

# Department of Chemistry and Biochemistry

## 2008-09 CBF Proposal

Date: 5/2/2008

To: Phil Bailey, Dean – College of Science and Math

From: Eric J. Kantorowski, Faculty Advisor – Chemistry and Biochemistry CBF committee

RE: 2008-2009 CBF Proposal

The following is the proposal from the Chemistry and Biochemistry College Based Fee Committee. The committee consists of voting members (students, see list below) and non-voting members (faculty, see list below). This proposal was prepared during several meetings in the spring quarter and has been approved by the committee by a unanimous vote.

As in past years the students chose to focus the allocation of funds toward a particular sub-discipline in chemistry and biochemistry. This year the students chose to focus on biochemistry and have prioritized a list of equipment that will have a major effect on this program and will add greater depth to their academic experience. The equipment has been differentiated into two priority lists based on input from biochemistry faculty advisors. Also the students continue to value both summer research and travel to national ACS conferences and as in the past have allocated significant funds to each of these activities. We continue to apply the model developed in 2005-2006 to invest in the summer research program with respect to student and faculty compensation.

In our most recent meeting, students unanimously approved the addition of a 300 MHz nuclear magnetic resonance spectrometer to the list. The price listed is from a recent quote from Bruker. In addition to the NMR, several items that would ease the transition of the organic chemistry teaching laboratories moving into the D-wing of building 52 were also approved by the voting members. These items have been placed in a third priority grouping only for the fact that they were an addendum to the original proposal developed in cooperation with biochemistry faculty advisors.

Thank you,  
Eric J. Kantorowski

<b>Committee Members</b>	
<b>Students</b>	<b>Faculty Advisors</b>
Laura Boles	Eric Kantorowski
Ian McIntosh	Chad Immoos
Megan Johnson	Derek Gragson
Kirsten McGhee	John Goers
Danielle Ruedas	Tina Bailey (Chair – Chem/Biochem)
Kaelyn DiNino	Lisa Lindert
Courtney Collins	Anya Goodman
Allison Hoelle (student representative)	Seth Bush
Jenna Arruda (student representative)	John Hagen
Jay Bala	Emily Fogle
Mira Elnan	Phil Costanzo
	Jen Carroll
	Rod Schoonover
	Corinne Lehr

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**Table I.**

**Proposed budget for non equipment expenditures beginning July 1, 2008**

<b>Budget</b>	<b>Brief explanation/justification</b>
\$50,000	For Summer Research Stipends. This amount will be used to support 15 students at \$2,500 each (\$10/hr for 250 hrs) and compensate faculty at the rate of \$833.33 per student (an additional \$666.67 per student for faculty compensation will be funded from departmental discretionary funds).
\$10,000	For Senior Project/Faculty support. Currently the College can only supply \$15,000 per new faculty member, a far cry from most other CSU campuses. The Department's senior project budget is less than \$10,000 per year. This amount will supplement the current departmental support of our senior project program, Faculty support will be by application of the faculty member to the Departmental College Based Fee committee, and should be used in ways that benefit the student experience at Cal Poly. Lesser requests (< \$400) for senior project support will be administered by the Department Chair, and student committee members will periodically review spending.
\$15,000	For student/faculty travel. Example uses would be to provide support for faculty members and their project students to attend regional and national professional meetings such as the American Chemical Society (ACS) meetings. These meetings have provided opportunity for students and faculty to present posters and to give oral presentations on their research. For example, here is a summary of the ACS meetings attended by students and faculty over the last couple of years: National ACS meeting (San Francisco, Spring 2006): 20 students, 6 faculty Regional ACS meeting (San Diego, Spring 2007): 24 students, 4 faculty National ACS meeting (Boston, Fall 2007): 5 students, 2 faculty
\$72,000	For access to classes, The Dean and Department Chair met with students at an open meeting in 2005. The Dean pressed his case for the need for the use of fee \$72k to support faculty positions for the 2004-05 academic year. The Dean will again need \$72k for the 2007-2008 academic year.
\$5,000	For the Computational Chemistry Lab, increased open, proctored hours, software and hardware upgrades, and continued "free printing". This lab has proven to be a valuable resource for students via the use a variety of applicable software to our major.
\$1000	For ACS and AXE use for the support of educational opportunities and community service activities.
\$153,000	<b>= Subtotal for the [non-equipment] items above</b>

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**Table II. Proposed budget for equipment expenditures beginning July 1, 2008**

<b>Priority 1 Group</b>	<b>Price:</b>	<b>Qty</b>	<b>Total:</b>
J30I Centrifuge Beckman	\$37,595.00	1	\$37,595.00
JA 30.50 Fixed angle titanium rotor with single locking lid	\$12,004.00	1	\$12,004.00
JA.9.1000 [JLITE] Rotor package (can use in JA30I & JE)	\$9,000.00	1	\$9,000.00
Gel Documentation	\$12,500.00	1	\$12,500.00
Laptop computers	\$1,200.00	8	\$9,600.00
Refrig microfuge	\$4,000.00	2	\$8,000.00
Microfuge	\$1,300.00	4	\$5,200.00
Tabletop Incubator/ Shaker	\$6,900.00	1	\$6,900.00
Micropipets	\$300.00	24	\$7,200.00
pH meters	\$750.00	10	\$7,500.00
pH electrode	\$150.00	10	\$1,500.00
<b>Group 1 total</b>			<b>\$116,999.00</b>
<b>Priority 2 Group</b>			
Speed Vac	\$25,000.00	1	\$25,000.00
Vortexers	\$200.00	2	\$400.00
Slant Culture rack for shakers (15 mL)	\$275.00	1	\$275.00
Slant culture rack for shakers (50 mL)	\$275.00	1	\$275.00
Stir/hotplates	\$310.00	5	\$1,550.00
Dry baths	\$500.00	2	\$1,000.00
Blocks for Dry baths	\$90.00	4	\$360.00
Platform for Shaker	\$650.00	1	\$650.00
Multi-channel pipettors (8, 50-300 uL)	\$400.00	4	\$1,600.00
<b>Group 2 total</b>			<b>\$31,110.00</b>
<b>Priority 3 Group</b>			
NMR Spectrometer (300 MHz)	\$183,000.00	1	\$183,000.00
Rotary Evaporator	\$3,420.64	2	\$6,841.28
Chiller	\$2,259.13	4	\$9,036.52
Vacuum Pump	\$1,397.14	8	\$11,177.12
Equipment maintenance/upkeep	\$5,000.00	1	\$5,000.00
<b>Group 3 total</b>			<b>\$215,054.92</b>
<b>Equipment Grand total</b>			<b>\$363,163.92</b>
<b>Totals</b>			
	Non equipment expenditures		\$153,000.00
	Equipment expenditures		\$363,163.92
	<b>Total Requested</b>		<b>\$516,163.92</b>