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Chair of the Assembly and the Academic Council Faculty Representative to the Board of Regents University of California 1111 Franklin Street, 12th Floor Oakland, California 94607-5200

March 14, 2008

## WYATT R. HUME PROVOST AND CHIEF OPERATING OFFICER

### Re: Academic Council Support for Sustainable SMI Funding

Dear Rory:

Michael T. Brown

Fax: (510) 763-0309

Telephone: (510) 987-0711

Email: Michael.Brown@ucop.edu

At its February 27, 2008 meeting, Academic Council endorsed a request from Professors Keith R. Williams and Trish Stoddart, who are the Senate representatives to the Science and Math Initiative (SMI) Steering Committee, for an **examination of the sources of funding for the SMI program**, including the possibility of making instructional funds directly available to the SMI programs. Council also recommends that SMI be included as a major part of whatever worthy efforts are planned related to enhancing the University's contributions to K-12 education.

By any measure, SMI, which was introduced by President Dynes and California Governor Schwarzenegger as 'California Teach: One Thousand Teachers, One Million Minds,' has been a tremendous success. For instance, enrollments in SMI courses, which allow UC undergraduates to experience actual science and math classrooms in California's public schools, have increased to nearly 700 students in 2006-07; these enrollments are projected to reach almost 1,200 students by 2007-08. However, not all benchmarks are so rosy. While the original SMI fundraising efforts, which included corporate sponsorships, were quite successful, SMI funds are being drawn down at Indeed, expenses will soon exceed current balances and future pledged an alarming rate. contributions; it has been projected that expenses will exceed the total amount of funding available as early as summer 2008. On a related note, it was reported to the SMI Steering Committee that UCOP fundraising was curtailed when the administrative structure was decentralized to the campuses. From our vantage point, it seems that significant campus-based fundraising have not been undertaken. Although Council is unable to suggest an appropriate fundraising model for SMI, it is clear that action is needed to support a program that the UC system has committed to strongly. There is also the concern that completely decentralizing the fundraising efforts to the campuses may put campuses in competition with each other; corporate sponsors may also be less inclined to provide continued support for the program if missteps in the area of fundraising and/or support are made.

The enclosed letter from Professors Williams and Stoddart of the SMI Steering Committee supports our concerns and provides further explanation of the current funding situation associated with SMI. Council believes that SMI is an important component of UC's contribution to K-12 education, as it will not only increase the supply of mathematics and science teachers, but will also improve UC access to students from underrepresented groups. Therefore, we hope that UCOP does not allow SMI to wither but, rather, provides it with the funding infrastructure it needs to further develop ongoing funding sources for its continued success.

I look forward to receiving your response to Academic Council's inquiry into the important issue of sustainable funding for SMI. If you have any questions, please let me know.

Sincerely,

Michael

Michael T. Brown, Chair Academic Council

Copy: Robert C. Dynes, President Academic Council María Bertero-Barceló, Executive Director

Encl: 1

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#### TRISH STODDART, KEITH R. WILLIAMS ACADEMIC SENATE REPRESENTATIVES ON THE SMI EXECUTIVE COMMITTEE

February 26, 2008

## MICHAEL T. BROWN CHAIR, ACADEMIC COUNCIL

### Re: Looming budget crisis related to funding of SMI.

Dear Michael:

As you are aware, the Science and Math Initiative (SMI) introduced by President Dynes and California Governor Schwarzenegger as *California Teach: One Thousand Teachers, One Million Minds* has made remarkable progress over the past few years. Enrollment in courses providing UC students experiences in science and math classrooms in the public schools grew to almost 700 students in 2006-07 and is projected to be near 1200 this year as programs continue to attract students. However, while the growth and quality of the programs at each undergraduate campus are laudable, we believe there is a looming crisis impacting the program by this summer related to the funding of stipends and classroom support for the field experiences, and that action must be taken soon to ensure that the SMI program described to currently enrolled and future students can be delivered. It is critical to the reputation of the University of California that this commitment to the Governor, people and UC students be kept. Given the local and national visibility attained by the Calteach program the credibility of the University is on the line. Additional background information highlighting the importance and uniqueness of the SMI program is provided in Attachment A.

The SMI program has evolved substantially over the past three years since its inception, and the program's successes have resulted from efforts from a variety of sources. A permanent base of funding of \$250,000 was provided to each campus SMI program from state and campus sources to help support the infrastructure needed for recruitment, advising, teaching and placement of students. The transition of the administrative structure overseeing the program from a UCOP-centric one to a campus-based Steering Committee appears in most regards to be progressing well. Dedicated efforts by campus administrators, faculty program directors, SMI instructors and public school mentor teachers are enabling students to get the hands-on classroom experiences fundamental to the philosophy of the SMI program. Though the program is so new enough that there are not yet students who have gone through a full cycle of SMI courses and programs, already there are indications that the program is helping to seed an interest in math and science teaching from students who will only able to sample some of the SMI experiences before graduating.

The rapid growth of the program, coupled with limited additional funding and what appears to be stalled

fundraising efforts, has put SMI programs on all UC campuses at the risk of not being able to deliver to students the program they have been promised. As representatives of the Academic Senate on the SMI Executive Committee, we are very concerned that funding will not be available to support all aspects of the programs in the near future. Not only might it not be possible to grow the program toward the goal of producing 1000 teachers per year, we may not be able to guarantee to students already involved the funding that would allow them to complete the program.

From the beginning, financial support for student and mentor teacher stipends, transportation, TB tests and fingerprinting, and other support were expected to come from fundraising efforts or other noninstructional funds, and a UCOP gift account established at the beginning of the program has been used for disbursement of some of these funds. Due to successful fundraising efforts by the original SMI administrative team involving corporate sponsorship, substantial resources were available when SMI was begun. Those funds have been drawn upon at an increasing rate as the program has grown, and the point is near when expenses will exceed current balances and future pledged contributions. In January, the SMI Executive Committee asked campus program directors to provide updated enrollment and budget information to Patrick Callahan, the Executive Director of SMI at UCOP. While the data resulting from this effort continues to be refined and analyzed, a preliminary look at budgetary and enrollment projections for winter and spring 2008 makes it apparent that even if pledged contributions (\$900k due in installments through Fall, 2009) are added to current balances, projected expenses will exceed the total amount of funding available by summer, 2008. If the growth from the last two years continues at the same rate during the next academic year, the 1500-1700 students taking courses next year would require a minimum of an additional \$1.3M to \$1.5M just for student and mentor teacher stipends.

Fundraising by UCOP personnel related to SMI was curtailed when the administrative structure was decentralization to a campus-based governance, with an Executive Director and some support services still provided by UCOP. From what we have been told, the changes related to fundraising were in part at the request of campus Executive Vice-Chancellors who felt major fundraising efforts by UCOP might conflict with campus-based efforts. Since the change in administrative structure, it is not apparent that concerted campus-based fundraising efforts aimed at providing the ongoing funding needed for support of the field experiences have been undertaken, and time is rapidly running out to replenish rapidly depleting funds. While the recent grants obtained by UC Berkeley and UC Irvine show promise in terms of finding external funding sources for the SMI program, even those grants do not include support for most of the expenses incurred through student and mentor teacher stipends. Dan Aldrich, a Senior Development Associate at UCOP has said that he believes there are several possible funding sources to help transition the support effort to a more stable situation if he can be given direction about what is needed and how funds would be used.

We will not try to suggest what the best fundraising plan might be, but it is apparent that something needs to be done quickly. We are concerned that relegating fundraising efforts to the campuses for a program that the UC system has committed to strongly may put campuses in competition with each other and may cause some corporate sponsors who have indicated an interest in supporting a UC-wide effort to be less inclined to provide support.

We request that the Academic Council urge the Office of the President to examine of sources of funding from the program, including the possibility of making instructional funds directly

**available to the SMI programs.** The program is fundamentally based in instruction using regular courses vetted through the Senate approval process, and it would be reasonable to help cover the associated costs with instructional funds just as all other courses are supported. The unique system wide nature of the program may justify a funding model that is atypical, but use of state funds is warranted based on the curriculum involved. Fundraising efforts will still be needed no matter how instructional funding is accomplished since student internship and mentor-teacher stipends would continue to rely on non-instructional funds.

Regardless of how it is done, we believe that there is a need for immediate attention to fundraising and the pursuit of funding from alternative sources to ensure that the SMI program is viable in the next academic year and beyond. Since this program was begun through UCOP administrative efforts, we believe there is still a responsibility for system wide administration to ensure that the SMI program is adequately funded, to help provide or identify funding sources, and to help coordinate the system wide effort. We are also concerned about how SMI is being integrated into the other educational initiatives OP has planned, especially when the potentially very successful SMI program is on the brink of insolvency. **Consequently, we ask Council to support a recommendation to the administration that SMI be included as a major part of whatever worthy efforts are planned related to enhancing the contributions of UC to K-12 education.** 

The program has the potential to be a flagship of success for UC contributions to California public education. It addresses two areas of critical need: increasing the supply of mathematics and science teachers and improving access to UC to students from traditionally underrepresented groups. Currently, the highest proportion of unqualified math and science teachers work in California's lowest API (Academic Performance Index) schools which serve our most diverse communities with children from economically challenged families (One Thousand Teachers, One Million Minds, 2004). Limited access to qualified teachers is reflected in the poor performance and low GPA of many children from these groups in state and national measures of achievement. It is vital to the credibility of UC K-12 outreach efforts that a proper model for establishing continued availability of the needed support funds for SMI be developed. This is of the highest priority and should be central to any educational outreach efforts.

We believe the Academic Senate, through the remarkable efforts of the faculty and staff involved in each campus program, is doing its part to ensure success of the SMI program. We hope that OP and campus administration will work together to provide the funding infrastructure necessary to develop ongoing funding sources.

Kreath R. William

Keith R. Williams, UC Davis SMI Steering Committee

Signed

Trish Stoddart, UC Santa Cruz SMI Steering Committee

### Attachment A - Background Information

The University of California Science and Mathematics Initiative was designed to meet the critical need in California to recruit and prepare highly qualified teachers of science and mathematics. Addressing the chronic and long-term shortage of teachers in these fields has been identified as an issue of critical importance to the US economy and global competitiveness. On October18, 2005 Ralph J. Cicerone, President of the National Academy of Sciences and Norman R. Augustine Retired Chairman and Chef Executive Officer of Lockheed Martin Corporation testified to the Energy and Natural Resources Committee of the U.S. Senate that the US faces a serious and intensifying challenge with regard to its future competitiveness and standard of living and that we appeared to be on a losing path. A key part of the strategy proposed to turn this around was the recommendation that the US recruit and prepare 10,000 new science and math teachers each year (Rising Above the Gathering Storm, 2005). The University of California has stepped up to meet this challenge. In May 2004, UC entered into a compact with the Governor of California to develop a major initiative to increase the number and quality of secondary mathematics and science teachers in the state. UC made the commitment that by 2010, the ten campus system would produce 1,000 or more qualified math and science teachers each year. In the summers of 2006 and 2007, a letter co-signed by President Dynes and Governor Schwarzeneger has been sent to every entering undergraduate encouraging them to consider becoming a math or science teacher and informing them that the Calteach program would offer them financial support to enter a program to pursue that goal.

Cicerone, R.J. & Augustine, N.R. (October 18, 2005). <u>Rising Above the Gathering Storm: Energizing</u> and Employing America for a Brighter Economic Furure. Testimony before the Committee on Energy and Natural Resources, U.S. Senate, Washington DC.

One Thousand Teachers, One Million Minds. (2004) Proposal to establish the University of California California Teach Program. UC office of the President, Oakland California.