and he spoke frequently and with eloquence about the injustices of apartheid and the damage it was doing to people of color and to society in general.

Don believed that the improvement of education at all levels went hand-in-hand with social justice. His passion for both served as a model for what a university professor could be. He was always available to help those in need. He will be greatly missed.

His wife Judi and her two children, his own four children, David, Chris, Lori and their children, and his daughter Jana survive him.

Jerome M. Ziegler, Chairperson; Robert Babcock, Andrea Parrot

George David Blanpied

June 29, 1930 – November 4, 2007

George David Blanpied, Cornell Professor Emeritus of Horticulture, passed away in Chestertown, Maryland on November 4, 2007. Dave is survived by his wife, Eloise, their children, George David Jr., Peter Raymond, Elizabeth Mott, and three grandchildren.

Dave was born in Ridgeway, New Jersey on June 29, 1930. He earned his B.A. degree in Botany from Dartmouth College in 1952 and served as a line officer in the Navy during the Korean conflict. In 1954, he began his Master's program in Pomology at Cornell, working in the department that would be his professional home for the next 39 years. During his Master's program, Dave was appointed as Assistant Professor of Pomology and he earned his Cornell degree in 1955. He completed his Ph.D. degree in Pomology and Fruit Marketing at Michigan State in 1959 and resumed his Cornell faculty responsibilities of pomology research and extension. Dave retired from Cornell in 1993, and he and Eloise later moved to Maryland where he resided at the time of his passing.

Dave totally devoted himself to research and serving the fruit industry, working mainly on the postharvest physiology of apples. He viewed his responsibility and that of his department as one of scientific support and problem solving for production horticulture. Early in his career, he described his approach as “a series of five-step programs” where he would (1) observe commercial problems in harvesting, handling and storage of apples and pears, (2) plan scientific experiments to resolve the problems, (3) conduct the experiments, (4) demonstrate successful practices on growers' farms, and (5) troubleshoot new practices as they were implemented. Not all of his research projects generated a steady source of grant money, but he passionately pursued those he knew were vital to the

growth and success of the industry. His approach earned the respect of the apple storage industry in the Northeast and beyond, and virtually every fruit grower in New York and New England knew Dave personally and many collaborated in his postharvest research and demonstration projects.

Dave began his career working with Professor Robert Smock who was instrumental in establishing commercial controlled atmosphere (CA) storage technology in the United States. At the time, this technology was new to the industry and previously undiagnosed postharvest physiological disorders were observed in the stored produce. Professor Blanpied visited the growers, observed their practices and identified their problems, and conducted research in Ithaca and at the growers' farms to understand the fundamental issues. In addition to addressing the physiological problems, Dave often needed to solve technical problems with the harvesting and handling procedures and the cold storage operations associated with CA storage. He used his academic expertise to address the physiological problems, he drew upon his natural problem solving creativity to "engineer" harvesting, handling and storage solutions, and his sincere, trusting demeanor enabled him to persuade growers to adopt the results in a timely manner. He could not only identify and explain physiological disorders in stored apples, but he could also provide succinct and relevant comments on historical discoveries relating to the disorder in question. As a result, when Dave Blanpied talked, people listened and everyone was enriched. Extension specialists implicitly trusted Dave's recommendations because they trusted him and they were often involved in the research. Growers willingly hosted meetings where Dave would demonstrate the improvements that had been developed and explain the cautions that were needed to make the improvements work.

Dave published his practical and fundamental discoveries widely in extension literature and research journals and presented his practical findings and recommendations to countless extension audiences throughout the northeast during his tenure at Cornell. In 1986, he

received the Cornell Cooperative Extension 75th Anniversary Program Achievement Award. In 1991, he was honored with the Western New York Apple Growers' Gold Apple Award. Dave was selected as one of the "100 innovative horticulturists" by American Fruit Grower and he was a member of Epsilon Sigma Phi honor society and a recipient of the ASHS Carl A. Bittner Award. He was also a member of both the American and the International Society for Horticultural Science and the American Society of Plant Physiologists.

During the course of his career, he worked on many aspects of fruit physiology and storage technology that improved stored fruit quality, reduced losses, extended market and shelf life, and added market value to the product. When the beneficial effects of low oxygen, low ethylene CA storage became known, Dave arranged a sabbatical to East Malling, England to work with the scientists and practitioners who were among the first to use this technology. His work at East Malling also accelerated the transfer of computer based atmosphere analysis and control technology to the North American fruit storage industry. Dave's quest for practical information brought him to research centers and commercial production areas throughout the United States and to British Columbia, Iran and Europe, and always involved collaboration with producers, scientists and students.

Perhaps his most lasting contribution involved predicting the optimal harvest date and maturity for New York apples intended for long term CA storage. Working many years with growers and extension specialists across New York, Dave and his collaborators developed an apple maturity model that used varietal, geographical and environmental factors during the growing season to predict the optimal harvest date for best long-term keeping quality of the fruit. Commercial trials in the different growing regions validated the model locally, and the "Blanpied-Silsby model" continues to be a valuable harvest management tool used by the New York fruit industry. In addition to maturity prediction, the work led to the

development of the “Generic Starch-Iodine Index Chart for Apple Maturity” that has become the standard reference used throughout the Eastern United States and Canada.

Dave’s commitment to helping others is also exemplified in his service to the university and greater Ithaca community. He served as Department Extension Leader; and he patiently and willingly mentored younger faculty and graduate students who worked in related disciplines. Although his academic appointment was in research and extension, he made time to advise undergraduates and serve on the CALS Academic Achievements and Petitions Committee. Early in his career, he was a volunteer fireman in the Cayuga Heights Fire Department and later he served on the board of the Finger Lakes Land Trust. Dave was an avid cross country skier and active in the Cayuga Nordic Ski Club that named a Hammond Hill ski trail for him.

Dave loved the outdoors and worked to preserve nature for future generations. He and Eloise enjoyed their woodland property southeast of Ithaca, and Dave worked with the Land Trust and the Nordic ski club to maintain public areas for all to use. After he and Eloise relocated to Maryland, he continued these activities working with the Eastern Neck National Wildlife Refuge near Chestertown.

He was a serious and complete cyclist and skier who enthusiastically pursued these activities well into his retirement. Le Creasy recalls,

“A new graduate student (Raymond Chee) came to the department from France where he owned a bicycle shop. He considered himself to be an accomplished cyclist. He agreed to go on a ride with Dave at lunch (frequently Dave did 60 miles at lunch). Raymond’s wife told us later that when Raymond got home, he could hardly move and was in pain for several days.”

Marvin Pritts, Chairman of the Cornell Department of Horticulture writes,

“Dave was a competitive cross-country skier, but he would often go to the Adirondacks with some of his buddies and just ski around the mountains. They would rent a cabin for several days, and the group would set off in the morning and not return until dark. Usually their goal was to ski up a mountain trail as far as possible, then put on snowshoes and climb to the peak. The views at that time of the year were fantastic, and the challenge was great.”

From the perspective of his professional colleagues and fruit grower friends, Dave was a quiet, diligent, multi-dimensional scientist who enjoyed life and was not afraid to make fun of himself. He once told how, while contemplating his research projects during one of his frequent road trips to the Hudson Valley, he was startled to see exit signs for the city of Scranton, Pennsylvania and only then realized that he had missed an exit an hour earlier.

Ken Silsby writes,

“David Blanpied was one of the most inspiring people I have ever met in my professional career. While Dave’s passing was our great loss, his contributions to apple storage technology continue to live on.”

We all feel this loss, and remember fondly Professor Blanpied’s unassuming personality, willingness to listen, love of discovery, dedication to service, sense of humor and trusting friendship.

Jim Bartsch, Chairperson; Le Creasy, Dave Rosenberger

Carolyn Olson Boegly

July 29, 1927 – June 6, 2008

Professor Carolyn O. Boegly (Cooperative Extension Administration) passed away at home after an extended illness with cancer. She was born in Camden, New Jersey, the daughter of Caroline O. and William J. Boegly. Her parents and brother William J. Boegly, Jr. predeceased her. She is survived by nephews William G. Boegly (Carla), John R. Boegly and Thomas L. Boegly (Glenanne) of Tennessee; great nephews, nieces and cousins in Pennsylvania and New Jersey.

Following graduation from high school in Mason, Michigan, she received a B.S. degree in Home Economics from Michigan State University and later, an M.S. degree in Extension Administration from the University of Wisconsin at Madison. Additional coursework at North Carolina State University at Raleigh addressed a broadening interest in adult education.

In 1952, she joined the Cornell Cooperative Extension system, first in Rensselaer County, and later in Broome County. There she developed programs adjusted to local economic, social and educational conditions—programs reaching a cross-section of citizens, public and private agencies and organizations. In Broome County, she also served as a “trainer” for new Extension Educators, implementing an intensive educational in-service program, with observations of work in action. She came to the Cornell campus in 1964 as an Assistant Professor in Human Ecology/Assistant State Leader for Home Demonstration Agents (currently Extension Educators). Promoted to Associate Professor in 1971, she served as an Extension Program Leader (1979) and then, Program Specialist in Staff Development (1986) where her leadership skills were needed for staff orientation, in-service planning and counseling. She

also received a courtesy faculty appointment in the College of Agriculture and Life Sciences.

As a master teacher and counselor, she was one of the innovators in the design of new statewide programs and in-service education offered by College faculty to Cooperative Extension field staff. She helped maintain two-way communication between Cornell faculty, staff and local citizens that would accompany the changing and growing subject matter base of the College. In essence, she worked effectively with local staff as well as College faculty to match local program requirements with the interests and resources of the College. She led the development of a pioneer media effort initiating Cooperative Extension into Educational Television in the eleven-county Albany area. She earned the respect of both professional colleagues and local citizens as she supervised both urban and rural programs.

Professor Boegly was active in state and national professional organizations: New York State Association of Extension Home Economists (President, 1962), New York State Home Economics Association (Secretary; Advisor/Chair to Student Section). She was also active in the National Adult Education Association and Zonta (Binghamton). The National Association of Extension Home Economists honored her with the prestigious Florence Hall Award in 1961 and a Distinguished Service Award in 1962. She received a Farm Foundation scholarship in 1960 and a fellowship to the National Extension Agricultural Center for Advanced Study at the University of Wisconsin (1963-64). She retired in 1991 as an Emeritus Professor.

A memorial service was held for colleagues, family and friends at St. Luke Lutheran Church in Ithaca.

Bettie Lee Yerka, Chairperson; Barbara Eshelman, Lucinda Noble

Anthony Caputi

December 22, 1924 – February 6, 2008

Tony Caputi, Professor of English and Comparative Literature in the College of Arts and Sciences, was a major scholar, a stellar teacher and mentor, a wonderful colleague, a loyal and trusted friend, a polished and talented actor, and a gifted administrator. Most importantly, he was a terrific human being.

A 1956 Cornell Ph.D. degree following a 1949 B.A. degree and a 1951 M.A. degree at the University of Buffalo, Tony stayed on at Cornell as an Instructor in 1956 but within a decade had climbed the ladder to full Professor. He published three important scholarly books—John Marston, Satirist (1961), a revision of his dissertation; Buffo: The Genius of Vulgar Comedy (1978); and Pirandello and the Crisis of Modern Consciousness (1988). For decades, students have learned from his splendidly edited Norton Critical Edition entitled, Eight Modern Plays (1966). Tony was also a writer of fiction; he published a critically acclaimed novel, Storms and Son (1985), as well as a fine earlier novel, Loving Evie (1974). Nothing speaks more to his academic distinction than the fellowships he held: the Guggenheim in 1964-65, a Senior Fulbright in the same year, and a National Endowment for the Humanities Fellowship in 1971-72.

During two sabbaticals, Tony and Adrienne resided in Rome and Paris, setting a pattern for extended travel abroad upon his retirement in 1991. He loved to practice his Italian and French during his travels. Essential equipment for these adventures included a pasta strainer, durably stashed in his suitcase for preparing his favorite food-type, and a list of worldwide outlets for theater-tickets inscribed in his address-book for access to his favorite cultural pursuit.

Tony served as English Department Chair in the mid 1970s. Competent and fair-minded, he would artfully disguise feelings towards the very few colleagues he felt were being difficult or selfish, but he would always try to see the point of view of others.

In 1984, Tony joined the Comparative Literature Department as its Chair, a position he held for six years. Tony had, for many years before then, offered a widely successful course in Italian, English, Spanish, and French drama from the Renaissance to the Enlightenment, cross-listed in English, Theater Arts, and Comparative Literature. During his administration of Comparative Literature, Tony negotiated delicate transactions between and among recent joint members and their home departments; he brokered new appointments of one full junior member and one full senior member; and he stabilized an increase of fellowship and teaching assistantship opportunities for graduate students. The department's shape has borne his imprint since then.

As his Comparative Literature colleague Walter Cohen remarked in his eulogy at Tony's memorial in May 2008:

“This or that faculty member, myself included, would complain, and Tony, always unflappable, would respond calmly, never get upset, and keep things going. The effect of all this, over time, has been, well, dramatic, though again in an ironic sense. Comparative Literature has long since been marked by a remarkably high degree of collegiality, by a consistent success in reaching consensus on most decisions, and, more important still, by an ability to disagree civilly and even in friendly fashion when consensus proves impossible, to reach a decision by majority vote, and then cheerfully to move on.”

A loving father, he is survived from his first marriage to Marjein by his three daughters: Pauline, Carol, and Mary; his son, David, predeceased him.

Tony had a surprisingly old-fashioned elegance and formality in his demeanor and speech. When Tony expounded on a play, a novel, or a movie, and wanted to clarify a point he had just made, he generally

used the phrase “that is to say,” a turn of expression that was, in fact, never out of place in the longer flow of his remarks.

Tony had a very fine and developed intellect, which he expressed with an extraordinary deftness, lucidity, and precision of speech. Tony wore the mantle of his learning easily and had vast array of interests from acting in plays, attending films, and fiction writing to horse racing, squash, tennis, and baseball, but he was also a learned man and deeply committed teacher and scholar.

An exceptional athlete, Tony took pride in being physically fit. On the squash court he was an enthusiastic, ebullient and optimistic teacher; on the tennis court an appreciative, curious, and enthusiastic student. And that combination informed so much of his zest and joy in the university and the world beyond.

Tony never forgot where he came from or that he was an urban Italian from Buffalo teaching in a department, which, especially in his early years, he felt, had the whiff of Ivy League pretensions. He was proud of his ethnicity.

All of us remember Tony’s zest for living, his wit, and his flair. And we also remember his incredible capacity for understanding other people, empathizing with them, and making them feel appreciated. He was fun to be with because he was articulate, intellectually curious, loved conversation, and embraced life as if it were a play in which he performed, an elegant meal or a beautiful woman. For him, the entire world was a stage; and polymath that he was, he played many parts.

Tony loved Ithaca—withstanding his impatience with Ithaca winters—and the surrounding area, and took great pride in the creation of the Gee Hill house and grounds he lived in with Adrienne in rural Virgil. He built his country home overlooking his land with a beautiful mountain view; here his evening meal, often with friends, to whom he would enthusiastically discuss his rural life, was still an important daily occasion.

Not surprisingly for a man who defined the concept of friendship in his very being, Tony had a very wide circle of friends, and was deeply loved by many in the Cornell community. He was an open, authentic, and enthusiastic friend who always made people feel that he was very glad to be with them.

A passionate and energetic man with many enthusiasms—theater and movies, France and Italy, food and wine, to name a few—he brought his passion and energy as well to his friendships. His conversation with friends was always animated and often even physical. When he spoke about something he cared about (and he cared about nearly everything), he would reach out to grab you by the arm or the shoulder, as though his words had to flow from his entire being, and so that no separation would exist between you and him. If you were walking with him, his arm would go around you as he talked.

Didn't we all relish our time with him? In our mind's eye, we can see Tony's wonderful smile with which he would greet a friend while shaking one hand and giving his shoulder a warm squeeze with the other. In his book on Pirandello, Tony wrote of how Pirandello, despite his rather dark view of the world, understood the possibility of creating a rich life for oneself. Tony did Pirandello one better by creating a rich life not only for himself, but also for his family, friends, and for so many others privileged to know him.

Daniel R. Schwarz, Chairperson; Stuart Blumin; William J. Kennedy

Howard Wilmot Carter

November 18, 1908 – September 2, 2007

Howard Wilmot Carter, a pioneer in the establishment of the Cornell University Dairy Records Processing Laboratory and a leader in the tabulating and distribution of genetic evaluations of dairy bulls, died September 2, 2007 in Delray Beach, Florida.

Wilmot was born November 18, 1908 in LaRaysville, Pennsylvania, the son of a dairy farmer. He graduated from high school in Montrose, Pennsylvania and matriculated to Pennsylvania State University (B.S., 1932). He earned an M.S. degree from the University of Connecticut in 1934. He married Helen Westcott in 1935 and moved to Kentucky as a County Agent. From 1943-46, Wilmot taught animal husbandry as an Associate Professor at Berea College, Berea, Kentucky.

Wilmot joined Cornell University in 1946 as an Instructor. He was promoted to Assistant Professor in 1949, Associate Professor in 1951 and Professor in 1961. Wilmot earned his Ph.D. degree from Pennsylvania State University in 1951. He and his wife experienced sabbatical leaves in Argentina in 1958 and in the United States in 1964, studying dairy records processing and dairy cattle breeding programs.

Professor Carter was instrumental in establishing (1947) and operating the Dairy Records Processing Laboratory. This laboratory was one of the first in the world to electronically tabulate production records on dairy cows for Dairy Herd Improvement, a farmer cooperative established and nurtured by Cornell Cooperative Extension. The laboratory serviced over 450,000 cows in 10,000 herds in New York and the northeastern United States. Carter and

his colleague, C.R. Henderson, tabulated sire summaries that evaluated genetic merit of dairy sires three times a year and distributed copies to cooperating dairy farmers. In addition, the archived data from the Dairy Records Processing Laboratory proved to be a valuable resource for the research programs of Carter and his colleagues and students at Cornell as well as at other northeastern universities.

Wilmot Carter was a valued Extension specialist with expertise in data processing and dairy cattle genetics. Wilmot crisscrossed New York and New England holding farmer meetings on dairy records and dairy cattle breeding. He was the farmer's resource for advice on genetic programs and won their acceptance for the concept of sampling young sires, a truly revolutionary idea in the 1950s. In addition, he was a consultant to the United Nations Food and Agricultural Organization and helped establish dairy processing laboratories in Argentina and Costa Rica. Professor Carter also helped the University of Guelph, Guelph, Ontario, Canada, establish a dairy records processing center.

Carter established a strong working relationship with New York Artificial Breeders Cooperative (NYABC). NYABC served as a valuable extension and multiplier tool for the dissemination of new ideas as well as a research laboratory for new ideas and student training. The Cornell-NYABC relationship was the strongest university-industry relationship in New York and resulted in numerous advances, including the young sire program, and linear model genetic evaluation systems, used throughout the world today.

Carter's work exemplified the ideal of the Land Grant concept of coordinated extension and research efforts. He was rewarded for his excellence and hard work with the 1961 Award of Merit by the New York Chapter of Epsilon Sigma Phi and the 1969 DeLaval Award in Dairy Extension by the American Dairy Science Association. He was a member of the American Dairy Science Association, American Society of Animal Science and American Genetics Association.

An avid fisherman, even well into his 10th decade, Wilmot enjoyed annual fishing expeditions in Canada with family members from 1972 until 2007.

Helen, his wife of 64 years, predeceased Professor Carter in August 1999. Three sons survive him, James E. (Lois) of Elmira, New York, Wilmot R. (Bill) (Sherry) of Arizona and Richard L. (Kathy) of Arizona, eight grandchildren and eight great grandchildren.

Robert W. Everett, Chairperson, J. Murray Elliot, Douglas E. Hogue

Lewis Duane Chapman

September 3, 1940 – July 29, 2007

Duane Chapman, Professor of Resource Economics in the Department of Applied Economics and Management, died unexpectedly after a short illness in July 2007 at age 66. He joined the Cornell faculty in 1972 after spending three years as a Research Scientist at the Oak Ridge National Laboratory. Duane received a Ph.D. degree in Agricultural Economics in 1969 from the University of California at Berkeley where his choice of a topic for research was indicative of his future career. While most of his fellow students worked on conventional problems in agricultural production and marketing, Duane studied the economic viability of using nuclear power to desalinate water. This research led to his first appointment at Oak Ridge.

At Cornell, Duane's research focused on energy and the environment, including nuclear energy, electricity market restructuring, world oil prices and international security, renewable energy policy, and climate change and energy use. He also worked on forestry policy and economic development and environmental quality. His research topics were sometimes well outside the mainstream of current academic fashions, and his conclusions were often at odds with the views of powerful economic interests. Nevertheless, his conclusions almost always proved to be correct, and in most cases, his policy recommendations were adopted after years of delay. When researchers at Cornell first identified the environmental damage caused by acid rain in the 1970s, Duane showed that it was both technically and economically feasible to install scrubbers to reduce sulfur emissions from coal plants, like Cayuga Station, but these emission reductions were not mandated for power plants in Federal legislation until 2000, over 20 years later.

Duane's research at Oak Ridge demonstrated that nuclear desalination was not economically viable. This conclusion was in conflict with the leadership of the Atomic Energy Commission, and this disagreement was partly responsible for Duane's move to Cornell. His early research at Cornell showed that Federal plans to expand nuclear power as a step towards energy independence, in response to the oil embargo in 1973, were based on unrealistically high forecasts of the demand for electricity. His well-researched opposition to the licensing of new nuclear power plants was an important reason why only two such plants were built in New York State instead of the seven that had been planned. As a result, New York State was able to limit the substantial financial costs of overbuilding experienced in other states like Washington.

This work provided a preview of Duane's academic career. He was only interested in issues with substantial economic consequences, and on occasion, his results angered people who stood to lose large amounts of money. Moreover, he was committed to communicating his insights beyond academic forums. He wrote opinion editorials for the Ithaca Journal and presented his research to numerous groups of citizens. In the 1980s, Duane visited the Mescalero Indian Nation in New Mexico where he spoke about the pros and cons of storing nuclear waste on their reservation. The result was a contentious referendum in which a proposal to store the waste on the reservation was first turned down and then reversed. In the interim, Mescalero Nation leaders sent letters to Cornell's President, Frank Rhodes, deploring Duane's "interference" in sovereign matters and calling for his dismissal. Such reactions to Duane's research were not unusual, but his conclusion, that nuclear waste should be stored on site, will likely prove to be correct.

The conclusions from Duane's research were based on empirical reality rather than on a blind belief in "invisible hands" and the other arguments used by mainstream economists. For example, when the electric utility industry argued that the installation of scrubbers on coal plants would cause major disruptions in supply, Duane brought a plant manager from Kentucky to testify before the Federal Power

Commission that his coal plant worked perfectly well with a scrubber. More recently, Duane was skeptical about the claims that deregulating the electric utility industry would benefit the public. He demonstrated that suppliers could use perfectly legal means of collusion to manipulate prices. These results did not make him popular with the advocates of deregulation.

Duane traveled to many different countries on professional projects for the World Bank and US AID to study energy and environmental problems. These projects included assessing levels of pollution in Siberia and Central Europe following the collapse of the Soviet Union, and more recently, evaluating energy policy in Iran. He was also interested in the economic and political changes occurring in Southern Africa. This interest probably stems from his active involvement in the civil rights movement during his undergraduate days at Michigan State University in the 1960s. In 1991, Duane spent a sabbatical leave at the Universities of Zimbabwe and Natal as a Fulbright Fellow studying the development of the mining industry in Southern Africa.

His recent work on world oil prices and international security received attention in academic, military, and policy circles. He was invited by the U.S. Army War College, the U.S. Air Force Academy, and the National Security Administration to present his research on oil. Duane's forecasts of future oil consumption and oil prices were quite different from the popular view of most analysts who believed that oil consumption would peak in the near future, but once again, Duane's results will probably be a more accurate guide for future energy policy.

Duane was the author of two books (Environmental Economics: Theory, Application, and Policy, Addison, Wesley, 2000 and Energy Resources and Energy Corporations, Cornell University Press, 1983), more than 50 journal articles, 16 book chapters, and well over 100 published essays, monographs, and hearing testimony. In 2007, he received the Editor's Choice Award from the Western

Economic Association International for a paper that was published in Contemporary Economic Policy in October 2006.

A popular advisor of graduate students, many of his publications were co-authored with his students. He supervised 16 Ph.D. dissertations and more than 25 Master's theses. His students were struck by his belief in their academic abilities, and he often played the role of morale booster and friend. He transmitted his penchant for writing about policy issues by pushing his students to think about the bigger policy context, no matter how detailed or technical the discussion. Even before a student would start writing a paper, Duane would want to know how it would advance an ongoing policy debate. Not surprisingly, he attracted non-traditional graduate students to applied economics, including former Peace Corp volunteers, a forest ranger, a military security officer, and students who initially questioned the applicability of economic analysis in realistic but complex settings. Many of these former students have established successful careers, and their work represents the most enduring component of Duane's legacy.

Although a rather quiet, diffident man, Duane was an active member of the Newfield (NY) Democratic Party and the Newfield Lions Club, and he was Vice President of Honest Insight. An avid outdoorsman, he camped in Montana, the outback of Australia and the high Sierra in California. He chose to live the last two decades of his life on 165 acres of wooded lands in Newfield. He incorporated the principles of solar passive architecture in the design of his house and heated it with a wood burning furnace and fireplace. Sitting on his porch, he could regularly hear coyotes and even encounter an occasional black bear. He was proud of the hiking trails and private campsite on his property, which he maintained with the help of a few friends. Winter camping was his passion, and it was not unusual for him to camp outdoors in subzero temperatures. He often invited graduate students for barbeques and hikes on his property, weather notwithstanding.

In June 2007, Duane was diagnosed with a rare form of non-Hodgkins lymphoma. After nearly a month of excellent care at the Strong Memorial Hospital in Rochester, he returned home on July 28 but passed away in his sleep that night. A celebration of his life was held on September 15, 2007, at the Anabel Taylor Chapel on the Cornell campus. It was attended by nearly 200 people, including former graduate students who traveled to Ithaca from across the United States and Canada. Following the Memorial Service, a small group of friends and former students hiked down to the campsite on the Chapman property in Newfield where they spent a few hours around a campfire exchanging stories about Duane and the “good old days.”

Duane was predeceased by his parents, Louis and Alice Fullerton Chapman, and by his two brothers, Bruce and Allan. The surviving members of his family are his two daughters, Erin and Amy Chapman, and their mother, Mary Chapman; many cousins and nieces; his loving partner, Alice Brody and her daughter, Melissa; and many former students, colleagues and friends who were all part of Duane’s extended family. Cornell has lost a researcher who searched diligently for the truth and was willing to stand his ground and defend the public’s interests whenever his results were in conflict with the interests of the powerful.

Timothy D. Mount, Chairperson; Neha Khanna, William G. Tomek

W. Donald Cooke

May 15, 1918 – September 20, 2007

Cornell Professor Emeritus W. Donald Cooke, 89, died peacefully at home on September 20, 2007. Don, as all knew him, had a remarkable Cornell career that covered the full academic gamut of teaching, research and administration.

Don was born in Philadelphia, Pennsylvania, on May 15, 1918. He joined Cornell in 1951 and advanced quickly through the ranks. When he came to Cornell, he led the effort to modernize analytical chemistry with spectroscopic, electrochemical, and chromatographic techniques. His productive 15 years of research yielded more than 35 publications, but during this time, he became Associate Dean of Arts and Sciences. He then was Dean of the Graduate School for a decade, and finally spent 15 years as Vice President for Research and Advanced Studies. He was an active member of the Cornell University Senate, Acting Provost, Acting Chairman of the Chemistry Department, and Director of the Occupational Health and Safety Program during its formative years. During all this, he continued an active teaching role, even past his retirement in 1987. Outside of Cornell, Don served on boards at several institutes and universities.

Don's early childhood was reasonably comfortable, but it fell apart with the 1929-1939 Depression. At one point, his extended family of eight lived day-to-day off the waitress tips of his sister, the only one with a job. Although Don has described himself as a lackadaisical student, St. Joseph's College saw enough promise to offer him deferred tuition and a job to pay for his study materials. After he graduated in 1940, he stayed on a year to work off his tuition and then spent a year at the Hanshaw Chemical Company as an analytical chemist. He joined the U.S. Army Air Force as a

Private and was sent to MIT for a year to study Meteorology. After serving three years in the European Theater, he was discharged with the rank of Major. He served at General Eisenhower's headquarters and helped with tactical weather forecasts including the Normandy D-Day invasion.

Don was a highly skilled poker player and on the return trip home he made enough money to afford a diamond ring and get married to his childhood sweetheart, June. His love of poker continued throughout his career and he played several games a month that continued until a few weeks before his death. Don founded the Cayuga Poker Society, and beginning in 1992, he published a monthly newsletter that in addition to poker announcements included unusual stories about everything from sports to politics. He was fascinated by stories about probabilities.

After his marriage in 1946, he entered graduate school at the University of Pennsylvania, where he received his M.S. degree in 1948 and his Ph.D. degree in 1949. He then studied at Princeton University with Professor N.H. Furman for one year as a National Research Council Postdoctoral Fellow and another year as a Eugene Higgins Fellow. Up until WWII, almost all of Analytical Chemistry used "gravimetric" and "volumetric" techniques, weighing a precipitate or titrating solution. Furman was a pioneer in the new instrumentation revolution, such as with "potentiometric" titrations, but Don took a far broader view at Cornell. His research exploited the analytical potential of new methods then used almost entirely in industry such as nuclear magnetic resonance, infrared, atomic absorption, and flame spectroscopy, and polarography and gas chromatography. This revolution was so complete by the mid-60s that several other major Chemistry Departments closed their Analytical Chemistry sections.

A QuickTime video, "Conversation with W. Donald Cooke," in which Don reflects on his youth and later experiences can be viewed at <http://hdl.handle.net/1813/3523>.

Don's extraordinary life experiences only hint at his character. He is remembered for his integrity, his genuine humility, and his ability to understand and respect the viewpoints of others from all walks of life. Not surprisingly, Don had a special gift with people. During the turbulent student unrest in the 1960s and 1970s, he negotiated with student leaders, and despite being on opposite sides, he afforded them the same respect and, indeed, remained in contact with several of them in later years.

After the death of Don's beloved wife, June, to whom he was married for 60 years, his health faded rapidly. His brother, Edward; two daughters, Catherine and Ann; four sons, W.D. Cooke, Jr., Peter, Christopher and Timothy; and nine grandchildren survive him.

All who knew Don will miss him.

Fred McLafferty, Chairperson; Ben Widom, Charles Wilcox

Harold R. Cushman

December 21, 1920 – July 28, 2007

Harold R. Cushman was born in Ferrisburg, Vermont and grew up on a dairy farm during the Great Depression. He served in the U.S. Army during World War II, taught high school agriculture in Vermont, served as an agricultural education professor at the University of Vermont and Cornell University, and spent much of his professional life working in the South Pacific. Harold is survived by his wife, Natalia, who still lives in the home they shared in Ithaca, New York; two daughters, Janette and Nanette; two sons, Robert and William; 11 grandchildren; and four great-grandchildren. His eldest son, Richard, predeceased him.

Harold graduated from Vergennes High School, having been a student in the agricultural education program and serving as his local FFA Chapter President and as the Vermont FFA State Reporter. He worked his way through the University of Vermont with the help of scholarships, majoring in agriculture and graduating in 1941. He began teaching agriculture at Peacham Academy that fall and completed his first year of teaching before enlisting in the Army in August 1942.

Harold attended Officer Candidate School at Ft. Knox, Kentucky and was commissioned as a Second Lieutenant. He was stationed at Camp Polk, Louisiana until being transferred to England in November 1944. On Christmas Day 1945, the German Army began a major winter campaign in the Ardennes region of France that came to be known as the Battle of the Bulge. Lt. Cushman's unit had been scheduled to deploy some time after the beginning of 1945 but when Allied commanders realized the seriousness of the German offensive, he and his unit were immediately rushed overnight to France to help counter the attack. During the remainder of the war

in Europe, he served as an armored Infantry troop leader and company commander in the 8th Armored Division of the U.S. Army. Lt. Cushman was wounded in close combat; his injuries resulted in medical evacuation and extended convalescence until the end of the war in Europe. By the end of the war, Cushman had been promoted to First Lieutenant and had been awarded the European Service Medal with Battle Star for the Rhineland Campaign, the Bronze Star medal, the Combat Infantry Badge, and the Purple Heart medal with Oak Leaf Cluster.

After the war, Mr. Cushman taught agriculture in Woodstock, Vermont for three years. After Woodstock, he was appointed to a half-time position as Assistant State Supervisor of Agricultural Education for Vermont and attended graduate school half time, completing a Master's degree at the University of Vermont in 1949. He attended Cornell University for his doctoral studies and earned his Ph.D. degree in Agricultural Education in 1951.

Dr. Cushman began a long career in higher education as an Assistant Professor of Agricultural Education at the University of Vermont in 1951. In 1955, he moved to Cornell University as a faculty member in the Department of Education serving as a member of the Agricultural Education team until his retirement in 1990. He taught courses in Agricultural Education, directed 39 graduate Master's theses and doctoral dissertations, developed curriculum, and worked to improve teaching methods.

Professor Cushman was best known for his international work. In the early 1960s, he was assigned as a Visiting Professor at the University of the Philippines College of Agriculture at Los Baños to help rebuild the undergraduate agriculture program with funding from the International Cooperation Administration (ICA). He followed his Los Baños ICA tour with post-doctoral study at the University of Hawaii, returning to Ithaca in 1962. He was promoted to Associate Professor in 1963 and to Professor in 1968. Professor Cushman returned to Los Baños for a second tour in 1968-70, during which he helped establish the College of Agriculture as a

graduate educational and research center for agriculture in Southeast Asia. He returned to Ithaca briefly in 1970-71. He was appointed by the United Nations as a Rural Education Officer at the University of the South Pacific in Western Samoa in 1972 and simultaneously appointed as the first Professor of Agriculture at the University of the South Pacific. His work led directly to the establishment of the University's Agriculture Bachelor's degree program. That tour was followed by a return to Ithaca lasting from 1973-79. His next international posting was to Papua New Guinea in 1979-80 followed by an assignment to the South Pacific Region Agriculture Development (SPRAD) Program in Fiji from 1980-86, on a grant from the U.S. Agency for International Development with the University of Hawaii and Cornell University. As a part of the SPRAD program, Professor Cushman developed and implemented a teacher preparation program in Agricultural Education at the University of the South Pacific.

In all of Harold's international projects, he recruited local graduate students for Cornell to prepare them to staff the programs when the project funding was terminated. Between his international assignments, Harold was a teacher educator in agriculture advising undergraduates and graduate students, teaching, and conducting research. Jointly with the late Professor Fred F.K. Tom, he developed a program for evaluation of college teaching that was used at Cornell and other higher education institutions.

One of Harold's former colleagues said:

"It was my privilege to work with Harold Cushman from my joining the CALS Education faculty in 1967 to his retirement in 1990. We collaborated in research, co-taught courses, and co-authored research papers. Harold's advice and assistance was very important for me as a new faculty member. He was also a close personal friend including deer hunting in New York and Vermont. I will both miss and remember him."

A former student said:

“Harold Cushman was my faculty advisor at Cornell. As one of the early female agriculture teacher candidates, he gave me advice as if I wasn’t a female in a male dominated world. He was similar to my parents by telling me that I could do anything if I put my mind to it. Thirty years later I am still following his advice and counsel.”

In 2005, Harold published a book of memoirs entitled The Other Side of the Mountain, in which he recounted his experiences as a child in Vermont, his war years in the Army, his years as an agriculture teacher in Vermont, his university career at the University of Vermont and Cornell, and his life with family and friends. Some of Harold’s most interesting stories involved his experiences in the War, his days in Vermont and New York hunting deer and bear, and his experience in the South Pacific working in sometimes dangerous but always interesting settings. Reflecting back on his life with the kind of wisdom that comes only with age and experience, Harold concluded his book with what he called “a few rules for life:”

- Dare to dream big when setting your life’s goals.
- Get all the education you’ll need to achieve your goals. Don’t let anything stop you. Stay in school.
- Work hard when you have to. Otherwise, don’t strain yourself needlessly.
- Pursue your hobbies vigorously.
- Listen a lot – and carefully.
- Be a team player. You’ll need the stimulus of others to do your best.
- If you can’t say anything positive or pleasant, keep your mouth shut.
- Volunteer for tough jobs; they have more payoff. Take reasonable risks.

- Be persistent. Don't give in to aches, pains, or loneliness. Hang tough. See it through. Life is not always a stroll in a rose garden!!
- Make love the central theme of your life and your relationship with others.

*William G. Camp, Chairperson; Arthur L. Berkey, Daryle E Foster,
Richard E. Ripple*

Norman D. Daly

August 9, 1911 – April 2, 2008

One of Norman Daly's proudest achievements was having taught at Cornell for over 50 years, in a career which began in 1942. He was probably the most influential art teacher in the post-war years in a long and remarkable career. It was a time when the University truly valued a strong independent Art Department as his esteemed colleagues joined him: Joe Hanson, John Hartell, Kenneth Evett, and Victor Colby. Norman Daly often remarked that he had been privileged to teach at Cornell during its golden age which he defined as that period after the war when all the veterans were returning to school, filled with enthusiasm, intellectual curiosity and the need to accomplish.

What made Norman so successful and valued as a teacher was his ability to sustain throughout his career, both as artist and teacher, an ever youthful and innovative mind forever searching out new ways to communicate, spreading out beyond the realm of visual aesthetics to archeology, music, poetry, history, anthropology, etc, etc. This served to make him invaluable to ever changing generations of students who brought new needs to their learning as well as providing him with the tools for his greatest artistic accomplishment to make him a peerless teacher of teachers.

Norman was born in Pittsburgh in 1911, receiving his undergraduate degree from the University of Colorado and Master of Fine Arts degree from Ohio State University. Professor Daly took great pride in having been a featherweight boxer as an undergraduate as well as a bartender in Chicago where he had been told to keep a knife behind the bar. He did post graduate work in Paris as well as the

Institute of Fine Arts of New York University. This diverse education gave him a great breadth of knowledge and erudition not often encountered.

After arriving at Cornell, he began an active exhibiting career, which included such galleries as Lurand-Ruel, Betty Parsons, Bertha Schaefer and the Rochester Memorial Museum as well as the State Archeology Museum in Bochum, Germany. Over his long career, he was represented in countless group exhibitions as well as achieving many awards and commissions. He is likewise represented in collections at Oberlin College, Walker Art Center, University of Washington, Seattle, Rochester Memorial Art Gallery, etc.

In 1972, Norman exhibited the largest project he had ever conceived and worked on at the Andrew Dickson White Museum. It was nothing less than the invention of an entire civilization, the Civilization of Llhuros, a project whose production had consumed him for well over a decade and whose roots went back to his beginnings as an artist. It was his protean qualities that allowed him to achieve this conceit for he was a painter but also a sculptor and conceptual artist, a found object artist, a musician, historian, actor, playwright and an insightful observer of the human condition. The civilization is a satire on how we humans organize ourselves into groups, form religions, taboos and conduct our lives in accordance with strict unsparing rules of behavior. Norman Daly explored as many avenues of how we organize our lives as any single artist could be expected to do.

This brilliant exhibition when fully installed often entirely filled a museum. It was shown internationally to rave reviews in the national and international press breaking attendance records when exhibited in Berlin. In the ensuing years, Norman Daly never stopped working on his civilization. He created music, church liturgy, further artifacts and a play, which was produced at Cornell. He was involved with art until the very last years of his life, never

losing his ardor and enthusiasm. As the years gathered, his loving son, Dr. David Daly, helped him in this and his many projects.

On a personal note, Professor Blum clearly remembers his Llhuros exhibit in the Rochester Memorial Museum when he dressed in a completely black ninja outfit replete with an immense gold medallion that he had made. He addressed an audience of over 300 museum goers posing as a Scandinavian archeologist who sought to debunk the entire exhibit as an obvious fraud. He soon convinced the audience of this. They left the hall with a new sense of their own erudition.

Professor Daly was truly a man for all seasons.

Moses Zevi Blum, Chairperson; Victor Kord, Eleanore Mikus

John L. Doris

April 12, 1923 – January 22, 2008

John Doris, Professor Emeritus of Human Development and founding director of the Family Life Development Center (FLDC) in Cornell's College of Human Ecology, died January 22, 2008 at age 84.

A member of the Cornell faculty since 1963, he served terms as director of the graduate program and associate chair in the Department of Human Development and was an active and dedicated mentor of many graduate students and newly hired faculty. He introduced a graduate curriculum around individual testing and assessment and directed a graduate training in psychopathology. He served as director of the FLDC from its establishment in 1974 until his retirement and appointment as Professor Emeritus in 1993, though he continued to work on center programs until his death.

The FLDC serves as a resource for extension, research and teaching related to issues of family stress and child maltreatment. Under Doris' leadership, the FLDC established a federal regional Resource Center for Child Abuse and Neglect as well as for Foster Care and Adoption, and the New York State Child Protective Services Training Institute, the first of its kind in the country dedicated to providing basic and advanced training to child protective workers and supervisors.

Four other major programs inaugurated under his leadership that continue today and have worldwide impact include: the Residential Child Care Project to prevent abuse and increase the quality of care in residential settings; the National Data Archive on Child Abuse and Neglect to ensure that researchers have access to federally

funded research data; the Internet-based Child Abuse Prevention Network, a worldwide resource to apply information technology to child abuse prevention; and the Military Projects, to prevent child maltreatment and domestic violence in families connected to the armed forces and help family members prepare for the stress of deployment.

Doris also directed the center while it was instrumental in developing the private, nonprofit New York State Federation of Task Forces on Child Abuse and Neglect. The largest advocacy organization for maltreated children in New York State, the federation, now known as Prevent Child Abuse New York, is affiliated with the National Committee for the Prevention of Child Abuse.

Doris grew up in the Bronx and graduated magna cum laude from the College of the City of New York in 1951. He earned a Ph.D. degree in 1957 in Child Clinical Psychology from Yale University. From 1958-63, he was chief psychologist in the Yale Child Study Center and an Assistant Professor in Yale's Department of Psychology before he joined the Cornell faculty.

Doris' research and teaching broadly concerned child clinical psychology, child and family psychopathology, and learning disabilities, as well as visual acuity in infants and young children. In addition to numerous journal articles and chapters, in 1969 he published the 4th edition of an award-winning book Psychological Problems in Mental Deficiency with his longtime mentor and collaborator, Yale professor Seymour Sarason. Their groundbreaking 1979 work, Educational Handicap, Public Policy and Social History, continues to receive both scholarly and popular interest.

In 1991, he edited a landmark volume, The Suggestibility of Children's Recollections, published by the American Psychological Association. This highly-cited volume was the culmination of an

historic three-day convocation at Cornell of top researchers throughout North America and Europe prompted by concerns about the reliability of children's eyewitness testimony in cases of alleged child abuse. The conference has been widely viewed as setting a decade-long research agenda for the field.

Predeceased by his wife, Marjorie Fouts Doris, M.D., Doris is survived by five children.

John Eckenrode, Chairperson; Ritch Savin-Williams

Donald L. Downing

April 2, 1931 – February 29, 2008

Donald L. Downing, Professor Emeritus of Food Processing at Cornell University's New York State Agricultural Experiment Station in Geneva, New York, passed away suddenly on Friday, February, 29, 2008 after a wonderful morning of skiing. He was 76. He was an exceptional mentor, colleague and friend, and will be greatly missed by those he worked with as well as by the food-processing industry.

Don was born in Willoughby, Ohio, on April 2, 1931, to Lelah and Dana Downing, both of who preceded him in death. He grew up in Fulton, New York, where he was a member of the class of 1948 at Fulton High School.

After high school, Don received an Associate degree in Dairy Science from Morrisville (New York) College. He then spent three years in the Army including two years in Europe. Upon his return, he enrolled in the University of Georgia's Food Science and Technology Program. After receiving first his B.S. degree and then his Ph.D. degree, Don and his family moved to Johnstown, New York, where he worked for Beechnut-Lifesavers for three years before joining the Cornell University faculty at the New York State Agriculture and Experiment Station in Geneva, New York, in 1967, where he advanced to full professorship.

Don's distinguished career at Cornell spanned more than 40 years; he attained full professorship in 1980. Although his position was 100% extension, he was always available to Food Science graduate students for advice in all aspects of the food industry. He was well known for encouraging them to attend symposia, conferences and meetings to complement their academic training. He established the

annual Downing Graduate Student Excellence Award. In addition, he was a valuable mentor to junior faculty in the Department of Food Science and Technology in Geneva. He gave freely of his time, and was an exceptional friend and colleague.

When he began work at the Station, Don's primary responsibilities were to assist the state food processing industry and farm wineries. To this end, he conducted pesticide training and certification for 13 years. He organized, or took part in, over 150 food related workshops and ran 22 annual offerings of the Better Process Control School required by the FDA for canning operations. He had 152 publications to his name, including Processed Apple Products and the three-volume A Complete Course in Canning both of which he edited and are industry standards. In addition, Don was one of the first Cornell faculty to work extensively with New York wineries. He was instrumental in creating the first Wine Industry Workshop in 1971 and helped start Cornell's enology extension program.

In 1988, Don created the New York State Food Venture Center in response to a growing need in the New York state food industry. The program, which began as an extension effort for the Department of Food Science and Technology, remains a valuable resource to this day. For most of its existence, Don has been an integral part of the Center's function. He was its first director, running the program until his partial retirement in 1994. After retiring, he continued to work at the Food Venture Center part time as the Process Authority, evaluating the safety of proposed recipes, making changes as necessary, and approving processes. His knowledge of Federal and State food law was inexhaustible, and he excelled in making obtuse regulations easy to understand. He was much sought after as a go between for the FDA and USDA, and could often be found with a phone to his ear, spending time with clients answering questions and offering suggestions.

He earned numerous honors and awards for his work including a Commendation from the New York State Commissioner of Agriculture in 1997 and the USDA-Group Honor Award for

Excellence for NECFE program in 2004. As a Fellow of the Institute of Food Technologists (IFT), Don initiated several divisions and served as chair of several national committees. He was Councilor for Western New York IFT for 21 years, helping to maintain the section's focus and financial health at a time when it was losing industry members due to transfers and plant closings.

In addition to IFT, Don was a member of the Alumni Association at the University of Georgia, the Geneva Country Club, the Finger Lakes Forum, and the Associated New York State Food Processors. He gave consistently both to Morrisville College and the University of Georgia. He showed every day, with words and actions, with an unselfish, enthusiastic, joyful and professional disposition, how to be a Cornell extension leader and a caring mentor. He loved working with people, always providing meaningful assistance and encouragement. His colleagues will be forever grateful for his advice, support and friendship and will never forget all he taught and the kindness he showed to everyone.

Don is survived by his wife of 48 years, Rochelle (Shelly); a son Kurt (Janice), Dublin, Ohio, and a daughter Karla, Phelps, New York; granddaughter Jacklyn Downing, Dublin, Ohio; four brothers, Eugene (Nancy), Phoenix, New York, Alan Downing, Mexico, New York, a twin brother Dana (Patricia), Valparaiso, Indiana, and Stanley (Josephine), Huntsburg, Ohio; and several nieces and nephews.

Olga I. Padilla-Zakour, Chairperson; Chang Y. Lee, Randy W. Worobo

Leonard B. Dworsky

January 5, 1915 – March 28, 2008

Professor Leonard B. Dworsky, a long-time Civil and Environmental Engineering faculty member, passed away in March 2008. He was 93 years old.

Born in Chicago in 1915, Leonard earned a B.S. degree in Civil Engineering at the University of Michigan in 1936, and an M.A. degree in Public Administration from American University in 1955. From 1936-41, he worked as a sanitary engineer with the Illinois Department of Public Health. During WWII, he served as an officer in the Army Sanitary Corps rising to the rank of Lieutenant Colonel. His responsibilities included water supply engineering and malaria control in the American Theater of Operations centered in the Caribbean, and staff training for military government field operations in preparation for the Far East military occupation.

In 1946, he became a commissioned officer of the U.S. Public Health Service, retiring after 18 years with the (Naval) rank of Captain. The USPHS was the focus of the nation's post-war federal effort in pollution control. As a senior administrator, Leonard formulated and administered legislative and policy initiatives that became the basis of the nation's environmental programs for decades to come. Together with Sanitary Engineering Director Carl Schwob, Leonard wrote the Congressional testimony for Surgeon General Thomas Parran on the Water Pollution Control Act of 1948. When the Act became law, Schwob was named the first Administrator of the Federal Water Pollution Control Program, and Leonard was his first appointee. Leonard prepared and presented testimony for the subsequent extension and the 1956 revision of the Act.

The 1948 legislation was noteworthy for recognizing that environmental and political boundaries often differed, and that formal interstate arrangements were necessary for successful pollution control. Participating in the implementation of the legislation he helped create, Leonard supervised the publication of 15 major basin summary reports covering the nation's 226 sub-basins. He was also a member of the first Federal Interagency Committee's River Basin Committee (1947), Secretary of the Missouri Basin Interagency Committee (1956), Chairman of the Columbia Basin Interagency Committee (1959-62), and HEW representative to the Federal Committee on Water Resources (1962-64).

Leonard joined the Cornell faculty as the first director of the Water Resources and Marine Sciences Center in 1964. For ten years as Center director, Leonard positioned Cornell as a major player in the development of the field of water resources research. The Center demonstrated the value of bringing together expertise from different disciplines including faculty from Engineering, Law, Economics, City Planning, Remote Sensing, Agriculture, Geology, and Human Ecology. Studies sponsored by the Center ranged in focus from the local Finger Lakes Environmental Studies program to the international Canada/U.S. Inter-University Seminar that laid the groundwork for the Great Lakes Water Quality Agreement.

Leonard's move to Cornell amplified his enthusiasm for the important role of government in improving environmental quality. He commuted to Washington where he was an advisor on water resources to Presidents Lyndon Johnson and Richard Nixon; he served on the President's Science Advisory Committee (1966-70), chaired the Federal Council for Science and Technology's Water Resources Research Committee (1965-67), was Senior Staff Assistant for Water Resources in the White House (1967-68), and served on the President's National Environmental Panel (1968-72).

For over 40 years at Cornell, Leonard studied and taught about river basin management, water quality planning, management of resources in international boundary areas, and conflict resolution. His teaching and research concentrated on water and land policy and institutional issues. He sought to bridge the gap between social problems and science and technology. His seminars frequently provided analyses and recommendations directly to state and national policy makers.

After becoming Emeritus in 1985, Leonard and his colleague David Allee, taught their water policy seminar course for another 15 years. Well into his 80s, Leonard continued to write and lecture nationally and internationally, to mentor graduate students, and lobby his colleagues about the bigger issues of resource management. His vision is illustrated by the conclusions in his 1963 speech, *The Problems of Water Quality Management*:

“Man’s relationship to water is vital and cannot be limited by engineering-economics or market-place economics. This nation has voluntarily taken on the task of blending massive industrial and urban society with high social and cultural goals in support of a seemingly boundless improvement in its standard of living. We cannot foretell the end result of this effort. It is clear, however, that water, the management of its quality and related factors, will play a large part in determining the outcome.

“Our job is to do all we can to guarantee to our children and generations to follow, the widest possible range of choice without loss of flexibility of action today.”

Leonard was active through the Universities Council on Water Resources, the Engineering Foundation, the American Water Resources Association, the National Academy of Sciences, the American Academy of Environmental Engineers, and the American Society of Civil Engineers. Leonard was also an environmental consultant to the Rockefeller Foundation where he initiated the first comprehensive study (11 volumes!) of the Hudson Basin. To the delight of his family who accompanied him, Leonard was also a consultant to the Governor of Puerto Rico for nine years. He

was a member of the International Joint Commission's Great Lakes Science Advisor Board (1972-79) and he was a Senior Associate of the Utton Trans-boundary Resource Center at the University of New Mexico Law School, writing frequently for the Natural Resources Journal. He traveled on behalf of the State Department, the United Nations and the OECD. Honors he received included a "Commendation Medal" from the Surgeon General; the "Caulfield Medal for Exemplary Contributions to National Water Policy," from the American Water Resources Association; and the "Outstanding Professional Achievement Award" by the Hudson River Environmental Society.

Leonard was happily married for nearly 50 years to Diana Levin. Together they had five children. In Ithaca, he found time to earn his private pilot's license at East Hill Flying Club, and he was an avid glider pilot, hiring sailplanes at any location that had an airport. He also sailed, was a scuba diver and in his mid-60s, took up skiing. He was a trustee and president of Temple Beth-El.

Leonard Dworsky never quit caring about water policy, the wise use of water resources, inter-government cooperation, and the development of his students and colleagues. He was on a mission, and encouraged his colleagues to join him by thinking larger thoughts and exploring broader issues. He was always talking about new ideas and paradigms: watershed-based, ecosystem-based, and risk-based planning. If we could just work together, he knew we could all be better off. He served as a tremendous role model for us all.

Jery R. Stedinger, Chairperson; Richard I. Dick, Daniel P. Loucks

Louis J. Edgerton

January 28, 1914 – July 26, 2007

Louis J. Edgerton, 93, Professor Emeritus in the Department of Horticulture, died July 26, 2007 in Ithaca, New York.

Professor Edgerton was born in Adena, Ohio on January 28, 1914, the son of Quaker parents Walter J. Edgerton and Anna Taber Edgerton. He attended the Friends (Quaker) elementary school in Barnesville, Ohio (near Adena), then Olney Friends School, a small boarding school in Barnesville for high school level students. After graduating from Olney in 1932, he attended the College of Wooster (Ohio) from 1932-34, and then transferred to The Ohio State University where he received his B.S. degree in 1937, with a major in Horticulture.

Cornell's Graduate School accepted him in 1937, where he began work toward his Ph.D. degree in Pomology (fruit studies). Interest in this subject was, no doubt, related to the fruit farm on which he was raised. At Cornell, he was one of several graduate students of that period who worked under the guidance of the late A.J. Heinicke, a pioneering fruit tree physiologist of considerable renown. Louis was granted the Ph.D. degree in 1941.

He spent four years with the USDA Forest Service during the war years, and then was appointed to the faculty of Cornell University in 1946 as an Assistant Professor.

As a Cornell faculty member, he had research, teaching and extension responsibilities. As a teacher, he introduced many students who were interested in fruit growing to their first course in the subject, and many of those students, in their time, became leaders in the fruit industry in New York State and elsewhere. He

committed a substantial amount of time to extension duties, speaking to numerous groups throughout New York and other venues with respect to the latest developments in the fruit industry. But it is his research activities that are best known.

His research interests included, among others, cold hardiness of deciduous fruit plants, chemical fruit thinning, control of premature apple fruit abscission in the fall, mechanical harvesting, and various aspects of synthetic chemical plant growth regulators and their use in the fruit industry.

These studies took him from the Cornell greenhouses and orchards to numerous growers' orchards from one end of New York State to the other, as well as to orchards and laboratories in other parts of this country and the world. His sabbatical leaves and other travel and research expeditions found him at various times at the University of California at Davis, in England, Scotland, France, Italy, Switzerland, Germany, The Netherlands, and Belgium. A Fulbright Award in 1966 allowed him to spend several months in Egypt, and yet another sabbatical leave, in 1977, found him in Australia and New Zealand. His numerous publications and other professional activities attracted students from the United States and from around the world.

He was a Fellow of the American Society for Horticultural Science. He established the Edgerton Career Teaching Award for outstanding teaching by members of Cornell's College of Agriculture and Life Sciences.

During his busy schedule, he found time to serve as Chairperson for the Department of Pomology from 1970-75.

He retired as Professor Emeritus in 1979. However, in retirement he continued for many years to be active in research, extension work, and student advising, and could be found in his office nearly every day till near the end.

Dr. Edgerton married Edith Hartz of Chestnut Hill, Pennsylvania in 1946. She was deceased in 2004. His son, John Edgerton and family of Akron, Ohio; daughter, Mary Edgerton of Albany, New York; and daughter, Sara Edgerton Thompson and family of Cape Girardeau, Missouri survive him.

Dr. Edgerton was a longtime member of the Ithaca Friends (Quaker) Meeting. Memorial Services were held at Kendal at Ithaca on September 2, 2007.

Loyd E. Powell, Jr., Chairperson; Leroy L. Creasy, Edwin B. Oyer

Jean Failing

March 17, 1913 – January 30, 2008

Jean Failing, former Dean of the College of Human Ecology at Cornell University, died January 30, 2008 in Ithaca. Born March 17, 1913 in Portland, Oregon, she was the oldest child of three to parents Marjorie Holcomb Failing and Edward J. Failing.

She received B.A. and M.S. degrees from the University of Oregon, and the Ph.D. degree in Counseling Psychology from Ohio State University in 1940. Before coming to Cornell, Professor Failing taught at Centralia Junior College, Washington. In 1939, Flora Rose, then Dean of Cornell's College of Home Economics, invited her to join the counseling staff as an Instructor. Martha Van Rensselaer, the founder of the New York State College of Home Economics, had retired her position as co-director with Flora Rose, but was still active in College and University communities. During her tenure at Cornell, Jean served as Chairman of the Counseling Service, as Coordinator of Resident Instruction, Associate Dean of Resident Education and then as Dean of the College from 1974-78. She retired as Emeritus Professor in 1978.

During her years at the College, Professor Failing exercised firm leadership in support of excellent undergraduate education and the recruitment of a highly qualified student body as well as helping to build a program with strong links between theory and practice. She advocated strong departments, and a multidisciplinary commitment to solving real world problems, with particular attention to non-formal education for New York State citizens. She traveled frequently throughout the State, visiting high schools and explaining the College's mission and programs to educators and families. She provided committed leadership to recruiting a diverse student body

and built the foundation for the changes the College would undertake in decades to follow.

During her tenure as Dean, she launched the College's first drive for private funds, raising \$250,000.00 for student support, teaching projects and other College needs. She led the College through the planning for the first major addition to the 1933 building: Martha Van Rensselaer Hall. The North Wing was completed in 1965.

She initiated the first traveling institutes throughout the State in cooperation with county cooperative extension associations. College faculty members presented current issues in nutrition and health, the American family, the delivery of human services, and energy and consumer policy. The objective of the institutes was to "bring the best research and knowledge on vital topics to those who need it the most, the people of New York." It was during her tenure at the College that the name was changed to Human Ecology (1969). Professor Failing helped champion the change and accepted responsibility for explaining the re-interpretation of the College's mission to alumni, educators, policy makers and citizens throughout the State and beyond.

In service beyond Cornell, Professor Failing was Chairman of the Council on Interaction, for the National Association of Land Grant Colleges and State Universities and served on several other committees at the national level. She was Chairman, Northeast Region, Home Economics Administrators, and on the Advisory Council of the National Association of Extension Home Economists. At Cornell, she chaired the Cornell Committee on Academic Records and Instruction.

During her many years as a highly effective educator and administrator, Jean Failing always maintained a personal warmth and congeniality in her daily interactions with people. She was open and sensitive to the concerns of others, whether students, faculty, staff or other colleagues. She was particularly adept at dealing calmly and effectively with complicated academic and interpersonal

issues. Her many professional, as well as personal contributions to the continuing evolution of the College will long be remembered and valued.

Lucinda Noble, Chairperson; Brenda Bricker, Henry Ricciuti

Walter Theodore Federer

August 23, 1915 – April 14, 2008

Walter Theodore Federer, or “Walt” as he was universally known, was born on August 23, 1915 in Cheyenne, Wyoming, where his parents were homesteaders. He received his B.S. degree in Agronomy from Colorado State University in 1939 and his M.S. degree in Plant Breeding in 1941 from Kansas State University. In 1948, he earned his Ph.D. degree in Mathematical Statistics from Iowa State University and accepted a position as Professor of Biological Statistics in the College of Agricultural and Life Sciences at Cornell University, where he remained for 60 years. Walt became the first faculty member and Chair of the Biometrics Unit in the Department of Plant Breeding. In 1978, he was awarded the Liberty Hyde Bailey Professor of Statistics Chair, which he held until his retirement in 1986. Walt remained active as an Emeritus Professor for 22 more years, teaching, advising, mentoring, and inspiring his junior colleagues.

Professor Federer was Secretary and Program Coordinator for the Eastern North American Region (ENAR) of the International Biometric Society from 1950-53, President-Elect of ENAR in 1959, and President in 1960. He served as Chairman and Executive Secretary of the Committee of Presidents of Statistical Societies (1965-72), Book Reviews Editor (1964-72), and Associate Editor for Biometrics (1972-76), Associate Editor for Communications in Statistics (1972-94), and Associate Editor for the Journal of Statistical Planning and Inference (1976-90). He was a member of numerous national, international, university, and government panels and boards, and he was a consultant for several international agricultural research stations.

Professor Federer was a Fellow of the American Statistical Association (1958), American Association for the Advancement of Science (1962), Royal Statistical Society (1964), and Institute of Mathematical Statistics (1967), and he was elected a Member of the International Statistical Institute (1974). He was awarded the Honor Alumnus Achievement Award (1972) and Honored Alumnus Award (2001) by Colorado State University, and the Distinguished Service in Agriculture Award (1988) by Kansas State University.

Walt was a major intellectual figure in the field of statistics. He gave us somewhere in the neighborhood of 300 published articles, an uncountable number of Biometrics Unit technical reports, and nine superb books, including his pioneering 1955 Design of Experiments, which became a major scholarly contribution and served as a day-to-day tool of statistical practice for innumerable researchers in agriculture and other fields. Walt's pearls of practical wisdom on design of experiments have become an integral part of statistical theory and practice throughout the world. His work will have continuing impact in the fields of statistics and agriculture.

Walt loved to collaborate with other researchers, getting them interested in projects he was working on and getting involved in projects that others brought to him. He took enormous pleasure in pushing back the boundaries of the unknown, and his excitement was multiplied by sharing it with collaborators. He was always ready to invite others to share his intellectual voyages of discovery, and he was always generous in giving credit to others for their role in the process.

Walt traveled the world to fulfill a calling to improve the lives of others, sometimes at great personal discomfort—doing joint research and lecturing on ways to advance modern agricultural systems by using suitably designed experiments. Walt introduced design concepts into our thinking. He was a researcher whose contributions made his field both respected and admired. He received worldwide recognition for his accomplishments from the international statistics and scientific communities.

Over and above what he gave us in statistics, Walt was a force of nature: champion bull, bareback, and saddle bronc rider; Little League baseball and ice hockey coach; ballroom-, square-, and tap-dancer; golfer, gardener, and skier; philosopher of statistics and science; agitator for fairness; loving husband, father, grandfather, and great-grandfather; and friend to hundreds, probably thousands. Walt was strongly rooted in his Christian faith and always said it was a tremendous asset to a healthy, happy, successful personal and professional life.

Walt died on April 14, 2008 at the age of 92, from complications of liver cancer. Walt is survived by his wife of 26 years, Edna Hammond Federer; and her children, Sandra Harle of Jamestown, New York, Suzanne (Thomas) McUmbert of Newark, New York, and Lynn (Lagrand) Chase of Skaneateles, New York; a brother, James (Rose) Federer of Cheyenne, Wyoming; a sister, Barbara (Harry) Epler of Cheyenne, Wyoming; 12 grandchildren; 15 great-grandchildren; and one great-great-grandchild. He was predeceased by his first wife, Lillian Vasey Federer; his son, Arthur John Federer; his brothers, John Henry Federer II, Kenneth (Tuffy) Federer, Melvin (Bud) Federer; and his sisters, Frances Federer Christensen, Ruth Federer, Lydia Federer Foster, Doris Federer Morrison, Esther Federer Thiele, and Alice Federer Pace.

Walt was a loving, compassionate man with a strong desire to give to others. He enjoyed teaching and sharing his knowledge for the betterment of his students, colleagues, family, and community. He was always ready to be a mentor when he encountered someone he could help. He was devoted to family life and he took great pleasure in playing with his grandchildren. He will be missed and remembered fondly by all who knew him.

Martin Wells, Chairperson; Steven Schwager, Shayle Searle

Douglas B. Fitchen

June 8, 1936 — February 9, 2008

After an assault by cancer over a period of several months, Douglas B. Fitchen, Professor of Physics, Emeritus, died on February 9, 2008 at his home.

Fitchen was born June 8, 1936, in New York City. Many of his earlier roots were in Ithaca, where his great-grandparents and grandparents were active members of the Ithaca community. After graduating from Harvard College in 1957, he moved to the University of Illinois in Champaign-Urbana for graduate work in physics, completing his Ph.D. degree in 1962, working with Professor David Lazarus. He came immediately to Cornell as an Assistant Professor of Physics, thus beginning a 45-year career devoted to research, teaching and departmental leadership.

Doug, as leader of an active and productive research group in the Physics Department over a period of 25 years, mentored and inspired some 30 graduate students and worked with nine post-doctoral associates and senior visitors to produce over 70 papers and conference reports. His research was recognized by the award of an A.P. Sloan Fellowship and by Fellowship in the American Physical Society. His scientific program profited from sabbatical leaves at the Clarendon Laboratory, Oxford; the Laboratory of Solid State Physics at the University of Paris-South at Orsay; the Los Alamos Laboratory; and Oregon State University.

Upon arrival at Cornell, he joined the program in the Physics Department involved with elucidating the properties of alkali halide crystals. Supported by grants from the Alfred P. Sloan Foundation, the AEC (now the DOE) and the NSF, through the Cornell Materials Science Center (now the Cornell Center for Materials Research), he

used optical absorption and emission spectroscopy to carry out extensive studies of the influence of pressure and of magnetic and electric fields on the properties of point defects (color centers and chemical impurities) in these systems. He helped develop the initial explication of the narrow features, “zero-phonon lines” as they are termed, which appeared in the low-temperature optical spectra of these defects, and then exploited them in studies that revealed the defect structures and their dynamics. The development of LASER technologies led to further studies using time-resolved photoluminescence and excited state absorption spectroscopy. Doug published an extensive review of his own and related work in 1968.

In the mid 1970s, as the research in the alkali halides matured, Doug recognized the potential for application to problems in biology of LASER techniques, including Raman spectroscopy, pulsed photoluminescence and transient absorption spectroscopy. He was a member of an ad hoc committee appointed to explore the possibilities of developing an interdisciplinary program to link Cornell programs in the physical and biological sciences and engineering. A program was subsequently established, and Doug, as member of the Biophysics Advisory Committee, joined with others from several departments in developing a number of instrumentation proposals and research projects. Supported by NIH grants and Cornell’s Materials Science Center, he engaged in Raman studies of the structure and vibrational dynamics of various biomolecules: for example, heme proteins, cytochrome-c, and chlorperoxidase. In the final years of his research program, his focus was on LASER studies of the vibrational and electronic dynamics of pure and doped electrically conducting polymers, primarily polyacetylene.

In 1977, in the midst of his personal research and teaching, Fitchen took on the chairmanship of the Physics Department, initially for a five-year term. Thus began a major leadership role for the department and the University. With interludes of department management by other colleagues, he again served as Chair in the periods 1986-91 and 1994-99. The confidence that his colleagues and University administration had in his leadership is evident.

Fitchen's long service as Chair was marked by a number of accomplishments stemming from his strong personal leadership. (1) In each of his three terms, he worked personally and continually to upgrade the quality of Physics courses, particularly those at the introductory level. (2) In the late 1970s, as the potential for major renovation of Rockefeller Hall came into view, he became a central figure in leading the departmental input to the renovation process, working effectively with architects, College of Arts and Sciences administration and Cornell buildings and properties people. The result was an academic building whose interior is visually striking and whose service to the College and the University is significantly broadened. A plaque on the ground floor of Rockefeller acknowledges Doug's great contribution, and directs the viewer to a tree, the "Fitchen tree" planted outside as a tribute. (3) A third special contribution was providing personal leadership in breaking the gender barrier in the department's professorial faculty. In the latter part of his first term as chair, he helped pave the way for appointment of Barbara H. Cooper in 1983 as the first tenure-track female member of the faculty. He also provided special support for succeeding appointments of women: Persis Drell in 1988, Ritchie Patterson in 1994, and Michelle Wang in 1998. Each has proceeded on to a tenured appointment and has made strong contributions to the department and the University.

Doug's contributions to the quality of the introductory physics courses lay in his personal teaching, as well as in support of the work of others. In the period of the early 1990s, between his final two terms as Chair, he worked with several colleagues in the redesign of Physics 207-208, a course designed to give physics background to students concentrating in other sciences, primarily chemistry and biology.

Doug's public service to the physics community also extended to the national scene. In the wake of the "opening" of the People's Republic of China, a special national program to connect promising Chinese physics students to physics graduate programs in the United States was established. The so-called CUSPEA ("China-U.S.

Physics Examination and Application”) program ran from 1981-89. Doug and his wife, Janet (an anthropology faculty member at Ithaca College at the time), served in three summers as one of several teams that went to China to interview Chinese student applicants to the program. The idea was to ascertain their overall level of preparation for graduate work in physics in the U.S. as well as their competence in use of the English language. The program brought a number of talented Chinese students to Cornell during the 1980s.

Many of his extracurricular activities centered around enjoyment of the outdoors, with activities such as hiking and cross-country skiing, as well as amateur study of nature’s flora and fauna. The Fitchen family enjoyed and shared with others the wooded land they purchased in 1975, located in the Town of Caroline. They have maintained the land in its undeveloped state, in early resonance with twenty-first century concerns about taking care of Mother Earth.

While in graduate school in Urbana, Doug and Janet Mathews were married. They raised their three children in Ithaca after their arrival in 1962. Janet taught anthropology for many years at Ithaca College, concentrating her studies on the world of rural poverty in New York State and the wider U.S. She authored a 1991 monograph drawn from these studies, Endangered Spaces, Enduring Places. At the time of her untimely death from cancer in 1995, she had been appointed Chair of the Department of Anthropology at Ithaca College and soon thereafter as a member of the faculty of Cornell’s Department of Rural Sociology (now Development Sociology). Doug and Janet’s sister, Nancy, were married soon after Janet’s death; unhappily Nancy was also a victim of cancer in 2000. In 2002, Doug and Karen Brazell, now Professor Emeritus of Japanese Literature and Theatre, were married. They enjoyed travels, and life with their greatly extended family until Doug’s death.

He is survived by his children, John Fitchen of Portland, Maine; Katherine Nisbet and son, Stephen, of Bozeman, Montana; and Sylvia Fitchen of Tucson, Arizona.

Robert H. Silsbee, Chairperson; Neil W. Ashcroft, Donald F. Holcomb

Audrey Jane Gibson

October 5, 1924 – June 10, 2008

Professor Audrey Jane Gibson was born in Paris, France on October 5, 1924, and grew up in Devon, England, and Switzerland. She attended the Maynard School in Exeter, England and was then a scholar at Newnham College, University of Cambridge, England, from which she graduated in 1946 with a first class honors degree in Biochemistry. She obtained her Ph.D. degree in 1949 at the Lister Institute, University of London, England, under the supervision of Dr. D. Herbert, where she was the first to discover a specific role for selenium in bacterial growth, revealing that it was required in *E. coli*, along with molybdenum, for the formation of formate dehydrogenase.

Jane was awarded a Commonwealth Fund Fellowship to study with C.B. Van Niel at the Marine Biological Laboratory, Pacific Grove, California, where she became interested in photosynthetic organisms. After two years in California, Jane returned to England to Sidney Elsdon's laboratory at the University of Sheffield where she isolated and characterized c-type cytochromes from green sulfur photosynthetic bacteria. In Sheffield, she met and married Quentin H. Gibson, and after the birth of their four children she worked part-time.

In 1963, Jane and Quentin Gibson moved to the University of Pennsylvania, where she was appointed an Assistant Professor of Microbiology and Physical Biochemistry. In 1966, Jane and Quentin moved to Cornell University, where they both remained until their retirement in 1996.

At Cornell, Jane was initially appointed in the Section of Microbiology, being promoted to Associate Professor in 1970, and serving as Acting Chairman from 1968-72. Upon dissolution of the Section of Microbiology in 1972, Jane was appointed in the Section of Biochemistry, Molecular and Cell Biology, and then promoted to full Professor in 1979.

Jane's scientific interests were centered on green photosynthetic bacteria, in particular the transport and utilization of ammonia and of small organic compounds. She was very proud of her isolation and description of *Chloroherpeton thalassium*, a flexing and gliding green sulfur bacterium isolated from marine sediments near Woods Hole, Massachusetts. Later in her career, Jane used the purple nonsulfur phototroph *Rhodospseudomonas palustris* to investigate anaerobic benzene ring degradation, a process important for the breakdown of hydrocarbon pollutants. She also studied the growth physiology of cyanobacteria and was a co-author on a paper with Carl Woese showing that many common Gram-negative bacteria like *E. coli* are evolutionarily related to purple photosynthetic bacteria. As this short description implies, Jane was a master at the culture of these difficult organisms.

At Cornell, Jane's commitment to teaching was legendary. Starting in 1975, she played a central role in the teaching of cell biology. In addition to contributing initially to teaching an upper level cell biology lecture course, Jane taught a very popular Laboratory in Cell Biology every year from 1975-96, except during sabbatical leaves. The effort she put into this spring course was phenomenal—rather than using the same set of lab experiments year after year, she developed a large new component each year. Moreover, after selecting new experiments in the fall, she would test all of them herself before incorporating them into the course. During this period, one of us (AB) remembers her coming each fall seeking suggestions for new projects. One year we had just described a simple purification of a contractile protein from smooth muscle. The lab course the following spring revolved around purifying the protein, making antibodies to that protein, and then localizing it by

immunofluorescence microscopy in smooth muscle cells—a wonderful exercise for the students and a remarkable achievement for any teacher! It is not surprising that Jane’s faculty colleagues, students and staff came together to nominate her for the Edith Edgerton Career Teaching Award, which she received in 1994. Among the comments in letters in support of this award is a common thread—as one student wrote:

“No other professor that I have ever had has taken such great pains to make sure that his or her students actually *know* and *understand* the course material. There was always one thing that I was sure I wanted to do with my life: teach. Now, with my convictions even stronger to go into education, I find myself with a perfect model of how to teach. Dr. Gibson has served above and beyond the role of professor.”

As a consequence of her devotion to teaching, Jane happily chaired the department’s curriculum committee for about ten years.

In addition to teaching at Cornell, Jane was an Instructor in the summer Microbial Ecology Course at Woods Hole from 1974-77, and again in 1980. Jane also served on the Editorial Board of The Journal of Bacteriology from 1983-91, and as Editor of Applied and Environmental Microbiology from 1989-95. Even in “retirement,” she continued as a Visiting Scientist in others’ laboratories, especially in Carrie Harwood’s laboratory at Cornell, then at the Universities of Iowa and Washington, and most recently in Deborah Hogan’s laboratory at Dartmouth. At the time of her death, she had a paper submitted to Applied and Environmental Microbiology that has subsequently been accepted for publication.

Jane was always very independent and full of energy, not only for her students and teaching, but also for almost any aspect of life. As examples, she was an avid gardener, she walked the two miles from the Gibson house on Dodge Road to her laboratory every day, rain, snow or shine, and she was adept at working on her car. Jane was devoted to her family. Her husband of 57 years, three children and

six grandchildren survive her. To the many faculty, students and staff who were fortunate enough to know Jane, she was an inspiration.

Anthony Bretscher, Chairperson; James Blankenship, Volker Vogt

George Lawrence Good

December 14, 1940 – December 24, 2007

George Lawrence Good, Professor of Ornamental Horticulture and authority on nursery crop, landscape, and pesticide management in the College of Agriculture and Life Sciences (CALs), died unexpectedly at home the morning of December 24, 2007. He was universally liked and respected, and will especially be remembered for his knowledge, compassion, integrity, humility, enthusiasm, and humor.

He was born on December 14, 1940, to George and Florence Good of Cincinnati, Ohio. After the untimely death of his father, his mother married William Sparrow, who helped raise him and whom George greatly respected. He received his elementary and secondary education in Cincinnati, and during the summers from 1958-62, was employed by John P. Shay Landscape Company, an experience that fueled his life-long interest in landscape plants.

In fall 1959, he enrolled at Ohio State University, majoring in ornamental horticulture. Among the faculty members who influenced his career were Professors L.C. Chadwick, D.C. Kiplinger, as well as Robert O. Miller who encouraged his entry into graduate studies at Cornell University. Graduate study began in fall 1963, under the direction of Professor Harold B. Tukey, Jr. George studied leaching of nutrients from plants by mists of water applied during rooting of cuttings, a component of crop nutrient management. He received his Master of Science degree in 1965 and Doctorate in 1968. George fondly remembered his graduate experience, relating stories involving Professors F.C. Stewart, David W. Bierhorst, Robert E. Lee, A.M.S. Pridham, and others, and activities with colleagues, including bowling, softball, and fishing.

It was during graduate studies that he met department employee, Carolyn McFall. They married in 1965, and raised two children, Matthew and Jennifer. George greatly enjoyed his family and in recent years his grandchildren, living in the country, reading, learning about historic events, fishing, hunting, gardening, barbecuing, spending time with his Brittany Spaniels, Lacey and Buster, and baking his wonderful bread.

In 1968, he was invited to join the Cornell faculty in the Department of Floriculture and Ornamental Horticulture launching a research and education career related to production and management of landscape plants. He rose to Associate Professor in 1974 and Professor in 1980. Early collaboration with colleague, Professor Peter Steponkus, and graduate students, led to pioneering studies of woody plant root hardiness, demonstrating that roots often are less cold tolerant than shoots, and revolutionizing methods of over-wintering container nursery stock in northern climates.

George worked tirelessly on behalf of the state nursery, landscape, and arboriculture professions, and the Cornell Cooperative Extension field staff enormously valued his knowledge, wisdom, and mentorship. His outreach in ornamental horticulture extended to weed and fertilizer management practices as well as organizing training for safer application of pesticides. He also collaborated with public sector horticulturists to further sound horticultural practices in state, municipal, and educational institution plantings, including Cornell Plantations.

At the national level, he served as state liaison to the federal government's interregional research program, member of the oversight committee of the rhododendron-breeding program at Holden Arboretum, Mentor, Ohio, and pesticide coordinator for CALS with the American Association of Pesticide Education. Within the state, he was member of the Plant Industry Advisory Board of the New York State (NYS) Department of Agriculture and Markets, and committee chair for many years of the NYS Gold Medal of Horticulture, an annual award presented jointly by the

NYS Nursery and Landscape Association and NYS Department of Agriculture and Markets. He was a member of the Board of Directors of Preferred Commerce, Inc.

During his academic career, George served at the University level on the Physical Education Committee and as department representative to the University Senate. Within CALS, he served on the Academic Achievement and Petitions Committee, Extension Scholarship Committee, Cornell Integrated Pest Management (IPM) Operating Committee, Ornamentals IPM Committee, eight ad hoc Promotion to Tenure or Full Professor Committees, CALS Policy Committee, and the Plant Science Curriculum Committee. He was Department Extension Leader for many years, CALS Nursery/Landscape Industry Program Leader through most of his career, and a member of the Horticulture Teaching Committee.

His courses in Nursery Management and Landscape Management were well subscribed for the depth of conceptual insights and practical experience gained as well as for the many stories George told. Described by one student, the courses were “extremely informative, practically oriented, relaxed, personal, and definitely the best and most fun of those I have taken at Cornell.”

He served as faculty advisor to the undergraduate Hortus Forum from 1997-2005, faithfully attending meetings and helping to plan study tours, often serving as tour leader. From 2001-05, he was advisor to the Alpha Chapter of the honorary floriculture/ornamental horticulture society, Pi Alpha Xi. He identified qualified undergraduate and graduate students each year, invited each to membership, and read insightful excerpts from the minutes of the society, from as early as 1923, at the annual student recognition ceremony.

During his career, George advised hundreds of undergraduate students, and served on the committees of 22 graduate students, for whom he was major professor for 14. He was a constant source of wisdom and nurture to faculty members.

He served as Acting Chair of the Department of Floriculture and Ornamental Horticulture for six months in 1980-81, and from 1988-97, chaired the unit, skillfully guiding it with sensitivity, humor, and insight through an exceptionally difficult period of shrinkage of public funding and downsizing.

George authored more than 34 scientific publications, 20 scientific meeting presentations, and 38 extension/public service bulletins, crop profiles, and other publications. Throughout his career, he edited the Production and Maintenance of Trees and Shrubs portion of the annually produced CALS Cornell Pest Management Guidelines series. He was a respected and sought after speaker at industry-related workshops and seminars.

After relinquishing department chair responsibilities, he took his only sabbatical leave. While on leave, he was asked by the College of Agriculture and Life Sciences, to, when he returned, assume the role of Director of the Cornell Pesticide Management Education Program, which he did with distinction in a half-time capacity from 1998-2005. During this period, he also collaborated with Richard Weir, retired Cornell Cooperative Extension educator from Long Island, to teach his Nursery Management and Landscape Management courses and to rewrite Cornell Information Bulletins for the nursery and landscape professions.

George was active in professional societies: American Society for Horticultural Science, International Plant Propagators' Society, International Society of Arboriculture, and American Association of Pesticide Safety Educators, as well as honorary societies: Sigma Xi, Gamma Sigma Delta, and Pi Alpha Xi.

He retired December 2005 and was appointed Professor Emeritus, teaching his course in Nursery Management for the last time during the fall semester of that year. He also continued to be involved with some research and Cornell Cooperative Extension activities. At the time of his death, he was actively collaborating with Professor Leslie Weston to develop management strategies for difficult to

control broadleaf perennial weeds in nurseries and Christmas tree farms, a NYS Farm Viability Program funded initiative.

Among many recognitions and awards he received were:

- 1977 - Award of Merit of the NYS Arborists' Association; Award of Merit of the NYS Nurseryman's Association
- 1978 - NYS Nurseryman's Association Hall of Fame Award
- 1979-1980 - Ho Nun De Kah (CALs student honorary society) Professor of Merit, chosen by the 1980 senior class
- 1984 - American Society for Horticultural Science's Nursery Extension Award in appreciation for dedicated service to the nursery industry
- 1985 - American Association of Nurserymen's Norman J. Coleman award for achievements in horticultural research
- 1989 - Certificate of Appreciation by the Eastern Region of American Association of Nurserymen
- 1993 - Senior Scholar Award by the NYS Arborists' Association
- 1995 - Hortus Forum planted and dedicated in George's honor one of his favorite trees, a scarlet oak, on the east lawn of Risley Hall
- 1997 - NYS Gold Medal of Horticulture Award; received a Cornell chair from the NYS Turfgrass Association during their summer field day;
- 2000 - Arborist of the Year Award of the NYS chapter of the International Society of Arboriculture
- 2001 - Outstanding Alumnus of the College of Agriculture and Natural Resources at The Ohio State University
- 2005 - Friend of the Green Industry by the NYS Turfgrass Association; the Environmental Award and Friend of the Industry Award from the Nassau/Suffolk Landscape Gardener's Association; Hortus Forum planted and dedicated in George's honor another of his favorite trees, a red oak, on the north lawn of Roberts Hall.

- 2008 - posthumously, the Department of Horticulture dedicated a grove of selected compact oak trees near the Plant Science Building in his memory; through a gift from the NYS Arborists' Association, a red oak was planted in George's memory near the top of Newman Meadow at Cornell Plantations; Cornell's Long Island Horticultural Research and Education Center staff planted a paper bark maple at its annual industry field day, remembering George as a beloved teacher, listener, researcher, and friend of the Long Island ornamentals industry; the NYS Nursery and Landscape Association honored him with the planting of a golden chain tree at the entrance of Cornell's Plant Science Building; and the annual NYS Gold Medal of Horticulture Award, established in 1982, was renamed the George L. Good Gold Medal of Horticulture.

Nursery and landscape practitioners have summarized best the stabilizing and nurturing influence of George Good on the profession. Early in George's career, George Schichtel, nurseryman, industry leader, and 1978 NYS Nursery Association Awards Committee chairman, at the NYS Hall of Fame Award presentation noted, "George Good is a concerned, cooperative, and productive person, and he does it all with enthusiasm and a smile." Posthumously, in 2008, Thomas Corell, a leader in the landscape professions, commented,

"George listened, put things in perspective, analyzed the situation and supplied thoughtful, considered responses. His humanness and consideration were always in the forefront in his relationships with his industry contacts. He talked to people with respect for them and the work they do. They felt they had a friend at Cornell and a connection to the college through the professor at Cornell University with whom they could talk."

*A song to the oak, the brave old oak,
Who hath ruled in the greenwood long!
Then here's to the oak, the brave old oak,
Who stands in his pride alone!
And still flourish he, a hale green tree,
When a hundred years are gone!*

Henry Fothergill Chorley, from "The Brave Old Oak"

Thomas C. Weiler, Chairperson; Carl F. Gortzig, Joann Gruttadaurio

Francine April Herman

March 1, 1921 – May 18, 2008

Those at Cornell University who knew Francine April Herman remember her passion for teaching and her strong sense of social responsibility. Growing up in New York City during the 1930s, Fran developed a commitment to social and labor causes and was an early advocate for women's rights. A story is told that, while still in high school, Fran was invited to a luncheon at the White House. Walking up to the entrance, she encountered President Franklin Delano Roosevelt who was on his way to a meeting. Anxious to put the young girl at ease, Roosevelt remarked, "Oh, so you're going to have lunch at my house—tell them I said they're to treat you well!" From then on, Francine April Herman was hooked on politics, a topic to which she devoted much of her energy throughout the following years.

Fran attended Hunter College, located in the center of Manhattan and one of the oldest public universities. Its strong public service mission fit well with Fran's evolving interest in the welfare of employees and employee rights. She had also fine-tuned her writing skills, focusing primarily on advertising. This background ultimately led to a contract with Rothschild's Department Store in Ithaca, New York. Fran immediately fell in love with the quirky little town and decided to make it her home. In 1953, she married Louis Herman.

Ithaca provided opportunities for Fran to become heavily involved in communication and the performing arts. She began a program of essays on WHCU, Ithaca's radio station, called "A View from the Kitchen Window." Fran was also instrumental in creating The Green Room Circle, an Ithaca summer theater company. Her love of theater regularly took her to Stratford, Ontario, where she enjoyed

the Shakespeare Festival. During this time, she was able to travel, visiting Italy and the Middle East.

Her husband of 11 years, Lou, died in 1964. A few years later, Fran decided to return to school. Because of her life experiences, she was provisionally accepted into the Industrial and Labor Relations School at Cornell University. She quickly embraced academic life, and by 1967, was teaching in the Industrial and Labor Relations Extension Program. Fran received her Master's of Science degree from Cornell in 1973. Her specialty was labor relations with emphasis on communication. In 1973, she joined the faculty in Cornell's School of Hotel Administration where she applied her interdisciplinary background to courses in human resources management, labor relations, and management communication. Fran had a significant impact on the Hotel and the hundreds of students she taught. She quickly realized that it was essential for future hospitality leaders to be able to clearly communicate complicated analyses and ideas to a variety of constituencies. What evolved from Fran's efforts were a two-course curriculum in management communication and a new disciplinary area in the Hotel School.

Fran loved interacting with her students, especially her teaching assistants whom she mentored enthusiastically. She treated them as budding professionals but also showed concern for their emotional and personal lives so that they would thrive when they stepped out into the world beyond Cornell. Her colleagues at the Hotel School recall the hours she spent with her students discussing controversial issues of the day—particularly those related to labor relations. When it came to her students, Fran had a tireless energy that was often contagious.

Fran orchestrated great parties, always inviting a mix of people drawn from the diverse facets of her own life. She included graduate students as well as faculty. She crossed the borders of many segments of the university and often included members of the

local community. Her friendships were wide ranging. The conversations at her parties were rarely superficial: major political and social issues of the day were discussed and debated. One always left her home knowing that Fran had orchestrated more than a simple social gathering.

Fran Herman worked closely with the New York City Hotel and Restaurant Workers' Labor Union. She researched the types of grievances filed and how they were negotiated and settled. Fran provided good insights about the way that people within the hospitality industry—whether they are entry-level housekeepers or top-level executives—can work together to ensure social justice for all. The net result, she believed, would be a humane workplace and a genuinely successful hospitality industry.

Throughout her career, Francine Herman continued to apply her talents to the political arena. During President Jimmy Carter's administration, Fran was appointed a mediator for the U.S. Department of Labor. She was also a mediator and fact-finder for the New York State Public Employment Relations Board from 1973-91. Fran mediated union negotiations in many public school districts, thus contributing to education in yet another important way. She served as a member of Cornell's Advisory Committee on the Status of Women and was Secretary of the University Faculty. Fran strongly supported and worked tirelessly on behalf of the "Cornell 11," a group of women faculty who sued the university for sex discrimination. In 1979, Fran created an endowment, the Mildred April Scholarship Fund of the College of Arts and Sciences at Cornell, in honor of her mother. The endowment supports undergraduate financial needs.

Fran had friends and former students living all over the world. She visited them in Europe and Australia and spent a term teaching in Paris, one of her favorite cities. For many years, Fran's role model and best friend was Alice Cook, an ILR professor who was the University's Ombudsman and co-founder of the Women's Studies Program. Fran fondly recalled a time in Japan when Alice Cook and

she were being honored at a country inn by former students. The meal included the swallowing of live goldfish. “...The hard part was getting them down without chewing, and having the strangest tickling sensation in your stomach,” she said in describing it. Following Alice’s death in 1998, Fran was instrumental in establishing a chaired professorship in her honor and was, in turn, honored in 2007 with the Alice Cook Recognition Award. This award is bestowed upon individuals “...who have significantly contributed to women’s issues, changing the climate for women at Cornell University.”

In 1989, Fran retired from Cornell as Professor Emerita. She died at the age of 87 on May 18 at the Hospicare Residence in Ithaca. Fran Herman appreciated the manifold dimensions of both issues and friendships. Throughout her life, Fran kept her sense of humor and her love of good friends and good scotch. She never stopped fighting for what she knew to be important—a fair shake for all.

Born in New York City on March 1, 1921, Francine Herman was the daughter of Abe and Mildred April. She was predeceased by her father, mother, brother, and husband, Louis Herman, who died in 1964. She is survived by her stepson, Dr. Paul Herman and daughter-in-law, Polly Herman, four grandchildren, Dr. Peter Herman, Anne Herman and Louisa Herman, all of Portland, Oregon, and Dr. Edwin Herman, his wife, Laura Herman-Schultz, and one great-grandchild, Lily Herman, all of Stevens Point, Wisconsin. Many thanks to Dr. Paul Herman for his assistance in creating this memorial statement.

Judith Brownell, Chairperson; Florence Berger, Daphne Jameson

George H. Hildebrand

July 7, 1913 – May 18, 2007

George H. Hildebrand, the Maxwell M. Upson Professor of Economics and Industrial and Labor Relations, died in Walnut Creek, California, on May 18, 2007 at the age of 93. He is survived by his second wife, Florabelle Hildebrand, to whom he had been married for 24 years, and his three sons. His first wife, Margaret, died in 1982.

George received his B.A. degree in Economics from UC-Berkley in 1935, his M.A. degree in Economics from Harvard in 1941, and his Ph.D. degree in Economics from Cornell in 1942. After service in the military during World War II, he began his academic career as an Assistant Professor of Economics at UCLA in 1947 and rose through the ranks to full Professor in 1954. In 1960, he returned to Cornell as a Professor of Economics and Industrial Relations and in 1970, he was elected the Maxwell M. Upson Professor of Economics and Industrial and Labor Relations. In 1977, he was elected the founding director of Cornell's Center for the Study of the American Political Economy—a position that he held until his retirement in 1980. His retirement came after the then-mandatory retirement age of 65; his professional stature led the university to voluntarily agree to extend his tenured appointment beyond the mandatory retirement age.

Few scholars can match Hildebrand's academic and professional contributions. His academic writings were numerous and spanned a wide variety of areas in labor economics and collective bargaining, including the effects of tax policies on unemployment and inflation, industrial relations in European nations, bargaining structure and power, impasse resolution, wage differentials, and collective bargaining and antitrust law. Although trained as an institutional

labor economist, Hildebrand understood the growing importance of econometrically-based empirical research in economics; in 1965, along with his colleague in the Economics Department, T.C. Liu, he authored an important book, Manufacturing Production Functions in the United States, 1957: An Interindustry and Interstate Comparison of Productivity.

George regularly applied his professional expertise to help solve real-world problems in his field. He was a noted arbitrator and mediator in both public and private sector labor relations disputes and had a special interest in labor relations issues in the mining industry throughout his career. He was a member of the prestigious National Academy of Arbitrators and a member of its arbitration panel and the arbitration panels of the Federal Mediation and Conciliation Services and the New York State Public Employee Relations Board. From 1969-71, he served as Deputy Undersecretary of the U.S Department of Labor, and during this period, he was the U.S representative to the International Labor Organization. Given his academic accomplishments and these professional contributions, it is not surprising that he was elected President of the Industrial Relations Research Association when he returned to Cornell in 1971.

Those of us who were fortunate enough to know George learned many important lessons from him. His effectiveness as a mediator and arbitrator was at least partially due to his extraordinary ability to keep things told to him in complete confidence. The parties to labor disputes that he was helping to resolve knew that nothing that they told him would be divulged to the other party unless he received explicit permission from them to do so. His academic stature at Cornell and the widespread knowledge of his ability to keep confidences undoubtedly were important factors in his selection to be the first faculty member to be a member of a Presidential Search Committee at Cornell; in 1976-77, he served on the committee that recommended the appointment of Frank H.T. Rhodes to be Cornell's 9th President. Those of us on the committee writing this obituary

tried to emulate George's discretion while we served as administrators at Cornell.

George also had an uncanny ability to see the positive in difficult situations—another attribute of a skilled mediator (at a more mundane level, he once told one of us that he loved it when it snowed in Ithaca because the snow was such a welcome contrast to Ithaca's predominant gray skies in winter). The importance of trying to make the best out of every circumstance set an important example for his younger colleagues, both as they coped with difficult administrative decisions and as they faced adversity in their personal lives.

Finally, two years before he was planning to retire, George came to one of us (who was then the chair of his department) and said that he no longer was going to vote on new appointment and tenure decisions. He said that this did not mean that he approved of the decisions that his younger colleagues were making; often he did not. But, he went on, we were the ones who would have to live with these decisions for decades, and so we should be the ones making the decisions. As a large number of his former colleagues in economics and industrial and labor relations are now nearing their own retirement ages, and the number of new faculty hiring and tenure decisions their departments must make is increasing, we wonder if those of us now nearing retirement will be able to be as magnanimous in ceding decisions to our younger colleagues as George was.

Ronald G. Ehrenberg, Chairperson; David Lipsky, Robert Stewart Smith

Robert B. Jones

January 31, 1920 – November 23, 2007

Robert B. Jones, Professor Emeritus of Linguistics and Asian Studies, passed away November 23, 2007 in the Lakeside Nursing home, Ithaca. RB, as he was known to all, was born January 31, 1920, in Dallas, Texas. He began undergraduate study in music, studying organ under Dora Poteet Barclay at Southern Methodist University. RB became an accomplished organist, and played organ regularly until shortly before his death. His studies were interrupted in 1941, when war broke out. RB joined the U.S. Army, where he was chosen for language training in Japanese. It was this training that stimulated his interest in linguistics. Following Army service, RB resumed his studies at the University of California, Berkeley, where he graduated in 1947. He continued on for post-graduate studies at Berkeley and completed his Ph.D. degree in Linguistics in 1958 under the renowned specialist in Thai and Amerindian linguistics, Mary Haas. His Ph.D. dissertation was a descriptive and historical study of the major languages in the Karen language family (Sgaw, Pho, and Pa'o), spoken in Burma and Thailand. RB revised and expanded the dissertation after a year of fieldwork in Burma funded by the Ford Foundation in 1957-58. The resulting study was published in the University of California linguistic series as Karen Linguistic Studies. This monograph is among the most thoroughgoing studies of any Tibeto-Burman language and is still the most authoritative single-volume study of the Karen family. In addition to extensive texts, and an in-depth analysis of the phonology, morphology, and syntax of Sgaw, it contains phonological sketches of Pho, Pa'o, and Palaychi and a reconstruction and glossary of Proto-Karen based on a comparison of the phonology of those four dialects.

After leaving Berkeley, RB taught briefly at Georgetown University and in the Foreign Service Institute of the State Department. In 1955, he joined the faculty of the then Division of Modern Languages of Cornell University and was given charge of all the language programs dealing with mainland Southeast Asia as well as Japanese. At the same time, he took part in the development of the Field of Linguistics and in the Southeast Asian Studies program. He taught courses and mentored students in both of these areas. RB taught Vietnamese, Thai, Burmese, as well as Japanese and linguistics courses. This unusually heavy teaching load was reduced somewhat after the first couple of years, when a Japanese teacher was hired, and then again in 1970, when the Department of Modern Languages and Linguistics was authorized to hire a professor of Vietnamese studies. RB remained in charge of Burmese and Thai and continued teaching linguistics and area studies courses until his retirement in 1986. He served as Graduate Field Representative in Linguistics for several years prior to his retirement.

Developing Asian language programs during RB's early days at Cornell meant creating pedagogical materials, for little was available for use in the classroom for Asian languages. RB created and published materials for learning beginning Vietnamese and advanced Thai and for the Burmese and Japanese writing systems. His primary academic interest was historical linguistics, and his teaching covered all of the major language groups in mainland Southeast Asia. He published a seminal article on the historical phonology of the Tai languages, and as noted above, Karen Linguistic Studies, the published version of his Ph.D. dissertation, is a keystone of modern Tibeto-Burman historical linguistics. RB was highly respected by colleagues in his areas of expertise, and he was invited to serve as a consultant to the National Science Foundation, the Defense Language Institute, the Ford Foundation, the Library of Congress, the Encyclopedia Britannica, the Department of Health Education and Welfare, and the Center for Applied Linguistics. An extensive collection of RB's unpublished papers on Southeast Asian linguistics and other topics are catalogued in the Cornell University Library Rare Manuscript Collection. A partial bibliography of RB's

writings on Tibeto-Burman follows at the end of this memorial. An important manuscript on Old Burmese was incomplete at the time of RB's death.

RB's social life revolved around music and the church. Upon arriving in Ithaca in 1955, RB joined the choir of St John's Episcopal Church, where he met the choir director and organist, A. Richard Strauss, who became his life-long companion. Several years thereafter, RB and Richard bought a house together on Glenside Road, where Richard established an organ-building business and built a succession of organs for RB, as well as a harpsichord. RB played both instruments regularly. There they entertained their wide circle of friends with music and RB's gourmet cooking. RB was also an avid gardener and established an exquisite garden, ringed with rhododendrons, in the woodsy setting of Glenside. Inside the house, RB had established a solarium filled with orchids and other gorgeous blooming plants, where his several cats (he once had as many as five) loved to nap.

RB's faithful companion, A. Richard Strauss, cared for him in the last months of his life.

R.B. Jones's publications on Tibeto-Burman

1. Jones, Robert B., Jr. 1961. Karen Linguistic Studies: Description, comparison, and texts (UC Cal pub in ling 25). Berkeley and Los Angeles: UC Press.
2. Jones, Robert B. 1972. Sketch of Burmese dialects. Studies in linguistics in honor of George L. Trager (Janua Linguarum, Ser. Maior, 52), ed. by M. Estellie Smith, 413-22. The Hague, Mouton.
3. Jones, Robert B. 1974. Rev. of Okell, A reference grammar of colloquial Burmese. Language 50. 1: 205-7.
4. Jones, Robert B. 1975. Rev. of Roop, An introduction to the Burmese writing system. Journal of Asian Studies 32. 1: 205-6.

5. Jones, Robert B. 1975. The question of Karen linguistic affiliation. 8th International Sino-Tibetan Language and Linguistics.
6. Jones, Robert B. 1976. Prolegomena to a phonology of Old Burmese. Southeast Asian history and historiography: essays presented to D.G.E. Hall, ed. by C.D. Cowan, and O.W. Walters, 43-50. Ithaca, NY, Cornell U. Press.
7. Jones, Robert B. 1986. Pitch Register Languages. Contributions to Sino-Tibetan Studies ed. by John McCoy & Timothy Light, 135-143. Leiden: Brill.
8. Jones, Robert B. 1988. Proto-Burmese as a test of reconstruction. Rhetorica, Phonological syntactica, ed. by Duncan-Rose and Vennemann, 203-211.

John U. Wolff, Chairperson; Richard L. Leed, John B. Whitman

Samuel Leeson Leonard

November 26, 1905 – November 11, 2007

Samuel Leeson Leonard, zoologist, passed away on November 11, 2007 at the age of 101. His research had a major impact on our understanding of reproductive endocrinology and contributed to the development of in vitro fertilization and hormonally based contraception. Dr. Leonard was born in Elizabeth, New Jersey and graduated from Rutgers University. He earned his doctorate in Zoology from the University of Wisconsin in 1931. He joined the Cornell Faculty in 1941 as an Associate Professor after teaching at Union College and Rutgers. In 1949, he was promoted to full Professor and retired in the 1970s. After his retirement, he was a regular visitor to campus as an Emeritus faculty member.

As a doctoral student at the University of Wisconsin, Dr. Leonard made the pioneering discovery that the pituitary gland produces two distinct hormones rather than a single hormone as had been previously thought. The new hormones were named follicle stimulating hormone (FSH), and luteinizing hormone (LH). These hormones function to stimulate ovaries and testes to produce sex hormones such as estrogen, progesterone, and testosterone, and thus are important for fertility. Dr. Leonard's discovery ultimately led to the use of FSH and/or LH to increase egg production in cattle, and later as an important element of infertility treatments in people.

In the 1930s, Dr. Leonard carried out a series of experiments to investigate the function of estrogen in rats and rabbits, discovering that applications of estrogen could prevent ovulation. This early finding laid the groundwork for use of hormone treatments as effective contraceptives.

Dr. Leonard's work also provided important insight into the role of hormones in behavior. In 1939, he showed that although female canaries normally do not sing, they could be induced to sing if treated with the male sex hormone, testosterone, while they matured. This discovery highlighted the direct role that hormones could have in promoting secondary sexual characteristics.

Dr. Leonard took to heart the teaching and mentoring of graduate students and of the ~9000 undergraduates to whom he lectured in zoology. Throughout his long life, he remained in contact with his former mentees, staying current with their work and taking great pride in their accomplishments.

Dr. Leonard was predeceased by his wife, Olive, and by their son David Leonard. He is survived by his daughter, Patricia Hoard, by four grandchildren, and by one great-grandchild.

Kenneth Kempfues, Chairperson; Ross MacIntyre, Mariana Wolfner

Bertha (Betty) Ann Lewis

October 21, 1927 – April 17, 2008

Bertha (Betty) Ann Lewis, M.S., Ph.D., died at the Truman Senior Living Center in Truman, Minnesota on Thursday, April 17, 2008 at the age of 80.

Betty was a native of Minnesota; born in Watonwan County and raised in rural Lewisville. Following graduation from Truman High School, she matriculated at the University of Minnesota where she earned a Bachelor's degree in Chemistry in 1949, a Master's of Science degree in Chemistry in 1954 and a Doctorate of Philosophy degree in Chemistry in 1957. Following the conferral of her Ph.D. degree, she continued to develop her academic career at the University of Minnesota as a teacher and research scientist, and developed what became a life-long interest in food carbohydrates. During this time, she also instructed a course in mortuary science at the College of St. Catherine's.

Betty was recruited to Cornell University, Ithaca, New York in 1967 as an Associate Professor in the Department of Textiles and Clothing/Design & Environmental Analysis. On February 01, 1970, she was jointly appointed as Associate Professor of Human Nutrition and Food. She was granted tenure in 1973 and the following year appointed Associate Dean for Research and Graduate Education in the College of Human Ecology and as Assistant Director of the Cornell University Agriculture Experiment Station. Her official appointment was transferred to the Division of Nutritional Sciences on July 11, 1980 until her retirement on July 16, 2006.

Betty was a highly active faculty member and distinguished scholar who contributed to the teaching, research and extension missions of the University. The undergraduate students best knew Betty for her instruction of NS345, Nutritional and Physiochemical Aspects of Food, which is a required course for all nutritional sciences majors. She also co-instructed FS/NS 620, Food Carbohydrates, a graduate level course with Professor John Brady in the Food Science Department. Among her contributions to Cornell Cooperative Extension, she authored a chapter on complex carbohydrates and fiber to the Cornell Extension Handbook, Take Charge of Your Health, in 1989. Betty enthusiastically served the graduate field of nutrition as Director of Graduate Studies for the Graduate Field of Nutrition and was awarded a National Needs Graduate Fellowship Program from the United States Department of Agriculture.

Betty's research and teaching activities focused on food biochemistry and the chemistry of food components, with applications to health, nutrition and food preparation and processing. In 2002, she was named to ISI's list of *Highly Cited* scientists in the Agricultural Sciences, an honor accorded to less than 0.5% of publishing researchers. She was among the first scientists to do research on dietary fiber and one of the few women scientists nationally working in the field of polymer chemistry. Betty was an inventive and innovative scientist with interests in both original research and advancing the development of new methodologies. Her research program generated over 50 peer-reviewed publications. Her 1991 publication entitled "Methods for dietary fiber, neutral fiber and nonstarch polysaccharides in relation to animal nutrition" has received over 3,300 citations since its publication, with 483 citations in 2008. Her research findings led to a better understanding of the role of complex carbohydrates to the quality of food as well as their physiological roles in health and disease. Later in her career, she developed an interest in food photochemicals including antioxidants and the relationship between their biological and health-promoting function and their chemical structure. Throughout her career, she served on several committees of the American Chemical Society, was national president of Sigma Delta

Epsilon-graduate Women in Science and was an active member of the Institute of Food Science and Technology.

Betty loved the outdoors and traveled to national parks, was an avid bird watcher, and established and hiked the trails of the Finger Lakes region.

She moved back to Minnesota in 2006 following her retirement from Cornell University to be with her extended family. Her modest manner, well-developed sense of humor, and wise counsel are missed by her many friends in Ithaca.

Patrick Stover, Chairperson; Patsy Brannon, Thomas Brenna

Duncan MacIntyre

June 2, 1915 – July 24, 2007

Duncan MacIntyre was among the early faculty of the School of Industrial and Labor Relations. His Cornell appointment in 1950 was a natural fit for a teacher and scholar whose interest in social welfare was deep. Duncan's interest in that field could be seen as occupational inheritance. His father served for many years as Commissioner of Public Welfare in Madison County, New York. Duncan often liked to bemuse inquirers by replying that he was raised in the county poor house! His interest in public policy subsequently was reinforced both by academic study and field practice as a welfare worker. Following graduation from Colgate, he attended the University of Berlin in 1935-36. From 1936-39, he attended the University of Chicago in pursuit of his M.A. degree in Social Work Administration. Following service as a cryptographer in World War II, Duncan was employed in various New York communities as social worker, investigator, and veteran's counselor. In 1947, he enrolled as a Ph.D. student at Cornell where he received his degree in Public Administration.

Duncan's mark as an undergraduate teacher was indelible. His stern demeanor at the first meeting of his classes let students know that this was a no-nonsense course. There was substance as well as theater in his performance, of course. Before that meeting, Duncan learned as much as he could about the personal and social backgrounds of each class member. It was information he used for rapport, and often to stimulate their interest by relating subject matter to student's personal experience.

Duncan's interest in students often continued well after their graduation from Cornell and establishment in their careers. A number of letters received both before and after his retirement

reflect that interest. Some were from individuals uncertain about their ability to meet the academic standards but, under Duncan's guidance and encouragement, succeeded to go on to rewarding jobs. Appreciation for that support is reflected in such phrases as treating students with "respect and dignity," teaching "analytical thinking," insisting on clarity of expression in their written work. A letter following his death, from a senior vice president for human resources of a major corporation, epitomizes the views of many such students.

"He was a fair, kind man who was a magnificent teacher, a task master who demanded no less than the best you had to give, a man of principle and integrity, whose moral compass never deviated from the correct course and a man who became my friend for almost 40 years."

In 1998, he was honored by the establishment of the MacIntyre Honors Awards Fund to encourage and strengthen teaching in the ILR School.

Duncan's research encompassed almost the entire field of social welfare, and always with a strong emphasis on public policy. His work on health insurance resulted in a number of well-regarded publications, including a monograph, Voluntary Health Insurance and Rate-Making, which received the ARIA Eleazar Wright prize. He served several times as consultant to various New York State and Federal legislative committees on welfare issues. He was also instrumental in the creation of the School's resident professorial extension faculty (the Mouse in the Experiment, as he called it), reporting on his experience with the requirement in the ILR School's early years that all faculty members devote a third of their time to its extension program.

Duncan was a brilliant man devoted not only to his field of study but to his interests in gardening, genealogy, the outdoors and, of course, his family. He regarded his success as a teacher as the most important contribution of his career.

His wife of 66 years, Margaret Ryan, and daughters Elizabeth and Rachel survive him.

Robert L. Aronson, Chairperson; James A. Gross, David B. Lipsky

William F. Mai

July 23, 1916 – August 15, 2007

Dr. Bill Mai was a Liberty Hyde Bailey Professor, Emeritus, in the Department of Plant Pathology at Cornell University in Ithaca, New York. He was born on a farm near Greenwood, Delaware and attended high school in Lewes, Delaware where he played soccer, basketball, and baseball. He obtained his B.S. degree in Agriculture from the University of Delaware in 1939 and started graduate studies in Plant Pathology at Cornell three months later, working with Dr. F.W. Blodgett on diseases of potatoes. While in graduate school at Cornell, Bill married Barbara Lee Morrell in 1941 and had three children: Virginia Austin, William Howard and Elizabeth Hardy. He received his Ph.D. degree with a major in Plant Pathology and minors in Plant Physiology, Plant Breeding and Entomology in 1945. After a brief time in the Navy, he was appointed an Assistant Professor of Plant Pathology at Cornell in 1946 to work on plant diseases caused by plant-parasitic nematodes, particularly the potato cyst nematode. He was promoted to Associate and full Professor in 1949 and 1952, respectively, and officially retired in 1984.

Dr. Mai was recognized as one of the pioneering leaders of Nematology in the United States. During his illustrious and long career at Cornell, he developed outstanding and productive research, teaching and outreach programs. When the potato pathogen known as the “golden nematode” was inadvertently introduced to Long Island in the mid-1900s, his classical research efforts on the biology and management of the potato-cyst nematode provided the needed basic and applied information upon which an effective quarantine program was carried out. The latter not only contributed to the continued viability of potato production on Long Island and throughout New York State, but also most effectively limited the

spread of this devastating nematode to other production regions in the United States. His numerous research projects dealt with the etiology and management of the replant disease complex of fruit trees, the ecology and damage of several plant-parasitic nematodes on vegetables, investigations of various interactions between nematodes, soilborne pathogens and general soil microflora, and the integrated management of plant-parasitic nematodes and root diseases of agronomic crops. He was a firm believer that research is not complete unless it is delivered to the appropriate audiences through publication and outreach activities. Bill always enjoyed his collaborations with extension educators and growers in formal and informal settings. He was truly a tireless worker with an enviable record of over 300 publications in academic journals and extension bulletins. In addition, he co-edited a two-volume treatise, Plant Parasitic Nematodes, in 1971; co-edited Nematology Laboratory Manual, in 1990; chaired a committee for the National Academy of Sciences that produced Control of Plant-Parasitic Nematodes, in 1968; and most importantly, co-authored a unique nematode taxonomy aid book, Pictorial Key to Genera of Plant-Parasitic Nematodes, in 1960 (revised in 1962, 1964, 1968, 1975 and 1996). The latter teaching and diagnostic aid has been translated into several languages and is used all over the world as a reference in Nematology teaching and research.

Bill Mai was an excellent teacher and mentor. His success was due to his ability to convey his enthusiasm for Plant Nematology, Plant Pathology and for scholarly research in general to hundreds of students in both formal courses and informal contacts. He developed and taught the first Nematology course at Cornell in 1955 and then taught Introductory Nematology (3 credits), Advanced Nematology (3 credits), and a Current Topic Course in Plant Nematology (1 credit) continuously until his retirement. He was always available to listen to a student discuss any problem, whether it pertained to research or a personal situation. Bill trained over 45 graduate students who went on to become leaders in research, teaching and industry both in the USA and in many foreign countries. He not only inspired and supported all the students who

came to work and know him, but he also embraced them as his friends and as part of the extended Mai family while in Ithaca and beyond.

Bill Mai was always an active participant in departmental and university affairs. He was recognized campus-wide for his participation in the Faculty Council of Representatives for CALS, membership in the Campus Council, CALS Library Committee and others. He was a member of ten professional scientific societies and organizations and served on various editorial, administrative or subject matter committees, especially in the Society of Nematologists (SON) and the American Phytopathological Society (APS). He received numerous awards and honors as a measure of the high regard in which he was held by his colleagues including being named Liberty Hyde Bailey Professor, Elected President and later Lifetime Honorary Member of the Society of Nematologists, Fellow of the American Phytopathological Society (APS), Award of Merit from the NE-Division of APS, Venture in Research award from the IX International Congress of Plant Protection, and many others.

As a person, Bill was a true gentleman, generous, courteous and most helpful to all people. He was an exemplary ambassador for the scientific community and brought recognition and honors to the department, the college and Cornell. Bill loved and was proud of his family. His two daughters, Virginia and Elizabeth, and son, William, and their extended families survive him. His wife, Barbara, predeceased him in 2005.

Memorials can be sent to: Graduate School, c/o Sarah Hale (Associate Dean for Student Services), Emergency Loan Fund, Cornell University, 350 Caldwell Hall, Ithaca, NY 14853-2602.

George S. Abawi, Chairperson; George W. Hudler, Richard P. Korf

Elsie Frost McMurry

April 1, 1908 – July 25, 2007

Professor Emerita Elsie Frost McMurry died July 25, 2007 at age 99 in East Lansing, Michigan.

She was a graduate of Michigan State College (now Michigan State University) in 1931 with a minor in Fine Arts. She received a Master's degree from Columbia University in Related Arts with minor degrees in Fine Arts and Education in 1932.

After teaching sewing and art in the public schools of Ann Arbor, Michigan, in 1938 she began teaching at Russell Sage College in Troy, New York while she continued her studies at Parsons School of Fine and Applied Arts, New York.

In 1942, she began her career at Cornell University, where she taught apparel design and history of costume, as well as directing graduate studies. She was also Curator of the Cornell Costume and Textile Collection from 1950 until her retirement in 1972. In this role, she became particularly interested in the historical development and cultural significance of apparel, and incorporated the collection in her teaching. She also organized two major exhibitions of historic dress at Cornell, one of which included a catalog.

Following her retirement, she undertook to organize the textile and costume collection at the DeWitt Historical Society of Tompkins County. This work included dating the objects closely enough to classify them by decade. This responsibility was ongoing through long-term membership on the Collections Committee and a six-year tenure on the Board of Trustees of the DeWitt Historical Society.

In 1982, with the support of a National Endowment for the Arts grant, she undertook a chronological photographic documentation of 30 nineteenth century women's dresses from the Cornell Costume and Textile Collection. This initial project eventually led to a more extensive study of dresses from this period, the focus of which was to develop a reference guide for collection curators and scholars that would assist in the more accurate dating of garments in collections, based on the physical dimensions of documented garments. This eventually led to a major publication, American Dresses 1780-1900: Identification and Significance of 148 Extant Dresses. This large reference work was published in CD format in 2001, when Professor McMurry was 93 years of age. The book has been cited as a valuable contribution to the study of the history of women's clothing because of its detailed comparative analysis of actual garments. It was unique in that instead of classification based on photographs or drawings of garments, it is based on physical examination of actual garments. Through a meticulous set of measurements and analysis of construction features, the researcher is given guidance in the examination of actual garments in order to fit them into a broader classification system. Cornell's Department of Fiber Science and Apparel Design intends to continue to make this important reference work available.

In 2002, Professor McMurry moved from Ithaca to East Lansing, Michigan to be near her niece. Her husband, Dr. Donald LeCrone McMurry, a scholar whose field was American Labor History, preceded her in death. Nieces, nephews and other members of her extended family survive her.

Charlotte Jirousek, Chairperson; Nancy Breen, Ann T. Lemley

Benjamin Nichols

September 20, 1920 – November 24, 2007

Benjamin Nichols was born in Staten Island, New York and died of complications of lymphoma and leukemia at age 87 in Ithaca. He was a member of the faculty of the School of Electrical and Computer Engineering for 42 years and a former Mayor of Ithaca (1989-95).

Ben's association with Cornell began in 1937 when he entered as a freshman in the School of Electrical Engineering (now Electrical and Computer Engineering). In 1941, he enlisted in the U.S. Army soon after Pearl Harbor. After nearly four years of service, he returned to Cornell in 1945 and obtained his B.S.E.E. degree in 1946. He began graduate studies in Electrical Engineering at Cornell the same year and held the rank of Instructor for three years. After receiving the M.S.E.E. degree, he became an Assistant Professor in 1949. During the 1951-52 academic year, he was a Faculty Fellow of the Ford Foundation Fund for the Advancement of Education, an interest that he would resume in later years.

At about the same time, he began research at Cornell in collaboration with Professor Henry Booker on radio-wave studies of the ionosphere. At the time of his promotion to Associate Professor in 1953, he was in charge of the radio and communications division in the School. During a sabbatical leave of absence in 1955-56, he was a Research Associate at the Geophysical Institute of the University of Alaska, where he studied radar echoes from the aurora, and received the Ph.D. degree in Geophysics from that institution in 1957. He was promoted to full Professor at Cornell in 1959. He served as a U.S. delegate to the 11th and 12th International Assemblies of the International Union of Radio Science and also was Cornell's representative at the University Corporation for

Atmospheric Research. During this period, he wrote or co-authored several papers and reports on Cornell's ionosphere research program.

In 1963, Ben discontinued radio-wave research because of its military applications and military support, and shifted his interest to science education. In 1964-65, he spent a sabbatical leave with Education Services, Inc. in Watertown, Massachusetts as director of an elementary science study whose goal was to develop textbooks with a new approach to education in mathematics and science at the grade-school level. Upon his return to the campus, Ben entered a four-year period of university-wide activity, first as Acting Director of the Center for Research in Education, followed by a period as Director of the Office of Teacher Preparation, and finally as Director of the Human Affairs Program. He was also a member of the Faculty Council before the creation of the Faculty Council of Representatives, and he served on several committees of the University Faculty, including chairing the Committees on the Economic Status of the Faculty, on Minority Education (he was deeply involved in the development of the Black-Studies Program) and on Admissions and Financial Aid, and as Director of the Upward Bound Program. During the existence of the first University Senate, he served as chair of its Executive Committee and later as Speaker. He took part in several special commissions, including the original Committee on Special Education Projects (COSEP) and the Commission on Financial Aid. He chaired the Cornell section of the Association of University Professors (AAUP) during the Willard Straight Hall takeover in the spring of 1969 and was instrumental in resolving the crisis.

In the College of Engineering, Professor Nichols served as chair of the Policy Committee and the Common Curriculum Governing Board. In 1980, he was appointed Assistant Dean of the Engineering College Division of Basic Studies and held that position for two years, during which time he was a member of the committee that outlined the core curriculum for the College.

At the School level, Ben concentrated his efforts on undergraduate teaching, particularly on development and improvement of the basic electrical science and electrical engineering courses. He held the position of Assistant Director for Undergraduate Studies and subsequently was a member of many committees in the School that were concerned with curricular changes and school policies. He served as the School's Graduate Field Representative in the academic year 1968-69, and was the Associate Director of the School from 1985 until his retirement in 1988. He was a member of several professional societies.

Along with these administrative duties in the School and his other responsibilities in the College of Engineering, Ben continued to give attention to the classroom, particularly in the required sophomore course, Introduction to Electrical Systems. With Professor Michael Kelley, he published in 1989 a text for that course entitled Introductory Linear Electrical Circuits and Electronics. Ben was also an active class advisor throughout his career in the School. He retired on July 1, 1988 as Professor Emeritus, almost 51 years after he first entered Cornell as a freshman.

No account of Ben's career would be complete without mention of his political activities, especially after his retirement. From an early age, he was influenced by his parents, who were political refugees from Czarist Russia, dedicated Communists who strongly believed that education was vital to the improvement of society. (Ben's mother ran for the U.S. Congress on the Communist Party ticket and one of her relatives is buried in the Kremlin wall!) So it is not surprising that Ben was committed throughout his life to the promotion of social justice and education, especially science education. In 1968, he ran for Congress on the Democratic ticket against the Republican incumbent but was defeated. Later he became involved in community affairs, was elected to the Ithaca Common Council in the late 1980s, and also served on the Board of Public Works, the Board of Planning and Development, the Cable Transmission Commission, and the Hydropower Commission.

Following his retirement, Ben launched an active campaign for mayor on the Democratic ticket and this time won the election in November 1989 with a platform that emphasized programs for youth, affordable housing, increased public participation in community affairs, and improved relations between the city and Cornell (including increased financial support from Cornell for the city, in lieu of taxes, to help defray fire protection and other costs). He was reelected in November 1991 and 1993 and served until 1995. (An interesting historical note: many years earlier another professor of electrical engineering also ran for mayor of Ithaca, but lost.) Ben was quite pleased to be known as “Ithaca’s Socialist Mayor” (he was a member of the Democratic Socialists of America).

Even in his 80s, Ben continued to argue publicly and passionately for his personal beliefs and causes. He served on the Ithaca City School Board and participated in a demonstration demanding the resignation of the superintendent of the Ithaca City School District over the application of a New York State Human Rights Law to an Ithaca racial discrimination case. He had the “honor” of receiving a police citation while joining students in fervently protesting the clearing of Redbud Woods to make way for a parking lot for the new west campus dormitories. Less than two months before his death, he spoke at the dedication of a plaque marking the spot near University Avenue where these woods once stood.

Ben and Ethel Baron were married in New York City on September 10, 1942. Ethel died nearly 49 years later in Ithaca on July 20, 1991. Ben married Judith Van Allen in Ithaca on September 20, 1995. Ben is survived by Judith and her daughter, Adrian; by the children of his first marriage, Mary Nichols Daum, and her husband, John, and his son, Jeffrey N. and his wife, Arlene; by his older brother, Joseph Nichols; and by five grandchildren and three great grandchildren.

Professor Nichols was a dedicated educator and a provocative colleague who was passionate in his concern for social justice for both men and women. He worked hard to make the world a better place.

*Michael Kelley, Chairperson; Donald Farley, Simpson Linke
(with acknowledgements to Judith Van Allen)*

Robert L. Patton

October 31, 1913 – June 25, 2008

Robert L. Patton, 94, formerly of Ithaca, died on June 25, 2008 in Ann Arbor, Michigan.

He was born in Livingston, Montana, to the late Alva L. and Annie L. Patton. He received a B.S. degree from Montana State College, Bozeman and a Ph.D. degree from the University of California, Berkeley. He married Mary Louise Trask (1913-2000) on September 6, 1938 in Deer Lodge, Montana.

In 1939, he joined the faculty at Cornell. His field was Insect Physiology, to which he contributed research, a textbook and mentored 22 graduate students, several of whom went on to become distinguished contributors as well. He was a pioneer in the field of electrophysiology as applied to insects, and in the early 1950s, he was able to monitor activity of the nervous system of an insect using electro-mechanical equipment of his own design. This breakthrough was reported in Newsweek Magazine. In 1978, he was named a Professor Emeritus, and in 2002, he was honored by the creation of a permanent visiting lectureship in his name.

He was skilled in ultra-micro chemistry, and during World War II, he was a member of the team that developed an extensible method for chemically isolating Plutonium 239. In 1948, President Truman cited him for this contribution to the war effort. He was very active in scouting, serving as a troop leader and in other roles for which the Silver Beaver Award recognized him in 1981. He enjoyed playing the clarinet and was an accomplished woodworker.

He is survived by his son, James L. Patton (Carol) of Dexter, Michigan; his nephew, Beyer R. Patton of Golden, Colorado; his granddaughters, Elisabeth A. Freeland of Portland, Oregon, Dr. Susana R. Patton of Dexter, Michigan, and Catherine L. Patton of Madison, Wisconsin; as well as three great-granddaughters. His parents, his wife, his brother, Alva R., his son, Robert W., and granddaughter Alice H., preceded him in death.

A family memorial service was held in Michigan. Burial was at East Lawn Cemetery, Ithaca.

Jeffrey G. Scott, Chairperson; Angela Douglas, Cole Gilbert, James L. Patton

William Arthur Rawlins

December 5, 1908 – December 31, 2007

Art Rawlins, Professor of Entomology, Emeritus, died at Memorial Mission Hospital, Asheville, North Carolina, at age 99. Art was blessed with longevity and was active almost to the end,

The factors of time and place were positive influences in his life. He was the son of Thomas Henry and Elizabeth Rawlins. His father had immigrated to the United States from England, being drawn to the abundance of its agricultural land.

Art's childhood was spent on the Darrow farm, just outside the city limits of Geneva, New York, located on the northern shore of Seneca Lake, the largest of the Finger Lakes. Geneva was a sedate town. Its South Main Street, lined on both sides with picturesque American Elms, was the elegant place to live. The city's cultural atmosphere was strongly influenced by the two liberal arts colleges, and the New York State Agricultural Experiment Station.

The Experiment Station was initially independent of the State educational system. In 1923, it was placed under administrative jurisdiction of the Agricultural College in Ithaca, fifty miles distance on Cayuga Lake. In 1940, the professional staff at Geneva was given faculty status in the College of Agriculture. Thus began the Geneva staff's long climb to parity with the Ithaca faculty.

Art's early schooling was in the one-room local schoolhouse. Discipline was strict with punishment; a note to parents usually provoked additional punishment. Art's home life followed the well-established pattern of life on the family farm, industriousness, honest toil, and faith in Agriculture as the basis for a strong independent Society.

Teenage boys were expected to supplement farm labor with an outside job. This gave Art an entrée to the staff of the Experiment Station to whom he delivered fresh eggs. This contact led to employment in the Entomology Department. His next step on the educational ladder was enrollment in the College of Agriculture at Cornell University. After earning his Bachelor of Science degree in 1930, and the Ph.D. degree in 1936, he joined the faculty of the Department of Entomology, as a specialist in economic entomology, biological, chemical and cultural control of insect pests of potatoes, carrots, lettuce, and onions. To add to his duties, he taught courses at the undergraduate and graduate levels. During his career as a faculty member, he supervised the graduate training of over 40 students.

Art's tutorial style was unique, largely collegial, bearing out his philosophy that Cornell's entomology program attracted able, highly motivated students. His primary objective as a mentor was to create an atmosphere of learning. His unobtrusive leadership encouraged a congenial setting where fellow graduate students would share in the learning quest.

Post World War II ushered in an era of assistance to third world countries. Cornell had become a leader in International Agriculture. Art's growing reputation and his humanitarian inclinations drew him to these opportunities. This was facilitated by his students having established themselves in Aid programs and welcomed collaboration with their mentor. The institutions that arose were the United Nations, Food and Agriculture and World Health Organizations, World Bank and foundations such as Ford and Rockefeller.

After retirement from academic life, he and his wife, Alma, traveled widely at home and abroad. In 1986, they moved to Highland Farms Retirement Community, Black Mountain in western North Carolina. This congenial setting saw them volunteering to assist newly made friends and neighbors.

Never having lost his devotion to gardening and sharing its abundant harvest of flowers and vegetables with friends, Art epitomized the spirit of generosity and excellence.

His beloved wife, son Stephen and daughter Elizabeth predeceased Art. His daughter, Phyllis Sherman, and three grandchildren survive him. It was a source of great pride to Art that the family established a thriving Roadside Market of high quality produce on the fertile soils of Conway, New Hampshire.

In reflecting on Art's life in retrospect, we cite the conventional wisdom of an earlier age, wisdom dear to his heart:

“...whosoever could make...two blades of grass to grow upon a spot of ground where only one grew before, would deserve better of mankind, and do more essential service to the country than the whole race of politicians put together.”

Jonathan Swift (1667-1745)
Gulliver's Travels, 1726

Edward H. Smith, Chairperson; James E. Dewey, Arthur A. Muka

Alvin F. Sellers

August 9, 1917 – January 19, 2008

Alvin Sellers joined the Cornell faculty in 1960 as Professor of Physiology and head of the Department of Physiology of the Veterinary College. At the time of the appointment, he was internationally recognized for his work on ruminant digestion and ion transport. He would soon attract talented new faculty members that became world leaders in research and graduate training in gastrointestinal physiology and in the emerging field of comparative gastroenterology.

Al was born in Somerset, Pennsylvania, the son of Addison B. and Marion F. Sellers. He received the VMD (Veterinariae Medicinae Doctoris) from the School of Veterinary Medicine, University of Pennsylvania in 1939. He subsequently did graduate work at the Ohio State University and received the M.S. degree in Pathology in 1940. He continued graduate research training at the University of Minnesota until 1942 when he joined the United States Army Veterinary Corp. During World War II, he served as Chief of the Section on Bacteriology and commanded one of three mobile units of the First Medical Laboratory in campaigns in North Africa, Sicily, Italy, France, and Germany. He returned to the University of Minnesota in 1946 to complete his graduate training and later served as Associate Professor, Professor, and head of the Division of Veterinary Physiology and Pharmacology in the School of Veterinary Medicine of the University of Minnesota. In 1957-58, he was a Guggenheim Fellow at the Physiological Laboratory, University of Cambridge and at the Rowett Research Institute.

Al's personality often appeared serious but this masked a huge sense of humor. For those who knew him well, he was the ideal dinner party guest because of his talent as a storyteller. His dedication of

purpose in the laboratory was recognized by all with whom he was associated. His work and that of his close associates resulted in numerous, critical advances in knowledge of ruminant digestive physiology and, during the latter part of his academic career, in similar advances in the closely related digestive function of the equine large intestine. Al was a dedicated experimental physiologist but was equally committed to applying the sciences basic to medicine in teaching and in veterinary medical practice.

Al is survived by his wife of 65 years, Dorothy M. Sellers; by three children, Alvin F. Sellers, Jr., Mary Ann (George B. Seeley) Sellers, and Christine (Karen Grimm) Sellers; by two grandchildren, Kate Sellers Seeley and Laura Jane Seeley; and by one great-grandson, Jack Riley Wheeler Seeley.

Bud Tennant, Chairperson; Charles Guard, Katherine Houpt, Richard Rawson

Sergio David Servetto

January 18, 1968 – July 24, 2007

Sergio David Servetto, Assistant Professor of Electrical and Computer Engineering, died at the age of 39 in the early morning of July 24, 2007, in the crash of his recently purchased single-engine plane during the final segment of a trip from the Midwest to Ithaca. Sergio's enthusiasm for flying began in his native Argentina and was reawakened in Spring 2007 when he saw it as a way to be with his family in Ithaca for long weekends during a year he was about to spend as a visiting faculty member at Notre Dame. In a haunting coincidence, Sergio started his life in the United States in Urbana, Illinois, and ended it in Urbana, New York.

Sergio was educated first at the National University of La Plata in Argentina, after which he worked for three years as a programmer for IBM in Buenos Aires. He then came to the U.S. from 1994-99 as a graduate student in computer science and electrical engineering at the University of Illinois Urbana-Champaign. Upon graduation from UIUC, he received the coveted David J. Kuck Outstanding Thesis Award in Computer Science at UIUC. Sergio then joined the Ecole Polytechnique Federale de Lausanne, working for two years with the eminent Professors Martin Vetterli and Bixio Rimoldi. In 2001, he was offered an Assistant Professorship at Cornell and joined our ECE faculty.

Sergio was a colleague of great intelligence, intense conviction, boundless energy, and tremendous enthusiasm for research, teaching, and ideas. He maintained high ideals for himself and expected the same of others. His friends enjoyed his great personal warmth. Sergio was an individual of strong principle who believed with Theodore Roosevelt:

“The credit belongs to the man who is actually in the arena...who strives valiantly...and who at the worst, if he fails, at least fails while daring greatly...”

He was widely read in his native Spanish as well as in German and English, and was known to quote aptly from Cervantes and Kafka. Sergio’s restatement of the engineer’s creed of “can do” was the proverb, “If there is no wind, row.”

At his untimely death, Sergio was already highly regarded worldwide for his work in information theory and its applications to such areas as sensor networks and media compression. He had the respect and affection of many outstanding researchers in these specialties. In an unprecedented gesture, his professional society, the Information Theory Society of the IEEE, held a session at the September 2007 Allerton Conference on Communication, Control, and Computing to honor him and his work. In addition, a Sergio Servetto Memorial Session was held in July 2008 at the IEEE International Symposium on Information Theory, where papers were presented that were cognate to Sergio’s unremitting work on the challenging information theory problem of multiterminal source coding, in which two correlated sources are encoded separately subject to distortion criteria.

While Sergio was actively engaged in journal editorial work and served on technical program committees, his favorite professional outreach activity was the Student Committee of the IEEE Information Theory Society, the purpose of which is to interest graduate students in the discipline and then support their research endeavors. Sergio was a founding member of the Committee, established its website and had recently assumed the responsibilities of Committee Chair. He assiduously laid the groundwork for an ongoing School of Information Theory for graduate and post-doctoral students. Indeed, the First Annual School of Information Theory, held in June 2008, was dedicated to Sergio Servetto.

Sergio is survived by his beloved wife Viviana Sitz and his two young sons, Luciano and Alejandro.

Terrence L. Fine, Chairperson; Toby Berger, David A. Hammer

W. Frank Shipe

March 8, 1920 – May 20, 2008

Born in Middletown, Virginia, March 8, 1920, W. Frank Shipe received his B.S. degree in Dairy Science in 1941 from Virginia Polytechnic Institute. Immediately after graduation, he was called into the Army. He served over four years, mostly in the Pacific theater in the artillery and achieved the rank of Major. Upon discharge, he returned to VPI as an Instructor. In April 1946, he entered graduate school at Cornell and earned his Ph.D. degree in September 1949. He majored in Dairy Chemistry and minored in Organic Chemistry and Bacteriology.

Since joining the Cornell faculty, October 1, 1949, Professor Shipe devoted most of his time to teaching and associated educational activities, but also maintained a very active research program, publishing over 100 scientific papers and articles. His research efforts were devoted primarily to determining the factors influencing fluid milk spoilage and in developing methods for monitoring quality. His work on the freezing point of milk led to the universal adoption of the thermister type of cryoscope and the use of standard salt solutions for their calibration. He introduced the Infrared Milk Analyzer (IRMA) for milk fat and protein analyses in New York State. His studies as associate referee for the Association of Analytical Chemists (AOAC) led to the adoption of turbidometric instruments (e.g. Milko-Testers) for determining the fat content of milk. He also developed improved methods for measuring free fatty acids and the Vitamin A contents of milk.

Much of his work on milk quality pertained to factors affecting milk flavor. His findings relating to lipolytic and oxidative changes during storage of milk contributed to the control of these defects. Professor Shipe and his graduate students demonstrated beneficial

and harmful effects of various milk enzymes. These studies led to the development of procedures for immobilizing enzymes. He and his colleagues developed pigmented plastic milk containers that protect the flavor and the vitamin A and riboflavin contents of milk. His research on dried beans helped to elucidate the causes for decreases in protein digestibility during storage.

During his teaching career, Professor Shipe taught over 4,000 students and advised more than 300 undergraduate and 40 graduate students. He always took a personal interest in his students and he and his wife, Margery, generously extended the hospitality of their home as an expression of friendliness and genuine interest in each individual.

As a teacher, Professor Shipe's dedication and performance was outstanding. One of his greatest assets was his untiring willingness to work with both undergraduate and graduate students on a one-on-one basis as well as in the classroom and laboratory, and his motivation and stimulation of students came not from a heavy hand, but by subtle direction toward self-discipline and inquiry. He also was very innovative in the classroom, being one of the first department members to use the overhead projector and videotapes. In recognition of his excellence in teaching, he received the coveted American Dairy Science Association (ADSA) Kraft Teaching Award in 1982.

The first course Professor Shipe taught, beginning in 1952, was entitled Commercial Grades of Dairy Products, which dealt with the grading of the sensory qualities of dairy products. With Professor Shipe's coaching, the Cornell Dairy Products Judging team entered seventeen national contests and eight northeast regional contests. Throughout those years, a number of the team members won awards for judging milk, ice cream, butter, cheese and yogurt. These contests gave the team members and coach an incentive to improve their sensory acuity and sensory vocabulary. When the dairy emphasis was replaced with the food science curriculum in 1964, he

modified this course to include all foods and placed more emphasis on the principles of sensory evaluation and statistical analysis of data. He taught this course, Sensory Evaluation of Foods, from 1965-88. Similarly, his Introductory Dairy Science Course, taught from 1957-64, was revised to include other foods and renamed Food Properties and Analysis. From 1972-86, he supervised the course in Food Chemistry for seniors and graduate students. In 1972, he developed a new course entitled Food Facts and Fads, currently called Food Choices and Issues. It was developed for non-majors to provide specific information about foods and the food industry and to dispel misconceptions about them. Since its inception, the course has had the largest enrollment of any food science offering, currently over 200 students from various disciplines.

In addition to chairing the department's Scholarship and Curriculum committees for over 20 years, Professor Shipe served the College of Agriculture and Life Sciences on the Program Area, Physical Science, Honors and Curriculum Committees. He was also a member of the University Faculty Council for four years.

During periods of sabbatical leave, he conducted research on the evaluation of stabilizers for ice cream at North Carolina State College in 1956-57, served as Flavor Project Director for the New York State Department of Agriculture and Markets in 1963-64 and conducted studies on milk fat globule membrane at the National Institute for Dairying, Reading, England in 1970-71. In 1985, he worked as a volunteer for Bread for the World by drafting legislative proposals pertaining to aid for developing countries. Other professional activities include: AOAC Associate Referee for Cryoscopy; AOAC Associate Referee for Automated Fat Tests; Secretary-Treasurer, Vice President and President of the Eastern Division of ADSA; Student Affiliate Committee of ADSA; Secretary-Treasurer, Vice Chairman and Chairman of Central NY Institute of Food Technologists, and Flavor Nomenclature and Reference Standard Committee of ADSA. He has been a member of the American Chemical Society, American Dairy Science

Association, Institute of Food Technologists, International Association of Milk, Food and Environmental Sanitarians, Alpha Zeta, Phi Kappa Phi and Sigma Xi.

Professor Shipe and his wife were active members of Saint Paul's United Methodist Church for over 40 years, where he served on several committees and as Lay Leader. He was also a very public spirited individual, frequently sending letters or telegrams to his state and federal representatives, the President and occasionally to the editor of the Ithaca Journal.

Professor Shipe retired from full time department activities July 1, 1986. He continued contributing to the department for several years. He spent time every week in Stocking Hall where he continued some of his research on milk quality and gave lectures in the Food Chemistry and Food Choices and Issues courses. His retirement allowed him more time to spend with his wife, Margery. They were married 59 years when Marge died in 2007. He attributed much of his success to her advice and support. Their two daughters and their husbands, 11 grandchildren and six great-grandchildren survive Professor and Mrs. Shipe.

John W. Sherbon, Chairperson; David K. Bandler, James C. White

Keith Hartley Steinkraus

March 15, 1918 – October 23, 2007

Dr. Keith H. Steinkraus, Professor of Microbiology and Food Science at the New York State Agricultural Campus of Cornell University received his B.A. degree cum laude from the University of Minnesota in 1939. After working several years in the food industry and the U.S. Army Quartermaster Corps, he returned to academia receiving his Ph.D. degree from Iowa State University in 1951. He became an Assistant Professor at Cornell in 1952, Associate Professor in 1955, Professor in 1962 and Emeritus Professor in 1988. After his retirement, he remained very active in research and publishing until shortly before his death.

Keith grew up in Bertha, Minnesota, and attended a one-room schoolhouse. While a student at the University of Minnesota, he met another former student from the same schoolhouse, Maxine Curtiss. They were married in 1941 and spent 65 idyllic years together until Maxine's death on December 11, 2006. He was even more dedicated to his family than to his research.

His research specialized in indigenous fermented foods and food microbiology. Over a long career at Cornell, he studied fermented foods including tempe, tape, trahanas, idli/dosa, and the fermented fish sauces and soy products of the Far East including miso and tofu. Throughout his career, he worked to share his knowledge and research not only with his Cornell students, but also with an international audience. His interest in fermented foods, unknown in America, was stimulated further by his students at Cornell who came from places like Taiwan, Thailand, Mexico, Kenya, Zaire and Egypt. These students were interested in studying the microbiology of the foods from their own countries, and this interest coincided with and expanded Dr. Steinkraus' research efforts.

In 1959, Dr. Steinkraus was invited by the Interdepartmental Committee for Nutrition for National Defense (NIH) to participate in surveys of the nutritional status of military personnel, their dependants, and the general populations of South Vietnam, Ecuador and Burma. The project was later extended to include Indonesia, the Philippines, Korea, Taiwan, Thailand, and Malaysia. In 1974, UNESCO/UNEP/ICRO invited him to lecture at the Institute of Technology in Bandung, Indonesia. Because of his contributions to the subject, and his teaching experience, Dr. Steinkraus was asked and accepted the responsibility of compiling a book on indigenous fermented foods. The finished reference, a 671 page Handbook of Indigenous Fermented Foods, was published in 1983 and was the first comprehensive and authoritative book on the subject.

Over the course of his distinguished career, Dr. Steinkraus contributed his knowledge to institutions, students, and colleagues worldwide. He maintained and developed his connections with Asia, consulting on food processing issues in Indonesia and as a teacher and researcher at the University of the Philippines College of Agriculture and the Institute of Technology in Bandung, Indonesia. He lectured as a Visiting Professor in Thailand and Singapore. He was also a Visiting Professor at the Polytechnic of the Southbank, London, in Germany at the Universitat Gottingen, and at the Central Division of Nestle Products Technical Assistance Co. in Switzerland.

Dr. Steinkraus' work had significant international impact; he was the American Delegate to the UNEP/UNESCO/ICRO panel on Applied Microbiology and Biotechnology and worked as a consultant to the United Nations Industrial Development Organization to determine how genetic engineering and biotechnology could be used to help developing countries in Africa. He was a fellow of the American Associate for the Advancement of Science, American Academy of Microbiology, Institute of Food Technologists, and the International Academy of Food Science and Technology. In 1985, the Institute of Food Technologists gave him

the prestigious International Award for his contributions to the international exchange of ideas in food technology to developing nations.

Keith's physical impression was enlivened by his shock of prematurely white hair, signature bowtie, and forward leaning rapid-fire speech. To students or anyone working in his lab, Keith displayed an infectious, nearly irrational optimism that inspired them to search for solutions to tough problems. This optimism carried over to international venues where he frequently was asked to speak or organize workshops and symposia on indigenous fermented foods. His approach of grounding research in the daily realities of indigenous food producers helped ensure that the right questions were addressed and locally sustainable methods were developed. A particular emphasis in editing and negotiating the publication of his Handbook of Indigenous Fermented Foods and the Industrialization of Indigenous Fermented Foods was to provide information useful in developing countries in a format that was affordable.

His broad experience and first-hand knowledge of indigenous food production problems, methodologies and microflora enabled him to bring his experience in the fields of microbiology, food chemistry and nutrition to bear on problems faced by producers in countries with limited resources for research. He had a great interest in improving the nutritional status of less developed countries by making nutritious, safe, shelf-stable foods available through locally sustainable production methods.

His trips through rural areas of Southeast Asia and Africa were notable for their grueling timetables and peripatetic itineraries. Travel companions would comment that if you weren't running you were falling behind. He would be taking pictures, asking local producers about production methods and sharing his enthusiasm and knowledge in a torrent. Stairs were taken two at a time. His belief that hunger and poor nutrition were inexcusable drove him to search for solutions before time ran out.

Life in the lab was experienced at a similar pace. Students would be working simultaneously on a wide range of problems important to food producers in their home countries. The atmosphere could be at once exciting and maddeningly chaotic. Keith would bounce from student to student, problem to problem, each quite unrelated and not skip a beat. Having completed a tour of the lab, he would return to his office and type furiously at a manuscript or one of the innumerable letters he wrote to colleagues and meeting organizers before email was in wide use. This continual networking was an outgrowth of his belief that by connecting well resourced labs and students with those working on indigenous food problems, affordable solutions would be found, increasing the supply of regionally palatable foods. His enthusiasm and sense of purpose enlivened discussions and problem solving, blunting sharp disagreements even among students and visiting scientists from wildly different cultural backgrounds.

Chang Lee, Chairperson; Malcolm Bourne, Roger Cullen

Harry Theodore Stinson, Jr.

October 26, 1926 – January 30, 2008

During his 36 years on the Cornell Faculty, Professor Harry T. Stinson had a lasting impact on the Biological Sciences at Cornell in the roles of teacher, department chair, and Associate Director of the Division of Biological Sciences. In the latter position, Harry was chiefly concerned with the Biology curriculum and advising of undergraduate students. Harry passed away on January 30, 2008, at the age of 81, ten years after retiring.

Harry attended the College of William and Mary and earned his Ph.D. degree in Botany from Indiana University in 1951. He established himself as a leading plant geneticist in positions at the College of William and Mary, and subsequently at the Connecticut Agricultural Experiment Station. Harry came to Cornell as a full Professor in 1962. At Cornell, Harry continued his research on the inheritance of traits in plants of the genus *Oenothera*, including fascinating examples of non-Mendelian inheritance of genes later shown to be in plastids. Harry also instituted an introductory undergraduate course in Genetics, a class that has evolved over the years and is still a central part of the Biology curriculum, leaving a lasting contribution.

With the founding of the Division of Biological Sciences in the mid 1960s, several new Genetics faculty were hired, and Harry became Chair of the newly formed Section of Genetics, Development, and Physiology. Harry continued, as Chair, after the unit became the Section of Botany, Genetics, and Development. He ended his service as Chair in 1980, just as the unit was split into the Section of Genetics and Development, and the Section of Plant Biology.

In 1978, Harry became the Acting Director of the Division of Biological Sciences, stepping into the breach left by the departure of Richard O'Brien. He served in this role until 1979 when Robert Barker arrived to become Division Director. At that point, Harry became Associate Director of the Division. Thus, from 1978-80, Harry simultaneously shouldered two major administrative responsibilities. He continued to serve as Associate Director of the Division until the Division structure was dissolved in 1999. Harry was highly regarded as a fair, effective administrator, and was particularly well known for his parsimoniousness in the husbanding of institutional financial resources.

In the position of Associate Director of the Division, Harry had a tremendous positive influence on the evolution of our undergraduate Biological Sciences major, at the time the largest major at Cornell. Harry participated actively in all aspects of the program, from the Curriculum Committee, which considered an endless stream of course proposals and petitions from undergraduate students, to overseeing faculty search committees, to serving as faculty advisor to a very large number of undergraduate Biological Sciences majors, including all the transfer students. As the administration of Biology and Life Sciences grew more complex at Cornell, Harry was a source of information and wisdom about previous mistakes that did not need to be repeated.

This recitation of Harry's contributions to Cornell does not capture the humor, energy, and enthusiasm that he brought to all tasks at hand. Spirits tended to lift when Harry entered a conversation; there was usually laughter, and always the expression of strong opinions.

As he approached retirement, and continuing on well into his Emeritus years, Harry participated actively in The Cornell Tradition, an alumni-supported program that recognizes and rewards outstanding undergraduates. Starting in 1986, he again, became a classroom teacher, collaborating with Dr. Rita Calvo to present an extremely popular seminar course on Human Genetics and Society that was offered to senior students concentrating in Genetics and

Development. In this class, in addition to learning about human genetics, students research, discuss, and write about controversial issues in human genetics and development. Thus Harry ended his service to Cornell as he had begun it, in the classroom teaching a cutting edge course in close contact with students.

In 2007, the Office of Undergraduate Biology, the lineal descendant of the office Harry directed for so many years, instituted an award to honor faculty members chosen by the graduating seniors. It is the Harry T. Stinson Award for Outstanding Service to Biology Students. The award was presented on May 27, 2007, for the first time before the assembled graduating students and their parents. All in attendance were graced by Harry's participation in the ceremony, and it was clear that Harry was delighted at his being honored in this fashion. Remembering Harry and his legacy of contributions to Biology at Cornell brings appreciation, warmth, and smiles to all who knew him and benefited from his efforts.

Thomas Fox, Chairperson; Rita Calvo, Ross MacIntyre, Rebecca Sparrow

Earl L. Stone, Jr.

July 12, 1915 – July 23, 2007

Earl L. Stone, Jr., Charles Lathrop Pack Professor of Forest Soils, spent a productive 31-year career at Cornell during which he pursued interests in soil science, forestry, ecology, tree nutrition and physiology, natural history, and land use history. After retiring from Cornell, he spent 23 productive years at the University of Florida. Earl died at age 92 at home in Gainesville, Florida

Earl Stone was born in Phoenix, New York and received his B.S. degree in Forestry from the New York State College of Forestry at Syracuse in 1938. He received an M.S. degree in Soil Science from the University of Wisconsin in 1940 and his Ph.D. degree in Soil Science from Cornell in 1948. He served with the 8th Photographic Reconnaissance Squadron, 5th Air Force in the Pacific, in World War II (1942-45). From 1958-60, he was Visiting Associate Professor at the College of Forestry, University of Philippines.

As a scholar, Stone had the unusual ability to design studies that were based on deep empirical knowledge of soils and plants, pertinent to theory, and clever in exploiting opportunities presented by nature (e.g., natural experiments). A good example is the study that grew from Stone's realization that fertilized pine plantations could be used to address a fundamental issue in the cycling of nutrient elements in forests. This study hinged on the distinctive chemical signature of rubidium in potassium fertilizers, as opposed to native soils, and allowed him to determine that the vast majority of the potassium of fertilizer origin was still present in the trees and the soil 40 years after the fertilizer had been applied. This result indicated a surprising ability of the ecosystem to retain an important nutrient element in the face of high leaching potential (water soluble

nutrient on a deep sandy soil). A second example relates to a recurrent theme in Stone's work: documenting the persistent effects of people on soils. Stone suspected that careful sampling of soil nutrients around old houses or barnyards would reveal "hotspots" for elements such as phosphorus long after the inputs ceased. He showed such enrichment of the soil even 50-75 years after farm animals last contributed manure to the sites, thus anticipating more recent studies documenting such legacies of Roman agriculture in parts of Europe. In the same vein, he suspected soil amendments associated with Native American maize cultivation as the cause of high soil phosphorus contents in some local forests near Cayuga Lake but was never able to provide conclusive corroborating evidence.

We mention one more study as an example of the breadth and depth of Stone's scholarship. He observed in the field that fairy rings were sometimes recognizable in the growth of ground pines (*Lycopodium*) here in New York, and that other plants were noticeably more vigorous in some rings compared to others. Stone and colleagues documented higher nitrogen content in the rings with the more vigorous growth. Finally, the study was taken to the molecular level by describing the enzyme, produced by the roots of the ground pines, responsible for making more nitrogen available to plants in the zone of greater growth. This study could have been based on observations in nature alone, or it could have also included the documentation of greater plant growth in some rings, but under Stone's guidance it went further and included the detailed molecular mechanisms.

Earl Stone was a keen observer in the field. His abilities to see both obscure details and broad relationships of soils and species in a forest—and through these to interpret the history of that forest—were legendary. An Earl Stone field trip was guaranteed to be fascinating, informative, and a jaw-dropping experience based on how much complexity and nuance he could marshal at a field site using experience, his eyes, a shovel, and perhaps a soil pH kit.

In his philosophical outlook, Stone could be the consummate “particularist,” seeing each forest stand as unique with its own history, its own mosaic of soils, and assemblage of plants. He was such a keen observer that he could see nature as a wealth of details and particular circumstances, and this quality made him impatient with generalizations that did not take account adequately of the variability of the real world. At the same time, Stone could look past much of the detail to offer important generalizations and syntheses. For example, he wrote papers proposing compelling and perceptive general frameworks for understanding forest management, site quality, nutrient cycling, and man’s use of forest land. Earl Stone was hard to classify using conventional categories like “soil scientist” or “forest ecologist” because he made use of so many disciplines in his research and teaching.

Stone was a gifted writer; reading his scientific papers was a treat quite apart from their content. His facility with the language produced writing that was pithy, incisive, yet elegant. Stone was also a great storyteller and one of the funniest people we have known. In conversation, he would often quote an author (George Bernard Shaw was a favorite) usually to make a humorous point. He regularly used colorful language to get points across. One of us witnessed a graduate student committee meeting at which the student was running on and on in response to a question from Stone, who interrupted with: “I expect you to tell me the truth, and nothing but the truth, but not the WHOLE truth.” On other occasions, he would use the phrase “where the dog died” to indicate the importance of past chance events as explanations for spatial patterns that we see in forests today.

With his wonderful stories, great sense of humor, sharp intellect, generous personality, and vast knowledge of many scientific fields, Earl Stone was a stimulating and engaging colleague. A brother, John R. Stone and his children survive him: Dr. Jeanne Fox, Dr. Earl Stone III, and Dr. Nathan Stone.

Peter Marks, Chairperson; David Bouldin, Susan Riha

William B. Ward

July 16, 1917 – April 27, 2008

William B. Ward came to Cornell as a full professor and department head in 1945 at age 28—after serving as an information specialist in the U.S. Department of Agriculture and War Food Administration during war years 1941-45. He earned a Bachelor's degree from Utah State University and a Master's degree from the University of Wisconsin in 1941. He taught in the College of Agriculture and Life Sciences for 56 years from 1945 to 2001. He died at age 90 on Sunday, April 27, 2008.

Bill was invited to Cornell to organize and develop a new department that would combine communication production, teaching, extension, and research functions in the newly emerging field of communication for both the College of Agriculture and the College of Home Economics. He mobilized resources to offer courses in agricultural journalism and public speaking and to establish divisions within the new department for the production of publications, visual aids, news services, and radio, television and film. He shifted the scope of the department from one that was originally named Extension Teaching and Information to the more comprehensive Department of Communication Arts (which later became the Department of Communication). During his 26-year tenure as head of the department, Bill assembled a staff of faculty and communication specialists who had a significant impact on the field of agricultural and extension communication in the U.S. Land-grant University system. During his tenure as head of the department (1945-71), the department won more national awards for excellence than any other land-grant university. The department frequently achieved distinction for the exhibits it produced for the New York State Fair. In 1998, he was recognized for these contributions with an Award of Excellence from the internationally

recognized organization Agricultural Communicators in Education—the award noting his

“substantial and creative contributions to the communication/information technology profession and leadership involvement over many years in international activities.”

Early in his Cornell career, Bill served as President of the American Association of Agricultural Editors.

Bill’s fostering of a strong academic base for the study and practice of communication paved the way for the department to add a new applied graduate degree to its B.S. degree. This was a Master of Professional Studies (Communication) program that was the first of its kind in the country. It was the forerunner and foundation of an expanded graduate program that in later years was to include M.S. and Ph.D. degrees.

Magazine Writing was one of Bill Ward’s most popular courses. Often the opening class of the year had more students enrolled than chairs in the classroom, and he would early on whittle the class size down by the rigorous demand of writing for specific publications. In his graduate course on Communication Planning and Strategy, he required students to write case analyses in three pages or fewer to encourage them to concentrate on the essentials in a problem. Much of his writing dealt with practical matters in which transparent communication was essential. His teaching reached beyond the Ithaca campus with the publication of his textbook, Reporting Agriculture, which was widely used in the U.S. and abroad. In addition, more than 400 of his articles have been published in national and regional agricultural magazines.

Bill was an early pioneer of Cornell’s use of television for educational purposes. In 1962, he participated in the effort to obtain support for a TV Film Center and in 1970 the new Educational TV Center became a reality in the College of Human Ecology, with modern studios and equipment capable of delivering full-color taped

programs to a network of 19 television stations. The studios also became a laboratory for the teaching of television production.

In addition to being a teacher and administrator, Bill was a noted professional communicator. After the Japanese attack on Pearl Harbor and while he was attached to the U.S. Department of Agriculture, he was assigned to report on available food supplies for Hawaii in case of a blockade of Hawaii. Later, he was a member of the press corps covering a trade mission to South America led by Ezra Taft Benson, the Secretary of Agriculture. His “Washington Connection” continued into the 1970s when he received a USDA grant to plan, write and design media materials for all 50 states to improve the public understanding and image of American agriculture.

Bill was a leader in many projects abroad. When Cornell was deeply involved in institution building in the Philippines during the 1950s, he helped establish a new Department of Agricultural Journalism at the College of Agriculture, University of the Philippines at Los Baños. He subsequently did consulting work on communications and publications at the nearby International Rice Research Institute during its earliest days. During a sabbatical leave in the early 1960s, Bill developed a communication program for Instituto Nacional de Tecnologia Agropecuaria, a nationwide agricultural research and extension agency in Argentina. In the late 1960s, he planned and helped create communication centers at two agricultural universities in India as a part-time consultant for the Ford Foundation. These centers continue to thrive today. In 1972, he became Chief of Party for the University of Tennessee agricultural development program in India sponsored by the U.S. Agency for International Development. He had the distinction of being one of those forced out of India when Indira Gandhi became unhappy with U.S. Government presence in that country. In India, he also responded to a request by the Director General of the International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) to plan a communication division for the organization.

In Africa, Bill served as a visiting scientist at the International Institute of Tropical Agriculture in Ibadan, Nigeria. During half-time retirement from 1977-89, he was a communication consultant for IITA for three months each year. One of his special talents was compiling and editing research reports. He carried this skill over into a long-term relationship with the International Agricultural Development Service in Indonesia where he was a communication consultant. He prepared five-year research reports for the country's Agency for Agricultural Research and Development that were published and widely distributed. Bill's involvement with international agricultural research centers also included many months over a five-year period during the 1980s at the International Center for Agricultural Research for the Dry Areas (ICARDA) in Aleppo, Syria. Bill's other overseas assignments also took him to Guatemala, Honduras, Taiwan, and Bangladesh.

Bill Ward was a member of the University Faculty during the tenures of seven Cornell presidents. He was appointed Professor Emeritus in 1988, served as Vice President of the Cornell Association of Professors Emeriti, and represented CAPE in the Cornell University Faculty Senate. Soon after the new Kennedy Hall became the home of the Communication Department, a room in the building was named in his honor. Since 1999, there has been a William B. Ward Communication Scholarship for undergraduate students majoring in Communication.

Royal D. Colle, Chairperson; Ronald E. Ostman, Donald F. Schwartz

Scott H. Williamson

May 15, 1975 – March 14, 2008

Dr. Scott Williamson, Assistant Professor of Biological Statistics and Computational Biology, passed away on Friday, March 14, 2008 after a year-long battle with glioblastoma. A rising star in the field of population genetics, Scott was best known for his work on using diffusion models for inference of natural selection and demographic history from genetic data. He will be fondly remembered by all who worked with him for his brilliance, humble nature, and kindness of spirit.

Scott was born in Lawrence, Kansas, the son of Brad and Carol Williamson. He was a natural athlete and scholar and seemed to excel effortlessly in whatever academic field or sport he tried. From an early age, his parents and grandparents instilled in him a love of the natural world, and along with his sister, Erica, spent an idyllic youth hiking and camping in his native state. His fondness and encyclopedic knowledge of natural history was reminiscent of the founders of the field of evolutionary biology and provided exceptional training for his career as an academic biologist.

A gifted mathematician, Scott excelled as an undergraduate and graduate student at the University of Kansas, where he worked with Maria Orive, John Kelly, and Richard Prum, among others. His Ph.D. thesis under Orive, focused on developing novel approaches for rigorous inference of evolutionary forces from DNA sequence data. His breadth of study was quite remarkable and ranged from mathematical modeling of bird feather formation and pigmentation to inference of Human Immunodeficiency Virus (HIV) population dynamics to identifying signatures of natural selection from DNA sequence data.

In 2003, he joined the newly formed Department of Biological Statistics and Computational Biology at Cornell as a post-doctoral researcher working with Carlos D. Bustamante and Rasmus Nielsen. Here, Scott found an invigorating and collaborative environment that allowed him to blossom into one of the most productive young evolutionary geneticists of his generation. He worked tirelessly to tackle difficult problems including modeling the joint impact of natural selection and population size change on patterns of genetic diversity, developing population genetic theories of domestication, and scouring the human genome for statistical signatures of recent adaptive evolution in our species. In 2006, he chose to stay at Cornell as an Assistant Professor after fielding job offers from throughout the country. During his graduate career and time at Cornell, he authored and co-authored nearly 20 scholarly articles including papers in Nature, Proceedings of the National Academy of Sciences (USA), Proceedings of the Royal Society B, Genetics, Molecular Biology and Evolution, and the Public Library of Sciences – Genetics. Scott's work also caught the imagination of the popular press, and his research was featured in both Discover magazine (Top 100 Science Stories of the Year 2007) and the New York Times. Tragically, during his first year as a faculty member, he was diagnosed with an inoperable brain tumor that would ultimately take his life. Scott fought bravely and strongly making frequent trips to Rochester and Duke University where he was treated.

Although many of us knew Scott as a scientist and educator, he considered his most important role that of a husband and father. A doting partner and parent, Scott adored his wife, Shannon, and two young daughters, Emma and Claire. The Williamsons lived in Trumansburg, and loved their small village on Lake Cayuga. In the tradition of his parents, Scott and Shannon spent many hours with their daughters enjoying the natural beauty of the region, and traveled to the mountains and seas of the East coast.

Scott Williamson was a scholar, a father, a husband, and a great friend. He will be missed by all who knew him, and remembered fondly for having made our lives better.

Carlos D. Bustamante, Chairperson; Charles F. Aquadro, Andrew Clark

Fred E. Winch

June 16, 1914 – May 17, 2008

Remembering a Maple and Natural Resource Pioneer

From November 1943 to November 1975, Fred E. Winch was a pioneer of maple research and education in New York State. He led the way in maple producer education through establishing annual maple schools at over 15 sites around the state. His dedication to natural resource research and extension was very broad and included such topic areas as forest planning, forest taxation, tree plantation spacing, installing windbreaks, recreation, and wood use as fuel. Fred broke new ground in maple and woodlot research through assisting with the establishment of two research extension facilities in New York that still are active today, including the Uihlein Sugar Maple Research and Extension Field Station in Lake Placid and the maple program at the Arnot Forest. The benefits of these pioneer efforts are still helping maple producers and forest owners today.

Mr. Winch was born in Framingham, Massachusetts on June 16, 1914. He graduated from the University of Maine at Orono with a B.S. degree and received his Master's Degree in Forestry in 1937 from Cornell University. He was an Assistant and Associate Professor at Cornell University and served as the Extension Forester from 1943-75. He was Professor Emeritus at Cornell University since 1975. Fred became widely known for his knowledge of maple syrup production and marketing. He was an experienced forester specializing in the management of farm woodlots. He worked extensively with maple producers, woodlot owners and Christmas tree growers throughout New York State. At Cornell, he held a number of responsible positions including Director of Arnot Forest; Associate Director of NYS Cooperative Extension; Acting Chair of the Department of Natural Resources and Department Extension

Leader. Fred provided significant support and leadership to organize the North American Maple Syrup Council and later to form a National Maple Research Council. He wrote extensively about the production and marketing of maple syrup including Extension Bulletins such as Know Your Trees, Production of Maple Syrup and Other Maple Products, Planting Forest Trees in Rural Areas, and Judging Maple Products. He assisted in producing the publication, The Maple Syrup Producers Manual. He was especially well known for his commitment to young people through his work with 4-H and Future Farmers of America.

In May of 1977, Mr. Winch was the first inductee into the American Maple Museum's Hall of Fame displayed at the American Maple Museum in Croghan, New York. In 1995, he received the Outstanding Alumni Award from the Alumni Association of the College of Agriculture and Life Sciences at Cornell University. In 2004, the College of Agriculture and Life Sciences named Mr. Winch a Charter Member of the Liberty Hyde Bailey Leadership Society.

Mr. Winch continued to show his dedication to his community in retirement as a member of The First Baptist Church of Bradford, New Hampshire, serving as chairman of the Board of Trustees. He was a member and treasurer of the Bradford Historical Society and the Bradford Conservation Commission. Mr. Winch was a founding member of the Bradford Voters Coalition and was on the Bradford Town Facilities Committee of the Board of Selectman. He was a Director of the New Hampshire Timberland Owners Association from 1977-85 and was a member of the New Hampshire State Tree Farm Committee, the New Hampshire Forestry Communications Council, and a member of the University of New Hampshire Cooperative Extension Advisory Committee for Merrimack County.

Fred passed away Saturday, May 17, 2008 at the age of 93. His pioneering spirit is still remembered by many maple producers and forest owners throughout the world and many more continue to benefit from his foresight, dedication and hard work.

Stephen Childs, Chairperson; Tommy L. Brown, Mike Richmond

Ray J. Wu

August 14, 1928 – February 10, 2008

Ray J. Wu, Professor in the Department of Molecular Biology and Genetics died in Ithaca on February 10, 2008. He was 79.

Ray was born in Beijing, China in 1928, one of five children. His parents, Hsien Wu and Daisy Yen Wu, were biochemists whose collaboration resulted in China's first nutrition textbook, which was still in print as late as the 1990s. Hsien Wu also was recognized as the co-developer of the first blood test (Folin-Wu reagent) for sugar. Ray's parents helped instill in him values that he kept his whole life, including the importance of education. He attended Yenching University in Beijing for two years. In 1949, the family moved to Birmingham, Alabama, where Ray's father became chair of the Biochemistry Department at the University of Alabama, and where all five children completed their undergraduate education. Ray received his B.S. degree in Chemistry there in 1950, and then went on to earn his Ph.D. degree in Biochemistry at the University of Pennsylvania in 1955.

As a Damon Runyon Postdoctoral Fellow working under Efraim Racker, then at the Public Health Research Institute of the City of New York, Ray studied regulatory mechanisms in carbohydrate metabolism in mammalian cells. It was during these years that he married Christina Chan, and they had their son and daughter, Albert and Alice.

After Efraim Racker came to Cornell to become chair of the Section of Biochemistry under the Division of Biological Sciences, Ray followed in 1966 to join the Cornell faculty as an Associate Professor of Biochemistry and Molecular Biology. He was promoted to Professor in 1972. He served as Chairman of the

Section of Biochemistry, Molecular and Cell Biology from 1976-78. Ray received numerous awards over his lifetime, most recently the Frank Annunzio Award (2002), which recognizes innovative research of Americans who devote their careers to improving the lives of humankind through their work in science and technology, and the Outstanding Faculty/Staff Award in the College of Agriculture and Life Sciences (2005). In 2004, he was named the Liberty Hyde Bailey Professor of Molecular Biology and Genetics.

Ray's work had lasting international impact in three areas—developing recombinant DNA technology, creating transgenic plants, and furthering graduate student exchanges with China. He was the first scientist to sequence DNA, and the tools he and his coworkers developed underlie many of the techniques used in science and medicine today. His laboratory created transgenic rice strains that could be grown in hostile climates, a step that will boost food production in areas of the world where it is needed most. He spearheaded the creation of a system to bring promising students from his native China to the United States for training, thus fostering collaborations and influencing generations of researchers.

The technology to determine nucleotide sequence of genomes is one of the most important breakthroughs in modern biology because it allows the possibility of understanding the genetic blueprints of life at the nucleotide level. Ray made significant contributions to this front. In 1970, he developed the first method for determining the nucleotide sequence of DNA using DNA polymerase, which has the ability to add nucleotides one at a time to a preexisting chain by reading off a template. This enzymatic method was adopted and made more efficient by Frederick Sanger, who received the 1980 Nobel Prize in Chemistry for his efforts. Even today, as the next generation of sequencing technologies is being developed, DNA polymerase remains the centerpiece of these new high throughput sequencing strategies. The DNA sequence determination of the entire genomes of rice and human, among other organisms has revolutionized basic and applied modern biology.

When he was in his 50s, Ray turned his attention to world hunger, specifically the problem that much of the world's climate and soils are too hostile to grow rice and other food staples. His first step was to develop efficient transformation systems for rice. In the mid-1990s, Wu and his group genetically engineered and successfully field-tested pest-resistant rice plants, marking the first time that useful genes could be successfully transferred from a dicotyledonous potato plant to a monocotyledonous rice plant. The potato gene in rice plants produces a protein that interferes with the digestive system of the pests. As a result, the stunted growth of insects such as the pink stem borer minimized plant damage. Using a similar approach, a barley gene conferring salt- and drought-resistance turned rice plants into hardy strains in saline and drought conditions.

In 2002, Wu and colleagues made another advance by bolstering yields of genetically engineered rice tolerant of drought, salt and temperature stresses. This feat was achieved by introducing the genes for trehalose (sugar) synthesis into Indica rice varieties, which represent 80 percent of rice grown worldwide including the widely consumed basmati rice. This strategy could apply to Japonica rice varieties and other crops, including corn, wheat, millet, soybeans and sugar cane.

In addition to his own lab work, Ray Wu was also a longtime scientific adviser to governments both in China and Taiwan. He was instrumental in establishing the Institute of Molecular Biology and the Institute of Bioagricultural Sciences at the Academia Sinica in Taiwan, and the National Institute of Biological Sciences in Beijing. He also served as an honorary professor at Peking University and a dozen other Chinese universities.

In the early 1980s, Ray devised a process to identify promising Chinese college students who wanted to continue in graduate school to study advanced molecular biology. Over eight years, the program he founded (China-United States Biochemistry and Molecular Biology Examination and Application, or CUSBEA) brought more

than 400 top Chinese students to the United States for graduate training, 100 of who are now faculty members in major universities. These scientists, with colleagues from the Chinese Academy of Sciences, formed the Ray Wu society (now called Chinese Biological Investigators Society), which meets annually to promote advancements in the frontiers of life sciences. A scientific symposium to honor Ray Wu and the CUSBEA students who received graduate education in the U.S. was held in October 2008 at Cornell.

Ray Wu co-authored more than 300 scientific articles and held five patents. The volumes on Recombinant DNA that he edited in the series called Methods in Enzymology were classics. Until a few weeks before his death, Ray continued to be active in research, still working full-time at Cornell, running his lab, submitting grant proposals, and flying to various countries to present papers and serve on scientific advisory committees.

Ray believed in organization and planning, setting goals for himself for each year and phase of his life. In addition, he had great personal discipline. Yet, as hard as he worked, he always kept his life in balance, taking breaks to enjoy family, friends, music and photography. He was generous with his time, devoting many hours to advising colleagues, friends and family. He is remembered for his kindness, thoughtful advice and even-handed judgments. Colleagues admired him, as much for his humble, generous nature as for his can-do spirit and many scientific achievements. He was a gentleman and a scholar.

His wife of 51 years, Christina; a son, Albert, '80, M.D. '84; a daughter, Alice, '82, M.S. '86; and four grandchildren survive Ray Wu.

Bik Tye, Chairperson; Maureen Hanson, Volker Vogt