

**TO THE MEMBERS OF THE ACADEMIC COUNCIL
THIRTY-FIFTH SENATE REPORT No. 8**

Summary of Actions Taken by the Senate
February 20, 2003

At its meeting on Thursday, February 20, 2003, the Thirty-fifth Senate of the Academic Council took the following actions.

1. By unanimous voice vote, upon recommendation of the Committee on Review of Undergraduate Majors, reauthorized the Advisory Committee of the Interdisciplinary Program in Mathematical and Computational Sciences to nominate candidates for Bachelor or Science degree for a period of five years from September 1, 2004 through August 31, 2009.
2. By unanimous voice vote, upon recommendation of the Committee on Graduate Studies, reauthorized the Steering Committee of the Interdisciplinary Program in Russian, East European and Eurasian Studies to nominate candidates for Master of Arts and Coterminial Master of Arts degrees for a period of five years from September 1, 2004 through August 31, 2009.
3. By unanimous voice vote, upon recommendation of the Committee on Graduate Studies, approved name change for the Interdisciplinary Program in Russian, East European and Studies (CREES), to the Interdisciplinary Program in Russian, East European and Eurasian Studies (CREEES).

**MINUTES OF THE THIRTY-FIFTH SENATE
OF THE ACADEMIC COUNCIL**

February 20, 2003

Call to Order

Senate Chair, Professor Henry Greely, gaveled this session to order at 3:19 p.m.

There were 35 voting members, 11 *ex officio* members and several guests in attendance.

Approval of Minutes

Greely said, "I'd like to start by drawing your attention to the document not in front of you, but which you received via E-mail, SenD#5301, minutes of our last Senate meeting." There were no additions or corrections, and the minutes were approved as submitted.

Action Calendar

This was empty

Memorial Resolution

Professor Greely introduced Professor emeritus Wolfgang (Pief) Panofsky who presented a memorial statement in honor of Professor **Karl Leslie Brown**.

Wolfgang Panofsky: Karl Leslie Brown, Professor Emeritus of Applied Physics and Research at Stanford Linear Accelerator Center died of heart failure on August 29th, 2002. It ends a career that bridged profound academic achievements, industrial innovation and international applications of his work. Karl was born in Coalville, Utah, on September 20th, 1925. And all his degrees, bachelor, masters, and Ph.D., were awarded in Physics at Stanford University.

Karl Brown was a very versatile applied physicist. He started his work at the university joining the team of Bill Hanson, Edward Ginzton and Marvin Chodorow working on high-power klystrons and linear accelerators. His master's thesis was on the beam dynamics of the first high-powered klystron, and his Ph.D. thesis dealt with the commissioning of the 30 MeV MARKII linear accelerator at Stanford.

He became a research associate in 1956 and a senior research associate at the Hansen Laboratories in 1957. After completing his Ph.D., Karl worked on quite a few problems in the commissioning of the one billion electron volt linear accelerator, the MARK III, at the Hansen Laboratories. Based on the success of that work, he joined the planning group that prepared the proposal for the two-mile accelerator laboratory, which initially was first called the "Monster" and which now has become SLAC.

In the late 1950s, in parallel with his work in the service of high-energy particle physics, Karl Brown joined the team led by Edward Ginzton of the physics department and Henry Kaplan of the Stanford Medical School, to build the first linear accelerator in the United States to be used for cancer therapy. A few years later, in 1958, Karl became the president and chief scientist of Spectromagnetics, a small accelerator design and manufacturing company in Hayward, California, which was later sold to Varian Associates in 1966.

Subsequently, Karl served two years, until 1968, as senior scientist and director of research at Varian's radiation division. That division developed a family of linear accelerators for the radiation treatment of cancer. It is a remarkable fact that in 2001, Karl himself was successfully treated for prostate cancer by one of those machines which he helped design.

Karl returned to Stanford University in 1968 as a senior research associate of SLAC, then became adjunct professor in 1974 and a regular professor in 1983. Karl Brown's best-known contribution was his work on charged particle beam dynamics in magnetic transport systems. He developed a code called Transport, which is widely used nationally and internationally to design beam transport systems, spectrometers, and accelerator focusing systems, ranging energy from less than 1 MeV to a billion electron volts and beyond that.

Karl Brown contributed directly to accelerator design in many organizations as a consultant, visiting scientist, and staff member. In 1958 to 1959, he transferred his in-depth knowledge of linear accelerators as a consultant to the newly founded linear accelerator laboratory at Orsay, France, and then he also contributed to work at CERN and other international institutions.

Karl Brown was a very inventive individual whose ideas applied to many fields. In 1960, while scientists were already using colliding beams in circular machines, Brown proposed to have two linear accelerators shoot beams at one another. That informal suggestion is what now has become the next stage for high-energy accelerator programs, as have been agreed to worldwide. Karl Brown has been recognized worldwide as an expert in magnetic transport systems, but his contributions and his generosity in sharing ideas will be long remembered by his many friends and colleagues at Stanford as well as elsewhere in the world.

Thank you very much.

Chairman Greely noted that "...the full text of the memorial resolution is in your packet and will, of course, be published by the Stanford Report. I would also note today that we're fortunate to have with us Professor Brown's widow and his son in the back of the auditorium. The Senate and guests stood for a moment of silence.

It also was noted that Professor Panofsky, having become officially emeritus in 1989, still comes to a vigorous working day, each day, at SLAC.

Steering Committee

Greely noted that “We have a short session of the Senate today, two IDP reviews followed by an Executive Session for senators only, upstairs, to talk about mental health of students at Stanford.

“The next Senate session on March 6th will be our last of this quarter. Professor Zoback, the chair of the Planning and Policy Board will present an early report on the PPB's work this year. John Raisian, director of Hoover, will present a report on Hoover Institution. We may have one or two other items.

“I also remind senators that our first meeting of spring quarter, somewhat unusually, will include our Executive Session for the spring quarter. The topic: Policy and practice for setting faculty salaries.

“You should soon be receiving ballots for Senate elections. And those of you in the sciences, natural sciences part of H&S and the combined group of GSB, law, and education, will also be nominating candidates for the Advisory Board. This is the beginning of our several-month-long election process for terms beginning in fall of 2003. These first-round elections will be followed later by Advisory Board elections by all faculty, and then by the Senate's election of its Chair and Steering Committee for Senate 36.

“I strongly urge all members of the faculty, senators and non-senators, to exercise their rights to vote, because only by taking part in this process can we strengthen the governance system for faculty here at the University.”

Committee on Committees

Professor Kreps, chair of CoC announced that most positions on committees for beginning work in September, 2003 had been filled, and he thanked the faculty for its willingness to serve.

Report from President Hennessy

The President began by saying, “As, no doubt, many of you have seen, we have filed an amicus brief in the University of Michigan case jointly with MIT; it was subsequently supported by DuPont, IBM, the National Academy of Sciences, the National Academy of Engineering, and the National Action Counsel for Minorities in Engineering. We've heard many complimentary remarks about our brief and the fact that it brings a different viewpoint from the other briefs that have been filed.

For those of you that follow the news, it appears that there will be more amicus briefs filed in this case than ever in a Supreme Court case. So it will be an interesting discussion later this spring.”

Chairman Greely was not so sure that “interesting” was the proper word, because he, as a law clerk in his formative days, had been assigned the job of reading amicus briefs for a justice!

During the question period, the President was pleased to note that no “flak” had come up to him or other members of the administration about the amicus brief.

Report of the Provost

The Provost, while denying that he had a report, reported that “I did send out to everybody a notice of modification to the limits on leave policy. Sabbatical leave now is under that policy. We now have a limit of two years in seven of leave, including sabbaticals. I immediately received a reply from my neighbor, Steve Fortmann, saying that, ‘...darn, I had planned to run for the U.S. Senate, and does this mean that I can’t?’ I emphasized that in cases of that sort, we do make exceptions.” Professor Fortmann denied that he any longer entertained this ambition, and had lowered his sights (perhaps to the benefit of the University) to the Palo Alto City Council. [It is by such rumor and innuendo that great political careers are launched]

Open Forum

The Chair recognized one of the parents of Open Forum, Professor Rickford, who noted, with an attitude of forlorn dismay, that there were no bottles of water or coffee (regular or decaf) outside for the senators. The Academic Secretary pointed out that the reason was simply that on this particular day, because of the Executive Session, the water had been carried upstairs and was being changed to wine for the subsequent gathering of the Senate. That soothed Professor Rickford.

That exchange pleased Provost Etchemendy, who added “Given that the other day I sent to all units a request to save money, as much as they can this year, and turn back any excess money they can, and that this became an article in the Daily that says ‘El Centro Incurs Budget Cuts,’ I think we need a follow-up article that says that the Senate has taken on budget cuts!” [“If it only meant a few bottles of water....” the Academic Secretary muttered to himself].

Harking back to Police Chief Laura Wilson’s report and his personal observations, Dean Pizzo said “Although not a scientific sample and highly biased, I must tell you that my survey of the numbers of bicyclists without lights remains at less than ten percent during the last two weeks. We had heard it was up to 30 percent or so. I don’t think so! I think this still remains a significant problem and I hope that we will continue to do what we can as a body to address this much more proactively.” Chairman Greely promised to pass those data on to Chief Wilson.

Other Reports

Committee on Review of Undergraduate Majors (C-RUM) Recommendation for renewal of the Interdisciplinary Program in Mathematical and Computational Sciences (SenD#5411)

This report was presented by Professor Nancy Kollmann, chair of the cognizant group, the Committee on Review of Undergraduate Majors (C-RUM). Greely pointed out that this was the first IDP to be presented by this newly-formed committee, and that Professor Kollmann would

be joined by Professor Brad Efron, Director of the program, the new Associate Director, Susan Holmes, and Professor Judy Goldstein, Associate Dean for Graduate and Undergraduate Education in the School of Humanities & Sciences.

Professor Kollmann was "...happy to recommend the five-year renewal of this IDP, a B.A. degree in Mathematics and Computational Sciences. We agree with the dean's report from the H&S curriculum committee that this IDP does, indeed, what IDPs are supposed to do, namely, to satisfy an interdisciplinary intellectual need that is not covered by curriculum in any single discipline or department. This is an IDP that combines mathematics, computer science, statistics, and management science and engineering.

"We found that this program satisfies the fundamental principles that we're looking for in a good undergraduate major, whether it's departmental or IDP. It has a good, strong, progressive sequencing of courses from introductory to intermediate to advanced levels, a number of students do honors research, and most majors end up taking advanced courses. Some even take graduate-level courses in their relevant department. Many follow up this major with a co-terminal M.A. degree in the relevant specific discipline they are interested in.

"In addition, the program has intellectual coherence. It has a strong core of required courses in four disciplines that give the students about 70 units' worth of common knowledge. The advising system is very good. It ensures that each student crafts an individual program once they get through the basic requirements. Professor Efron has carried the heaviest load of advising but the director took the curriculum committee's advice to consider developing a peer advising program, and they are doing this. The addition of an associate director strengthens the advising system. We look forward to continuity in the program from that appointment.

"We also noted with interest that this is an IDP that has a forum for providing 'community' among the majors, inasmuch as they provide what they call a monthly 'pizza party' that is a professional experience at which speakers from business, academia, medical research, and industry speak to the majors about how they might apply their skills in the real world. The program also has a strong Writing in the Major course. The support given by Academic Council faculty in teaching and in participation in this IDP's steering committee is quite impressive.

"So all in all, at all the points for which we look for a strong, well-developed undergraduate major, this IDP comes up to the mark quite well and we're happy to recommend it for five more years."

Chairman Greely thanked Professor Kollmann and asked Director Efron for comments. Efron was pleased by the smooth and helpful process, better than in previous years. Dean Goldstein was very supportive of the program, that now graduates fourteen or fifteen each year (and appears to be growing).

Answering a question from Vice Provost Jones, Efron noted that in response to development of a relatively new track in Computational Biology that is in the major, the steering committee, with a principal effort from Susan Holmes, was making a large effort to increase faculty with strong biology interests. It appears as though combining efforts of M&CS, Human Biology, and perhaps Medical Informatics, a better ratio of students and advisors could be achieved in this new track.

Dean Sharon Long added that “I think we'll probably find that the graduate level orientation of Medical Informatics will dovetail nicely with Computational Biology, particularly with honors dissertations.”

Professor Michael Peskin observed that “in looking at the list of courses under biosciences, they're all very much on the population biology side, the ‘large’ things. The enterprise beginning now in genomics and medical information at the genome level should somehow tie into the computer science components of the program.

“Are there going to be more courses in genome analysis, etc. in the major? And for people who take that track, do you have some way of assuring that they'll get enough basic biology in order to be able really to be prepared to work in that field?”

Professor Holmes responded, “The Writing in the Major (WIM) class is a computational biology offering that is statistical genetics and computational sequence analysis, very much in the bioinformatics side. As the core capstone course of this particular track it is very much in the statistical and bioinformatics arenas.” She emphasized that the program is attempting to add more courses on molecular computational biology with focus on the genome, and she reassured Professor Peskin that those heading into this track are directed to first have several 5-unit biology core classes first.

Professor Rickford had a couple of comments and a question. First, he was pleased that the process of IDP review had become more compact and substantive. He then planted a seed that may grow into a full-fledged discussion in the Senate before long. “I know we started doing something with Departments... I'm wondering whether we would ever have the benefit of having departments respond to these very appropriate probing questions about their majors in the future.”

Professor Kollmann answered, “The assignment to the C-RUM, is both interdisciplinary and departmental majors. Our responsibility is to respond to SenD#5081, passed in the year 2000. It sets out a template for what a good departmental undergraduate major should be. We reviewed four departments last year. This year we will review six. We're developing a fairly strong program of review within the schools. H&S has a very strong curriculum committee that reviews departments. And then C-RUM works with the deans and the departments on the results of these reviews. These reviews of departmental majors do not come to the Senate floor.

We communicate back to the deans and to the departments with C-RUM's opinions. Our goal is to take the kinds of four or five principles that I just enumerated in reference to IDPs and apply them also to departments, in order to apply the same standards to departments as to IDPs.”

Professor Rickford mused that it “would actually be nice to see some of that coming back to the Senate floor....”

Chairman Greely, showing interest in this topic, added that “Professor Kollmann and I have had a short discussion about how the departmental review process is going and whether it would be appropriate for the C-RUM to talk substantively to the Senate about the process of reporting about departmental major reviews.” He allowed as how this discussion on the Senate floor might be one or two years away.

Dean Long, [issuing a “states rights” view], said that, “I think we do have to keep in mind that there's a truly fundamental difference in governance here. The IDPs are created by the Senate. It is the responsibility of the Senate to examine them and to evaluate whether they are functioning the way the Senate has intended them to. In contrast, departments are part of a school. All of the resources and examination of these must remain within the school in a dialogue between the faculty and the academic leadership. That is another nuance that must be kept in mind in considering the role of C-RUM and the Senate in terms of feedback to the majors.” She was, however, supportive of taking the strong and beneficial aspects of IDP reviews and applying them to the departmental process.

Professor Rickford added, “So it may be that the fact that IDPs are forced to go through this rigorous evaluation process forces them to remain on their toes and to improve their programs in ways that departments, not having that kind of structure, do not have but could benefit from.”

President Hennessy got the discussion back on track. “I just wanted to compliment Professor Efron and his colleagues. I think they have created here a program which not only is intellectually challenging, but which also fulfills an important need for students whose real interests are in applied math. Those of you who have interacted with the students in this program must agree that they are simply exceptional. It really does attract great students, and they all deserve our thanks for their hard work in maintaining this great program.

The vote in the Senate to reauthorize the advisory committee of the interdisciplinary program in Mathematical and Computational Sciences to nominate candidates for the Bachelor of Science degree for a period of five years to run from September 1st, 2004, through August 31st, 2009 was passed by unanimous voice vote. Chairman Greely thanked all involved for their hard work and cheered on the efforts of C-RUM.

Committee on Graduate Studies: (C-GS) Recommendations for renewal of the Interdisciplinary Program in Russian, East European and Eurasian Studies (SenD#5412)

Greely introduced “Professor, fellow senator, and Committee on Graduate Studies Chair, Luis Fraga, to present the committee's report” and added that, “Professor and program director Nancy Kollmann, switching hats from chair to director, and Judy Goldstein keeping the same hat, are also here as guests for this item.”

Professor Fraga was “fully confident that you have read the entire report, and consistent with the recommendation of Associate Dean Judy Goldstein and Dean Sharon Long, in my role as chair of the Committee on Graduate Studies, I am pleased to report that the Committee on Graduate Studies recommends that the Steering Committee of the Interdisciplinary Program in Russian, East European, and Eurasian Studies be re-authorized to nominate candidates for the Master of Arts degree and the co-terminal Master of Arts degree for five years, effective September 1, 2004, through August 31st, 2009.

“Our review of the program indicated a program that was intellectually coherent, that had an extremely well-organized required core curriculum, and a very high level of participation by members of the Academic Council. There are high standards of admission for its students, including very high standards for admissions of its co-terminal students. And, as an indication of the high admission standards, we note a very successful placement rate in Ph.D. programs and professional positions for graduates of this program.

“I am also pleased to recommend to the Faculty Senate that the name of this interdisciplinary program be changed, actually, that it be extended by an “E” and be changed to the Interdisciplinary Program in Russian and East European, and Eurasian Studies from its current name, consistent with an expansion in the intellectual breadth of those interested in these issues, and especially consistent with what was identified to us as an increasing interest on the part of students who enrolled in the program.”

Director Kollmann “...wanted to thank the Committee on Graduate Studies and the H&S committee for the good feedback... and even for the process, although it was onerous. But by and large, it was a process that allowed us to think hard about the tensions between core curriculum and broad interdisciplinary components. I think we improved our core curriculum in response to this process.

“I'd just like to add that from where we sit in Russian, East European, and Eurasian Studies, we applaud the initiatives being taken by the Provost and the Dean of H&S to further internationalize the curriculum and develop international studies here at Stanford, with particular focus on the more narrow initiatives in Islamic studies. These are all areas that our program is impacting and feeling the influences of. As Professor Fraga said, students in post-9/11 America

are increasing their interest in central Asia, Afghanistan, Islamic cultures, and the languages of that part of the world. We're happy to serve and provide them with what we can. And the more the University develops its resources, the faculty, library, and other resources, the better students will be served." Dean Goldstein, admittedly biased, agreed that this was "another great H&S program."

In response to a question from Professor Markus about the exact meaning and breadth of "Eurasian," Professor Kollmann pointed out that "the terminology, basically, is common to the federal system of so-called national resource centers that are funded by the federal government in the Title VI program. Title VI program has been funding Russian and East European centers since the 1960s. And those centers always included central Asia, but nobody bothered to refer specifically to it because it was all really the old Soviet Union. In the wake of the collapse of the Soviet Union, Columbia, Harvard, Georgetown, Berkeley, and other institutions have all begun to realize we're covering more than just Russia and more than Eastern Europe. We're covering a vast non-European part of the world. As a result, Eurasia has been added to their program names to signify that."

Professor Hastorf (the *ex officio* representative of emeritus/a faculty) was curious about not seeing the word "culture" in any of the course titles. Is it that the anthropologists have not been cooperative, he wondered?

Professor Kollmann admitted that "...right now we don't have strong faculty presence in that part of the world in the Anthropology department. I know there's interest there, but they don't have a faculty billet." In response to a pragmatic query from Professor and Vice Provost Jones about whether such a program should be recruiting a petroleum engineer into the faculty, Professor Kollmann smiled and thought not.

Chairman Greely then asked all those senators in favor of adding the third "E"(for Eurasian) to the program to indeed say "EEEE".... and everyone did. Also passing unanimously was the proposal from C-GS to encourage and permit the steering committee of the program in Russian, East European, and Eurasian studies, to nominate candidates for the Master of Arts and co-terminal Master of Arts degrees for the period of five years, effective September 1st, 2004, through August 31, 2001.

At this point there was no old business, new business, or other items, and the Senate was continued to the Law School Faculty Lounge for its executive session.

Respectfully submitted,

Edward D. Harris, Jr. M.D.
Academic Secretary to the University