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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 University Faculty members whose deaths were reported in the period from July 1, 2014 through June 30, 2015. Also included is a memorial for one faculty member whose death was reported in 2010. The names of the committee members who prepared the statements are given at the end of each article.
M. H. Abrams, Class of 1916 Professor of English, Emeritus, who died in Ithaca at age one hundred and two, was one of the most distinguished and influential scholars produced by the American academy and an almost mythical figure in literary studies, and not just because he remained intellectually active to the end (Norton published his *The Fourth Dimension of a Poem* in his one hundredth year). He was the inventor and general editor of the *Norton Anthology of English Literature*, the first and dominant anthology presenting the literary canon, and for nearly fifty years he presided over the gradual expansion of that canon. He was also, as Wayne Booth of the University of Chicago put it, “the best historian of ideas, as ideas relate to literature and literary criticism, that the world has known.”

A beloved teacher of undergraduates and mentor to graduate students, Mike spent his entire academic career at Cornell and was a fervent Cornellian: a devoted supporter of Cornell athletics, and a generous benefactor of the Johnson Museum and the Kroch Rare Book and Manuscript Library.
Mike Abrams was born in 1912—long enough ago to remember hearing a speech by President Wilson. The son of Russian Jewish immigrants, he grew up in the seaside town of Long Branch, New Jersey, where his father owned a house painting business. During his school years his parents insisted that he concentrate on his studies above all else, and while photographs of the time show a muscular young man, his interest in sports did not develop until his college years. He was, from his earliest days, an avid reader; in an interview in 2001, he recalled:

“I used to devour books as a kid; it never occurred to me that I would write one. There was a time when I read three novels a day. I read fast; sometimes if I really enjoyed a novel I read it three times in one day, the same novel. It was during the Depression that I was in college, and there was no living to be made in anything really, so I thought I'd start doing something I enjoyed rather than something I didn't enjoy.”

He entered Harvard in 1930 as a scholarship student, and in 1934 won the prize for best honors thesis in English, which Harvard published in a run of 350 copies. *The Milk of Paradise*, later published with a new preface in the 1960s, concerned the relationship between opium and the literary imagination in several romantic writers.

Graduating from Harvard in 1934, Mike won a Henry Fellowship to study at Cambridge University with the critic I. A. Richards and attended seminars by such distinguished philosophers as Ludwig Wittgenstein, C. D. Broad, and G. E. Moore. Mike’s celebrated gifts of stylistic clarity and precise distinctions may owe something to virtues emphasized by British philosophers. During his year in England, he travelled to Germany and Italy and witnessed first hand the rise of fascism.

Mike returned to Harvard for graduate work in English and in 1937 married Ruth Gaynes, also from Long Branch. He received his Ph.D. from Harvard in 1940 with a dissertation, now in Kroch Library, that took off from Richards's interest in the functioning of
metaphors in systems of thought by examining the metaphors structuring romantic critical theory. The two fat volumes of “The Mirror and the Lamp” would eventually be transformed into a revolutionary and prize-winning book.

In 1941, when the U.S. entered World War II, Mike joined the team of the Psycho-Acoustic Laboratory in Cambridge, under the direction of the Harvard psychologist S. S. Stevens, which was charged by the government to solve the problem of vocal communications in noisy environments. Mike and his colleagues developed the "Abel, Baker, Charlie" code, which consists of English words least likely to be garbled or mistaken for each other. After the war, when the group's reports were no longer secret, Mike published two of them--his first professional publications, which as it turned out, were in a scientific rather than a literary field. This work in acoustics eventually contributed to the book he published in his 100th year, *The Fourth Dimension of a Poem*.

In 1945, Mike was offered a job as assistant professor of English at Cornell. He recalls: “the only thing I knew about [Cornell] came from a Saturday Evening Post article, a double-page spread showing the outside platform in Willard Straight which is still in use. It displayed tables with Cinzano umbrellas and undergraduates sitting there luxuriously sipping a tall drink, a view of Cayuga Lake in the distance. I said to myself, ‘Is this Eden, or an American university?’ So I decided to go for an interview, and was charmed by the place.” As he told it, he phoned his wife Ruth to tell her the news: “Ruthie, we’re moving to Ithaca.” She replied, “Where’s Ithaca?”

As a Cornell professor, Mike set to work developing the material in his doctoral thesis. Mike’s memory of writing what became one of the foundational works of twentieth-century literary scholarship involved Cornell colleagues, such as David Daiches, Robert M. Adams, Morris Bishop, Arthur Mizner, and of course Vladimir Nabokov: “When you walked into the hall [of Goldwin Smith] you could hear a typewriter clicking at one end and a typewriter clicking at the other—with the smell of my pipe smoke in the middle . . . At one end was Bob Adams, who never stopped typing; at the other end was David Daiches, who stopped typing only to talk once in a while.
And they drove you crazy because you knew they were just churning out this fine prose.”

*The Mirror and the Lamp*, when it was published in 1952, met with immediate acclaim. (A Modern Library survey ranked it 25th among the one hundred most important books of the twentieth century). The book begins, “The development of literary theory in the lifetime of Coleridge was to a surprising extent the making of the modern critical mind.” “Surprising” because Abrams argues that critical theories usually thought of as post-Romantic, if not anti-Romantic, have their roots in the Romantic period. Specifically, he argued that a paradigm shift had occurred during the early nineteenth century from what he called mimetic theories of literature to expressive theories. The book presented itself as the history of an intellectual transformation, but, more important, in outlining different possible theories of literature, for the first time it made the study of literary theory and theories an explicit topic of academic inquiry.

His second major scholarly work, *Natural Supernaturalism* (1973), which Mike frequently claimed to prefer to *The Mirror and the Lamp*, is a grand synthesis of Romantic literature and philosophy, exploring in particular the secularization of structures of religious thought as an animating force in nineteenth century culture. In a discussion moving across theology, poetry, history, and philosophy, and ranging from St. Augustine to Hegel and from Blake to Carlyle, Mike foregrounds Wordsworth’s claim, as he undertook to write an autobiographical epic, that the great “fables” of religious poetry--paradise, heaven, and hell--have their ultimate existence “within the mind of man,” which alone is capable of achieving “a new heaven and a new earth.” That faith, Mike argues, enabled Wordsworth and his contemporaries to produce works that conceive of the extraordinary in the ordinary and the supernatural in the natural.

Another contribution to critical theory is his *Glossary of Literary Terms*, which he continued to edit and augment into his nineties; its modest title conceals succinct essays on all the topics germane to thinking about literature and culture. The most recent edition contains an entry on rap, testimony to his continuing intellectual openness.
A number of Mike's essays over nearly seventy years have become classics; collections include *The Correspondent Breeze, Doing Things with Texts*, and *The Fourth Dimension of a Poem*. A set of lectures delivered to celebrate his life's work were published (along with his lengthy response, delivered without notes at the end of the conference) as *High Romantic Argument*.

In his nineties he developed a new interest in the acoustic aspects of poems and how a reader’s experience of articulating the poem’s sounds contributes to its effects. He called this “the fourth dimension of a poem,” and beautifully performs these effects in readings available on YouTube. The phrase became the title of his final collection, *The Fourth Dimension of a Poem*, published on the occasion of his hundredth birthday, when he also appeared before an audience of students, colleagues, and other admirers.

But what made Mike Abrams famous the world over is the *Norton Anthology of English Literature*, the first anthology of its kind and the widest-selling literary anthology in use today. Mike assembled a team of editors, including his colleagues Robert M. Adams and David Daiches, and brought out the first edition in 1961, expecting to sell perhaps ten thousand copies; instead, the anthology sold a hundred thousand in its first year and eight million copies subsequently. In the course of eight editions, the two volumes of the anthology have expanded to more than six thousand pages, as Mike oversaw the gradual expansion of the literary canon, adding more women and minority authors in every edition. He consistently supported a flexible approach to canon-formation and dismissed complaints about "watering down" the quality of approved writers by resisting the implication that literary judgments are a zero-sum game. "It's all good," he liked to put it, referring to both new and old writers in a recent edition. "And Keats is still good no matter who else is included."

When Mike was approached to take on the job of anthologist, he had already inaugurated at Cornell the perfect match for the new publishing project: the course called “The English Literary Tradition.” He ended up teaching the survey to several generations.
of Cornellians. His conception of literature as a human act of transmission was bound up in pedagogy: the conversation of teaching might be said to continue in the conversation of criticism. During the heyday of the New Criticism, which dealt with a poem or novel in isolation, Mike insisted that this approach ignored “a really important aspect of a student's introduction to literature”: “the order in which it was written, where you deal with the earlier poets before you deal with the later poets, who set themselves up against their predecessors or in important ways learned from them.” He loved to teach, and he loved being with young people; in return, he was consistently popular among students. His lectures, unsurprisingly, were models of clarity and compression; he never rushed, never ran over time. But there was nothing cut-and-dried about his presentation, and when he read the texts, in his richly expressive but slightly understated baritone, he demonstrated that reading aloud is also a form of interpretation and understanding.

Among his most famous students are the literary critics Harold Bloom, Sandra Gilbert, Gayatri Spivak, and E. D. Hirsch, and the novelists Thomas Pynchon, and William Gass. Asked about his students, Mike replied, “I've been fortunate in having so many good students who've done so many good things, and I certainly wouldn't want to single any one -- or two, or three -- out.”

Though one of the preeminent critics of the century, Mike Abrams had none of the qualities we associate with academic superstars. He did not fly around the country speaking at conferences or in prestigious lecture series; he declined visiting professorships, preferring to remain at home in Ithaca. He did not seek academic power, either within the university or in professional organizations. He did not want a center of some sort to direct, though he worked to help found the National Humanities Center in North Carolina. He was never president of anything. And at Cornell he was a benign figure, supportive even of colleagues whose approaches to literature differed from his own. As one of his admirers put it, he didn’t seem to notice how distinguished he was. What struck one in conversation were qualities of generosity, modesty, dignity, responsiveness, self-deprecation and a willingness to be amused. It
took some effort, in the aura of his charm, to remind yourself of his standing in the world.

Part of Mike's legendary quality had to do with the longevity of his energy and creativity. He was a great supporter of Cornell sports, especially the football team, and in his nineties was made honorary co-captain and allowed to call the toss of the coin at homecoming. He claimed never to have missed a home game until his one hundredth year. This “unreconstructed humanist,” as he called himself, was an incurable optimist, not only about the prospects of Cornell football but also about Ithaca weather. In a fitting culmination of his career, he was able to travel to Washington in 2014 to receive the National Humanities Medal from President Obama.

Jonathan Dwight Culler, chair;
Paul Lincoln Sawyer, Roger Stephen Gilbert
Dr. Heinz B. Biesdorf, Professor of Consumer Economics for 25 years in the College of Human Ecology, Cornell University is survived by his wife Ellen, relatives in Germany, and many friends.

Born in 1924 to Emilie and Alfred Biesdorf in Stuttgart, Germany, Professor Biesdorf emigrated to the United States in 1950. Following a short stay with his sponsor in rural Pennsylvania, he accepted employment at the H. J. Heinz Company and later as a night laboratory technician at St. John’s Hospital in Pittsburgh.

Professor Biesdorf earned a Business Administration degree from the University of Pittsburgh in 1955, the year he became a citizen of the United States.

Returning to Europe, Professor Biesdorf received a Ph.D. in Economics and Finance at the Leopold Francisca University in Innsbruck, Austria, and spent several years in marketing, and teaching economics at U.S. Army bases.

Professor Biesdorf returned to the United States to accept a professorship at the University of Pittsburgh and then at Cornell University in 1964, the year he and Ellen were married.
At Cornell, Professor Biesdorf launched mass media messages on money management through the Cornell Cooperative Extension system. Radio, television, newspapers, and magazines were utilized, as well as workshops and personal appearances throughout New York State. Educational Guides for schools and the general public accompanied these communication techniques.

Under the titles of Timeless Topics, Change for your Dollar, and Be a Better Shopper: Buying in Supermarkets, he and collaborating colleagues helped develop and disseminate the key consumer education messages. According to one interviewer, Professor Biesdorf became a household name for consumers with his timely emphasis on better money management.

He appeared on several national television programs and more than 200 different radio stations as well as daily broadcasts to Ithaca residents. One national newspaper called his efforts “a classroom for the millions.” His focus on supermarkets highlighted the major places where people were doing their food shopping, checking prices, and developing smart buying practices.

During Professor Biesdorf’s sabbatical leaves he taught at the Justus Liebig University in Giessen, Germany. He also gave lectures at several German and Austrian Universities and Swiss educational institutions, as well as talks and interviews for radio, television, newspapers, and magazines about consumer issues, money management and the history of the Cornell Cooperative Extension in the U.S.

Professor Biesdorf retired in the fall of 1989 as a Professor Emeritus. Much of Heinz and Ellen’s time in retirement was spent in Ithaca and cruising on small ships around the world.

Ellen recently offered the following statement that expresses her own evaluation of her husband’s life and captures Professor Biesdorf’s philosophy and endeavors as an educator: “Leave footprints of knowledge in the path of your life for others to follow in perpetuity.”
Professor Biesdorf created an outline of his own life story from which an obituary was created and published in the “Ithaca Journal.” This version is used with permission and assistance from Mrs. Ellen Biesdorf, and assistance from Bettie Lee Yerka and Martha Mapes.
Carole Ayres Bisogni was born in Jersey City, New Jersey and raised in northern New Jersey. At age sixteen, Professor Bisogni enrolled as an undergraduate at Cornell University to study human nutrition and food. This was the beginning of her long-term affiliation with Cornell University. At Cornell, she earned a B.S. with distinction and honors in Human Nutrition and Food in 1970, a M.S. in Foods and Nutrition in 1972, and a Ph.D. in Nutrition in 1976.

Professor Bisogni joined the Cornell faculty in November 1975 as an assistant professor in the Division of Nutritional Sciences with a joint appointment in the Institute of Food Science; she was promoted to associate professor in 1981 and to professor in 2000. In the early years on the faculty, she was responsible for Cornell Cooperative Extension education programs about consumer food issues including food safety, food product labeling, and seafood throughout New York State and beyond, as well as outreach to policy makers. With colleagues, she developed several award winning nutrition education programs including “Food for Health: The Carbohydrate Connection,” “Nutrition for Life,” and “In Touch Science: Food and Fabrics.” These programs included multi-media
interventions for adults and youth that were implemented in supermarkets, schools, and after-school programs.

The challenges of her extension and outreach work led Professor Bisogni to develop a research program to strengthen the design and evaluation of these programs using social science theories and methods. In later years, her research program evolved to focus on understanding food choice—the personal, social, cultural and situational influences on human eating practices. With colleagues in the Food Choice Research Group at Cornell, she developed the Food Choice Process Model that considers the multifaceted and dynamic factors that shape food activities. The Research Group produced over 50 publications in refereed journals about food choice. Professor Bisogni was passionate about engaging undergraduate students in food choice research, and many of her research articles were co-authored with undergraduates. In both 2001 and 2013, the Society for Nutrition Education and Behavior honored Professor Bisogni and her co-authors with its award for Best Article in the Journal of Nutrition Education and Behavior.

Throughout her academic career, Professor Bisogni was a strong supporter of and advocate for undergraduate students. This commitment was expressed in several academic appointments. From 1989 through 2002, she served as Associate Director of Academic Affairs in the Division of Nutritional Sciences. In this position, she led the revision of nutrition curriculum for undergraduate majors, the development of the new Division of Nutritional Sciences major in Human Biology, Health and Society, the initiation of the new nutrition major in the College of Agriculture and Life Sciences, and enhanced the undergraduate advising program and honors program in the Division of Nutritional Sciences. For this work, Professor Bisogni received several awards including the Human Ecology Alumni Association/Kappa Omicron Nu Award for Excellence in Advising in 2002, the Merrill Presidential Outstanding Educator Recognition in 2003, and the Kendall S. Carpenter Memorial Advising Prize in 2004.

After a one year stint as Interim Associate Dean for Academic Affairs in the College of Human Ecology, Professor Bisogni was
appointed to the position of Associate Dean in 2008, in which she
served until her death in 2014. In this role she engaged in many
initiatives that advocated for students, promoted innovative
teaching, and enhanced academic standards. She played a critical
role in establishing a research immersion program that provided
undergraduate students with stipends to conduct research with
faculty members over the summer. Early in her career (1978-1983)
she taught the course, Consumer Food Issues. Later she co-taught
the graduate course NS7030, Seminar in Nutritional Sciences. Most
recently (2005-2013), Professor Bisogni co-taught a large
undergraduate course, NS 2450, Social Science Perspectives on
Food and Nutrition with Professor Jeffery Sobal.

Professor Bisogni was a member of the graduate field of Nutrition
and the graduate field of Food Science and Technology. During her
academic career, she chaired the Special Committees of over 30
doctoral and masters students and served as a minor or field member
for 33 graduate students. She was an outstanding university citizen,
serving on many, many division, college and university committees,
as well as, in positions in professional groups and organizations
including the Institute of Food Technologists, the Society for
Nutrition Education and Behavior, the National Academy of
Sciences, and the United States Department of Agriculture.

Carole Ayres met James J. Bisogni, Jr. after he came from Lehigh
University to Cornell University as a graduate student in Civil and
Environmental Engineering (M.S. ’70, Ph.D. ’73). They were
married in Anabel Taylor Hall in August 1971. James Bisogni
joined the faculty in the College of Engineering and retired as
professor emeritus in 2014. Carol and James have two sons who
both attended Cornell University: Jared (M.P.S. ’06) and Adam, a
current doctoral student in molecular and integrative physiology in
the College of Veterinary Medicine (B.S. ’08). Carole Bisogni was
broadly and deeply involved in the community of Cornell
University, having been a student, faculty member, faculty spouse,
and parent of Cornell students.

Christine Olson, chair; Malden Nesheim, Jeffery Sobal
Professor Emeritus George Louis Casler was a New Yorker and a Cornellian. Born in Herkimer County New York, he graduated from West Winfield Central School as the valedictorian of his class. After earning a B.S. degree from Cornell in 1950, he owned and operated farms in Cortland and Seneca counties. While farming, George injured his back—a problem that plagued him for the rest of his life—and he returned to Cornell, earning a M.S. degree in 1959. He then served as a farm management extension specialist at Cornell from 1959 to 1962, before entering a Ph.D. program in agricultural economics at Purdue University. He joined the Cornell faculty in the Department of Agricultural Economics, now the Dyson School of Applied Economics and Management, as an assistant professor in September 1965 and became a full professor in 1975.

Professor Casler’s teaching, research and extension efforts focused on topics in production economics and farm business management. His experience as a farmer helped him develop effective working relationships with extension educators and their farm clients. On campus he taught Production Economics for a few years in the late 1960s. Subsequently, he taught senior-level Advanced Farm Management, inter alia covering the principles in a textbook that he co-authored: Capital Investment Analysis. This book was used in
teaching both college and extension audiences and was revised through three editions. He also collaborated on the development of a computer program to assist farmers and extension agents in evaluating major capital investments for farm businesses.

Professor Casler sometimes had strong opinions that were forcefully expressed but worked effectively in the team-oriented culture of the farm management faculty. He participated in the development of sequential schools as a method of teaching extension clients within and across county lines. He worked closely with department colleagues to develop teaching materials on farm finance, capital budgeting, and other management topics. He also often led efforts to experiment with new quantitative tools for the classroom and extension teaching.

George played a major role in research concerned with the current status and future development of agriculture in New York State (Project Toward the Year 1985); this was an important effort to blueprint the “current status and future development in agriculture in New York State.” Along with coordinating inputs to the project, he authored three and coauthored one of the series of 14 publications. In the mid-1980s, Professor Casler returned to this theme with important contributions to a companion assessment entitled “Agriculture 2000,” this high profile project was undertaken by the College of Agriculture and Life Sciences in collaboration with the New York State Department of Agriculture and Markets.

Professor Casler was actively involved in interdisciplinary research, working extensively with crops, soils, and engineering faculty. He took responsibility for evaluating the economic implications of the agronomic research on fertilization, and he was the departmental representative to the College task force on agricultural wastes. The early 1970s saw new efforts to uncover and understand the environmental consequences of farm and food production methods, and Professor Casler was a principal investigator for a Rockefeller grant for research in this area. This grant supported an interdisciplinary team focused on methods for predicting nutrient runoff and leaching from agricultural land, as influenced by climate, soil characteristics, and agricultural practices. Because of the
significance of the New York State dairy sector, management of nutrients on dairy farms became one of the centerpieces of environmental concerns for the State, and Professor Casler was at the forefront of efforts to understand the consequences of policies designed to ameliorate environmental problems associated with livestock production. In particular, he conducted research on waste management and disposal, including cutting-edge work on the economics of on-farm generation of methane gas. George contributed a chapter to the book *Nitrogen and phosphorus: food production, waste and the environment: a report of an interdisciplinary research project* (Ann Arbor Science Publishers, 1975), an important output from this research.

Over his career, George made significant contributions to three long-standing extension programs. In 1977, he assumed leadership of the Cornell Farm Tax Program. This educational effort dates to the 1920s, and after World War II, emphasis was placed on program delivery through regional tax schools for farmers and their tax preparers. Professor Casler’s pivotal role in the quality and sustainability of this program was chronicled by his colleague, Stuart Smith, who reported that, in the 18 years Professor Casler led the program, they taught 170 tax schools to nearly 22,000 tax practitioners with over 1,000 hours of teaching. Professor Smith indicated that “George was willing to teach many of the most difficult tax topics like Alternative Minimum Tax, Limited Liability Companies, Passive Activity Losses and Tax-Deferred Retirement Plans. He had the interest and ability to dig into the tax code, figure out what it meant, and explain it to his audience so it made sense. George Casler made a major contribution to the success and longevity of the Cornell farm income tax school.”

Professor Casler was also a regular contributor to the department’s Economic Outlook Program. He co-authored a chapter in the department’s annual Economic Outlook report and made presentations at the December Economic Outlook Conference. These efforts capitalized on his interests and his ability to disentangle economic relationships for the New York State farm sector, analyze the prospects for viable farm businesses, and explain it all to a lay audience.
In addition, George was a member of the team of management and finance faculty who annually developed and taught extension training programs for Extension Agents and farmers. He made contributions to programs in dairy systems, investment analysis, cost-price squeeze and the dairy buyout, among others. A part of this effort involved support and management of another legacy program, the Cornell Dairy Farm Business Summary (DFBS). George worked in concert with other farm management staff and faculty to assemble, analyze and disseminate this basic intelligence on dairy farm costs and returns in New York State. At the time of his retirement in 1995, Professor Casler was presented with an Excellence Award by the New York State Association of County Agricultural Agents for his work in Farm Management Extension.

Professor Casler was a life member of the Agricultural and Applied Economics Association (AAEA). In addition to service on several AAEA committees, he was a member of the Northeast and North Central farm management extension committees. He was a participant on the Cornell National Dairy Herd Buyout Program Team that developed educational materials for a major dairy policy initiative under the 1985 Federal Food Security Act. This team’s work received the 1987 Distinguished Extension Program Award from the AAEA.

With an enthusiastic interest in wine-making, George was a lifetime member of the American Wine Society. He chaired the local chapter for many years. He was also a member of City Club of Ithaca and served on the Corporation Board of Alpha Zeta fraternity and was their long-time Treasurer. He also served two 3-year terms as treasurer of the Cornell College of Agriculture and Life Science Charitable Trust which provides financial assistance to students in the College.

George is survived by his wife, Patricia and sons, William, Donald, and Dale; by three grandsons, Donald Jr., Jack and Michael; and by three brothers.

Bill Tomek, chair; Nelson Bills, Ed LaDue
Edmund Titus Cranch

November 15, 1922 – February 4, 2015

If one were 17 and had the choice of touring the country in a popular dance band or studying engineering what would you do? This was the choice of former Engineering Dean and Sibley School graduate Professor Edmund Cranch who in February 2015 passed away at the age of 92. He helped create the department of Theoretical and Applied Mechanics (T&AM) and co-authored a pioneering engineering mathematics text used at Cornell for many years. Ed was the principal author of the so-called Cranch Report in 1974 that found the University finances in serious trouble and he went on to become the 12th president of Worcester Polytechnic Institute.

Ed was born in Brooklyn on November 15, 1922 and grew up in Westfield New Jersey. In 1941 he enrolled at Newark College of Engineering for two years and in 1943 enlisted in the Navy V-12 program at Cornell University, earning his BSME in the Sibley School of Mechanical Engineering in 1945. He served as ensign aboard a Navy ship, the USS Providence, that sailed to the Mediterranean Sea. Before returning to Cornell to take up graduate studies, Ed worked briefly at Bell Labs in New York City on electromechanical devices (1947-48). He returned to Cornell and earned his Ph.D. in 1951 in engineering mechanics, mathematics and physics. He was hired as an assistant professor in engineering mechanics. He rose quickly through the faculty ranks to become the
first head of Theoretical and Applied Mechanics, a graduate research
and undergraduate service department in the College of Engineering
from 1956-1968.

Professor Cranch believed in the educational value of teaching
mathematics in the context of engineering problems. Beginning in
the late 1950’s, Ed worked with Professor H. David Block of
T&AM and Peter Hilton and Robert Walker of Mathematics to write
one of the first engineering math texts to incorporate the digital
mathematics of the emerging computer age. This book became a
mark of Cornell engineers as they carried the enormous pre-
published math text to class for more than a decade. In establishing
Theoretical and Applied Mechanics Ed believed in the value of
teaching applied mathematics in engineering and hired H. David
Block and Geoffrey S.S. Ludford to create a popular sequence of
graduate applied mathematics courses in T&AM in the 1960’s. He
also realized the struggle to strike a balance between theory and
practice in engineering. He is quoted as saying “in teaching and
research the pure will drive out the applied.”

In 1970 Professor Cranch was elected to a five year term on the
Cornell Board of Trustees, serving on the executive committee for
four years. He also became associate dean of the College. He was
asked by President Dale Corson to chair a faculty Advisory
Committee on Financial Planning to study University finances in
March 1971. At the time there was scant literature on the economics
of research universities. Ed served with Cornell economist Fred
Kahn. The committee concluded that Cornell’s endowment could
not sustain Cornell’s mission without both increased resources and
faculty productivity. The release of this report in 1972 came at the
time of a U.S. recession sparked by the end of Vietnam War
spending, the end of the Moon missions and an energy crisis. The
findings became known as the Cranch Report and was immediately
controversial among the faculty. Its findings heralded the increase
in undergraduate enrollment by 2000 students in the late seventies
and the accelerated growth of contract research grants.

In 1972 Edmund was chosen to become the 6th Dean of the College
of Engineering. Under his leadership he brought Geology into the
College. He helped convince alumnus Lester B. Knight ’29 to establish the Knight Lab that later became the Cornell Nanoscale Facility. He actively supported expansion of the Materials Science Center and the Center for Environmental research and sought increased funding for the Master of Engineering Program. Ed said his leadership philosophy was inspired by earlier Dean Hollister, that is, hiring excellent faculty and letting them create exciting research at Cornell.

In 1978 Professor Cranch was invited to become the 12th President of Worcester Polytechnic Institute (WPI). In an interview in 2012, Ed said he found WPI a strong technical institution with challenges to move into more science-based engineering, bio-engineering and an MBA program which he felt were his major contributions. During his tenure 1978-1986, WPI enrollments increased and the endowment doubled. He helped expand WPI’s traditional links to industry as well as supported automated manufacturing and robotics laboratory programs. During Cranch’s presidency WPI underwent major renovation and expansion of Washburn Shops and dormitories.

He was further challenged by an offer from An Wang the head of Wang Laboratories to establish a graduate institution centered on software engineering. As first president of Wang Institute of Graduate Studies in 1986, Cranch hired a number of faculty and established a curriculum and classes that attracted several hundred part-time students. After two years however, financial conditions changed and Wang Institute was closed in 1988. Disappointed but not disheartened he became the Granite State Professor at University of New Hampshire and worked on the emerging field of long distant education.

Edmund Cranch was a man of his time. His tenure as department head, dean and university president from 1956 - 1986 coincided with the rise of applied science and mathematics in engineering education spurred by the Cold War and the ‘Space Race.’ Since that era, the emergence of digital technology, global economic competition from Asia and low wage economies have re-focused U.S. engineering
education toward design, manufacturing and innovation, some of these initiatives Cranch helped establish at WPI in the 1980’s.

In 1985 Edmund Cranch was elected national president of the American Society of Engineering Education. He was an NSF Fellow and a member of President Reagan’s Advisory Council on Private Sector Initiatives. He was also a Fellow of the American Society of Mechanical Engineers and as a student was elected a member of the engineering honor society, Tau Beta Pi and president of Cornell chapter of Sigma Xi. Ed was awarded honorary doctorates from Villanova University (1982), WPI (1985) and Milwaukee School of Engineering (1993).

Ed’s wife of seventy years, Virginia Harrison was a graduate of Russell Sage College. She was a nurse at Cornell’s Infirmary during the time Ed was a student at Cornell. They married in March 8, 1945. Virginia and Ed had three children; Virginia (b. 1946), Edmund (b. 1948), and Timothy (b. 1942). As of 2015, they had five grandchildren and three great grandchildren. Virginia Cranch lives in Bonita Springs, Florida. According to his family obituary, he had a “scientist’s appreciation of the threat of mutual thermonuclear destruction and studied the teachings of Mahatma Gandhi.” In Ithaca, Ed and Virginia were members of the Society of Friends (Quakers). While a Navy student at Cornell, Ed played hockey on Beebe Lake. This love of hockey continued as Ed and Virginia were season ticket holders at Cornell’s Lynah Rink. Today those season tickets were handed down to the co-author of this memorial, Professor Joseph Burns and his wife Judy. Ed had hired Joe in T&AM in 1968.

From this brief outline of Edmund Cranch’s career, it is clear that from the time he came to Cornell he was on a path to become an academic and administrative leader in engineering education accepting the challenge of change and transition. His colleagues in Carpenter Hall found him open and accessible and truly interested in people and solving problems. Former Director of Development in the College Don Berth wrote, “As dean he showed an uncanny skill at ranking priorities—he had an underlying courage and toughness. Still, he respected the opinions of others.” Ed and Virginia always
shared a love and loyalty to Cornell, returning in later years to spend their summer months in Ithaca, and sometimes going to lunch with colleagues in Theoretical and Applied Mechanics.

In a web interview with one of Ed’s hires, Professor Emeritus Francis Moon, Cranch revealed that in the late 1930’s as a teenager he was an up and coming jazz cornet player. He often went to NYC to hear the Duke Ellington band and Louis Armstrong. He already played in bands on the Jersey Shore when his amateur jazz band entered a contest at the NY World’s Fair of 1939 and won a chance to tour the United States. Tempted but not having the temperament for a life on the road in a band bus, he decided to study engineering and the rest is history.

Francis C. Moon, chair and Joseph A. Burns

Professor Frank Moon’s interview with Ed Cranch can be found on Cornell’s eCommons: https://ecommons.cornell.edu/handle/1813/31544

This summary of Edmund Cranch’s life and career was written with input from the 2012 conversation between Ed Cranch and Frank Moon on the Cornell oral history website, the Ithaca Journal Obituary, the Cornell Chronicle Obituary, the 1972 Chronicle Summary of the Cranch Report, the Engineering Quarterly article of 1986 summarizing Edmund Cranch’s term as dean by Don Berth, as well as personal memories of the authors.
Loy Van Crowder
February 5, 1920 – March 1, 2015

The Section of Plant Breeding & Genetics in the School of Integrative Plant Sciences (formerly Department of Plant Breeding & Genetics, formerly Department of Plant Breeding & Biometry), and the Office of International Programs in the College of Agriculture & Life Sciences lost a dear friend and colleague with the passing of Loy Van Crowder at the age of 95 on March 1, 2015 in Cornelia, Georgia.

Professor Crowder started life in the little North Carolina town of Polkville, where he was born on February 5, 1920 into a rural farming family. Although he worked in the fields from an early age, his father having a mule-drawn plow cut down to suit Loy’s size as a small boy, he excelled in school where he joined the Future Farmers of America (FFA) club. He won first place in speaking locally and then at the state FFA meeting as well. He graduated at the early age of 16 and left the farm for Berry College near Rome, Georgia. This happened in 1937 in the midst of the Great Depression and Loy had no money for a college education. He chose Berry College because it offered education in exchange for work at the college. He worked in a number of areas including the dairy, grounds, and tree trimming. It was at Berry that Loy met and courted the love of his life, Eloise Cooper from Tignall, Georgia.
Loy graduated in 1942, when the U.S. was involved in World War II, and he wanted to join the war effort. He enlisted in the Army Air Corps and was accepted for bomber training in B-25 twin-engine bombers. He married Eloise in 1943 after finishing his basic training. He trained to fly the B-25 bomber and, perhaps as a precursor to his later teaching career, he was so successful that, after receiving his wings, he was sent as a B-25 instructor to Turner Field near Albany, Georgia, where he remained for most of the war.

Following the war, Loy decided that he wanted to follow a career in agronomy -- a case of the “boy leaving the farm, but the farm not leaving the boy.” He and Eloise moved to Athens, Georgia in late 1945 so that Loy could pursue an M.S. degree in agriculture at the University of Georgia. While working in Griffin, Georgia, at the University of Georgia agricultural experiment station, Loy and Eloise started a family with two closely spaced children, Judie and Van. After two years in Griffin, Loy was encouraged to seek a doctorate degree. He moved the family to Ithaca in 1949 to study for a Ph.D. in plant breeding at Cornell University. In 1952, he completed the degree and returned to the Griffin experiment station. After three years there, Loy accepted a position with the Rockefeller Foundation to work in Colombia, as the Director and Research Coordinator for the Foundation’s Agricultural Program. He moved the family to Bogota in 1955 where he took up his post. Suzi was born in 1958. After eight years, Loy and Eloise decided to move the family back to the U.S., so in 1963 Loy accepted a position as International Professor of Plant Breeding at Cornell, one of the original 10 international professorships established by then Governor Nelson Rockefeller. Loy worked at Cornell for 17 years, taking sabbatical leaves and assignments in many countries including Japan, Ecuador, the Dominican Republic, the Philippines, Nigeria and Costa Rica.

During his time at Cornell, Loy took a sabbatical leave at the University of the Philippines at Los Baños (UPLB) and is well remembered there for his scholarly contributions and by the former plant breeding field staff as “the American professor who drove as fast backwards as forwards.”
Loy retired from Cornell as a Professor Emeritus in 1979 and accepted a position with the Rockefeller Foundation in Jogjakarta, Indonesia, from 1980 until 1984 when he retired from the Rockefeller Foundation and took a position as an adjunct professor at the University of Florida. Loy worked as a consultant in many Latin American, African and Asian countries until he retired completely in 1996, moving to Cornelia, Georgia to be close to family living nearby.

Loy was internationally recognized for his expertise as a plant breeder and in particular as a tropical forage breeder. He was a dedicated supporter of and contributor to international plant breeding, which was the hallmark of his career. He wrote numerous journal articles and several books, one of the better known being *Tropical Grass-land Husbandry* written with a colleague in 1982. He showed exceptional leadership in training graduate students to deal with plant breeding problems of the tropics and developing countries. He influenced many U.S. students to pursue careers in international plant breeding, and helped prepare international students for leadership positions in their respective national programs, and in some cases at the highest level of university administration and cabinet-level government positions.

Loy was an accomplished teacher and contributed significantly to the curriculum in plant breeding. When the Division of Biological Sciences was created, the introductory course in Genetics was reassigned from Plant Breeding to the Division. Later it became evident that another introductory course in breeding and genetics was needed in the College. The responsibility for developing this course was shared by the Poultry Science and Plant Breeding departments. Loy accepted the responsibility of developing and teaching the plant section of the new course until his retirement. The course is still offered and is popular with Cornell undergraduates.

Professor Loy Van Crowder was a man who started life with little, worked hard and gained a lot, and along the way, did a lot of good for a lot of people.
Loy is survived by his wife Eloise of Cornelia, GA, daughter Judi (Fred Wendt) of Alto, GA, son Loy Van, Jr., B.S.’74-MPS’77-Ph.D. ‘89 (Patricia Parrera) of Blacksburg, VA, and daughter Suzi (Randy Hall) of Augusta, GA; sisters, Linda Spangler, Fredericksburg, VA, and Carole Lattimore, New Melle, MO; grandchildren, Melissa Tymchuk, Frank Wendt, Mary Catherine Hall, Betsy Hall, and Julietta Crowder; six great-grandchildren; and many nieces and nephews. He was predeceased by his brother Gene Crowder, sister Ruth Wilson, grandson Ryan Perry Crowder, and granddaughter Anna Eloise Hall. His grandson, Nathan Crowder died November 25, 2015.

W. Ronnie Coffman, chair; Robert L. Plaisted, Judy Singer
Eugene Dynkin, the A.R. Bullis Professor of Mathematics Emeritus at Cornell University, died November 14, 2014, in Ithaca, NY. He was 90. He is survived by his wife, Irene; a daughter, Olga Barel; three grandchildren; and seven great-grandchildren.

Evgenii Borisovich Dynkin was born in Leningrad (now St. Petersburg) in 1924. When he was 11 his family was exiled to Kazakhstan and, two years later, his father disappeared in the gulag. On accepting the AMS Leroy P. Steele Prize, Professor Dynkin said it was almost a miracle he was accepted at Moscow University at the age of 16 to study mathematics. There, he attended the seminars of I. Gel’fand and A. Kolmogorov.

Early in his career, Professor Dynkin made outstanding contributions to Lie theory and introduced the diagrams now known as Dynkin or Coxeter–Dynkin diagrams. This work found applications in the study of elementary particle physics. He also discovered the explicit formula for the universal coefficients of the Baker–Campbell–Hausdorff series describing the logarithm of the product of two exponentials. He kept a keen interest in Lie theory throughout his career, which he described as “Seventy Years in
Mathematics.” Several of his Moscow former students became worldwide leaders in Lie theory and Algebra.

Professor Dynkin made even more outstanding contributions to Probability Theory where he played a major role in the development of the theory of Markov Processes. His books, *Foundations of the theory of Markov processes* (1959) and *Markov processes* (1963), became highly influential. Among several important conceptual breakthroughs, Professor Dynkin can be credited with the idea of looking at a Markov process as a single stochastic process under a collection of probability measures corresponding to the possible initial values, with the introduction of the shift operators, and the rigorous formulation and proof of the strong Markov property.

At the 1962 International Congress of Mathematicians in Stockholm, Professor Dynkin’s plenary lecture “Markov Processes and Problems in Analysis” was read by Kolmogorov. On each of the three occasions Professor Dynkin was invited to speak at the International Congress of Mathematicians (Stockholm, Nice and Vancouver), his lecture was delivered by a colleague as he was not authorized to leave the Soviet Union.

At the end of 1976, Professor Dynkin left the Soviet Union and immigrated to the United States via Israel. He found a new home in Ithaca, attracted by Cornell’s established tradition of excellence in Probability Theory and Mathematical Statistics. He was proud to have become part of this long tradition and greatly contributed to it. At Cornell, he pursued his famous work on the relation between occupation times of a Markov process and Gaussian random fields, with striking applications to multiple points of Brownian motion, before turning to the development of the theory of superprocesses, a class of measure-valued Markov processes which gives probabilistic solutions to certain nonlinear partial differential equations. He remained active in mathematical research until his death. For almost forty years, he was a towering presence in the department of mathematics.

Professor Dynkin was a courageous, organized and determined human being who dedicated most of his life to the study of
mathematics and to the mathematical community. Many of his ideas and contributions were foundational in nature and have gained a permanent place in mathematics, influencing the work of many others. The Dynkin Collection of mathematics interviews (available at http://dynkincollection.library.cornell.edu/) contains interviews which were recorded over the span of more than fifty years. He worked tirelessly to make sure this remarkable collection becomes available to all via the World Wide Web. Most important to him was his role as a mentor and supporter of young talents. Indeed, Professor Dynkin has over 500 mathematical descendants. Through his outstanding lecturing and teaching, he touched and transformed the life of many an apprentice mathematician.

Professor Dynkin’s contributions were recognized by numerous distinctions. He received the Prize of the Moscow Mathematical Society in 1951 and the Leroy P. Steele Prize for lifetime achievement from the American Mathematical Society in 1993. He was a fellow of the Institute of Mathematical Statistics, of the American Mathematical Society and of the American Academy of Arts and Sciences. He was a member of the National Academy of Sciences of the United States.

Laurent Saloff-Coste, chair; Clifford Earle, Anil Nerode
LeRoy August Ellerbrock, 72, Associate Professor at Cornell’s Department of Horticulture for many years, passed away unexpectedly at his home on December 12, 2014 after a brief illness. Roy grew up on his parents’ family farm in New Cleveland, OH. There he did the usual chores, helped to tend his father’s large truck garden, and organized baseball games with neighbor boys in nearby fields. Roy went on to graduate from Miller City High School where he was captain of the basketball team and president of the Class of 1960. Roy studied Russian at the University of Cincinnati, but his studies were interrupted by service in the U.S. Air Force, in the Air Weather Service at Fliegerhorst Army Air field near Hanau, Germany. He returned to the U.S. to study botany at The Ohio State University, graduating Phi Beta Kappa in 1969.

Roy received his Ph.D. in Plant Pathology in 1976 from Cornell University, working under the guidance of Professor James Lorbeer. His study of a disease of onions, carried out on growers’ fields in several areas of New York, together with his experience of working on a farm while young, launched a lifelong career of research and interaction with the onion industry. His first job after the Ph.D. was employment as a plant pathologist for the USDA in Chicago, followed by engagement by the Santa Fe Railroad as a produce
inspector. But Cornell pulled him back, and he joined the Department of Vegetable Crops faculty in 1978 with responsibility for research and extension work on the high organic matter soils of New York (so-called muck soils), and teaching.

Roy became a familiar figure in onion fields, working closely with Cooperative Extension specialists and growers. He focused on topics that represented the major production constraints to the industry, primarily the control of weeds, selection of higher-yielding varieties, and optimum levels of fertilizer. His operational style was unique, and was vividly remembered by a vegetable specialist that worked with him:

“Roy deployed his field trials throughout the onion growing areas of the state, and when it was time to hit my territory, he’d call me the night before and arrange to meet me at the field first thing the next morning. I would show up at 8 a.m., to find that Roy had already been there for at least an hour, had laid out the trial, staked the plots, and was already strapping on his CO2 sprayer to apply treatments. He was the picture of efficiency, striding plot to plot, explaining each treatment, commenting on weed populations, and shedding empty herbicide bottles as he went….We might put out several trials in one morning, then he’d pack up his truck and speed off to the next pocket of muck scheduled on his rounds. Later in the season he would pop in and out, ghostlike, to rate his trials….Roy never ate a meal, and barely drank water when he was out doing field trials, but he graciously let his “collaborator” wolf down a sandwich and some iced tea when I was ready for a break. Those were great days, in the field with Roy Ellerbrock.”

Another specialist stated Roy was “highly respected by growers, was very approachable and a personally engaging person. He was warmly welcomed at any farm and many a producer dinner meeting. In 2004, he was awarded, by the Orange County Vegetable Growers Improvement Cooperative Association, the Lifetime Achievement Award for all of his hard work toward improving producer profitability.”
These sentiments were also shared by other extension colleagues: “Roy traveled the State relentlessly to serve his growers, without expectation of reward or credit. Roy was a modest man who did not seek the limelight, but earned a deep respect and immense gratitude from all New York onion growers nonetheless.”

Roy felt that growing up on a farm was instrumental in his ability to build relationships with growers. He was the Cornell liaison to the NYS Vegetable Growers for many years and was a key part of the establishment and growth of the statewide Vegetable Growers Meeting, starting in the 1980’s. Roy had a passion for teaching and remembered not only students’ names years later, but could describe their personalities and interests. He shared his love of the vegetable growing industry with his students and conducted field trips to visit growers in several parts of the state as part of his courses, so that they could see and experience what they studied. He thus fostered a love of gardening and vegetable production in an entire generation of students.

The close collaboration of Cornell faculty and major agricultural industries in New York State was a common feature during the establishment and growth of such enterprises in the 19th and 20th century, but has become increasingly rare in recent years. In his quiet but effective manner, Roy Ellerbrock epitomized the best of what might seem to be a vanishing breed.

*Chris Wien, chair; Elmer Ellis Ewing, Maire R. Ullrich*
Milton J. Esman

September 15, 1918 – February 7, 2015

Milton Esman was a devoted teacher and advisor of students, a distinguished public servant, and a truly creative thinker. His was an exemplary life with deep Cornell roots. He leaves three children, Judy, Michael, and Oliver, four grandchildren, Elisabeth Esman, 30, Emily Esman, 29, Daniel Finegold, 25, and Sarah Finegold, 22, his brother, Aaron, and his devoted wife of 66 years, Janice (née Newman). Of his relationship with Janice, his friend John Montgomery wrote; “I could never get him away from Janice for very long at a time, a choice that was easy to understand.”

Milton was born in Pittsburgh, Pennsylvania, and began his long association with Cornell as an undergraduate in 1935, where he majored in Government. He earned his Ph.D. in Politics at Princeton in 1942, before training in Military Government at Harvard and serving as a Civil Affairs Officer in the Government Section of General MacArthur’s headquarters in Tokyo, where he participated in the drafting of the current Japanese Constitution. His ideas for the reform of the civil service, the role of political parties, and democratization in general, were eventually recognized by both American and Japanese constitutional experts.
Returning to the U.S. after his military service, he worked as a Program Planning Officer and a Research Officer at the U.S. Civil Service Commission and the Department of State between 1947 and 1954. While serving in these government positions, Esman was a part-time lecturer in political science and public administration at the George Washington University.

Milton’s life was woven into the history of Japan and Southeast Asia. He returned to the region’s affairs, first with the International Cooperation Administration in Washington and then as head of a program office in Vietnam between 1954 and 1959; he moved back to the US and served as Director of the Economic and Social Development Department of the University of Pittsburgh’s School of Public and International Affairs from 1959 to 1969. For two of these years he was on leave, serving as Senior Advisor in Public Administration for the Prime Minister of Malaysia. In 1969, he returned to his alma mater, Cornell, as Director of its Center for International Studies. He served as director for fourteen years, holding the John S. Knight Chair of International Studies.

Milton came to Cornell not only to direct CIS, but to teach development administration – the formulation and execution of development plans, programs and projects and the development of administrative institutions, mainly in third world countries. He also made broader contributions to teaching, branching into subjects like ethnic studies and conflict resolution. While at Cornell, he was also a visiting professor at the Hebrew University, the University of Leiden, and the Osmania University in India. His teaching continued well after retirement, offering the Government Department’s basic course in Comparative Politics for a number of years.

Professor Esman was adept at bringing colleagues from many disciplines together to work on issues of cross-cutting interest. In the early 1970s, at Esman’s initiative, the Center organized a series of multi-disciplinary courses designed to introduce undergraduates to the social sciences from the viewpoint of a problem rather than that of a single discipline, as social science intro courses were then organized. Examples were a course on the causes of war and peace
taught by social science, natural science and engineering faculty members in the Peace Studies Program, and one on Third-World rural development entitled ‘Peasants, Power and Productivity,’ planned by the Rural Development Committee and taught by an anthropologist, a political scientist, and an agricultural engineer respectively, approaching social science analysis from micro, macro and technical perspectives. Esman’s bold cross-disciplinary teaching initiatives rattled traditionalists in the College of Arts and Science, who thought that all teaching had to be linked to specific disciplines.

At Cornell, Milton was more than a talented teacher. He mentored younger colleagues, like Peter Katzenstein, Sidney Tarrow, Shibley Telhami, and Norman Uphoff. “For me,” remembers Telhami, “Milt was not only an inspirational and supportive senior colleague, but also a father figure. He was kind and caring in ways that meant much to me when I arrived at Cornell. After I left Cornell, I don’t recall a year during which we didn’t talk by phone or I didn’t receive a commentary from him on an article I had written.”

Milton’s research initiatives at CIS were equally interdisciplinary. For example, with Uphoff and Gil Levine, he established an active, interdisciplinary Rural Development Committee (RDC), which brought together faculty and students from the colleges of Arts & Sciences, Agriculture & Life Sciences, Human Ecology, and Art, Architecture and Planning, to address the problems of enhancing productivity and security for the many millions of smallholding households in Asia, Africa and Latin America who were not well-served by prevailing development strategies, research and investment. The RDC provided documentation, theory and recommendations for what came to be known as participatory approaches to Third World development. With Uphoff, he published a book analyzing experience and performance with Local Organizations: Intermediaries in Rural Development (Cornell, 1984/88).

Professor Esman’s activities ranged nationally and internationally. He organized and was the founding director of the Inter-university Research Program on Institution Building, a consortium of four
university centers studying the institution building process in developing countries. He also consulted on development administration for the World Bank, USAID, the UN Food and Agriculture Organization, the ILO, the Ford Foundation, and the UN Development Program. His contributions to the study of development administration were honored in a volume of essays, *Puzzles of Productivity in Public Organizations*, published in 1994 by the Institute for Contemporary Studies under the editorship of Norman Uphoff.

After decades of working on public administration and rural development, Professor Esman was drawn to the field of comparative ethnic politics. His first book in this field, *Ethnic Conflict in the Western World* (Cornell, 1977), drew on the work of a group of distinguished scholars of ethnicity, and included his own original work on the Scottish nationalism. He then turned to ethnic conflict in the Middle East in a collective volume edited with Israeli expert, Itamar Rabinovich, *Ethnicity, Pluralism and the State in the Middle-East* (Cornell, 1988), and to a sweeping analysis of *International Organizations and Ethnic Conflict*, co-edited with Telhami (Cornell, 1995). He wrote two synthesizing books on the subject, *Ethnic Politics* (Cornell, 1994) and *An Introduction to Ethnic Conflict* (Polity, 2004). In a book co-edited with Ronald Herring, *Carrots, Sticks and Ethnic Conflict: Rethinking Development Assistance* (Michigan, 2000), Esman came full circle, knitting together his interests in ethnicity and development efforts.

Milt was engaged with scholarship until the end – “a scholar’s scholar,” in Telhami’s words. His final two books were on American politics: *Government Works* (Cornell, 2000) and *The New American Garrison State* (2007). In the first he argued that Americans still need an activist federal government; in the last he argued that the constitutional structure of the American federal government is no longer providing responsible and effective governance.

Milton Esman was a truly wonderful colleague, a fine thinker and teacher who was also wise in the ways of the world because of his direct and personal engagement with problems of public
administration, economic and social development, ethnic relations, and governance around the world. We at Cornell were blessed by his presence here over more than a half a century and are diminished by his passing.

*Sidney Tarrow, chair; Gilbert Levine, Norman Uphoff*
Professor Emeritus James Jeffries Eyster Jr. was born March 28, 1941 and died Tuesday, April 7, 2015 at the age of 74. A Cornell University faculty member from 1972 - 1999, Professor Eyster is credited with creating an entirely new area of study – with his exploration and analysis of hotel management contracts – then writing the authoritative book on the subject. His death elicited an outpouring of support from his colleagues at the University, his former students, and the large circle of friends and acquaintances that he developed during his productive life.

Professor Eyster is survived by his beloved wife of 50 years, Susan Brown Eyster; their children, Jennifer Bradley and husband, James, of Virginia, William James Eyster and wife, Norri, of Australia; granddaughter, Grace Elizabeth Bradley of VA; sister, Louise Pileri and husband, Graziano, of NJ; sister in law, Helena C. Brown and husband Russell Warne of ME; a large extended family; as well as his faithful canine companion, Coconino.

Dr. Eyster was a professor at the Cornell Hotel School for 27 years. His love of teaching was paramount in his career. His connection with his students continued many years after he retired. One of Jim’s most special moments was his nomination by a former student to carry the Olympic Torch in Seneca Falls N.Y. as part of the 2002
Olympics. Jim taught courses in financial management and real estate. He followed politics closely and was very concerned about the social and political injustices of the world as well as with human pain and suffering. To make a difference, he courageously initiated the course entitled Housing and Feeding the Homeless, which was well received by students, but contentious with his colleagues. He received a Chaired Professorship, the HVS Professor of Hotel Finance and Real Estate and became a Professor Emeritus at the Hotel School upon his retirement. His Ph.D. centered on a study of hotel management contracts and evolved into worldwide consulting work, and he was sought after by many of the leading hotel owners and management companies. His book, “The Negotiation and Administration of Hotel and Restaurant Management Contracts,” has become the go-to book for the industry. His consulting work lead to a longstanding relationship with the United States National Park Service, which held a special place in Professor Eyster’s heart. He loved nature and the outdoors. He served as the chair for ten years of the National Park Service’s Concessions Management Advisory Board.

Jan A. de Roos ’78 who co-authored with Eyster on the fourth edition of “The Negotiation and Administration of Hotel Management Contracts,” calls Eyster “the intellectual father of hospitality real estate.” De Roos, SHA associate professor and the HVS Professor of Hotel Finance and Real Estate, who was an SHA freshman the same year Eyster became a “freshman” faculty member, said, “Jim Eyster was known for his warmth and integrity,” adding, “He always took the high ground.”

One of Professor Eyster’s long standing colleagues, Professor Emeritus Neal Geller says: “The best thing I can say for Jim’s memorial statement is that he was a consummate Cornellian—as a student, graduate student, and faculty member. As a faculty member, he was demanding yet caring for his students. Their love for him showed. As a colleague, he was caring, supportive, and wonderful to work with. As a friend, he was caring, concerned, and incredibly reliable. I will miss him greatly.”

Another long-term colleague, Professor Emeritus Michael Redlin
says: “I remember Jim as a principled and caring man. He lived his principles throughout his life by such activities as being a Boy Scout leader to his son, Jamie, and other young men and creating at SHA the innovative course “Housing and Feeding the Homeless.” This course was renowned for applying the tenets of hospitality to a nationally important cause. He cared about his students because he knew the importance of them having significant impacts on their generation. He maintained an extensive and active network of past students with whom he shared his wisdom and passion for life. He will be missed by many spread far and wide around the world.”

Professor Eyster grew up in Narberth, Pennsylvania, attended Lower Merion High School, Dickenson College, University of Pennsylvania, and received his Ph.D. from Cornell University. In 1963 he served as a Second Lieutenant in Company A of the First Engineer Battalion, Fort Riley, Kansas. Jim was a wonderful father, husband, and great friend. He was a great role model and inspiration to many people including students, friends, and family. Spending time with children, his granddaughter, wife and other family members gave him great pleasure. Involvement in his men's writing group and meeting one-on-one with dear friends meant a great deal to him. He was an avid reader with a book list requested by many. He enjoyed being involved with many activities such as driving for Gadabout, working with Loaves and Fishes, as a Boy Scout Leader and Eagle Scout, volunteering at The Friendship Donation Network and Louis Gossett Jr. Residential Center, birding, sailing with his son, taking walks with his wife, and having long talks with his daughter.

Jan A. deRoos, chair; A. Neal Geller, Michael H. Redlin, Glenn Withiam
Dr. Francis Henry Fox passed away on March 13, 2015 at the age of 92. He was born on March 11, 1923 in Clifton Springs, NY, the son of Henry Sylvester and Alma (Lindner) Fox. He grew up on a farm that had horses, dairy cows, pigs, chickens, and cash crops. From the farm he went on to have a distinguished career in veterinary medicine. As a student he worked in the Cornell infirmary, and there he met a nurse named Mildred Cullen, who was to become his devoted wife ‘Cully’ for 68 years. Together they had four children - Rosanna ‘Rusty’ Fox, Laurinda ‘Rindy’ (Stephen) Garcia, Teresa ‘Terry’ (Mark) Malaspina, and Henry ‘Ted’ Fox - and 7 grandchildren.

Dr. Fox graduated from the Cornell University College of Veterinary Medicine in October of 1945. He was recruited to the Ambulatory Clinic at Cornell after graduation, giving up a job in the Small Animal Clinic, and then spent one year as an instructor at the veterinary college at the Ohio State University. Dr. Fox then returned to Cornell where he taught physical diagnosis and large animal medicine from 1947 until retirement in 1992. Early in his career, in 1946, Dr. Fox encountered and spread a new contagious disease in the local cattle herds. He recognized that the febrile cows
affected with this condition had almost no white blood cells. With the aid of his colleagues at Cornell the viral cause of this disease, bovine virus diarrhea, was identified. The disease remains very important for cattle in the United States to this day.

Over the course of Dr. Fox’s illustrious career, he educated and influenced thousands of students, teaching them the art of physical examination. The secret was to use all of the senses all of the time, to make a diagnosis by closely observing the patient instead of depending on laboratory tests. Under his gruff exterior was a genuine, caring, loyal friend and role model. He demanded on time arrival at lectures, hard work and genuine effort from his students, and provided subtle encouragement to help them become able practitioners.

Dr. Fox held many administrative positions within the veterinary college and the veterinary profession. He served as Head of the Ambulatory Clinic, Chairman of the Department of Large Animal Medicine, Obstetrics and Surgery, president of the American Association of Bovine Practitioners (an organization which he helped to found), and regional director for that organization. He served on the Executive Board of the American Veterinary Medical Association for 15 years and chaired it for two terms. Dr. Fox was a charter diplomate of the American College of Veterinary Internal Medicine. He served as veterinarian for the New York State Fair for 26 years. He was active in the New York Veterinary Medical Society, from which he received the Distinguished Life Service Award, and served for 18 years on the local Tompkins County Board of Health and was chairman of the board for 13 years.

Dr. Fox was a beloved prankster, and past students fondly remember the pranks Dr. Fox pulled on them. Many of these doings are recorded in a booklet, the Fox Chronicles, presented to him at his 70th birthday and available through the Cornell library system. The students also enjoyed reciprocating whenever possible. His birthday was celebrated each year with concerted attacks on his office. Some years it was filled with balloons or styrofoam peanuts, some years with farm animals, once the furniture was relocated to the roof of the research tower, and once (when entry into the office was stymied)
the door was bricked shut. Each year members of OTS, the Omega Tau Sigma veterinary fraternity, would risk a fall or even arrest to paint a birthday greeting to Dr. Fox on the disused railroad bridge over Route 366 in Varna.

After his retirement, Dr. Fox stayed active on campus and on the farms of his former clients for many more years. He always had a great interest in the farm families as well as in the animals to which he tended. He remained the driving force behind senior seminar, a class during which each student presented the results of an in-depth clinical investigation to faculty and fellow students in the college. Graduate veterinarians across the country made regular pilgrimages to his office or called him up for consultation over a difficult case.

Dr. Fox was a giant in veterinary medicine. Although Cornell University and the profession have suffered a great loss with his death, his legend lives on and all he taught will continue to help veterinarians and the veterinary profession for years to come.

Mary C. Smith, chair; Robert B. Hillman, Leslie D. Appel
Donald L. Fredericksen, a teacher, adviser, mentor and friend to generations of Cornell students, died in Ithaca May 15, 2015 from brain cancer. He was 69.

Professor Fredericksen began his teaching career at Cornell in 1971 and was a professor of film, a faculty affiliate in the programs in religious studies and visual studies, and a longtime adviser and seminar teacher for the College Scholar Program. Professor Fredericksen also practiced as a Jungian psychotherapist in Ithaca.

His friend and colleague Marilyn Rivchin, retired Senior Lecturer of film production in the Department of Performing and Media Arts, said, “Don and I shared many hundreds of film students at Cornell for over 30 years, he in theory and history, I in practice. Don always understood our work as complementary and proved to be consistently supportive, respectful and pleasantly witty. His integrity in his teaching and advising of students was a model of opening minds to the many worlds of film and ideas.”

Professor Fredericksen’s colleague of 30 years, Bruce Levitt, professor of theater, added: “He was a generous and insightful mentor who always believed in the Buddhist notion that ‘if you light a lamp for somebody, it will also brighten your path.’”
That spirit enveloped his students during his intimate seminars. His eloquence with dreams and memory raised students beyond the cold, worldly business they would focus on otherwise, and many of his former students consider those moments of connection incredibly educational, for reasons no GPA could quantify. Many students came to visit Fredericksen when they heard he was gravely ill.

He earned a bachelor’s degree in English at Colgate University, a master’s degree in communication studies at the Annenberg School of Communication, University of Pennsylvania, a doctorate in film studies from the University of Iowa and a master’s in counseling psychology from Pacifica Graduate Institute. He also studied for four years at the Namgyal Monastery Institute for Buddhist Studies in Ithaca, and later served on its executive board for several years. His honors included the College of Arts and Sciences’ Paul Award for excellence in advising.

“The rigor Don brought to his field proved to his students that film could be studied as seriously and reasonably as anything else, and his teachings will influence them as long they think about art,” College Scholar Zachary Zahos ’15 said.

“Don believed firmly that art could have a healing aspect for the human psyche as well as help resolve many of the conflicts of humankind,” Levitt added. “He was a spiritual man, indebted to Buddhism, as well as his wonderful wife Hyoin, for the strength and serenity in his life.”

Richard Archer, professor of theater and technical director for the department of PMA said, “To paraphrase from Buddhism: Thousands of candles can be lighted from a single candle, and the life of the candle will not be shortened. Wisdom never decreases by being shared. Don’s ‘candle,’ burns brighter than ever in the fire he lit in his students and advisees.”

Professor Fredericksen’s final work of scholarship is a chapter in the forthcoming book “Eavesdropping: The Psychoanalyst in Television and Cinema,” to be published this year by Routledge.
He is survived by his widow, Hyoin Park, and daughter, Lina Sanguin.

Bruce A Levitt, chair; Richard Archer,
Marilyn Rivchin, Zachary Zahos
Marjorie Galenson was born in New York City in April 12, 1917. She graduated from the Julia Richman High School. Throughout her college education, B.A., M.A., and Ph.D., her interests were in Economics. She graduated with a B.A. in 1937 from Barnard College, with a M.A. in 1943 from Columbia University; and with a Ph.D. in 1961 from the University of California, Berkeley.

From 1960 to 1966 Professor Galenson was a Research Economist and Assistant to Clark Kerr, President of the University of California. She joined the faculty of the Department of Consumer Economics & Public Policy (now the Policy Analysis and Management Department), College of Human Ecology in 1966 as a Research Associate. In 1968 she was appointed as an Assistant Professor. In 1974 she gained tenure and was promoted to Associate Professor. She retired in 1982 and was awarded the title, Professor Emeritus.

Professor Galenson’s research and teaching interests spanned labor, consumer and consumption economics. She taught one of the first, if not the first, “law and the consumer” courses in the country.
inception of her course coincided with the rise nationally in the 1960s of the interest in consumer rights and the rise of the Consumer Movement. In labor economics her research included women in the labor force, comparative real wages both internationally and between men and women, and labor law. In consumption economics she did research on family savings and racial differences in saving rates. The research of the graduate students she directed focused on consumer policy. One dissertation she directed won the best thesis/dissertation award from the American Council on Consumer Interests in 1971. She was the author of one book, the editor of another, and published scholarly articles in several journals including the American Economic Review, the Yale Law Review, and the Columbia Law Review.

Professor Galenson was married to Walter Galenson, Professor Emeritus, School of Industrial and Labor Relations, Cornell University. They had three children: Alice Galenson of Saratoga, California, Emily Schneider of Yonkers, New York, and David Galenson of Chicago, Illinois, and three grandchildren: Daniel Taylor, Joshua Schneider, and Joel Galenson. She had a lifelong interest in art stemming in part from her father who was an artist. She spent the last 13 years of her life in Westchester Meadows, Valhalla, New York, a continuing care retirement community.

W. Keith Bryant, chair and Jean Robinson
Ephrahim Garcia

June 14, 1963 - September 10, 2014

At the time of his passing, Professor Ephrahim Garcia was described as a “gregarious” colleague. If you look up what gregarious means you get a few synonyms that accurately describe how Ephrahim was as both a friend and a colleague to many: “sociable,” “company-loving,” “friendly,” “affable,” my favorite “informal chummy,” and “warm.” He was the kind of guy who would address you by your last name in that “we’re good buddies” kind of a way. His friendly and outgoing nature is what led him to become an informal mentor to so many of his junior colleagues. His engaging nature meant that many of the discussions one would have with him were long and drawn out, but they were always, or at least usually, valuable. Nearly everyone can remember Ephrahim pacing outside his office waiting to engage someone in a conversation about some new idea and application of mechanics and electronics. While always a proponent of new ideas, much of his advice tended to revolve around focusing on those things that were important to you (both professionally and personally). If building up a particular part of your research program was important to you, do that. If starting a business was important to you, do that. Don’t do things because you believe other people think they are important.
Ephrahim Garcia was born in Manhattan to Cuban refugees Efrahin and Zenaida Garcia. Like many first generation Americans, he had very strong feelings about his new country that were reflected not only in his academic research but also in the obligations he eventually assumed to enhance the nation’s security. In addition to being a Professor, he worked as a program manager at the Defense Advanced Research Projects Agency (DARPA) and as a consultant to the CIA. At 30, Ephrahim was diagnosed with cardiomyopathy, and realized he would not live a normal life span. Most of us did not know of this diagnosis, which likely shaped his larger than life personality. He was determined to make the time he had productive. And he did that, he lived every day fully.

He earned his B.S., M.S., and Ph.D., all in Aerospace Engineering, at the State University of New York at Buffalo. After finishing his Ph.D. in 1990, he spent a year as a research associate at the U.S. Air Force Academy, and then a year in the same capacity at the Air Force Phillips Laboratory. In 1991 Ephrahim accepted a position as an Assistant Professor of Mechanical Engineering at Vanderbilt University and shortly after in 1994 he obtained tenure and was promoted to associate professor. From 1998-2002 he took a leave from his position at Vanderbilt to serve as a program manager at DARPA. Finally in 2002, he joined the Cornell faculty as Associate Professor of Mechanical and Aerospace Engineering and was promoted to Full Professor in 2011. From 1990 to 1997, he was also the principal of Garman Systems, Inc., a small high technology consulting company in Nashville, Tennessee, which was eventually sold to another company in Franklin, Tennessee.

At DARPA, Ephrahim developed and managed four programs with a total funding of around $218 million. These programs all dealt with defense and intelligence issues, but of course had civilian applications. One of these, the “Exoskeletons For Human Performance Augmentation Program” was focused on developing an integrated approach to power, actuation, control, and the man-machine interface. The goals were to generate new capabilities for ground forces. This technology also has applications to devices to enable mobility for amputees. These uses have now been advanced to a remarkable degree.
Engaging, creative, inquisitive, scholarly, combative, respectful of older colleagues, proud to be a member of the Cornell faculty and of the Sibley School faculty, Ephrahim taught students the intersection of Physics and the Art of Engineering and Engineering as both a creative and competitive endeavor. He was demanding and wanted students to strive for quality. He would withdraw a team from national competition if they were not at their best. Ephrahim believed that modern engineers could learn from past generations. He often kept models of ingenious mechanisms of the Reuleaux collection on his desk to inspire new applications.

His research was very diverse, but centered around “smart” structures (which can adapt and be reconfigured by actuator control or automatically by sensing temperature, stress, or some other characteristic of its state), control engineering, flight characteristics of unmanned flying vehicles, and generally the design and analysis of mechanical systems. Ephrahim established the Laboratory for Intelligent Machine Systems that explored this fascinating field and its applications to aerospace structural systems, energetics, bio-inspired robotics, and precision motion controls. The types of research projects that most appealed to Ephrahim were those that were somewhere between a little far flung and very far flung, but had the potential to be incredibly impactful. In particular, he was very excited about projects that could use mechanical systems to augment biological ones and vice versa. This fascination is easily understood by looking back to his days at DARPA where he founded the “Exoskeletons for Human Performance Augmentation Program” and more recently to his days at Cornell where he worked on a number of projects including those entitled “Insect Cyborgs” and “Lab-on-a-Bird.”

Perhaps it comes with experience, but Ephrahim was particularly good at putting people at ease and maintaining calm in stressful situations. A specific example was before a DARPA program meeting in Hawaii at which the team had to give a presentation on its approach to a particular project. Millions of dollars were on the line. The rest of the team was freaking out in the hotel room trying to get the presentation together, worrying about how others weren’t
sending us their stuff, etc. Ephrahim was never worried, confident the team would perform well when the time came, walking around the hotel room wondering if we have to pay for the in room coffee. Of course, come show time, everything worked out, we gave a dynamite talk, and the money came through.

He had incredible pride in his family. He spoke of his kids often, being known to catch early flights back from travel to make more time with them. He was very proud of the growth of his wife Maria’s medical practice. In that spirit let us close this memorial statement with two quotes from his family.

“Ephrahim was more than a husband. He was a great friend with extraordinary vision, passion and belief in not only his own goals, but his family's as well. He often would tell people he didn't need any hobbies or toys since his work as a researcher satisfied all of those needs for him. He meant it. His research was his joy.

“Ephrahim occasionally took our children, Isaac or Sarah, on conference trips and adventures with him. One particular trip that stood out was when he took our son Isaac, as a young boy, to a DARPA grand challenge. Ephrahim was very moved when Isaac, despite the desert heat, looked up at his dad and said, ‘You have the coolest job in the world!’ Ephrahim's response with his typical cockeyed grin was ‘Yeaaahhh, I do, don't I!’

“We will forever miss Ephrahim's enthusiasm for living life to its fullest potential. He is not gone from the hearts of those who had the privilege to have known him, and his visions will move forward in the research community through his former students and colleagues and future generations. His life and work were not in vain.”

His son Isaac also had to say: “He was the best father anybody could have asked for. Loving, strong, courageous – I had the privilege to grow up with a bull in my corner. His combination of extraordinary wit and integrity was
something I had to grow up to learn is rare in most men. It was easy to have him as a father, because he could always be whatever I needed him to be. I loved him, and I never once had in all of my life one moment’s doubt whether he loved me back. He was always steadfast.”

David Erickson, chair; Sidney Leibovich, Francis Moon
With assistance from Dr. Anna Marie Garcia
and Isaac Garcia
Christopher L. Henley died June 29, 2015 in Ithaca after a year's struggle with brain cancer. He was 59 years old. He was a Professor of Physics, working in theoretical condensed matter physics in the Laboratory of Atomic and Solid State Physics. His mind remained clear and he remained scientifically active almost to the end.

Chris had a gift for mathematics, winning in the Putnam competition while an undergraduate at Caltech. He seemed to be headed for a career in mathematics when, after graduating in 1977, he studied functional equations at Silesian University in Katowice, Poland. However, memories of Richard Feynman's Physics-X lectures at Caltech in the end proved decisive, and Chris entered the Harvard Physics graduate program the following year. At Harvard he worked under Bertrand Halperin, writing a thesis on the low temperature properties of vector spin glasses.

During his two postdocs (1983-1987), at Bell Labs and then at Cornell, Chris took up the scientific challenge that would define the first half of his career. Quasicrystals were discovered in 1984, turning crystallographic orthodoxy on its head. Choosing not to devote his prodigious mathematical skills to the finer points of the quasicrystal formalism, Chris instead dove headlong into the problem of unraveling these novel structures at an atomic level of
detail. This meant sifting through dozens of known crystal structures of similar composition, with the hope of discovering shared structural principles that might flesh out the "tile" shapes that served as cartoons of the novel form of order. This intense period of library research payed off, when Chris observed that the quasicrystal structure could be systematically approximated by a series of ever larger unit cell crystals, and identified with known structures in much the same way that the golden mean is approximated by ever larger ratios of Fibonacci numbers (1/1, 2/1, 3/2, 5/3, etc.). The known crystal structures led Chris to the first proposals for the atomic structures of quasicrystals.

Although other topics in condensed matter and statistical physics made increasing demands on his time in subsequent years, Chris never turned his back on important quasicrystal questions that remained unresolved, even when the popularity of the subject diminished. The most notable of these is the stabilizing mechanism: is it the configurational entropy of tile-rearrangement degrees of freedom, or the energetics of "tile matching rules" and how these are implemented by actual atoms. He was named a Fellow of the American Physics Society in 1996 for "theoretical contributions to the understanding of the structure and physics of quasicrystals and related crystalline structures."

The role of geometry is a common theme in Chris' research, not just on quasicrystals but also on magnetic systems and biology. He understood that there would always be problems that could not be reduced to spherical cows, and felt he was uniquely qualified to take charge in those situations. Examples include his discovery of semi-classical interference effects associated with "weathervane modes" of spins in kagome magnets, and his models of retro-virus capsid self-assembly. Chris' geometrical toolbox was immense, and a rich source of metaphor, as his students grew to appreciate.

Old-fashioned in his ways (he never owned a laptop or cell phone), Chris throughout his life tried to preserve the tradition of informal face-to-face discussion at a blackboard, and plain-talk when expressing ideas. To his students he was somebody who could be
counted on for help at odd hours and weekends. Many of these students went on to distinguished careers in physics.

Chris was a deeply ethical man, and combined a disarming honesty with a sharp wit. He was quiet about his private life. It is known that reading the Harry Potter series was among his few indulgences. He was always fond of puns. In drafts of his textbook, he composed Haiku to the beginnings of each chapter. To introduce the origins of superconductivity, Chris wrote:

Casimir's marvel
A mile of dirty lead wire --
Perfect transmission

And, to illuminate the subtle concept of electron spin,
Their moments are just
Distractions; the electrons
Simply feel twoness

During his therapy when his hair became sparse, he wore his beret with a rakish humor.

Christopher Henley devoted his life to physics. He worked heroically on his courses, inventing more and more new ideas about how to teach, and seemingly bringing a newly rewritten chapter of his book to every class. He kept the Physics Department's condensed-matter theory group on track, and fiercely defended the summer pizza presentations for theory graduate students. An outstanding intellect, he felt a deep responsibility to do the best possible science. He pushed himself days and evenings to deliver his best to his students, to Cornell, and to the scientific enterprise.

Chris lived spartanly, donating generously to charities that supported the environment and fought disease and poverty. He ran, swam, and bicycled in the Ithaca countryside.

Chris is survived by his mother, Nancy, and a son, Christopher King. He will be very much missed by them, and by his many academic colleagues at Cornell and around the world.

Veit Elser, chair; Jim Sethna, N. David Mermin
Phyllis Janowitz was born in New York, N.Y., to Lillian Reiner and Morris Winer. Her mother worked as a homemaker and in retail sales, and her father was a police officer. She grew up with an older sister, Ruth Winer, in the Washington Heights neighborhood of Manhattan. In 1951, she graduated magna cum laude from Queens College and married Julian Janowitz, a psychiatrist. During her eleven year marriage, Phyllis lived in San Francisco and Amherst, Massachusetts. In the 1960s she began writing poetry and was awarded a graduate fellowship to the University of Massachusetts, Amherst, where she studied with Robert Lowell, among others. After receiving an MFA in 1968, she spent two years in Israel with her daughter Tama and son David. Upon her return to the U.S., Phyllis was twice made a Fellow of the Bunting Institute at Radcliffe. In 1978, Elizabeth Bishop selected her book *Rites of Strangers* for the Associated Writing Programs Poetry Prize. This was the first of many honors Phyllis received for her poetry, including a Hodder Fellowship from Princeton and two grants from the National Endowment for the Arts.

Phyllis taught at Princeton, Harvard, and a number of other institutions before coming to Cornell in 1980 as a visiting assistant professor. In 1982, Maxine Kumin selected her second book,
Visiting Rites, for publication by Princeton University Press. The book received critical acclaim and was a finalist for The National Book Award in 1983. It has been reissued as part of the Princeton Legacy Library series. In Visiting Rites, Janowitz expands upon earlier themes of isolation and identity to include poems about rituals of aging, communion, and confining cultural roles. She was tenured in 1986, and her third book, Temporary Dwellings, was published by University of Pittsburgh Press in 1988. A fourth collection, Truck With Marvelous Creatures, remains unpublished. Her poems appeared in the most distinguished literary venues, such as The New Yorker, The Atlantic, and Poetry. Phyllis was promoted to full professor in 1992, and 29 of her 39 years of teaching were devoted to Cornell students. She directed the creative writing program from 1980 to 1983 and from 1986 to 1991. In 2009, she retired from teaching and was granted emerita status.

A colleague who once asked Phyllis if she had models, antecedents, other poets who were “sort of like her,” remembers that she looked serious and answered quickly, as if to dispense with discussion: “No one.” This was not a statement of grandiosity or defense. Her work was singular. The world, with all its heartbreaks and humors, assumed a phantasmagoric vividness in her poems, which resemble a blend of Sylvia Plath and Samuel Beckett, leavened by a helping of the absurd. The lines are bright with surface; the comedy tinged with tragedy; the sardonic wit deepened by empathy. In her poetry, as in her life, Phyllis evinced an unwavering generosity. Her poems were musical and intricate, but she remained open to all literary possibilities. For her, all of the arts were interconnected, and she celebrated poetry’s ability to ennoble and democratize.

Phyllis began writing during the second wave of feminism, and many of her poems center on the difficulties faced by women as mothers and as breadwinners. The limitations of traditional male roles are treated with equal discernment in poems that recount the yearnings of men who “wear their simple birthrights like / shiny gold watches on long gold chains.” A review in The Times Literary Supplement praised Visiting Rites for being “little affected by neo-Romantic narcissism” or “Oedipal influence-anxiety.” The Michigan Quarterly deemed Janowitz “a student of survivors and of
those who ask more of life, despite the slim chances of receiving the desired plenitude,” and cited *Visiting Rites* as “one of the few recent poetry books that does justice to our helplessness and resilience.” Of Phyllis’s third book, a review in *Prairie Schooner* notes “The humor, the word-play, and the sheer energy of the language in *Temporary Dwellings* are infectious and invigorating. They are at once so human and humanizing....”

Although her work was celebrated, Phyllis’s humility and sensitivity probably proved a hindrance rather than asset in a literary culture that tends to reward self-promotion and networking. The density and originality of her unpublished fourth book set it apart from the dominant modes of the day. As on the page, so in the world. Phyllis’s self-effacing manner might have allowed her to float under the radar in the English department were it not for her elegant, quirky sense of style, which could take the form of winklepicker shoes or vintage cashmere coats. A little dog often trotted alongside her wearing a matching outfit.

In person she might be reticent, but on stage Phyllis was mesmerizing. Her public readings of her work were unconventional delights of music, costume, and dramaturgy. A colleague recalls the first time she heard Phyllis read, in 1989: “A large boombox stood on a chair to the side of her. After reading a couple of poems Phyllis approached the machine almost delicately, leaning down as if to consult it. She pushed a button and out came circus music. While this briefly played, she regarded her audience with what I would come to recognize as the quintessential Phyllis look: a little smile suffused with wonder, humor, wisdom, love, a look that said, modestly, ‘How can this be?’ and ‘This must be.’ When she pushed the button again, the music stopped and she read another poem. And so it went, throughout the reading. This was a strange, exhilarating synchronicity that seemed logical in the fantastical way that poetry means to be, operating on terms beyond logic, lifting understanding beyond the words and hitting the heart in a way the heart comprehends. The audience was ecstatic throughout. For Phyllis this was not a show, a ruse, a trick, but an essential act: that was the major amazement. All the same, she had a bit of the old Vaudevillian in her and knew how to hold, surprise, thrill, and
educate her audience. She had the power to turn the world out once again as brand new and wholly astounding.”

The greatest teachers offer something more than knowledge, and Phyllis enacted the most capacious possibilities of what a mentor could be. She was a steadfast advocate for her students, generously helping them toward professional goals and offering advice through personal dilemmas. She corresponded with many long after they’d graduated, attended their weddings, took them to lunch when they came to town. She nurtured, championed and even sheltered students in her home as a matter of course. In class, she brought an encyclopedic knowledge of literature, the arts, and cultural studies to her textual analyses — for she was no respecter of divisions. As a colleague, she quieted rather than concocted drama, a blessing in any situation but especially when departmental personalities and politics threatened to implode.

Maya Angelou noted that “People will forget what you said, people will forget what you did, but people will never forget how you made them feel.” Phyllis made others feel accompanied: less alone and more alive. She was funny and fearlessly willing to fight for her beliefs, which were expressed with a wit that recognized and forgave human foibles. The audacity and élan that critics prized in her work allowed her to turn ordinary — even dreary — events into memorable adventures. She also was a headspring of pithy apercus. "Another last straw," she’d sigh in the face of adversity. “The possibilities are not infinite, they are yours.” Or as she said to a frightened colleague, “You are perfectly perfect.” In Phyllis’s world, “all weeds were regal.” “Are there //…no monasteries for a heretic?” she wondered in a poem. She was the least calculating writer imaginable, one who never allowed her core values — at times quite inconvenient ones — to be subverted by literary politics. Her autobiographical poem “Cells,” ends with a daughter who glimpses some graffiti from a train after visiting her dying father:

The word love, read in a jolt of wheels.  
Astonishing. Ineludible. Like a blissful couple, joined at the chest, thighs, knees, kissing in the doorway
you’re trying to exit through.

The corridors of Goldwin Smith Hall are long and narrow. We see approaching figures from a distance and there is time for a constellation of emotions to gather as our paths converge. In these halls, Phyllis appeared as an unlikely apparition: oracle, witness, shaman, fellow traveler, revisionary mother goddess. The speaker of her poem “Birthday” describes her disorientation when separated from her mother on a mythic subway trip:

She has taken an escalator down to where
I can no longer see her…
I’m afraid without her I will lose
gloves, manuscripts, even the map of my
destination in the dim chambers underground.

Generations of students and colleagues will cherish Phyllis’s guidance. She will be remembered with abiding gratitude and affection, for there never was a more brilliantly original and endearing poet, teacher, or friend.

Alice Fulton, chair; Kenneth A. McClane, Maureen McCoy
Robert E. Johnston died at age 72 in Ithaca of complications from treatments for lymphoma. Bob was born in Philadelphia, graduated from Dartmouth College in 1964, and received his Ph.D. in Behavioral and Neural Sciences from the Rockefeller University in 1970. He and his wife Joan immediately moved to Ithaca, Bob joining the faculty of the Psychology Department at Cornell University where he remained for his entire professional career. A gregarious hermit and trendsetter completely uninterested in trends, he roamed our hallways as a looming and beneficent presence. He was instrumental in creating and maintaining the animal behavior program in Psychology at Cornell.

Bob was an unfailingly kind colleague and mentor, steadily productive in his research at Cornell for over 40 years. He published more than 135 articles and chapters but, because he took little interest in keeping track of such things, their exact number is not clear. What is clear is that his research influenced generations of students and stimulated research around the world. His love of natural history was always apparent. After his death we found a note in his office that read: “Retirement plans: find a new species and study it in the field.”
Bob’s central research area was olfactory communication in mammals but his interests were broad and included social recognition (individual, kin, species, and sexual recognition), the neural and hormonal substrates of olfactory behavior, central nervous system mechanisms of social recognition and memory, sexual behavior, and scent marking. He was a worldwide expert on the vomeronasal system of mammals. Bob was a strong advocate of integrative, comparative, and evolutionary approaches, and worked in the laboratory and in the field – with Joan in Turkey and neighboring Dagestan. They both enjoyed extensive animal tourism in Australia, Africa, Madagascar, China, and South America. Bob also studied a panoply of animals: Golden hamsters (see photo above), Djungarian hamsters, meadow voles, Belding’s ground squirrels, Central American white-throated magpie-jays, and even people.

Indeed, many of us regard his most influential paper to be a 1979 “field study” with then-colleague Robert Kraut. They studied, among other things, the facial emotions of bowlers, including members of the psychology department, at the Helen Newman Lanes on campus. The research question was whether emotional reactions to bowling’s successes or embarrassments could be read on the bowler’s face immediately when still facing the pins or afterwards when turning to face the other bowlers. Results were clear: faces only registered emotion when individuals turned around and approached their friends, strong evidence that emotions shown on the face exist in service of social communication, and are not a simple spillover from the bowler’s emotional evaluation of the event. To bowl alone is to bowl deadpan. This study became an important element in our current understanding of the function of emotion and emotional expression in a research thread tracing back to Darwin’s *Expression of emotions in man and animals*. Alas, and perhaps all too predictably, the research also managed to win Senator William Proxmire’s Golden Fleece Award.

In addition to being a distinguished scientist, Bob also was a talented artist, excelling in photography, wood sculpture, and oil painting. He also was a stunning athlete – squash (Western New York State champion), basketball, skiing, ice skating – as well as an
accomplished dancer. He trained many of us in the Texas Two-Step, the Cotton-Eyed Joe, and the Boot Scootin’ Boogie. He is survived by his wife Joan and two sons, and is sorely missed by his colleagues and friends.

James E. Cutting, chair; Elizabeth Adkins-Regan, Barbara L. Finlay
Judith Kellock, Professor of Music, died in Ithaca on March 27, 2015 from complications following cancer surgery. She was 64. Kellock was a beloved and active member of the Cornell music faculty, which she joined in 1991, and an enthusiastic participant in Arts College and University events campus-wide. She taught voice performance to generations of students and participated in numerous recitals and concerts. Her last performance on campus was a midday recital in Lincoln Hall on December 4, 2014: “Love, Loss, and Longing: The World of 19th-Century German Song.” She is survived by her brother James and a nephew, James Albert.

Professor Kellock was lauded in the press as “a singer of rare intelligence and vocal splendor, with a voice of indescribable beauty.” According to the Boston Globe, to listen to her voice "was to be plunged into another world, one of outright, risk-taking virtuosity, extremes of range and color." She sang with the Cayuga Chamber Orchestra and the St. Louis Symphony, the Minnesota Orchestra, the Brooklyn Philharmonic, the New World Symphony, the Limburg Symphony Orchestra, the Honolulu Symphony, the Pro Arte Chamber Orchestra and the Greek Radio Orchestra, among other ensembles in the United States and Europe. She performed
major operatic roles in Italy and Greece, toured with the Opera Company of Boston, and performed with the Mark Morris Dance Company in Brussels. Her honors included a National Endowment for the Arts recitalist fellowship, which led to a string of innovative song recitals in California.

She also led master classes at institutions from Prague to San Francisco and gave voice lessons in New York at her studio in Jackson Heights. Also in Jackson Heights she launched an innovative grass-roots series at the Renaissance Charter School, "Chamber Music for the Neighborhood, celebrating the diversity and energy of Queens." As The New York Times reported, "The soprano Judith Kellock has been producing concerts in Jackson Heights since 2005, usually including music that reflects the neighborhood’s Indian, Latin American and gay residents." The series included local performers but also outsiders whom residents of the district hoped to hear in person. For instance, in 2012 she arranged for “an ambitious event: the world premiere of the first act from “Agni Varsha” (Fire and Rain), an opera by the veteran Bollywood composer Vanraj Bhatia," who flew in from Mumbai for the occasion.

“It goes without saying that Judy was an important artist – one of the very few equipped to carry on the legacy of her own teacher, the great American mezzo Jan DeGaetani, in art song, in vocal chamber music and in championing the living American composer,” said Steven Stucky, Given Foundation Professor of Composition emeritus. “But more importantly, on a personal level with her colleagues and friends, she was warm-hearted, passionate and fiercely loyal. The outpouring now of love and grief from her legions of students reminds us that she was a teacher of rare gifts, utterly dedicated to passing on the secrets of her craft and to bolstering her students’ integrity and confidence. As a mentor and friend, she set a standard we can all aspire to but few can match. Her passing leaves a hole in the lives of so very many – scores of lives she changed decisively for the better.”

Assistant Professor of Music Roger Moseley adds: “My favorite memory of Judy is from the semester we taught a class on Lieder
together. She hosted a dinner party attended by Johannes Mannov, a visiting Danish baritone who took part in the class, his wife Adrienne, my wife, Associate Professor of Classics Verity Platt, our twin three-year-old boys, and me. There was torrential rain that evening and Forest Home was hit by a blackout, throwing Judy's dinner plans into darkness and disarray. What amazed and amused us all about Judy that evening was the effortless panache with which she took this major disruption in stride: we grilled fish outside by candlelight as she told the boys stories before indulging them with deliciously soft ice cream. What could have been a disaster turned into an adventure.

“Poise under pressure, imagination, and generosity: these qualities were typical of Judy as an artist as well as a colleague and friend. Although I miss her intense devotion to her craft and her deep knowledge of her repertoire, I will always remember them. It was a profound pleasure to work and play alongside her.”

“Judy was one of the most positive and generous people I know, always looking for new approaches and creative projects that included friends and colleagues,” said pianist Xak Bjerken, professor of music. “Her singing was emotionally committed and expressive, and she was beloved by her students and by her many friends here in Ithaca and afar. Those who knew her and worked with her are left heartbroken.”

Professor Kellock held a master of music degree from Boston University. A primary influence in her musical life was the late Jan DeGaetani, with whom she studied for many years. Other teachers included Grace Hunter, Hazel O’Donnell, Phyllis Curtin at Tanglewood, and Wilma Thompson at Boston University.

On Monday, April 20, 2015, in Barnes Hall Auditorium, the Department of Music presented “A Concert for Judy.” Among the tributes on stage, five of Judy’s former students who are now professional singers — Arsenia Soto Brickley, Brian Ming Chu, Terence Goff, Jamie Jordan and Nathaniel McEwen — returned to campus to honor their mentor by performing some of her favorite vocal works. “Losing Judy creates a void in our hearts and in our
department,” said Roberto Sierra, interim chair of the Department of Music. “She was a beloved teacher and colleague, and her artistry graced our stages for over two decades.”

Judy's repertory was wide and deep, but she especially championed 20th Century Music and young composers and performers, influencing the lives and careers of her many students at Cornell. She was a founding member of Ithaca's new-music group, Ensemble X.

Composer Kevin Ernste, associate professor of music, created his own memorial to Judy: a new composition using the sounds of her recorded voice. As Ernste explains, his piece was an electronic interpretation of the Cornell chimes stretching, manipulating and filtering the last five notes of the alma mater to produce new sounds and harmonies. Added to the mix was Professor Kellock's voice. “The melody was constructed, note-by-note, from a combination of source recordings, projects that [Judy] and I worked together on over the years. I specifically sought to undermine any perceptible language, transcending words in order to more directly convey the indelible timbre of her unique voice. I was pleased to discover that many of my colleagues and students, those close to her, immediately recognized the source.

“The idea of using Judy's voice was one that I couldn't avoid. It anchored the piece, for me, in people and work, rather than the institution. Or perhaps I simply needed the joy of performing with her one last time, something my particular form of expression, with electronic sounds, makes possible.”

As Ernste's description reminds, Judy's voice is still with us on her recordings. They include The Astronaut's Tale, an opera by Charles Fussell, as well as the music of Samuel Barber, Paul Hindemith, Lukas Foss, Steven Stucky, Roberto Sierra, Judith Weir, Arthur Berger, Chen Yi, Toshio Hosokawa, Donald Womack, Peter Askim and Lawrence Moss. Those who wish to listen to Judy might begin with her Grammy-nominated disk of Paul Hindemith's song cycle, Das Marienleben, continue with Roberto Sierra's Cancionero, Steven Stucky's In Shadow, in Light, David Dies' Agevolmente or
Samuel Barber's song cycle, *Everything but the Hermit*, then move on to Lucas Foss's *Complete Vocal Chamber Music* or Dan Welcher's *Vox Femina, Seven Songs of Poems of e. e. cummings, The Bequest* and *Harbor Music*. These recordings are available commercially and may also be sampled in Cornell's Sidney Cox Library of Music and Dance.

*Neal Zaslaw, chair; Roberto Sierra, Steven Stucky, Xak Bjerken, Kevin Ernste, Roger Moseley*
Fred H. Kulhawy, Professor Emeritus of Civil and Environmental Engineering, died in Ithaca on May 12, 2015. He was born in Topeka, Kansas on Sept. 8, 1943. He received both his B.S.C.E. and M.S.C.E in 1964 and 1966, respectively, from Newark College of Engineering (NCE, now part of New Jersey Institute of Technology), where he was a part-time instructor and researcher. In September 1966, Fred and his wife, Gloria, began their graduate studies at the University of California, Berkeley, where he specialized in geotechnical engineering, geology and geomechanics. He finished his doctorate in September 1969. His dissertation on Oroville Dam in California was one of the early applications of the finite element method in nonlinear, geotechnical construction problems. After completing his doctorate, Fred joined Syracuse University as an assistant professor of civil engineering where he was promoted to associate professor in 1973.

In 1976 Fred joined the faculty of the School of Civil and Environmental Engineering at Cornell as an associate professor. In 1980 he joined Cornell’s graduate faculty in geological sciences. By
1981, he had become a full professor. In 2009, Fred retired from Cornell University as Professor Emeritus. Fred was a registered Professional Engineer in New York, New Jersey, and Pennsylvania, and as both Civil and Geotechnical Engineer in California.

During his 40-year academic career, Fred taught a wide range of courses in geotechnical engineering, including basic to advanced soil mechanics, engineering geology, basic to advanced foundation engineering, retaining structures and slopes, rock mechanics and engineering, embankment dam engineering, tunnel engineering, case studies and reliability-based foundation design. His courses emphasized engineering fundamentals and the development of basic and advanced analytical skills, and always focused on design and professional practice. At Cornell, Fred supervised the annual Master of Engineering geotechnical design project 17 times. He also supervised 21 Ph.D. and 33 M.S. and M.S.C.E theses.

Fred was an internationally acclaimed educator, consultant, and researcher widely recognized for his contributions to foundation engineering, development of reliability-based geotechnical design, mechanics of soil-structure interaction, and evaluation of soil/rock behavior. In recognition of his contributions, an American Society of Civil Engineers (ASCE) Geo-Institute Geotechnical Special Publication 229 was prepared in his honor. This 2013 tribute is titled “Foundation Engineering in the Face of Uncertainty.” Notable reliability papers, authored by Fred and republished in the proceedings, include the Sixth Casagrande Memorial Lecture “From Casagrande’s ‘Calculated Risk’ to Reliability-Based Design in Foundation Engineering” and the 5th Peter Lumb Lecture “Uncertainty, Reliability, and Foundation Engineering.” He had a profound impact on reliability-based design in foundation engineering, among other areas, and was honored by the ASCE Geo-Institute as the 2014 GeoHero during its annual congress in Atlanta, Georgia.

Fred was a prolific researcher, who received support from various government agencies and private companies. His research on transmission line structure foundations sponsored by the Electric Power Research Institute is now recognized as classic work, which
was fundamentally important in developing the Institute of Electrical and Electronics Engineers standard for transmission structure foundation design and testing. He authored/co-authored more than 380 publications and made 1440 presentations in 102 cities in 36 states and the District of Columbia, within the U.S., and in 70 additional cities in 26 other countries around the world. Fred also contributed extensively to professional societies and their activities through his participation on National Academies, ASCE, American Society of Testing and Materials, and International Society for Soil Mechanics and Geotechnical Engineering committees. Among his many awards, Fred was honored as Distinguished Member of ASCE, the highest accolade of ASCE for acknowledged eminence in engineering, and reception of the Norman Medal, the oldest and most prestigious technical award of ASCE, the Karl Terzaghi Award, the ASCE Geo-Institute career accolade for eminence in geotechnical engineering, and the Canadian Geotechnical Society G. Meyerhof Award for outstanding contributions to foundation engineering.

Fred’s expertise was sought on numerous engineering projects worldwide. After his retirement, Fred maintained an active consulting practice. He travelled extensively to give lectures, provide consulting services, and indulge one of his passions, opera. He is survived by his wife, a brother, brother-in-law and sister-in-law, nieces, a nephew and several cousins.

*Philip Li-Fan Liu, chair; Thomas D. O’Rourke, Harry E. Stewart
With input from James L. Withiam and Kok-Kwang Phoon*
Bernd Lambert was born in Frankfurt, Germany, and the story of his childhood perhaps explains much regarding his curiosity about the world, his kindness, and his meticulous professionalism. His father, Fritz ("Fred") Levy-Oswald, was born in Germany, served in the trenches in the German Army in World War I, and then worked as a banker until intervention by the Nazis forced him out, as a Jew; Josef Goebbels himself was said to have intervened personally at the Deutsche Bank. Fred Levy married Bernd's mother, Sabine (Kahn) Levy, in 1932 and the family moved between Berlin, Frankfurt, and Sofia, Bulgaria; they also had a daughter, Marion, in 1936. In 1937 the family relocated to Sofia, where they were able to stay until once again forced out by Nazi policy in March 1941.

Then ensued a wartime voyage through Odessa, Moscow, and Vladivostok, across the Soviet Union, and then by boat to Tsuruga, Japan, and then Yokohama. Bernd had completed two years at the American School in Sofia, which included a little English instruction, and along the course of that trip served as translator for the family at points, when a little English was the best linguistic match available (they also used German, Yiddish, and Bulgarian.
along the way, the latter close enough to Russian to get by). Most of their companions on that trip were fellow Jews fleeing the Nazis, from Poland and Bulgaria and elsewhere; at least one family "disappeared" en route, and Bernd's parents had to expend much of the money they had been able to gather for the trip as well as considerable skill at negotiating bureaucracies in order to keep the family moving, fed, and housed. At the end of April 1941 they embarked from Yokohama on a Japanese freight-transport ship for San Francisco. A fellow traveler on the way to San Francisco, concerned about using the recognizably Jewish Levy in front of "Aryan" Germans, suggested that they take on the name Lambert.

Arriving in San Francisco in May 1941, a family of four with almost no resources, with limited English language ability, they spent a week in a detention center for undesirable immigrants until funds from a small account the family had previously set up in New York were forwarded by a family friend there. After almost a year, and night-school classes, Bernd's father was able to get a position as an accountant, and six years later his mother opened Sabina Lambert's Knitting Studio. In the late 1950s they received some restitution from the German government for their wartime losses.

As a child immigrant growing up in San Francisco Bernd found it difficult to make friends, but developed his senses and powers of observation in that culturally rich environment. In college at Berkeley he took a cultural anthropology course to fill the science requirement in what seemed an easy way, and was drawn to the field both by general curiosity about humans and by what he called "anthropotherapy": the idea of studying others in order to learn about oneself. Alfred Kroeber and Robert Lowie, anthropologists specializing in Native North America who had built the Berkeley department, had retired by the time Bernd was there, but the program still emphasized studies in Native North America; that grounding would prove useful to Bernd at Cornell. He completed his Bachelor's degree in 1954, and after two years of service in the U.S. Army stationed in Germany Bernd returned to continue in Berkeley's graduate program. Bernd later said that he found the discipline then "much more theoretical" compared to the "factual" anthropology that had constituted his undergraduate experience.
In many ways, Bernd’s anthropology spanned most of the history and currents in modern American anthropology. He remained ever-loyal to his original teachers: John Rowe, who was his first anthropology teacher, and convinced Bernd to study anthropology; David Schneider, who assured Bernd that the lack of course work in field methods at Berkeley wouldn’t be a problem for him in his research because he "was an intelligent man"; and, above all, Robert Murphy, who chaired Bernd’s doctoral committee and remained a lifelong friend and mentor.

In 1958 Bernd received funding through the Tri-Institutional Pacific Program (Yale, Hawaii, and the Bishop Museum in Hawaii) to do research in the Gilbert Islands (despite his training focused more on North America, and a personal interest in Africa), and in 1959 he left California for the field. He often talked in later years of how distant and isolated the Pacific islands were then, necessitating a long sea voyage to reach.

Despite the distance, Bernd returned to Kiribati (the current name of the former Gilbert Islands, adopted at independence in 1979) nine times over the next 50 plus years, most recently in 2012. He worked primarily on two of the more than 30 atolls which comprise the island nation, Makan and Butaritari. Much of his work was on kinship and adoption on these islands, a subject he learned about by being adopted into the fabric of Kiribati society. One of his fellow Micronesian anthropologists hailed him by saying "Kiribati was in him and he was in Kiribati."

In Kiribati, Bernd uncovered a system of ambilineal kinship relations which was in contrast to the unilineal systems of descent and inheritance in many other parts of the world. In an ambilineal or cognatic system, people honored relatives on both sides of their genealogy equally. Bernd was also sensitive to the ways that kinship was created through adoption and fosterage. He found that many children lived in households other than those of their birth parents. Some of these arrangements were similar to adoption in western societies where the care-giving adults became the parents of the children. Other arrangements were less permanent but arose
from status differentials where higher status families sent their children to live with those of lower status for a period of time, thus bestowing status to those families.

After completing his Ph.D. at Berkeley in 1963, Bernd took up a post-doctoral position at the University of Pittsburgh for 1963-64 (where even the Pirates winning the World Series could not dislodge his never-waning devotion to the Giants). Bernd joined the Department of Anthropology at Cornell in 1964 and dedicated his entire career to students and colleagues with unfailing generosity until his death. His prolific reading, expansive scope of interests, and nearly encyclopedic memory made him an ever-engaging colleague and unique teacher. Interacting with students in and out of the classroom, Bernd was a fount of provocative ideas and inspiration for generations of Cornellians, and prodigious in his service to students. His courses -- notably "Myth, ritual and symbol" and "Kinship and social organization" -- were anchors of the Cornell Anthropology program and shaped the reputation and impact of Cornell’s distinctive vision of anthropology throughout the country.

With Bob Smith, Bernd started Cornell's first regular course on North American Indians in 1972. He continued to teach that course for many years after, and was also an active -- but never controlling -- member of the American Indian Program after it was begun a few years later. As a teacher, Bernd was exceptional, not only for the breadth and clarity of his lectures, but especially for the kindness and charity with which he responded to student questions: his was a skill which defined the art, transforming even the most awkwardly conceived question into something that not only made the asker feel good, but became an opportunity for adding new knowledge to the exchange. Few will ever approach his ability to make even ambilineal descent groups in the Northern Gilbert Islands unabashedly riveting. Integral to Bernd’s presence in Anthropology was his willingness to continue to share his love of teaching and students beyond the classroom. His gurgling laughter -- almost a giggle -- was infectious, and he shared it and himself generously at colloquia and social gatherings.
Bernd was a socio-cultural anthropologist in the full sense of the term, a student of comparative social formations as they are grounded in extensive empirical field studies of one or more different societies. His work developed as the traditions of Europe and America, sociology and cultural anthropology merged in a more integrated approach to epistemology, linguistic and cultural forms. The bringing together of different theoretical traditions and ethnographic instances involved in creating the discipline of socio-cultural anthropology was a challenging project fraught with conflict between established authorities, national traditions and theoretical positions. Bernd stood out for the humor, humility, and understanding with which he was able to mediate the differences while keeping in sight the promise and potentiality of the field.

Bernd was a bibliophile and was always reading multiple books at one time. He annotated each book he bought with the date, place, and often occasion of its purchase. After retirement, he remained a regular participant in departmental events and continued to work with and advise students, particularly a few interested in Pacific Island languages. The passing of first Marcia and then Bob Ascher took Bernd to the synagogue for their services, and he recognized there traditions and philosophies not pursued, but deeply resonant. Before his untimely death Bernd had been working with his fieldnotes from Kiribati, on language and culture, with graduate student Kathryn Hudson and on his own; on gender relations and their expression in mythic stories (he gave a lecture in the Cornell Anthropology Department in October 2014 entitled "Mothers and Sons: the Female Side of Kiritibati Cultural Heroes"); and on his family history. Some of these materials may be published posthumously.

Frederic Gleach, chair; Jane Fajans, Kathryn March
Robert J. “Jack” Lambert
August 25, 1927 – August 8, 2014

Professor of Freehand Drawing, Jack Lambert, instructed in and directed a program of visual communication established at Cornell University’s founding for landscape design majors. He demonstrated a remarkable combination of natural ability in drawing, sketching, and watercolor painting with ability to impart techniques and knowledge to his students. In recent decades, his elective Freehand Drawing courses also nurtured the artistic development of innumerable students throughout the University.

Born in Tremont, Indiana, and raised there and in Dayton, Ohio, Professor Lambert served in the military in 1945-1946. He then entered Cornell University as an undergraduate majoring in Zoology (Anthropology), where he also assisted in the teaching of drawing. He served as fisheries aide, U.S. Fish and Wildlife Service, Woods Hole, Massachusetts, summer of 1949. Lambert received a Master of Science degree in Anthropology and Zoology at the University of Michigan in 1951. In 1951-1952, he was chemical laboratory assistant for Dayton, Ohio, Water Department, analyzing industrial waste and domestic pollution. He spent much of 1952-1953 in anthropological fieldwork in the mountains of Peru in cooperation
with the Cornell-Peru Project, the University of San Marcos, and the U.S. Point Four Program, before receiving a letter from Professor Elizabeth Burckmyer, offering an instructorship in drawing at Cornell. Accepting the offer, he returned to Ithaca fall, 1953, where he would spend the next 45 years teaching drawing and watercolor painting in the Freehand Drawing program. Anthropology still interested him, and he devoted many of his first summers to fieldwork in Cuba, Jamaica, and the British West Indies. In following summers he painted in the islands of the Fiji group, South Pacific, as well as along the New England Coast, Nova Scotia, and Quebec. He met Nina E. Weingarten at Cornell studying for her masters in Child Development in 1955; they were married in 1956.

During unsalaried leave, he continued professional improvement through formal and informal studies with Norman Daly, Cornell University, 1957; Woodcut studies with Antonio Frasconi, Pratt Contemporary Graphic Art Centre, New York, NY, 1957; lithography course with Richard Graf and painting course with Richard Diebenkorn, California School of Fine Art, San Francisco, CA, 1959-1960; and study and practice of Japanese Sumi ink painting with Chiura Obata, Berkeley, CA, 1960-1961.

He was promoted to Assistant Professor in 1958, Associate Professor in 1965, Professor in 1977, and Professor Emeritus in 1998. He was a valued member of a faculty where art and science did not always intermingle comfortably, and led the Freehand Drawing program from 1962 until his retirement.

Sabbatical leaves in 1968 and 1975 were devoted to sketching and watercolor painting of landscapes in England. In 1981 he toured and sketched gardens of the eastern United States seaboard.

Lambert’s artwork has been exhibited in numerous galleries, museums, and juried shows – including Upstairs Gallery and Ithaca College Group Show. His art work is found in many private collections and was featured in publications, including Good Times Gazette and Cornell Countryman. Cornell University commissioned many of his works. Kendal of Ithaca featured a retrospective of his work fall, 2013, and in 2015, the Village of Cayuga Heights, for
which Lambert’s artwork is still found on the letterhead, also featured a retrospective of his work in celebration of the Village Centennial.

Gardening was a passion he shared with his wife, Nina, creating together a much toured rock garden at their home in Cayuga Heights. He collaborated with Professor William C. Dilger on the design of the rock garden at the Cornell Plantations. He taught numerous mini-courses and workshops at Cornell Plantations, Boards of Cooperative Educational Services, and meetings of the New York Federated Garden Clubs. He participated in running the American Rock Garden Seed Exchange in 1975-1976. From 1973-1976, he volunteered with the Tompkins Girls Hockey Association as timer, assistant coach, and coach.

Even in this increasingly digital age, a stub of pencil and a scrap of paper remained Professor Lambert’s primary means of expression, and he always found time and inspiration to sketch a little every day. Jack inspired generations of artists who now engage in all walks of life, from the life sciences, to communications, marketing, medicine and a host of other disciplines. He taught the power of keen observation, and encouraged students to pause to record nature’s beauty everywhere. He possessed a wry wit, strong opinion, and a unique lens through which he viewed the world. And his dedication to teaching made him beloved by students. After additional years of emeritus teaching concluded, he continued to teach an informal class with a select group on campus.

Visit the Jack Lambert memorial website, http://jack.lambert.muchloved.com/, for examples of his art and where friends, former students, and admirers have posted remembrances.

_Thomas C. Weiler, chair; Marcia Eames-Sheavly, Carl F. Gortzig_
John Leask Lumley, the Willis H. Carrier Professor of Mechanical and Aerospace Engineering at Cornell University, died in Ithaca on May 30, 2015 of a brain tumor. It is widely believed that his contributions to fluid mechanical turbulence were among the most significant in the second half of the twentieth century.

John Lumley was born November 4, 1930 in Detroit, Michigan. His parents were immigrants, his father from England and his mother from Scotland. John’s father, Charles Swain Lumley was an architectural engineer, and instilled in him a deep appreciation of good design. His mother, Jane Leask Lumley, was the likely source of his extensive repertoire of British aphorisms with which he occasionally sprinkled his conversations.

John enrolled in Harvard University in 1948, and received an A.B. in engineering sciences and applied physics in 1952. His interest in statistical physics was piqued by a course taught by Stanislaw Ulam, who was visiting Harvard. He chose to attend the Johns Hopkins University for graduate work, primarily (or so he said) based upon the attractiveness of their recruiting brochures. After receiving a
M.S.E. in mechanical engineering in 1954, he switched to the aeronautical engineering program to work with Stanley Corrsin on turbulence, earning his Ph.D. in aeronautics in 1957. After two years as a postdoctoral fellow with Corrsin, he joined the Pennsylvania State University initially as a Research Professor at the Garfield Water Tunnel of the Applied Research Laboratory, and then as a professor in aeronautics. By age 44, he was appointed Evan Pugh Professor of Aerospace Engineering, the youngest person to hold this title. In 1977, he accepted an offer from Cornell as the Willis H. Carrier Professor of Mechanical and Aerospace Engineering. He thrived at Cornell, and built a turbulence group that became recognized worldwide.

His thesis advisor was a prominent experimentalist, and John’s first research activities upon joining Corrsin’s group were in the laboratory. That apparently did not go as well as hoped, and he moved to a theoretical project. That did go well, and he had found his personal scientific niche as a theoretician. That said, he was always well versed in experiment, wrote papers on instrumentation and experimental methods, and many of the 34 or so Ph.D. candidates that he supervised at Penn State and later at Cornell wrote theses on experimental topics.

While at Harvard, John met Jane French, a student at Radcliffe. They married while John was a graduate student and their three children were born in Baltimore.

John’s own work covered many areas, from the fundamental physics and the mathematical theory of turbulence, to the very practical, like his design of very quiet water tunnels for testing full scale torpedoes. He was an expert on undersea warfare, in which turbulence plays a central role, and he was involved in this work throughout his tenure at Penn State. The scope of his work was remarkably broad, ranging from turbulence modeling (he insisted on models that obeyed the same invariance properties as the physics), to incisive experiments, to computation. He wrote about environmental flows, technological flows, drag reduction, and buoyant plumes, among other applications. In a seminal paper presented at the 1967 Moscow conference, “Atmospheric
Turbulence and Radio Wave Propagation,” he showed that a particular series representation of any turbulent flow, a “proper orthogonal decomposition,” could be found. For a given number of terms, this kind of series captures more of the energy of the flow than a Fourier or any other series, and in this sense, is an optimal representation. Each term can be thought of as representing a “structure” in the turbulence, and in this way he provided a precise definition of what had been a loose notion of the coherent features observed in turbulent flows. This paper appeared in an obscure publication, and it took some time to become widely known. Proper orthogonal decompositions of turbulent flows has since developed into a cottage industry, and a standard method for understanding coherent structures.

He wrote six books: *Structure of Atmospheric Turbulence*, with H. Panofsky; *Statistical Tools in Turbulence; A First Course in Turbulence*, with H. Tennekes; *Engines: An Introduction*; *Turbulence, Coherent Structures, Dynamical Systems and Symmetry*, with P. Holmes and G. Berkooz; and *A Still Life with Cars: An Automotive Memoir* and he edited several more. He also wrote 229 scientific papers, and produced and performed in two films in the well-known National Science Foundation series on fluid dynamics. In addition to his books and papers, he was active in the scientific community in numerous ways, including memberships and chairmanships of many national and international committees, editorial duties for several journals, including over 30 years with *Annual Reviews of Fluid Mechanics*, nineteen years of which he was Co-Editor or Editor. His impact on the field was impressive and lasting.

During the cold war, Soviet scientists had developed turbulence theory and experiment further than their counterparts in the West. John brought their advances to the attention of Western researchers first by editing English translations of the important two volume treatise *Statistical Fluid Mechanics: Mechanics of Turbulence*, by A.S. Monin and A.M. Yaglom. These had to be smuggled out of the Soviet Union. He also edited the translation of the book *Variability of the Oceans*, by Monin, Kamenkovich, and Kort. In addition, for many years he edited the cover-to-cover English translations of
He made several trips behind the iron curtain, and got to know the most prominent and productive Soviet scientists working in turbulence. His work had caught their attention starting with his 1964 book with Panofsky, *Structure of Atmospheric Turbulence*. This was recognized as an important contribution and was translated into Russian by Monin.

Among the most prominent of the many honors John received were election to the National Academy of Engineering and the American Academy of Arts and Sciences; he was a Fellow of the American Physical Society and Fellow of the American Academy of Mechanics; he was awarded the Timoshenko Medal of the American Society of Mechanical Engineers; the Fluid and Plasmadynamics Award of the American Institute of Aeronautics and Astronautics, and the Fluid Dynamics Prize of the American Physical Society. He also received honorary doctorates from the University of Poitiers and the Ecole Central d’ Lyon. He was especially proud of these.

John developed a love for automobiles as a small child that stayed with him for his lifetime. He attended a preparatory school in Detroit together with children of auto company executives. In addition to a fine academic curriculum, the school also offered shop courses, including ones particular to the automobile industry, which he appreciated and in which he excelled. Throughout his life, his avocation was the repair of family cars – mostly his family’s small fleet of Volkswagen Beetles - and the restoration of classic cars. The six classic cars he restored ranged from about 50 to 80 years old. He was a self-taught craftsman, rebuilding cars that arrived at “Lumley’s Good Enough Garage” in poor condition, and on one occasion, in boxes. He did all aspects of the restorations himself, including all mechanical work, body work, painting, and the fabrication of the interior, even the sewing of the leather upholstery and reconstruction of the interior wood veneer. Some of this is captured in his memoir written after retirement, *Still Life with Cars: An Automotive Memoir* (McFarland & Com 2005). He had an expert knowledge of the history of the automobile, and enjoyed
talking about it, and especially about the engineering solutions to various subsystems that the designers adopted, some of which he admired, and some not.

His curiosity and memory were remarkable, as was the facility for language so evident in his writings. Together with his love of reading and sense of humor, these characteristics made conversation with him entertaining and rewarding. Despite this, he was not at ease with those he did not know well, and could seem reticent in their company. While he had strong opinions about research, and rapidly arrived at theories for controversial questions, he was always willing (though not always happy) to abandon a pet theory if experiment proved it untenable. On many occasions, he talked about theory and theoreticians. For example, on the occasion of receiving the American Physical Society Fluid Dynamics Prize, he wrote (one would expect with tongue in cheek) of how experimentalists and practical engineers regard theoreticians with alarm. “It does not help that any theoretician worth his salt can come up with several contradictory theories a day. He had a beautiful theory to explain yesterday’s data, but this morning it seems that those data are wrong; this afternoon he has a new theory to explain the new data. Who can trust a man like that?”

Although he was not a natural classroom teacher, his books and films provide a lasting testament to his role as an educator. His graduate students, and the many others whose careers John promoted, write of their deep appreciation of his influence. He taught the research method by example: few spoken words, many written words communicated by handwritten notes.

John and Jane were gourmets, which no doubt was why John preferred France as the destination for his sabbatical leaves. Jane taught in the School of Hotel Administration at Cornell, and was a restaurant critic for *Distinguished Restaurants of North America*. Both John and Jane loved to cook, and hosted many delightful dinner parties at their home.

John was predeceased by his wife, Jane Lumley (nee French). He is survived by his children, Katherine Leask Lumley-Sapanski,
Jennifer French Lumley and John Christopher Lumley, and five grandchildren.

*Sidney Leibovich and Zellman Warhaft*
Professor Emeritus of English Phillip L. Marcus taught at Cornell from 1967-1995 where, after taking his Ph.D. at Harvard, he made his mark as a brilliant teacher-scholar. After retiring from Cornell, he began a second career at Florida International where he excelled at teaching a somewhat different kind of student than those he encountered in the Cornell College of Arts and Sciences.

What greater compliment can his memorial committee pay than to say that we all learned from him? The chair of this memorial committee never missed a chance to talk about William Butler Yeats, James Joyce and Irish culture with Professor Marcus. Professor Michael Colacurcio, his Cornell colleague and closest friend here, and now Distinguished Professor at UCLA, recalls: “What I know about William Butler Yeats I learned from Professor Phillip L. Marcus—at breakfast in the basement of the Cornell Statler Club, where we went, almost every day, to complain about the weather and lament the fact that historicists like ourselves could not…[practice] theory. . . .”
He was one of the world’s leading Yeats scholars, Co-General Editor of the Cornell Yeats, and author of two of the most important critical and scholarly books in Yeats in the last fifty years: *Yeats and the Beginnings of the Irish Renaissance* (1968) and *Yeats and Artistic Power* (1992). His publications include an important study of Standish O’Grady (1970). He also co-edited a collection of essays on D. H. Lawrence (1985) as well as a variorum edition of Yeats’ stories entitled *The Secret Rose* which he co-edited (1981). He also published many essays in the field of Irish studies. With 27 completed volumes, his authoritative Cornell Yeats edition is considered by scholars one of the most important scholarly projects in the study of modern literature. Having expanded his teaching and scholarly interests into American Literature, he recently completed a major essay entitled “The American Crisis Poem.”

Professor Winthrop “Pete” Wetherbee recalls: “In 1967 and 1968 the English Department took in eighteen new assistant professors, and there was great solidarity among us. A pleasant memory of those early years is of the open house that Phil and his office mate, the late Frank McConnell, maintained in their office in Goldwin Smith. It was a matter of course to drop in with coffee before the teaching day began, to chat, to joke, and compare notes on our teaching. We all appreciated the contagious effect of Phil’s enthusiasm for teaching. He loved to talk about his classes, and the gifts and foibles of his students, often with remarkable insight into the personalities their work revealed.”

Having gone to the University of Kansas City as an undergraduate (B.A. 1963), Professor Marcus was undaunted by first generation students he encountered at Florida International. These students were often from economically deprived backgrounds and many were from families where English was not the primary language.

In 2004 he won Florida International’s Excellence in Teaching Award. James Sutton, his former chair there recalls: “Phil was beloved by our students. When we had the memorial service, more than 20 of his students came up to the podium “uninvited” to talk about how Marcus had changed their lives, impacted their minds, made them see poetry and literature and life in a new way. . . . He
was a wonderful colleague, especially with junior faculty and with his friends working on Yeats. He also made very good friends with our star poet here, Campbell McGrath, and worked with McGrath frequently in the classroom, teaching his poems under the rubric of the ‘American Crisis Poem.’ . . . [H]e was ever so generous, kind, and an excellent scholar. His last article, coming out soon, is on the Crisis poem, from Whitman to McGrath—what a smart article it is.”

Professor Marcus was a bibliophile who collected first editions and an ardent big game fisherman. He had a strong interest in pottery and paintings. He was a man known for his wit, intelligence, and generosity, both of time and money. He was a dedicated teacher who loved words, reading, and the books that he knew almost by heart. He wrote an elegant prose.

He is survived by three children: Mary, the eldest, and his twin sons Leonard and Patrick, as well as by five grandchildren and three great-grandchildren.

Daniel Schwarz, chair;
Michael J. Colacurcio, Winthrop Wetherbee III
Jay Orear had a distinguished career as an educator and researcher in physics. He grew up and received all of his education in Chicago, a Ph.B. from the University of Chicago in 1944, an M.A. in 1950, and a Ph.D. in Physics, also from the University of Chicago, in 1953. His career path was: Research Associate, University of Chicago, 1953-54; Instructor and Assistant Professor at Columbia University, 1954-58; Associate Professor Cornell University 1958-64, and Professor of Physics, Lab of Nuclear Studies from 1964 until he retired in 1993. Jay continued to live in Ithaca until the last few years of his life.

Jay was the Chairman of the American Federation of Scientists 1967-68.

Jay was a co-author, while still a graduate student, of one of the first nuclear physics texts, based on a course at Chicago by Enrico Fermi. He also authored a successful introductory physics text *Fundamental Physics*, published in 1961, with a second edition in 1967. This was a rather innovative text at the time, introducing modern physics concepts such as relativity and quantum theory at the start of the course, which Jay taught for many years. It preceded similar efforts at Berkeley and Cal Tech. This book was also translated into Russian and published in the Soviet Union, which took
the unusual step of paying royalties to Jay. Since there was no
currency exchange at the time from rubles to dollars, Jay was given
a numbered bank account in the USSR, which he used to help out
friends and colleagues there.

Jay was very much influenced by his close association over a seven
year period with Enrico Fermi (1901-1954), who was his thesis advisor.
He was Fermi’s last student. Over the years since Fermi died, there
have been a number of Symposia dedicated to Fermi’s life and
accomplishments, including one at Cornell in 1991 which was
organized by Jay. Jay was an invited speaker in six of the one-
hundredth birthday celebrations devoted to Fermi in 2001, five of
which were in Italy. After his retirement, in 2003, Jay wrote a
manuscript: “Enrico Fermi, The Master Scientist,” based on the
video taping of the 1991 Cornell conference. This is available
online. It contains many interesting talks on Fermi, from all
aspects. Among others, there were talks by Hans Bethe, Dale
Corson, and Bob Wilson.

Jay’s other published educational work was a paper on statistical
methods for physics Statistics for Physics. This was originally
based on lectures by Fermi. It was first published as a UCRL report
in 1958. It was reprinted many times under Jay’s name since then
for the Advanced Lab in Physics at Cornell. This is a very useful
compilation of statistical methods for the analysis of experiments.
It is still used in this lab, since it is a well-written and succinct
description of essential techniques needed by every experimental
physicist.

Jay’s research career was spent as a high energy experimentalist.
When he came to Cornell in 1958 he joined Professor Giuseppe
Cocconi’s group, which was then doing experiments at Brookhaven
and at Cornell. After Cocconi left Cornell in 1963 for CERN, Jay
took over the leadership of the Cocconi group. Although Cocconi
had done experiments at both Brookhaven and Cornell, Jay never
did experiments with the accelerator at Cornell. Jay became the
leader and administrator of a successful group, originally
consisting of physicists and graduate students from Cornell and
physicists from Brookhaven. Later, this group included people from
many other universities and laboratories. Jay’s group performed experiments at Brookhaven, and later, at Fermilab. Their specialties were high energy elastic scattering and the total cross sections for different particles on proton targets. Perhaps the most famous experiments by this group were the observation of a backward peak in positive pi meson scattering from protons in 1965, which was a follow-up of an experiment started at CERN in 1964 by Cocconi, and, later, anti-proton and proton elastic scattering at very high energies. These last experiments were done at Fermilab. Jay was a co-author of 33 peer-reviewed publications, mostly in Physical Review and Physical Review Letters. There were also many conference reports and proposals. His publications totaled over 70 papers in all.

*Louis Hand and Donald Holcomb*
Verne N. Rockcastle

January 1, 1920 – April 5, 2015

Verne Rockcastle, Professor of Science and Environmental Education in the Department of Education at Cornell, and Professor Emeritus, died Easter Sunday, April 5, 2015 in Ithaca, at age 95. Verne was an active faculty member at Cornell since 1956, despite formally retiring at age 66.

Verne was raised in Rochester, NY, a child raised during the Great Depression by teacher-parents. His career was influenced in no small way by his history and by his summers on Tupper Lake, his love for nature, and his commitment to hands-on learning. He wrote in his memoir, “Most of my boyhood memories centered on experiences on the Raquette River near Tupper Lake. My father had built a cottage there for our family doctor, Dr. Kimball, who had said to my father that he could be paid to build the camp, or he could use it for the month of July each year as long as he lived. Since my father was a teacher, he decided that the latter course was the better one.” Verne and his family have summered in Tupper Lake thereafter, building their own “camp” and enjoying time there together as the family has grown. He once boasted to his colleagues how the land at his cottage was of his own making—he had, for years brought leaves swept from his Cayuga Heights property up to
the Lake, where nature took its course and created a rich soil in his ‘camp.’

Verne did not always aspire to be a science teacher and college professor, but his interest in science and nature were long-seeded since those early days in Tupper Lake. At first he had an interest in being a Forest Ranger. But still feeling the effects of the Depression, he attended the state-tuition side of Syracuse University College of Forestry in 1937. He soon concluded, “being in the woods was not the best way to support a family”—a thought that may have coincided with meeting his to-be wife Madeline, a junior transfer from Bucknell, during his sophomore year. Likewise, the world can thank his “disability” of being color-blind for his becoming a science teacher and teacher-educator. Due to discovering color blindness while a Pulp and Paper Engineering student and unable to do the visual work for his major, he transferred to major in Landscaping. But, he found that “the same color-blindness...still haunted me in Landscaping.” He therefore took an additional year to finish the science and math requirements and became a teacher in 1942. He wrote, “I had grown up in a teaching family. So what better could I do than to pursue a teaching career?”

But before this career was underway, like most men of his age, Verne served in the Army upon college graduation, intent to fight in World War II. Due to a combination of fated factors such as exposure to illness, his high scores on an intelligence test, and what he called “luck,” he served in the Army by attending MIT, intending to be trained as a meteorologist in the US Air Corps. Instead of being shipped out, Verne was retained as a teacher at MIT to teach other Air Corp trainees. He there earned an M.S. degree (and married Madeline). After the war Verne attended a workshop taught by Cornell’s Dr. E. L. Palmer, a naturalist and experientially-based teacher, who influenced Verne to apply to the Cornell Ph.D. program. Accepted, Verne worked with Professor Eva Gordon as his Committee Chair, a professor who authored and edited the Cornell Rural School Leaflet, a 32-page Quarterly for rural elementary schools of the State, which Verne later took over for about 15 years, after Verne had joined the faculty at Cornell. Verne
was at first an associate professor of science education, arriving here from teaching at SUNY Brockport, and he continued to be a beloved teacher throughout his career and his active emeritus status. Verne is most known and fondly remembered for his ability to bring science to life to students of all ages through experiential education.

In his teaching, Verne was before his time with experiential and experimental education. It was during his first sabbatical in Europe that Verne met Jean Piaget, one of the most world-renowned cognitive developmental scientists and father of constructivist education. Verne was one of a group of Cornellians, including Richard Ripple, also of the Education Department, who arranged for Piaget to give a series of lectures at Cornell in 1964, which marked among the first of Piaget’s trips to the United States. Verne’s own science teaching had always been constructivist in nature, without having made these theoretical connections at that time. Verne and Professor Ripple published a monograph based on Piaget’s visit entitled, *Piaget Rediscovered: A Report on the Conference of Cognitive Studies and Curriculum Development*.

Verne also served as a professor for the summer portion of Cornell’s Adult University (CAU) for more than 20 years, first in Ithaca, and later in other areas, including Tucson, the Grand Canyon, Alaska, and the Galapagos Islands. Additionally, he taught at Fresno Pacific College for 13 summers. He was senior author for the Addison-Wesley Science Program, and co-author of a number of science textbooks. Verne was always very hand-on and experiential when it came to teaching—at every level—before it was popular. Colleagues recall that he was most proud of these trips throughout the world, bringing people to science—whether it was in Alaska or in the gorge near Cornell. He used the world as his laboratory and brought people’s attention to it.

At age 66 Verne formally retired from Cornell, as “was the custom of the time,” he said, but did not retire from working. He continued to work nearly daily for the next 40 years, spending many days in the emeritus office at Cornell, as well as taking short teaching assignments throughout the country. Two decades after formal retirement, he developed a web site where he could “continue the
development of simple investigations by school kids to demonstrate and explain science concepts that I felt were both basic and important, but were not often well understood, and often were not even included in elementary, junior high, or secondary school science.” (Rockcastle, Acorn to Oak, p. 233). He called his web site (www.rockcastle.org) “Rocky’s Science Fun.” One colleague recalls Verne coming to her backyard to film her children conducting one of his outdoor experiments; the videographer was one of his own grandchildren.

For nearly all his years at Cornell, since 1956, Verne lived with his wife of nearly 72 years, Madeline, in a lovely cottage in Cayuga Heights, where they raised their two daughters. Verne always gave credit to Madeline for his success—whether it was through her hosting weekly visits at their home for students, continuing to bake her amazing baked beans recipe for potluck dinners on campus. She drove him to work each day in his later years, being sure to pack him a light lunch that included (or rather, comprised of) a cookie and fruit—which he thought to be the healthiest way to eat lunch! His longevity seems to prove his point.

Verne was an active member of the Ithaca community as well as the Cornell Community. In addition to being the faculty advisor to the Cornell track and cross-country team, which he took tremendous pride in, he and Madeline were generous supporting members of the First Presbyterian Church in downtown Ithaca, supporting myriad missions and programs there. After church each Sunday, Verne and Madeline could be seen visiting friends and residents of the Oak Hill Manor Nursing Home, even throughout his own 90’s. He always had a smile, a chuckle and a story to share with each of them. Skiing was another activity keeping Verne active into his 90’s. Even after surgeries on both knees, Verne was still making weekly trips to Greek Peak to ski, putting the rest of us younger colleagues to shame.

Verne’s wife Madeline died in November of 2015. He is survived by his daughters Lynn (Forrest) Thye of Blacksburg VA and Diane (John) Wiessinger of Ithaca NY; his half-sister Lois Rockcastle of Alaska and Tupper Lake; four grandchildren, eight great-
grandchildren, and nieces and nephews, all of whom continue to spend time in Tupper Lake.

Photo of Verne and Madeline Rockcastle from the *Ithaca Journal* obituary.

*Dawn Schrader, chair; John Sipple, Mark Constas*
Professor Edward Schano grew up in Buffalo, New York, during the great depression. Money was scarce, jobs were difficult to find and government programs such as the WPA and CCC provided work for the unemployed. Nonetheless after graduation from high school in 1937, Ed found work for a few months in 1940 as a salvage clerk, gathering scrap metal in a radiator shop. He next landed a job bucking rivets at Curtiss-Wright Corporation. Before long he was a riveter, then assembler and eventually an experimental mechanic at the Corporation. He worked on a large variety of airplanes including military aircraft such as the B-17 Flying Fortress, B-24 Liberator, and Curtiss P-40 Warhawk, among others. He enrolled at the University of Buffalo and planned to work on aircraft for Curtiss-Wright during summers. But in 1941 the Draft Board required that he work full time on aircraft. He managed to continue his education at the University of Buffalo by enrolling in evening courses that were offered by Millard Fillmore College while continuing to work on aircraft during the day. As World War II broke out, Ed was eager to join the Army Air Force but the Draft Board, likely because of his skill as an aviation mechanic, pressed him to continue his work on aircraft. Ed married Evelyn M.
Hackspacher in 1942 and their first child, Edward was born a year later.

By mid-1943 Ed was allowed to join the Army Air Cadet Program, graduating as Navigator in 1944, and subsequently serving as Navigator in bombing missions over Europe. After the war, Ed held the position of Information and Education Officer in the U.S. Air Force at the European Air Depot. Ed was honorably discharged as Captain in 1947. He returned to the U. S. and continued his education at the University of Buffalo, completing his sophomore year. In a decision that started him on the path to his professional career, Ed accepted a job in 1948 with the Kreher Poultry Breeding Farm in Amherst N.Y. In 1949 he transferred to the College of Agriculture at Cornell University where he majored in Poultry. He became a member of the Cornell University Poultry Science Club and served as president of the Club in his senior year. He received a B.S. degree in 1951.

As an undergraduate, Ed Schano was employed part-time by the New York State Poultry Improvement Plan and then worked full time as a Record of Performance (R.O.P.) Inspector from 1951-1952. Ed accepted a position as a technologist in the Department of Poultry Science at Cornell University in the fall of 1952. He received an appointment as Assistant Professor in the Department of Poultry Science in 1953. Following completion of an M.S. Degree at Michigan State University in 1957, he was promoted in 1958 to Associate Professor Poultry Science at Cornell University. Ed was promoted to Professor of Poultry Science in 1978 and retired as Professor Emeritus in 1986.

Ed Schano’s charge was to develop an extension program focusing on youth. He developed a marvelous program that used poultry as the ‘hook’ to attract youngsters. He always emphasized that the program was not designed to teach ‘Poultry’ but to use poultry science to help kids develop strengths that would serve them well in their adult lives. Ed’s educational philosophy was summarized in his own words in the FORWARD of the Cornell University Poultry (4-H) Handbook. Ed wrote: “In New York State, we use poultry as an educational tool to help us develop in our youngsters all of the
wonderful ideals of initiative, resourcefulness, competence, and integrity that we as parents, leaders, and teachers feel are so important. Let us hope that as we work to develop the potential of our youngsters we will in part begin to fulfill our own.”

Ed vigorously pursued this philosophy by preparing instructional materials and worksheets on a variety of poultry topics for 4-H members, as well as lectures, tapes, and written guidance for adult leaders. He organized 22 Regional Poultry Science Schools across New York State as part of a Teen Leader Program in which youth received training in various aspects of poultry science, public speaking and leadership. The 4-H Agents in each region selected the top candidates as Teen Leaders from their regions and these leaders were offered the opportunity to participate as 4-H Poultry Science Ambassadors at the NYS Fair. These Ambassadors progressed through a variety of positions and leadership roles until the very best of them were selected to participate in a Northeast Poultry judging team, while a few other outstanding Ambassadors were selected for a Career and Education Opportunities Tour to learn more about the poultry industry. Ed’s gentle, encouraging touch and his infectious enthusiasm was evident throughout this important program.

Ed’s highly successful 4-H Incubation and Embryology Program was designed not only to promote interest in science, but to provide training in English grammar, composition, spelling, and mathematics. By the time of Ed’s retirement, approximately 4,000 teachers and 80,000 students annually benefitted from this outstanding educational activity.

Professor Ed Schano was the epitome of what land grant-based extension education has been and should continue to be in the service of public education. He was a master teacher who brought a passion, dedication, and enthusiasm to his youth and adult education projects that was literally infectious. Even if you worked outside of his area, the interactions with Ed made you want somehow be a part of or at least support these educational initiatives. He cared deeply about those he reached with educational materials and experiential exhibits and that caring infused all he touched. He was particularly
committed to give young people the information and tools useful for pursuing a happy and fulfilling life. Ed always took the time to ask about what was going on in the life and career of others.

To work in the same department with Ed was a treasure that grew in richness over the years. In Ed’s eyes, each new day brought a marvelous new opportunity, a gift that should be cherished and enjoyed. When Ed was in a meeting, even his presence lighted the room and no topic, no matter how challenging could dampen the air of joy. In a specific example, Ed was a part of a meeting seeking solutions for fiscally challenging changes at Cornell where the economics of some educational resources were impacted. Ed had seen it all in his prior life’s experiences growing up in tough times and knowing how to be both resilient and resourceful. While he was a strong advocate for those to be educated, he was equally a sympathetic partner toward those seeking the economic solutions. Since Ed cared deeply about all things, he was equally effective as a listener as he was as an outstanding educator, and was able to understand and articulate different points of view. Even through these tough fiscal times, people left the meeting feeling uplifted and indeed you had been, because of Ed’s presence and active engagement in the discussion. Whether through spoken words or something beyond that, Ed helped to make us all better people and better Cornell faculty members.

Ed Schano was an excellent athlete who played high school football and was a member of an undefeated team that in 1936 won the Harvard Cup as the City of Buffalo champions. Ed also was a member of the straight and 4-oared crews that both won gold medals at the U.S. Rowing Association Championships in 1938 and 1939 and gold medals in the Royal Canadian Henley Regatta in 1938, 1939 and 1940. As an adult Ed played squash and tennis, among other sports and enjoyed camping with his family. He liked to hunt and fish. In fact, Ed loved the fellowship of his associates and the challenge of catching Walleyes to the extent that he continued to participate in the bi-annual fishing excursions of the departmental poultry group to Bob’s Lake in Ontario, Canada - even after it became physically challenging for him to do so.
Ed Schano and his four children suffered the untimely loss of Evelyn to cancer after 22 years of marriage. Ed married Mary Anna (Benedict) Perry and her eight children in 1967. Three children were born in subsequent years. At one point during his career at Cornell University, Ed recalled that he was asked what came first: “Is it that my work as a Youth Specialist using Poultry Science as an educational tool has prepared me for life as the father of 10 boys and 5 girls, or did my experience as a father prepare me to be a youth specialist?” Ed’s reply – “One thing for sure, I’ve got to like kids.” Ed was a man of deep faith and truly lived it every day of his life.

Ed is survived by his wife Mary and 14 children including Thomas Perry, Eric Schano, David Perry, Richard Perry, Deborah Henry, Loraine George, Joseph Perry, William Perry, Mary Anne Flowers, Robert Perry, Margaret Wooley, Michael Schano, Catherine Llama, and Andrew Schano. Ed was predeceased by his oldest son, Edward Spencer Schano.

Richard E. Austic, chair; Rodney R. Dietert, Robert B. Gravani
Harry W. Seeley, Jr. -- microbiologist, administrator, navigator, and good friend -- was born on March 5, 1917 in Bridgeport, Connecticut. His parents, Genevieve Quinlan and Harry W. Seeley, brought him up in their family home in Stratford, Connecticut where he received his early schooling. After high school, he briefly attended Tufts University, and then transferred to the University of Connecticut where he earned both Bachelor of Science and Master of Science degrees, and, subsequently, was appointed to the rank of Instructor. It was there he met his life’s partner, Peggy (Margaret E. Johnson), whom he married in 1940. Seeing great opportunities to specialize in bacteriology under Professor James M. Sherman, who was head of Cornell’s Laboratory of Bacteriology and a dominant figure in the emerging field of dairy bacteriology, he transferred to Cornell where he earned his Ph.D. degree in 1947. He was appointed Assistant Professor in the Laboratory of Bacteriology at Cornell, and was promoted to Associate Professor in 1951 and to Full Professor in 1954. He also served concurrently as Professor of Bacteriology in the School of Nutrition from 1954 to 1957. Harry’s research was centered on the nutrition, metabolism, biochemistry, and classification of lactic acid bacteria, particularly
the genera *Streptococcus* and *Pediococcus*, important organisms in dairy and other food fermentations. He is perhaps best known for his authoritative contributions to *Bergey’s Manual of Determinative Bacteriology* in which he described the family *Streptococcaceae*. Harry is also known for a surprising discovery made with T. W. Ritchie in 1974, following up on research of his colleague Paul VanDemark at Cornell. They showed that *Streptococcus* (now *Enterococcus* *)faecalis*, an important opportunistic pathogen, could make cytochromes and carry out aerobic respiration when provided with heme in its growth medium. Lactic acid bacteria were considered fermentative and unable to use oxygen for respiration. Only now, in the genomic era, do we know that *E. faecalis* and some other lactic acid bacteria possess genes for respiration but not for heme synthesis, and giving them heme allows them to lead “double lives.”

During the 1960s, Harry’s time was increasingly devoted to administrative work. In 1965 he was appointed Chair of the Section of Microbiology in the newly formed Division of Biological Sciences. The Section contained members of the old Laboratory of Microbiology and several new faculty members from allied disciplines such as biochemistry, genetics, and molecular biology. But this created a split culture within the Section. In addition, at the time there was a general de-emphasis on organismal biology at most major universities. Thus, because of these circumstances and differences within the new unit, the Section of Microbiology was eliminated from the Division and its faculty members were reassigned to other Departments and Sections. In 1972, Harry and several colleagues with interests in microbes as organisms in their own right re-created the Laboratory of Microbiology within the Department of Food Science with Harry as Professor in charge. Ultimately, in 1978, he became the chair of the newly created Department of Microbiology, in the College of Agriculture and Life Sciences. With the hiring of a new chair and several new faculty members in 1979, Harry retired and became Professor Emeritus.
Harry’s teaching career was legendary. For more than 30 years, he continually developed, taught and supervised the Department’s flagship General Microbiology lecture and laboratory courses (now BioMI 2900 and 2910). These are still popular microbiology courses that serve many undergraduate programs within the University. He also taught Advanced General Microbiology (now BioMI 3910), and he managed the graduate student seminar program. Perhaps his biggest impact was with two very successful laboratory manuals, *Microbes and Man* and *Microbes in Action*, which he co-authored with Paul J. VanDemark. After he retired, Harry remained active in editing new editions of the popular lab manual, which was used widely for many years at universities and colleges across the country. The 4th and final edition of *Microbes in Action* was published in 1991.

Harry served on numerous college and university committees including the University Faculty Council. He also served as President of the New York Branch of the American Society of Microbiology and also as Visiting Lecturer of the American Institute of Biological Sciences. For several years, he served on the Postdoctoral Fellowship Selection Committee of the National Academy of Sciences-National Science Foundation. He was a member of numerous professional organizations including the American Society for Microbiology, the Society of General Microbiology, the Society for Applied Bacteriology, the American Association of University Professors, and the honorary societies Phi Kappa Phi and Sigma Xi. He was awarded a John Simon Guggenheim Fellowship in 1958 and was elected as a Fellow of the American Academy of Microbiology.

Harry had a lifelong interest in water activities, especially sailing. He worked during the summers of his college years in Bedell's Shipyard near Stratford, and he spent time sailing in Long Island Sound and along the coast of New England in personally owned or rented schooners. He also held a license from the Bureau of Navigation for operating passenger-carrying vessels. For a number of years he was a member of the Ithaca Yacht Club, and also the City Club of Ithaca. Most of the summers of his retirement were spent at his home on Block Island, RI, where he was a charter
member of the Block Island Conservancy, and he pursued many saltwater activities, especially surf-casting.

Harry was a kindhearted, supportive, sensitive, generous and loving husband, father, neighbor, colleague, and friend – a true gentleman. He will also be remembered for his fondness of animals and birds, his dry sense of humor, and, especially, his avid cloud-watching.

William C. Ghiorse, chair; Stephen H. Zinder, Carole C. Rehkugler with contributions from Cathy J. Shappell
Dr. Maurice J. Tauber, an emeritus professor, Department of Entomology, Cornell University, Ithaca, NY, died Oct 6, 2014 at the age of 82. At the time of his death, Dr. Tauber was a visiting professor/scientist and associate at the UC Davis, Department of Entomology and Nematology, Davis, CA.

Dr. Tauber received his bachelor's and master's degrees at the University of Manitoba, Canada and his doctorate in entomology from the University of California, Berkeley in 1966. Dr. Tauber joined the entomology faculty in Ithaca in 1966, served as Department chair from 1981-1986, and retired in 2000. In addition to being granted emeritus status, he was also appointed as Graduate School Professor.

For nearly 50 years, Dr. Tauber shared a prolific scientific career with his wife, Dr. Catherine (Kady) Tauber, whom he met at UC Berkeley. The scope of their research embraced ecological, evolutionary, and behavioral questions, and involved both beneficial and pest species from eight insect orders. The research yielded fundamental insights into insect photoperiodism, dormancy, development, and speciation. The findings have a broad impact on
applied problems, for example in the management of diverse crop production systems and natural ecosystems. Dr. Tauber published approximately 200 papers, many with Kady, in entomological journals, as well as in *Nature*, *Science*, and *Annual Reviews*. He had two papers in press, and was working on several manuscripts in the weeks before his passing. After retirement and when he became associated with UC Davis, his research emphasis shifted to the comparative biology of New World green lacewings.

He also wrote numerous book chapters, and a textbook *Seasonal Adaptations of Insects* (1986, co-authored with Kady and Dr. Sinzo Masaki of Japan). The book continues to serve as a stimulus and resource for research on insect seasonality: the underlying ecophysiological and genetic mechanisms; its role in the evolution of insect life histories and speciation; and its importance to insect pest management.

Dr. Tauber was major professor for a number of graduate students who have continued their careers in entomology, including Drs. Jim Nechols, John Obrycki, John Ruberson, Gilberto Albuquerque, Lindsey Milbrath, Yin-Fu Chang, and José I. Lopez-Arroyo. He was a dedicated mentor and enthusiastic supporter of his graduate students, as well as undergraduates who worked in the Blauvelt Lab at Cornell University. Dr. Tauber was also a willing mentor for the numerous assistant professors who joined the Cornell Entomology Department during his years as a faculty member. At UC Davis, he advised numerous graduate and undergraduate students in an informal capacity.

Dr. Tauber was a Fellow of the American Association for the Advancement of Science (AAAS), the Entomological Society of Canada, and the California Academy of Sciences. He served on the Governing Board and several editorial boards of the Entomological Society of America. For more than 20 years he was active on the editorial board of the *European Journal of Entomology*. He was also a research associate of the B.P. Bishop Museum in Honolulu, and a member of numerous scientific societies.
The International Organization of Biological Control (IOBC) recognized Dr. Tauber’s work with two awards that he shared with his wife Kady: the IOBC/Nearctic Regional Section Distinguished Scientist Award (2002) and Honorary Membership – Global IOBC (2012).

Dr. Tauber is survived by his wife Kady who continues to reside in Davis, CA. He is also survived by their sons Paul and Michael and their daughter Agatha.

*Elson Shields, chair; Arthur A. Muka*
The Section of Plant Pathology and Plant-Microbe Biology in the School of Integrative Plant Sciences (formerly Department of Plant Pathology and Plant-Microbe Biology), and the Office of International Programs in the College of Agriculture & Life Sciences lost a dear friend and visionary colleague with the passing of H. David Thurston at the age of 87 on September 26, 2014 after a short illness in Ithaca.

H. David Thurston was born in Sioux Falls, SD, on March 24, 1927. He received his primary and secondary education in Sioux Falls and spent 16 months in the Air Force prior to entering the University of Minnesota. In 1950, he received a B.S. degree, majoring in plant pathology and minoring in bacteriology, and M.S. and Ph.D. degrees in plant pathology in 1953 and 1958, respectively. H. David married his lifelong partner, Betty Hillers, in 1951, and together they had three sons – Jeffrey, Joseph, and David.

While working toward his Ph.D. degree, Dave spent two years with the Rockefeller Foundation in Colombia, and in 1958, upon completion of his doctorate, he joined the Rockefeller Foundation in Colombia as the director of their Plant Pathology program at the
Instituto Colombiano Agropecuario. While in Colombia, he was promoted to the director of the Rockefeller Potato Program in Bogotá in 1963, and in 1965, to director of Plant Sciences of the Colombian Agricultural Institute. He and his family stayed in Bogotá until 1967. Throughout his 11 year career in Colombia, Dr. Thurston was known for his calm insistence on accuracy and thoroughness. Though his colleagues often referred humorously to his obsession with neatness, this trait was respected and soon became a trademark of a student or research assistant fortunate enough to come under his direction. These traits, and the ever present ‘cards in his wallet’, followed him to Ithaca and were a mainstay during his 29 year career at Cornell.

In 1967, H. David joined the college of Agriculture at Cornell University as the International Professor of Plant Pathology, one of the original ten International Professorships established in the College of Agriculture at Cornell by Governor Nelson Rockefeller. David Thurston is most recognized as a dedicated contributor to and supporter of international plant pathology, which marked his career for many decades. Dr. Thurston showed exceptional leadership in training graduate students to deal with plant disease problems of the tropics and developing countries. He influenced generations of U.S. students to pursue careers in international agriculture, and prepared generations of international students for leadership positions in their respective national programs. He guided 22 students through their advanced degrees in plant pathology and served on the committees of dozens more. Dr. Thurston and his associates published extensively on the diseases of rice, oats, sugarcane, bananas, and other tropical crops, but it was his piercing insight into the phytopathological problems confronting the potato grower that brought him international fame. Though an expert in research on fungicides and their application, he pioneered the discovery of new sources of resistance to such classic diseases as late blight (Phytophthora infestans) and brown rot (Pseudomonas solanacearum). For over twenty years at Cornell, Thurston worked closely with the potato breeders in the Department of Plant Breeding on testing breeding material for resistance to Phytophthora infestans, Alternaria solani, Verticillium spp., Streptomyces scabies, potato leaf roll virus, virus X, and virus Y. In addition, breeding
material were maintained in tissue culture and tested (using ELISA) for freedom for potato viruses X, Y, A, S, M, and PLRV. Material was tested for freedom from potato spindle tuber viroid using a nucleic acid hybridization (cDNA) test.

Dr. Thurston taught or participated in courses in tropical plant pathology, traditional agriculture, agriculture in the tropics, and other international agriculture courses. From 1969-1997 Dr. Thurston taught International Agriculture 602 (Agriculture in the Developing Nations, which included a 2 week field trip to the American tropics). He was one of the founders of this course, which has now operated for 48 years as perhaps the most life-changing and popular course in the college. He remained active in teaching and writing after his retirement from Cornell University in 1995. Even at 79 years of age, Thurston, as an emeritus professor, could fill a 40-person classroom to its capacity in a course he originated on Traditional Agriculture.

Dr. Thurston’s abilities as a teacher, director, and organizer of research, and his knowledge of plant pathology at the international level, made him a widely sought consultant and speaker in the areas of crop protection, concepts of resistance, and international agricultural development. He traveled extensively in Latin America, Asia, and Africa for Cornell and while consulting for CGIAR, FAO, and US/AID.

Dr. Thurston raised awareness of policy makers and the public with regard to issues of world hunger and sustainable agriculture, and his legacy of books and photos will serve as key resources for future generations of U.S. and international plant pathologists. His first book, *Tropical Plant Diseases*, was published with APS Press. More recently, his major interest was compiling and analyzing information on sustainable plant disease management practices of traditional farmers, most of which are cultural practices. He published two additional books on these subjects: *Sustainable Practices for Plant Disease Management in Traditional Farming Systems* and *Slash/Mulch Systems: Sustainable Methods for Tropical Agriculture*. 

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In 1972 Dave Thurston was selected as a Fellow of The American Phytopathology Society (APS) and later received the APS International Service Award. He was recognized for his contribution to student education with the ‘H. David Thurston Student Travel Award’ named in his honor.

As an active member of Trinity Lutheran Church, H. David was an ardent advocate of mission work, and through the church actively assisted in the resettlement of refugees from Vietnam, Myanmar (Burma), Russia and other countries.

H. David is survived by his wife Betty, sons Jeffrey (Ourania Chilimidos) of Oakland, CA, Joseph (Janet Durkin) of St. Paul, MN, and David (Emily) of Ithaca, NY; grandchildren Alexander and George Thurston, Nickolas and Kristofer Chilimidos Thurston, and Aaron Thurston; Brother John Thurston (Corpus Christi, Texas) and many nieces and nephews. He was pre-deceased by his brother Charles and sister Virginia.

_Thomas A Zitter, chair; W. Ronnie Coffman, Gary C. Bergstrom_
Bruce Wallace was born in McKean, Pennsylvania on May 18, 1920 and died on January 12, 2015 in Blacksburg, VA at the age of 94. He was predeceased by his wife, Miriam, and is survived by his children, David B. Wallace, of Blacksburg, VA, and Roberta Wallace, of Wauwatosa, WI. He graduated from McKean High School then attended Columbia University where he received his Bachelor's degree in Zoology in 1941. His Ph.D. study under the eminent population geneticist Theodosius Dobzhansky at Columbia University was interrupted by World War II, during which he served in the army as Statistical Control Officer under Robert McNamara. After four years in the army, he returned to Columbia and received his Ph.D. in 1949. He took a position at, and later was Assistant Director of, the prestigious Long Island Biological Laboratory (LIBL) at Cold Spring Harbor, NY. In 1958, he joined Cornell University, where he was a professor of genetics until retiring in 1981 to take a position at the Biology Department at Virginia Polytechnic Institute and State University. There, he became a University Distinguished Professor of Biology (1983) and was active until he retired again in 1994. He authored over 150 research articles, mostly in the field of population genetics using Drosophila as a genetic model. During his years at Cornell, he published no
fewer than 70 research papers or book chapters. He also wrote more than 15 books, many translated into other languages. Most of his books were written while he was at Cornell. Four books in particular, Radiation Genes and Man (1959, with Th. Dobzhansky), Adaptation (1961, with Adrian Srb), Topics in Population Genetics (1968, W.W. Norton & Co.) and Genetic Load: Its Biological and Conceptual Aspects (1970, Prentice-Hall) were well received by the evolutionary geneticists of the time. In 1981, his textbook, Basic Population Genetics (Columbia Univ. Press) was published. This book was one of a very few written at the time and was very popular because it was not full of mathematical equations.

Bruce Wallace was recruited from the LIBL by R. P. Murphy in 1958 to replace H.H. Smith in the Department of Plant Breeding at Cornell. Murphy’s justification for hiring a geneticist who did not work on plants argued for the best scientist to fill the position and Wallace fit the job. He was a member of the American Academy of Arts and Sciences (1971), and served as President of the Genetics Society of America (1974), the American Society of Naturalists (1970), the Society for the Study of Evolution (1974), and the American Genetics Association (1990), as well as an editor of Evolutionary Biology. In 1970, he was elected to the National Academy of Sciences. However, during the Vietnam War, his social conscience prompted him (and several others) to resign from the Academy when it was discovered that the Academy, through its operating arm, the National Research Council, had committees doing secret war research, funded by the Defense Department. If not unprecedented, resignation from the Academy was certainly a profound action and one which necessitated great strength of conviction. Happily, Professor Wallace was reinstated in the Academy after the war was over.

Professor Wallace was a truly original thinker. He had a sometimes eclectic, but always insightful view of population genetics and biology. As Theodosius Dobzhansky’s graduate student, Bruce Wallace viewed natural populations as genetically diverse (now well documented at the molecular level) with polymorphisms maintained by heterozygote superiority or overdominance. His research initially centered on irradiated populations of Drosophila melanogaster and
the fitnesses of the flies in those populations. Professor Wallace maintained that the additional heterozygosity generated by the irradiation was beneficial to the genetic health of the populations. This viewpoint was not immediately accepted by the population geneticists of the time, but Wallace persisted by obtaining extensive data that supported his view of population diversity.

Professor Wallace’s imagination never stopped generating new ideas and innovative ways of testing popular theories. For example, in order to test certain assumptions regarding island biogeography, he devised an “island machine,” a large plexiglas population cage where founding populations could be controlled in number and density and immigration could be controlled by the length of time vials remained attached to the machine. Island size or the number of ecological niches available could be controlled by exchange rates between vials representing an island, and extinction rates could be measured. In so doing, Professor Wallace devised the best way to estimate the equilibrium number of species and what was the major determinant of extinction (Wallace, B. 1975. The biogeography of laboratory islands, *Evolution* 29:622-635).

Another novel experiment was prompted by Hampton Carson’s descriptions of several species of *Drosophila* whose larvae live amongst the bristles underneath the excretory pore of certain tropical land crabs. Wallace devised an “artificial crab” consisting of a rectangle of indoor-outdoor carpeting inside a population cage. Dilute urine was slowly dripped onto the carpeting via an I.V. tube. The population was initially started with eight different *Drosophila* species, but *D. virilis* quickly became the only species that survived. This population maintained itself for more than a year, when they essentially ran out of pupation sites. When the remaining adults were removed and put on standard *Drosophila* medium, they failed to survive. Thus, Professor Wallace demonstrated that a small population had adapted to this unusual niche so that, within one year, they became virtually unable to survive on the standard *Drosophila* medium. (Wallace, B. 1978. The adaptation of *Drosophila virilis* to life on an artificial crab. *Amer. Nat.* 112:971-973). Bruce also correctly anticipated the structure and roles of enhancers in gene regulation, well before they were discovered by

Bruce loved to travel and did so extensively as a visiting scientist
and scholar, teaching and working at various universities and
academic institutions worldwide. Devoted to his family, he
frequently travelled with his wife and two children. Lee Kass
remembers Professor Wallace at Cornell as a brilliant educator,
making difficult or abstract concepts clear to both the scientist and
the public. He graciously offered his time and assistance to
professional societies, yet he was always available for guidance to
family, friends and students, often with his wife, Miriam. Following
the example they learned from Dobzhansky, Bruce and Miriam
freely hosted visiting faculty at their home, inviting graduate
students and colleagues for dinners, good Scotch and lively
conversation, lasting long hours into the evening.

Bruce Wallace and his close colleague Adrian Srb hosted and
arranged for future Nobel Laureate Barbara McClintock to return to
Cornell as one of the first A.D. White Visiting Professors (1965-
1974). Previously members of Cornell’s Department of Plant
Breeding, they had moved to the Section of Genetics, Development
and Physiology (GDP) in 1965, as members of the newly established
Division of Biological Sciences. As a graduate student in GDP,
Kass, other graduate students, and faculty colleagues were
encouraged by Wallace to engage with and learn from McClintock
and other visiting faculty.

Cornell celebrated Bruce Wallace’s second retirement (1994) by a
symposium in his honor. Colleagues and former students lauded his
contributions and legacy on October 27, 1995; many published
subsequently in Evolutionary Biology Volume 30.

After retirement, he turned his attention from genetics to complex
environmental, and associated societal issues. He became concerned
about environmental degradation and wrote extensively on the
subject.
Bruce Wallace gave us the opportunity to learn from him, and, in essence, started us off on our careers in science. We, and his many students and colleagues both at Cornell and Virginia Tech, will never forget nor cease to appreciate this remarkable man.


Ross J. MacIntyre, chair; Thomas Fox, Lee B. Kass
L. Pearce Williams

September 8, 1927 – February 8, 2015

L. Pearce Williams, ’49, PhD ’52, the John Stambaugh Professor of History of Science Emeritus, died on February 8, 2015, at the age of 87. Pearce was one-of-a-kind. Tall, bombastic in both voice and attitude, politically conservative, a distinguished scholar, fiercely devoted to his students, and dedicated to teaching writing of the highest quality, he was a well-known figure on campus from 1960 until his retirement in 1994. He was a committed Cornellian.

Born Leslie Greenberg in 1927, Williams grew up in Croton-on-Hudson, New York, the son of George and Addie Adelia (Williams) Greenberg. He entered Cornell in 1944, intending to study chemical engineering. He left for a year in the U.S. Navy at the end of World War II. On his return, to fulfill a requirement, he took Henry Guerlac’s history of science course. He was smitten. For the rest of his life, he argued that one could not understand Western Civilization without understanding the history of science. After graduating in 1949 (and that year marrying Sylvia Alessandrini ’49), he stayed on at Cornell to earn his Ph.D. under Guerlac, writing a thesis on “Scientific education in France during the revolutionary and imperial periods, 1789-1815.”
In 1948, Pearce and his brother Charlie ’44 (who later became the long-time business manager of the Cornell Alumni News) tried to volunteer for the army of the newly-created State of Israel. But, Pearce recalled, because they were only half-Jewish (and, by Jewish religious law, not Jewish at all), their service was declined. A few years later, finding that anti-Semitism was keeping Sylvia from finding a job, he and his brother legally changed their name, taking their mother’s family name.

On graduation, he taught at Yale, spent a year as historian at the National Foundation for Infantile Paralysis, and then taught at the University of Delaware. He claimed that one night, while teaching at Delaware, the bridge to his home had washed out and he had to ford a rushing creek, holding student papers high over his head to keep them dry. Pearce returned to Cornell in 1960, and never left. He became Professor in 1965, and took up the John Stambaugh chair in 1971.

Pearce began his scholarly work by looking at the social context of French scientific education. But he was ahead of his time, and “externalist” history of science was not yet in vogue. From the late 1950s, he focused more on the “internal” history of science, looking at the development of scientific ideas, with particular attention to the intersection of philosophy, religion, and science. He was best known for his 1965 biography of Michael Faraday (entitled, not surprisingly, Michael Faraday: A Biography), which won the History of Science Society’s Pfizer Award for best book in the history of science published that year. In the book, he argued that Faraday was the true father of electromagnetic field theory, providing the foundation on which James Clerk Maxwell would later build. Pearce published several other books in the area, and compiled a two-volume set of Faraday’s correspondence. Pearce also edited a number of readers placing the history of science fully into the Western Civ syllabus. In the final years of his career, Pearce worked on a biography (alas, never finished) of André-Marie Ampère, the great French physicist. Pearce was proud that, at age 60, he taught himself Latin so that he could read Kant in the version to which Ampère has access. Pearce also edited the Cornell
University Press series in the field and served on the Board of Editors for the *Dictionary of Scientific Biography*.

His teaching was legendary, both for the quality of his lectures and for the detailed comments he provided on student essays. Born to a vaudeville family, he was a natural performer. For many years, he presented to entering freshman “The Notorious Note-Taking Lecture (hint: it’s not about taking notes).” Among the topics was the founding of the university. Sample line: “One day, Ezra said to Andrew Dickson White, ‘I’ve got it! Our motto will be ‘An institution where any student can find instruction in any study.’ ‘Ezra, you can’t do that!’ White replied. ‘We’ll be overrun with students.’” Pearce waited a beat to give Ezra’s reply. “‘Not where I’m going to put it!’” After Pearce’s death, one student commented on Facebook that the Notorious Note-Taking Lecture “was the moment I knew I was at the right school.”

A key element of Pearce’s scholarship and teaching was his commitment to rational thought. In 1989, the *Cornell Daily Sun* wrote that “L. Pearce Williams found his religion of rationalism 40 years ago and has been preaching the search for truth ever since…. Like most fanatics, he is eager to teach by preaching the Word whenever and however possible – dynamic lectures to classes of 250 students, sarcastic letters to the editor, scathing critiques of colleagues’ work, stormy public debates and quiet one-on-one discussions with a student. These activities have earned the … history of science professor the respect of some (including a 1971 award for distinguished teaching), the resentment of others and the attention of all. On one thing everyone can agree: L. Pearce Williams cannot be ignored…. ” The story captured Pearce’s distinctive voice: “He acknowledges that his freely shared views are filled with strongly held value judgments, but he wonders what’s wrong with that. ‘This will come across as, “You pompous ass,”’ he said, ‘but I am a moral human being. I have standards of behavior. Students are desperate for this, by the way, for someone who will fight for values.’”

Students did respond to him. In the Facebook comments after his death, one student wrote that he “chose History as a major because
of [Pearce’s] masterful storytelling.” Tamar Terzian, herself the
daughter of an extremely popular Cornell professor, wrote that
Pearce was “my best professor at Cornell. I took four of his classes
and used to trudge up Libe Slope on Friday mornings to be in his 8
am section.” Pat Munday, one of his last Ph.D. students, called
Pearce “a great mentor.” Pearce also helped recruit funding from
Philip Merrill ’55 to provide TA support for the Western Civ
courses.

The upheavals of the 1960s tested Pearce’s politics, and he became
adamantly conservative. He wrote frequently to the Cornell Daily
Sun and the Ithaca Journal, gaining (according to his obituary) “a
certain local notoriety, or fame, depending on one’s point of view.”
Years later he told another story, recalling a time when radical
students were threatening to march on the homes of professors they
opposed. One African-American graduate student, Pearce said, had
been a TA for him and dissuaded his colleagues from heading to
Pearce’s home. “’He’s got guns,’ the student said, ‘and he’ll use
them!’” Whether the stories were true or not, Pearce loved the role
he played. When he retired, the Cornell Alumni Magazine described
him as “either a pompous blowhard or a tough-minded teacher who
bludgeoned his students into becoming better writers; an erudite
lecturer on the history of science, or, as the Cornell Daily Sun
dubbed him, ‘Cornell’s Biggest Loudmouth.’ … ‘I don't think it's an
exaggeration for me to say that throughout about 28 of my years at
Cornell, mine was the only voice speaking up for Burkean
conservatism. I'm not a Republican. I am, in fact, a Roosevelt
Democrat who has stood still for the last 40 or 50 years while
everyone else has moved.”

Pearce also served the institution in a variety of ways, including as
Chair of the History Department (1969-1974). Then, in 1984,
Pearce joined with astronomer Martin Harwit to lead a group on
campus creating a graduate Field in History and Philosophy of
Science and Technology (HPST). With seed money he raised from
the National Endowment for the Humanities, he helped bring a cadre
of young historians and philosophers to campus, placing them in
departments across the university. A few years later, the HPST
graduate field combined with the two-decade-old Program on
Science, Technology, and Society to form in 1991 a new department of Science and Technology Studies. I am not sharing any secrets – and holding back wouldn’t have been Pearce’s way anyhow – to say that not being the founding chair of S&TS was deeply disappointing to him. But according to records in the S&TS files, the department faculty at the time quite explicitly had hoped that he could somehow be formally acknowledged as a department founder.

Pearce retired in 1994, continuing to hunt with his Weimeraners and swim in the pool at his home on West Hill. Unfortunately, dementia arrived in the mid 2000s, robbing him of his beloved rationality, and Pearce spent his final years in a nursing home in Ithaca. He was survived by his wife of 65 years, Sylvia; by his children David, Alison, Adam, and Sarah; and by nine grandchildren.

Bruce V. Lewenstein