

**Brown University**  
**Minutes of a Faculty Meeting**  
**February 3, 2009**

President Simmons called the meeting to order at 4:04 p.m. followed by approval of the customary motion to adjourn no later than 6:00 p.m. The faculty voted to approve the minutes of December 2. Professor Banchoff read a memorial minute for Katsumi Nomizu, Professor Emeritus of Mathematics, and the faculty rose in a standing vote of respect. The Minute is attached and will be entered into the permanent records of the Faculty and forwarded to members of the immediate family.

Professor Dreier reported that the Faculty Executive Committee (FEC) would be bringing to the Faculty a motion by the Dean of the College to remove “Modes of Thought” courses and add “Departmental Independent Studies” to the curriculum. He also reported a forthcoming motion for a “Translational” Center.

Professor Valente asked about a proposal to award tenure through the Watson Institute. Professor Dreier replied that there was no such proposal and Provost Kertzer called attention to the need for the search for a new director to be completed.

A motion was presented by Professor Levine on behalf of the FEC following a report from the Academic Priorities Committee (APC) proposing a name change for the William R. Rhodes Center.

**MOTION:** The Faculty acknowledges receipt of the report from the Academic Priorities Committee supporting the proposal to change the name of the William R. Rhodes Center for International Economics to the William R. Rhodes Center for International Economics and Finance. The Faculty recommends to the President and Board of Fellows changing the name of the William R. Rhodes Center for International Economics to the William R. Rhodes Center for International Economics and Finance.

The Motion passed without dissent.

President Simmons reported the still developing story of global financial collapse that complicates our ability to both project a long term balanced budget and to assure a continuation of our plans. As she will suggest in an essay to appear in the Faculty Bulletin, this challenging time is also an opportunity to question long held assumptions about needs, to rethink our approach to our work, to be more open in terms of how we serve the public, to take greater advantage of sharing resources, and to refine and improve greatly upon our effectiveness in carrying out our mission.

Broad assumptions include:

- 1) We are assuming a crisis of a duration greater than two years, while our typical planning model is five years. We are adhering to the same planning approach to avoid lurching from one scenario to another. This longer horizon should also help us avoid radical short-sighted solutions based on incomplete and uncertain information. The budget that the Provost will discuss encompasses that longer horizon.
- 2) We are assuming that our existing governance process can serve us well during this period. Only one new committee has been created to deal with the crisis: the ad-hoc Corporation Committee on the Financial Crisis.
- 3) We are assuming that all revenue sources will be down and expenditures will need to be pared to the same degree as the drop in revenue.
- 4) We are assuming that there will not be an endowment rescue possible by drawing down more than is prudent to maintain the purchasing power of the endowment.
- 5) We are assuming no significant additional near-term debt will be incurred in order to fund our capital projects. We will proceed with projects in the near term only as we can see a means of continuing them based on available revenue to support operation costs, and on the basis of gifts available to fund them.
- 6) We are assuming that we must continue to make investments in new efforts, find ways of continuing to improve facilities, meet financial aid obligations, and apply ourselves even more to raising funds to support all of the above.

Our plans to adjust our approach as a consequence of the financial downturn include the following:

- 1) We are reviewing every new capital project with an eye toward seeing how we can affect the same or a similar result at lower cost without damage to programs and without significant delay of the schedule. Our emphasis is on moving forward rather than holding out for a return to a normal economy. We expect to present to the Corporation at its next meeting a set of recommendations that will emphasize forward momentum on projects during this period.
- 2) We are asking some donors of as yet unallocated gifts to consider directing those gifts to projects that require nearer term funding. Thus far, some donors, understanding the importance, have been willing to comply.
- 3) We are encouraging those who have the flexibility to do so to consider moving up their payment schedule on gifts.
- 4) We are re-doubling our efforts to raise new funds. Recent communications from our peer institutions suggest that we are doing comparatively well.

All universities are making significant changes in their plans, particularly the big-ticket capital projects. The best places are committed to looking for ways to expand and improve on their offerings. In order to remain competitive, Brown must do the same.

After comments from Vice-President Huidekoper on indirect costs and the E & G budget, President Simmons emphasized the priority of continuing to move the institution forward even while making cuts. Provost Kertzer, Dean Bonde and Professor Vince Mor discussed how not to lose momentum in the Graduate School and President Simmons

stated that Brown lives now under the burden of earlier planning to thrive and that she intends to find ways to hold on to faculty members even in this current situation. Discussion followed about distribution and implementation of the cuts, especially across disciplines and divisions, a decision most difficult when those deciding do not necessarily have access to important local knowledge. Questions were also raised about preserving the wholeness of the University and maintaining the role of the APC, as well as about maintaining competitiveness with staff cuts and with overall budgets. Vice-President Huidekoper and President Simmons commented that the short and long-term management of our overall budgets is optimistic.

Provost Kertzer reported that matching the five-year revenue reduction of \$60M (E & G) and \$10M (Bio-Med), the URC was working on measures for corresponding cuts and a use of \$40M of our resources to ensure a break-even E & G budget in FY2014 while allowing at least \$10M for critical academic initiatives. Revenue growth from tuition and financial aid is projected to decrease as well as endowment payouts and fund-raising revenue. To achieve break-even budgets for FY2010, E & G expenses must be cut by \$21M. There will be no salary increases except for unionized staff and fewer new hires, and increases in expenditures for financial aid, debt service, collective bargaining agreements, promotions, and inflation. The Organizational Review Committee is seeking measures to secure the additional \$30M in the E & G budget required by FY2014. Capital projects are also under review and will be forthcoming for discussion at the February Corporation meeting.

Professor Dreier and President Simmons announced the recipients of this year's President's Awards for Excellence in Faculty Governance: Professors Ann Dill, Robert Pelcovits, and John Savage.

Professor Andrea Simmons presented the report of the Committee on Nominations.

**NOMINATIONS RECOMMENDED TO THE FACULTY FOR COMMITTEE APPOINTMENTS TO BE EFFECTIVE IMMEDIATELY:**

**ADVISORY COMMITTEE ON HONORARY DEGREES**

Franco Preparata (Computer Science) replacing David Gottlieb (Applied Mathematics) to 12/31/09

**COLLEGE CURRICULUM COUNCIL (CCC)**

Rod Beresford (Engineering) replacing Jack Wright (Psychology) to 6/30/09  
Lynne de Benedette (Slavic Languages) replacing Evelyn Lincoln (History of Art & Architecture) to 6/30/09

**MEDICAL FACULTY APPOINTMENTS (Committee on)**

Pascal Van Hentenryck (Computer Science) replacing George Karniadakis (Applied Mathematics) to 6/30/10

**PUBLIC SAFETY OVERSIGHT COMMITTEE**

Tom Lasater (Community Health) and James Simmons (Neuroscience) continuing to 12/31/09  
Corey Walker (Africana Studies) replacing William Trenkle (Chemistry) to 12/31/10

The nominations were approved without dissent.

Professor Almeida presented the report from the Graduate Council commenting on subcommittees and new initiatives and on the review of new and revised programs.

Presenting the report for the Advisory Committee on Honorary Degrees, Professor Silverman gave an overview of the process.

The meeting was adjourned at 5:45 p.m.

Respectfully submitted,

Stephen Merriam Foley  
Secretary of the Faculty  
(Edited by Cheryl Moreau and Barrett Hazeltine)

## MEMORIAL MINUTE FOR PROF. KATSUMI NOMIZU

Professor Katsumi Nomizu died on November 5, 2008 shortly before his eighty-fifth birthday. He taught at Brown University from 1960 until 1995 when he retired as the Florence Pirce Grant University Professor. He was an internationally known research mathematician who applied his almost legendary concern for detail, both in his research activities and in his graduate and undergraduate teaching.

He graduated from Osaka University in his home town in Japan in 1947 and came to the United States on a US Army-Fulbright scholarship, first to Columbia University and then to the University of Chicago where in 1953 he became the first student to earn his Ph. D. under the thesis direction of the renowned geometer Prof. Shiing-Shen Chern. The subject was affine differential geometry, a topic to which he would return much later in his career. He returned to Japan to earn an Sc.D. two years later at the University of Nagoya in 1955, the year of the publication of his first volume, "Lie Groups and Differential Geometry", dedicated to his wife, Kimiko, whom he had married that same year. He taught at Nagoya until 1958 when he accepted a position at Catholic University in Washington DC. His first Ph.D. student there was Fr. Andrew Whitman, SJ, founder of the Clavius Research Group, who like so many other of his students, maintained a close relationship with his advisor over the years.

In 1960, he came to Brown as an associate professor, and produced a graduate text, "Vector Spaces and Tensor Algebras" in 1961. During this time, he embarked on a major collaborative project with Prof. Shoshichi Kobayashi in the University of California, Berkeley, math department, resulting in the classic two-volume work, "Foundations of Differential Geometry". Volume I appeared in 1963, the year he was promoted to Full Professor. This book became the standard reference for all subsequent work in this important and broad field. A second volume completed the project in 1969. A mark of the style of these two mathematicians is that in the more than 700 pages in this work on geometry there is not a single diagram or picture.

Katsumi Nomizu was well known for his devotion to meticulous exposition in a very formal style, and he was equally committed to high quality teaching at the undergraduate level. His 1966 text "Fundamentals of Linear Algebra" includes these words in the dedication: "It is my hope that this book will continue to serve those students of mathematics and science for whom a more than rudimentary background in linear algebra is an indispensable part of their training." The truth of these words is testimony to his success as a teacher and mentor. When the book came out in a new edition in 1979, he specifically acknowledged help from a student, Marty Magid, who started as a freshman at Brown in his linear algebra class and ended up writing a Ph.D. thesis under his direction in 1978.

Over the course of his career, he was influential in determining the course of differential geometry by stressing what he called the structural approach. In 1965, he edited the Proceedings of a United States-Japan Seminar in Differential Geometry that he had helped to organize for the National Science Foundation. He was invited to visiting

positions in Berlin, Bonn, Strasbourg, and Rio de Janeiro, and among his nearly 100 papers and articles and seven books, he had twenty-three co-authors from Belgium, Brazil, China, Germany, Italy, Japan, Poland, the U.S. and Yugoslavia . In 1994, on the occasion of his seventieth birthday, a large group of former students, co-authors, and colleagues influenced by his work, gathered for a six-day celebration co-sponsored by the Catholic Universities of Brussels and Leuven, leading to a Festschrift in his honor containing 62 papers with authors from 18 countries. During the same year, his final book was published, “Affine Differential Geometry”, co-authored with Takeshi Sasaki. He received international awards from Germany, Japan, and Italy for his writing and his leadership.

According to the Mathematics Genealogy Project, he has thirteen Ph.D. students at Brown and one from MIT, as well as seventeen mathematical grandchildren. Two of his students, Patrick Ryan at McMaster University and Thomas Cecil at The College of the Holy Cross, are members of the Clavius Group and each has spent sabbatical time at Brown continuing to work with their teacher. These two, together with Martin Magid, now at Wellesley College, spoke with fondness and gratitude at the memorial service for their mentor last semester.

In addition to his wife, Kimiko, he is survived by his four children: Naomi, Yvonne, Simone, and Raymond, and seven (familial) grandchildren.

Madame 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.

Respectfully submitted,

Thomas Banchoff  
Professor of Mathematics