

## **Minutes of the Faculty Meeting April 6, 2010**

President Simmons called the meeting to order at 4:05 p.m., and the customary motion to adjourn no later than 6:00 p.m. was approved. It was announced that Secretary of the Faculty Professor Foley was unavailable for today's meeting and that the Faculty Executive Committee (FEC) had nominated Professor Colwill (Psychology) to serve pro tem. The nomination was approved. The minutes of the meeting of March 2, 2010 were approved following a brief explanation by Professor Curtin (Engineering) of the use of the stamp-sized note carried by Stavros Fallieros, late Professor Emeritus of Physics and referred to in the Memorial Minute delivered by Professor Tan (Physics) last month. The note was used to announce to the students the when and where of the Final Exam for his course on quantum mechanics.

Professor Fidler (Slavic Studies) delivered a memorial minute for Henry Kucera, late Professor Emeritus of Slavic Languages and Linguistics. Professor Miller (Molecular Biology, Cell Biology and Biochemistry) delivered a memorial minute for Elizabeth Leduc, late Professor Emerita of Molecular Biology, Cell Biology and Biochemistry. The faculty rose in standing votes of respect. The minutes are attached and will be entered into the permanent records of the Faculty, with copies to be sent to members of the immediate families. Late arrivals who had graciously observed the posted requests to wait at the back of the auditorium until the memorial minutes were complete then took their seats.

Professor Tan, Chair of the FEC, welcomed President Simmons back from her trip to India. Among the routine activities of the FEC in March he noted were meetings with the Undergraduate Council of Students and the Graduate Student Council, and reviewing reports from Committees and Advisory Boards. The FEC was asked to recommend names of faculty for two search committees – the Dean of the Graduate School and the University Registrar. A proposal to revise the Academic Calendar is available on the FEC and Dean of the College websites and will come to the faculty for a vote in the Fall. A working group will be organized to address the issue of on-line teaching evaluations. In light of recent incidents of workplace violence, the FEC has been asked to consider a proposal to conduct background checks for faculty hires. Professor Tan concluded his report with a summary of two very time-consuming activities. First, he reviewed FEC involvement in the proposal for a School of Engineering – a Faculty Forum, a meeting with the Provost and Dean of the Faculty, and meetings with the Dean of Engineering and other faculty. Second, he reviewed FEC actions resulting from the report of the Provost's ad hoc Committee on Tenure and Faculty Development. Meetings with the ad hoc Committee were facilitated for junior (tenure-track) faculty on April 5. Meetings of the ad hoc Committee with the FEC, the Committee on Faculty Equity and Diversity (CFED) and the Tenure, Promotions and Appointments Committee (TPAC) will take place on April 7, a Faculty Forum will be held on April 13 and the FEC will meet with the Provost on April 19. It is expected that the Provost will prepare a motion or series of motions for consideration at the May 4 faculty meeting. Professor Tan thanked members of the ad hoc Committee for their efforts to produce a thoughtful report and reminded all of us that we should consider the recommendations in the context of improving Brown. He stressed the importance of balance between faculty and administration input into the decision to grant tenure.

A motion by the Dean of the College and the Dean of the Graduate School to amend the Faculty Rules to discontinue the 4-year concurrent A.B./A.M. degree program was introduced by Dean Bonde.

**MOTION:** That the Faculty amend the Faculty Rules and Regulations, Part 2, Section 4, V., effective immediately, to discontinue Brown's 4-Year Concurrent A.B./A.M. degree program.

Dean Bonde provided a detailed rationale for this motion which had grown out of discussions with the Committee on Academic Standing (CAS) and the Graduate Council. Chief among the concerns mentioned was the stipulated "breadth" requirement of the 4-year concurrent degree program which is at

odds with the Open Curriculum that expects undergraduates to craft their educations purposefully, rather than by prescription. Other concerns were that this program requires only 4 more credits than the A.B. degree, a number that the Graduate School considers insufficiently rigorous, and that students can count AP credits towards this degree. Such credits cannot be used for a regular A.B. degree. Dean Bonde pointed out that the 5-year A.B./A.M. degree provides a more rigorous option for students wishing to obtain a Master's degree.

Professor Doeppner (Computer Science) pointed out that the Faculty Rules describe the "concurrent baccalaureate/master's degree," but the motion mentions merely the "AB/AM degree." He asked if the intent is to include the ScB/ScM degree as well. Dean Bonde indicated that their intention was to discontinue both degrees.

Professor Doeppner expressed grave concerns about this proposal and argued for retaining the 4-year ScB/ScM concurrent degree program. Though the concurrent degree might date back to the '60s, the current requirements for the concurrent degree were approved by the faculty and the Corporation in 2004. When they were discussed in the faculty meeting in 2004, concern was expressed that people in the program might be too narrowly focused. Thus it was the feeling of the faculty that ten courses outside of the concentration should be required. He addressed differences in the interpretation of Faculty Rules about the number of courses required for the 4-year concurrent degree. Although Faculty Rules require only 34 courses for the concurrent degree, in practice more courses are usually needed. In particular, 20 courses are required for an ScB in Computer Science. Eight courses are required for an ScM in Computer Science, though an overlap of two courses is allowed. The concurrent degree requires 10 additional courses outside of one's concentration. Thus, for Computer Science, 36 courses are actually required for the concurrent degree. He also noted that the 5-year bachelor's/master's degree also requires just 36 courses (30 for the bachelors, 8 for the master's, with a 2-course overlap). He rejected Dean Bonde's assertion that treating the 4-year concurrent degree program as a super Honors program is problematic and urged members of the faculty not to pass this motion. The degree is a huge draw for many prospective first year students in computer science and those who do complete it are among Brown's best. Dean Bonde clarified the statement by Professor Doeppner. The Graduate School does not accept APs in the concurrent degree program and the ScB/AB is 38 not 36 credits.

Dean Bonde reviewed the statistics on the number and distribution of students who had graduated with a 4-year concurrent degree. She acknowledged the greater rigor of student advising for this program in Computer Science whose students accounted for 13 of the 83 degrees awarded since 1983, but expressed concern about other programs. Dean Thompson asked how the transition would be made if this motion passed for students currently in the 4-year concurrent program. Dean Bonde indicated that they would be allowed to complete the concurrent degree.

Professor Charniak (Computer Science) asked why the requirements for this concurrent degree program were not simply firmed up. Dean Bonde explained that both CAS and the Graduate Council felt that in too many departments this degree program lacked a mechanism to offer students high level graduate instruction. Students were better served being directed to the 5-year integrated degree program.

The point was then made that this motion eliminates a program that is used to attract the best students in math and computer science, and that makes Brown competitive against MIT and Berkeley in these areas. With so few students affected, it was unclear why the Administration was killing good programs to get rid of bad ones. Dean Bonde said it was not so much an issue of a killing a program but replacing it with a better option. Professor Curtin (Engineering) echoed the concerns raised by Professor Doeppner and stated its importance in Applied Math. Professor Banchoff (Mathematics) expressed concern that eliminating this 4-year concurrent degree program would adversely affect recruiting and cost his department top students.

The discussion was terminated when President Simmons announced that the Motion was out of order and should be withdrawn or voted on solely for discontinuing the 4-year A.B./A.M. degree program. Dean Bonde had earlier stated that the intent was to discontinue the 4-year concurrent ScB/ScM degree program. However, this was not announced in the Motion that had been circulated in advance so 7-day's notice had not been given as required by Faculty Rules for substantive Motions. The Motion was withdrawn.

A motion to create a School of Engineering was made by Provost Kertzer.

**MOTION:** Be it resolved that Brown University will create a School of Engineering. This School of Engineering will be the new name of the current Division of Engineering. The creation of this school will not change the way in which undergraduate engineering students are admitted to Brown or the freedom that they currently have to consider engineering as one of many concentration options at Brown. Faculty appointments and promotions will continue to be approved by TPAC, following the standard processes used in all departments. Graduate admissions would continue to be processed by the University's Graduate School.

Provost Kertzer explained that this proposal originated with the faculty in Engineering and was sent to the Academic Priorities Committee (APC). We need to strengthen Engineering at Brown. We are the only Ivy League university without a School of Engineering. Both Harvard and Yale upgraded their Divisions of Engineering to Schools of Engineering. The APC heard that undergraduate admissions are negatively impacted by this difference in status because it gives the impression that Brown is not as serious about the sciences as her peer institutions. A School of Engineering will also strengthen allied fields in both the physical and life sciences. This is described further in the document prepared by the Engineering faculty. Provost Kertzer indicated that the details will be filled in as the evolution of the School is planned. Details about space and faculty hires will be worked out later as new budgetary resources are acquired through sponsored research, Masters' programs and development opportunities. The Corporation will assist with this.

Professor Rosen (Modern Culture and Media) asked about the future growth of Engineering. The new Dean will be charged to raise funds for the entire expansion and this expansion will not impact the E&G budget. A question was asked about who would approve new programs and degrees. Any such initiatives would be considered by the appropriate standing committees (College Curriculum Council and Graduate Council) and would not be done internally by the School of Engineering.

At this point, Professor Cutts (Physics) offered a substitute motion.

**SUBSTITUTE MOTION:** Given the potential of interdisciplinary areas in the sciences, we urge that a plan be developed to support the co-evolution of the physical sciences and engineering.

Professor Cutts admires the efforts of his engineering colleagues and is enthusiastic about what they would like to do. However, he urged greater consideration of related areas in the physical and life sciences. It is important to invest in a framework that captures a larger number of faculty and to consider putting some of the proposed appointments in other departments not just engineering. After re-reading his substitute motion at the request of President Simmons, Mr Patterson (Engineering) objected that it was an inappropriate substitution. Professor Head (Geological Sciences) remarked that this is exactly the kind of proposal that should have been considered in depth by the Science Advisory Council. Professor Charniak suggested that rather than voting on the substitution, we should vote no on the original motion. Professor Mor (Community Health) speaking as a member of the Science Advisory Council indicated support for the original motion and that he would vote against the substitute motion. Provost Kertzer indicated that if

the motion were voted down, then we would talk about what to do. Professor Head then clarified that the Science Advisory Council had minimal input into this proposal and no opportunity to formulate a vision of this School of Engineering in the context of the overall direction of science at Brown. The recommendations of engineering should be considered in a broader context.

Dean of Engineering Rod Clifton talked about how long they had been working on this proposal and that the time had come to move to a new level of growth and a greater level of visibility. A School would do a better job of servicing the students and the campus. Interdisciplinary research is important to engineering and he believes that this is the track we are on. He agreed that there must be a collaborative and unified effort to be strong in these areas. Dean Clifton pointed out that Engineering is disproportionately small. They have only 40 faculty members. Their competition has Schools of Engineering containing multiple departments of that size. Brown needs to have a strong presence nationally and the next step in that direction is to create the School of Engineering. The substitute motion takes us backwards and requires us to start over. Engineering is out of lab space and out of office space. He urged that we accept the original motion and work with it as a base for Brown's commitment to engineering and science.

Professor Serio (MCB) raised the question of why we need to have a School of Engineering to search for external support to fund the expansion. Provost Kertzer replied that to attract the kind of corporate interest needed we have to have a School. Several additional points were then made by members who did not identify themselves. Biomedical Engineering was mentioned as an example of a wonderful partnership between Engineering and the School of Medicine that grew as a grassroots initiative with visionary leadership. Speaking in support of the substitute motion, it was pointed out that science and engineering are very multidisciplinary. A School of Engineering will not promote interaction among the different sciences at Brown. Professor Sanes (Neuroscience) did not understand Professor Cutts' aim here. Engineering is already multidisciplinary. He thought that the substitute motion was not productive at this time.

Professor Cutts spoke to the prevailing inequity between Engineering and other sciences. The Dean of Engineering has a seat at the President's Cabinet. He already has the ability to do fundraising. It is not a level playing field. Engineering has advantages and access to resources that other departments do not have. Dean Clifton countered that Engineering has the same ability as everyone else to approach donors.

Professor Nurmikko (Engineering) commented that the world of technology has exploded. Our peer institutions are expanding engineering faculty left and right. He is so tired of hearing colleagues at other institutions express surprise that there is engineering at Brown. The motion by Professor Cutts is counterproductive to the future of engineering at Brown.

The substitute motion was voted down with some dissent.

Professor Fausto-Sterling (MCB) stated her support for the notion of a School of Engineering at some future point but felt there was too little too soon in this proposal. She sent comments to APC and she had read the minutes of the Faculty Forum. Her concerns fell into three areas. First was the administrative structure with another Dean reporting to the Provost. She proposed a restructuring of the campus based departments so that there were Deans for each Division reporting to the Provost. This would ensure an equal and balanced footing for all disciplines and prevent serious inequities that might arise from an unbalanced representation. Second, there is no place in the curriculum for secure development of ethics and society courses. This is absolutely crucial for accreditation. MIT has whole departments in these areas yet the present proposal contains nothing but a diagram. Third, neither the proposal nor the resolution has a statement about educational equity. She would like to see the hiring and retention of women faculty and faculty of color, and the recruitment, retention, and graduation of female students and students of color as an articulated part of this resolution.

Professor Smith (Anthropology) expressed surprise at the tentative nature of the resolution and its commitment to not changing anything but its name from a Division to a School. It sounded as if it were written to discount anticipated problems. Professor Banchoff asked if the motivation to make this change were simply based on what other Ivies are doing, what would be next and where would we stop? Provost Kertzer assured him that the Administration is not looking for departments to turn into Schools. The School of Public Health is a work in progress and the currency in Engineering is different. Professor Banchoff was relieved to hear the Provost's answer. Engineering and math have very little to do with each other. Professor Banchoff likes the idea of unity at Brown.

Professor Tan expressed support for the motion but having heard concerns he wanted to offer a friendly amendment. He added that when the reporting structure for the Dean is worked out, he expects it will be brought to the faculty for approval. He amended the resolution to read:

**MOTION:** Be it resolved that Brown University will create a School of Engineering. This School of Engineering will be the new name of the current Division of Engineering. The creation of this school will not change the way in which undergraduate engineering students are admitted to Brown or the freedom that they currently have to consider engineering as one of many concentration options at Brown. Faculty appointments and promotions will continue to be approved by TPAC, following the standard processes used in all departments. Graduate admissions would continue to be processed by the University's Graduate School. The School of Engineering will continue to strive to increase diversity among engineering faculty and students and to work closely with other departments and centers at Brown so that the activities built in engineering, especially around any particular research thrusts, are fully integrated into and supportive of ongoing activities in these areas outside of engineering at Brown.

The friendly amendment was accepted by the Provost.

Professor Serio asked how the financial structure of the School of Engineering would be integrated with the rest of the University. Graduate student stipends differ between bioengineering and biology. The Provost said that the change to a School will have no impact on the disparity in graduate student stipends across units.

There was further discussion about the curriculum, engineering ethics courses and accreditation as Professor Curtin and Dean Clifton responded to points made earlier by Professor Fausto-Sterling. We were reminded again that MIT has hundreds of engineering faculty so they can offer more courses in more areas. Brown limits the number of courses that students can take. With an expanded engineering faculty, more courses can be offered and we will have a more literate student body. They offered some numbers to demonstrate their success in recruiting women, reporting that the current enrollment percentages of women students in sophomore, junior and senior years were closely equal, but they did not know the figures for retention. This concerned some faculty. Professor Fausto-Sterling pointed out that there was nothing in the proposal about hiring experts in ethics as part of the faculty expansion. She also lamented the fact that Engineering had not consulted with the Science and Technology program which she directs.

Professor Miller (MCB) noted the lateness of the hour and called the question. There was no opposition and the motion to end discussion carried.

The amended motion was passed on a voice vote with only a few dissensions. Following a burst of congratulatory applause, a large number of faculty members noisily exited the auditorium.

The meeting continued with a report from the President. Beginning with an expression of concern for all those affected by the March floods in RI, President Simmons went on to outline steps that Brown was taking to support employees affected by the flooding and private organizations involved in addressing immediate family and community needs. She has contacted the Governor and is awaiting his response. Russell Carey and Marisa Quinn are co-directing a campus effort to assist with fundraising, community volunteer efforts and additional means to help with the recovery effort. Brown employees affected by the flood may be request help and advice from the Human Resources Office.

President Simmons then moved to a discussion of the report of the Provost's ad hoc Committee on Tenure and Faculty Development. She thanked members of the committee and expressed gratitude for their excellent report. While acknowledging the value of a critical debate about the report, she reminded the faculty of the importance of embracing three vital principles encapsulated in a quote that she read from the report. Tenure decisions are central to the ability of a university to meet its mission at the requisite level; the need for an on-going examination of whether the tenure process and standards that exist are achieving the needed results; to be among the world's best institutions absolutely requires the aspiration to tenure faculty – not of good quality – but of the highest quality. The President expressed the hope that the faculty does not disagree with these three fundamental principles. President Simmons warned of the dire consequences to the reputation of the faculty and the University if one outcome of the debate were to reject the goal of being a faculty of the “first rank.” In defining itself, the faculty sends an important message to the students of whom it demands much, to its prospective students who seek to learn in the best of all possible environments, to its peers across the world and to its prospective colleagues who may seek to join the Brown faculty. President Simmons asked that whatever message emanates from our debate, we do not inform these groups that we do not aspire to a faculty of the highest quality with all that this aspiration implies.

President Simmons next offered remarks on the size of the University. Does Brown's current enrollment best facilitate its aspirations in the current era? More international students and previously disenfranchised groups are seeking admission to American universities. The growing needs of society have lead to an expansion of graduate and professional programs. Is Brown's conception of an intimate, undergraduate-centered environment either consistent with our aspiration to be a world renown research university or, even without that aspiration, sustainable over time? President Simmons wants to protect Brown's unique approach to undergraduate education. This will require careful planning of the balance between undergraduate and graduate programs, with attention to the virtues of the Brown approach and the needed balance between undergraduate and graduate life. We have time – perhaps years – to consider how to maintain and manage this balance. However, as the number of applications to Brown increase, the visibility of Brown internationally is magnified, and the demands of various fields grow more onerous, we have ample warning that the current total enrollment may not be sustainable if we are to achieve our long term goals as a university-college. It would be wise to begin conversations now about how to address these issues.

Finally, President Simmons commented on her recent trip to India with Rajiv Vohra, Vijay Chitnis, Matt Gutmann and Ron Margolin. The primary purpose of the trip was to establish an India Advisory Council to represent Brown, to suggest initiatives that will increase our visibility, and to assist with gaining access to political, educational and non-profit leaders in India. All of this will help us recruit excellent students. The passage of a law establishing compulsory education for all children and a Minister of Education who advocates for more openness to foreign higher education and a significant expansion of the non-public higher education sector make this an opportune moment for Brown to explore partnerships and exchange programs with leading Indian universities, and to seek opportunities to recruit more top graduate students to Brown. Looking forward, President Simmons expected to field delegations of faculty to explore these relationships and to establish ongoing collaborations. Quite possibly, the Indian Advisory Council will provide funding to enable more visitors from Indian universities and more Brown curricular content on

India. Matt Gutmann and Rajiv Vohra will be able to answer questions in the coming weeks about opportunities for departments to request resources for these initiatives.

Professor Banchoff thanked President Simmons for her interesting report and expressed regret that more of his colleagues had not stayed to hear her.

Provost Kertzer began his report with a quick update on the activities of the ad hoc Committee on Tenure and Faculty Development. There was a good discussion with the junior faculty. There will be meetings with TPAC, FEC, CFED and a Faculty Forum. Department chairs will also discuss the report. Motions will be presented to change the wording in Faculty Rules but they hope to have feedback before the motions are finalized. Full discussion of the report and motions will take place at the May 4 faculty meeting.

Professor Dill (Sociology) asked if the faculty will be voting on recommendations that do not require a change to Faculty Rules. Not all issues are codified in Faculty Rules. The recommendations are also very specific, more so than Faculty Rules. Professor Valente (Portuguese and Brazilian Studies) pursued the matter by asking if changes to the Handbook for Academic Administration will be brought to the faculty for approval. He gave as an example the recommendation that letters be sent by the appropriate Deans. The Provost indicated that votes will only be on changes to Faculty Rules. He stated that it is not our intention to bring Full Professor promotion issues to the faculty. He emphasized that the report is not final and that the May 4 motion will reflect faculty input. Professor Rosen asked if the draft wording for the resolution might be distributed before the Faculty Forum. Ms. Doherty from the Dean of the Faculty's office indicated that a draft might be possible. Following up on this exchange, Professor Colwill (Psychology) asked for clarification about whether there would be a single motion or multiple motions. Provost Kertzer indicated that he thought there would be one but he was open to considering multiple motions.

The report of the APC was presented by Professor Forsyth (Geological Sciences). The report of the Nominations Committee was presented by Professor Simmons (Psychology). There was no discussion of either report. President Simmons thanked both committees for their excellent reports.

There being no Old Business and no New Business, the meeting was adjourned at 5:53 p.m.

Respectfully submitted,

Ruth M. Colwill  
Secretary of the Faculty Pro Tem

## Memorial Minute

### Professor Henry Kučera April 6, 2010

Professor Henry Kučera was born on February 15<sup>th</sup>, 1925 in the former [Czechoslovakia](#) in the town of Třeboň. After the Communists takeover in 1948, Henry was barred from his studies in philosophy and linguistics at Charles University in Prague, and had to leave the country in the April of '48 when it became clear that his political writings and activities had placed him at risk of detention.

After working for Czech refugee organizations in the occupied Germany, Henry emigrated to the United States in 1949 with a scholarship to study at Harvard University.

Henry received his PhD from Harvard in '52, where he studied under renowned linguist Roman Jakobson. He first taught at the University of Florida at Gainesville. After returning to Harvard in 1954 as a research fellow for one year, Henry received an appointment at Brown University. He was promoted to full professor in 1965 and retired in 1990 with full honors and the publication of a Festschrift. His title upon retirement was: The Fred M. Seed Professor Emeritus of Linguistics and Cognitive Sciences, having received a Chair in 1983.

In the sixties Henry collaborated with W. [Nelson Francis](#) to create the Brown Corpus of Standard American English, which was very widely used and most-cited resource in computational linguistics. Kučera and Francis derived from this corpus their classic works *Computational Analysis of Present-Day American English* (1967) and *Frequency Analysis of English Usage: Lexicon and Grammar* (1982). The [American Heritage Dictionary](#) is the first dictionary to use corpus linguistics data and is based on the work by Kučera and Francis.

Henry is the author of one of the first [spell checkers](#), which was used on word processing systems including Word Star and Microsoft Word. He also published intensively on verbal aspect, particularly of Slavic languages (e.g. *Time in Language* (1975)).

Besides his PhD from Harvard, Henry has a doctorate from Charles University in Prague, a degree restored after the fall of communism. He has honorary degrees from Pembroke College in Providence, RI, Bucknell University in Lewisburg, PA, and Masaryk University in Brno, Czech Republic. He is a member of the academic honor society Phi Beta Kappa.

Committed to Czech causes, Henry supported underground literary and political publications in communist Czechoslovakia. He was also a proud supporter of the Hodonín Sea Lions, a Czech regional baseball team.

Henry married Jacqueline Marie Fortin in 1951. Jackie and a son John Kučera predecease Henry. Henry is survived by two sons, Tomáš and Edward, and three grand children, Maia, Calvin, and Wilson. Henry passed away peacefully at the Phillip Hulitar Hospice center in Providence, on February 20<sup>th</sup> 2010.

Madam President, I move that the Faculty adopt this Minute by standing vote of respect, and that the Secretary of the Faculty be instructed to enter the Minute into the permanent records of the Faculty and to send copies of it to members of the immediate family.

## Memorial Minute

### Professor Elizabeth H. Leduc April 6, 2010

On January 30th of this year, Professor Elizabeth Leduc passed away. Born in Rockland, Maine in 1921, she grew up in northern Vermont and graduated with a B.Sc. from the University of Vermont in 1943. She subsequently earned a Masters degree from Wellesley College and a Ph.D. from Brown in 1948. Dr. Leduc held postdoctoral fellowship at Brown (1948-49), was an Instructor in Anatomy at Harvard Medical School (1949-1953), and then returned to Brown in 1953. In 1964 she became only the third woman to be appointed Full Professor in Brown's 200 year existence. In 1967 she was appointed Director of Biology, the first woman to lead an academic department at Brown. From 1973-1977, she served as Dean of Biological Sciences and later as Associate Dean of the College (1987-1988).

Professor Leduc was one of a handful of true pioneers in the field of cell biology, and was a founding member and officer of The American Society for Cell Biology. Her early papers, co-authored with J. Walter Wilson, focused on the regulation of cell division in the liver, a problem with important health implications. She was a master of technique, and helped to develop a number of important new methodologies in cytochemistry. These included techniques to localize enzyme activities, as well as the development of water-soluble embedding media and ultrathin frozen sections for electron microscopy. Her work was instrumental in the field of immunology as well, where she was the first to directly identify the particular cells responsible for the production of antibody proteins.

Professor Leduc was a member of 12 professional societies and served on several editorial boards. She served on the Cell Biology Study Section at the National Institutes of Health (NIH) and was named to the National Advisory General Medical Sciences Council of the NIH (1972-1976), as well as many other review and advisory committees. In 1976, Professor Leduc was appointed to President Gerald Ford's Committee on Science and Technology – the only woman on the nine-person committee, whose charge was to review the entire structure of federal science.

She mentored 7 Ph.D. candidates and was a gifted teacher of cell biology and histology. The distinguished microbiologist Stanley Falkow, in a 2008 article reflecting upon his own scientific career, said this of his time as a graduate student at Brown: "I remember especially that Elizabeth Leduc's cell biology lectures seemed like poetry." (S. Falkow. 2008. *Ann. Rev. Microbiol.* 62: 1-18). And poetry they were. I was fortunate as an undergraduate to be one of many students transfixed by Professor Leduc's combination of intellect, passion, and sheer joy in the pursuit of science. Neither I nor any of her other students will ever forget the way she lit up a classroom or a teaching lab.

As a person who loved life in every respect, she had no peer. As the Providence Journal noted at her passing, we called her "Dukie." The insistence upon such easy familiarity with colleague and student alike was an indelible and unforgettable part of this extraordinary woman.

It is fitting that Brown has recognized Dukie's contributions in many ways: by establishing the Elizabeth Leduc Award for Teaching Excellence in the Life Sciences, by honoring her with the Leduc Imaging Facility, and by awarding the Elizabeth Leduc Prize in Cell Biology each year to an outstanding Brown undergraduate. For all her achievements, Dukie was an approachable person with a ready smile who delighted in nothing so much as showing schoolchildren her mouse colony. A leader in cell biology and cancer research, a devoted teacher and stellar administrator, Elizabeth Leduc was truly a role model for women and men in science.

Madam President, I move that the Faculty adopt this Minute by standing vote of respect, and that the Secretary of the Faculty be instructed to enter the Minute into the permanent records of the Faculty and to send copies of it to members of the immediate family.

