

## Brothers, Sheila C

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**From:** Farrell III, Herman D  
**Sent:** Friday, April 26, 2013 4:53 PM  
**To:** Brothers, Sheila C; Blonder, Lee  
**Cc:** Debski, Elizabeth A; Ederington, Josh; Effgen, Susan K; Geddes, James; Jasper, Samuel J; Kilgore, Michael W; Larson, Susan; Lee, Brian D; Kingsolver, Ann E; Puleo, David A; Walz, John  
**Subject:** RE: New Cmte Item (SAOSC)\_Proposal to Change the Name of the Graduate Center for Biomedical Engineering

The SAOSC met this afternoon and voted unanimously (5-0) to endorse the proposal to change the Graduate Center for Biomedical Engineering to the Department of Biomedical Engineering.

Herman Farrell  
Chair, SASOC

***Herman Daniel Farrell III***  
*Associate Professor - Playwriting*  
*University of Kentucky*  
*Department of Theatre*  
*138 Fine Arts Building*  
*Lexington, Kentucky 40506*

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**From:** Brothers, Sheila C  
**Sent:** Wednesday, March 27, 2013 1:33 PM  
**To:** Farrell III, Herman D  
**Cc:** Debski, Elizabeth A; Ederington, Josh; Effgen, Susan K; Geddes, James; Jasper, Samuel J; Kilgore, Michael W; Larson, Susan; Lee, Brian D; Kingsolver, Ann E; Puleo, David A; Walz, John  
**Subject:** New Cmte Item (SAOSC)\_Proposal to Change the Name of the Graduate Center for Biomedical Engineering

Good afternoon, Herman. There is a new item ready for review by the Senate's Academic Organization and Structure Committee (SAOSC), to change the name of the Graduate Center for Biomedical Engineering to the Department of Biomedical Engineering. The proposal is attached here and can also be found at [http://www.uky.edu/Faculty/Senate/committees\\_councils/standing\\_committees/academic\\_organization\\_structure.htm](http://www.uky.edu/Faculty/Senate/committees_councils/standing_committees/academic_organization_structure.htm)

David Puleo is your contact for this proposal. If you cannot reach him, Dean John Walz is a secondary contact.

This is tentatively scheduled to be reviewed by the Senate Council on Monday, April 15, and by the Senate on Monday, May 6. Therefore, I'll need the determination of your committee no later than Wednesday, April 10. If this proposal requires a longer review period, please let me know and I will adjust the agenda scheduling.

If you have any questions or requests, please don't hesitate to let me know.

Thank you,  
Sheila

*Sheila Brothers*  
Staff Representative to the Board of Trustees  
*Office of the Senate Council*  
203E Main Building, -0032  
Phone (859) 257-5872



Office of the Provost  
105 Main Building  
Lexington, KY 40506-0032  
859 257-2911  
*fax* 859 257-1333  
[www.uky.edu](http://www.uky.edu)

March 20, 2013

Dr. Lee X. Blonder  
Chair, University Senate Council  
201 Main Building  
CAMPUS 0032

Dear Lee:

I am writing concerning the feasibility of changing the Graduate Center for Biomedical Engineering to the Department of Biomedical Engineering. I understand the proposal has the approval of the Biomedical Engineering faculty, the support of the Graduate and Undergraduate Teams in the College of Engineering and the endorsement of the faculty of the College of Engineering. The Dean of the College of Engineering supports the proposal.

The proposed change will not cause any disposition of faculty or staff and will not affect operational resources. The information provided supports the rationale that the long-term potential for growth in the biomedical engineering programs is best served by the name change. I certify the administrative feasibility of the proposed change.

Sincerely yours,

A handwritten signature in black ink, appearing to read "T. Tracy". The signature is fluid and cursive, with a large loop at the end.

Timothy S. Tracy  
Interim Provost

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Office of the **OFFICE OF THE**  
College of Engineering **SENATE COUNCIL**  
351 Ralph G. Anderson Building  
Lexington, KY 40506-0503

859 257-1687  
859 257-8827  
fax 859 323-4922

www.engr.uky.edu

March 11, 2013

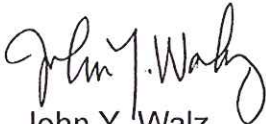
Dr. Timothy S. Tracy, Interim Provost  
University of Kentucky  
105 Main Building  
Campus 0032

Dear Tim,

I am requesting your approval for Biomedical Engineering, a graduate center in the College of Engineering, to become a department within the College of Engineering. There will be no administrative change and no educational policy change with this change in name.

The attached proposal to change the Graduate Center for Biomedical Engineering to the Department of Biomedical Engineering was approved by the Biomedical Engineering faculty in November 2012. This proposal has the support of both the Graduate and Undergraduate Teams in the College of Engineering and the endorsement of the faculty of the College of Engineering (96 in favor, 3 opposed by electronic ballot in March 2013). By copy of this letter, I am routing this proposal concurrently to Dr. Lee Blonder, Senate Chair, for Senate endorsement.

Sincerely,



John Y. Walz  
Dean

Attachment

Cc: Dr. Puleo  
Dr. Blonder

**PROPOSAL TO CHANGE**  
**GRADUATE CENTER FOR BIOMEDICAL ENGINEERING**  
**TO**  
**DEPARTMENT OF BIOMEDICAL ENGINEERING**

**Background**

During the 1970s, an ad-hoc committee was formed to develop a Biomedical Engineering Program. This committee was later replaced by a Biomedical Engineering Council. The Graduate Center for Biomedical Engineering was eventually created in 1985, the Kentucky State Council on Higher Education approving graduate programs leading to the M.S. and Ph.D. degrees in Biomedical Engineering in January 1988.

**Rationale**

Whereas most benchmark universities established *departments* of biomedical engineering, UK's has retained the center designation. Although operation of the program as a Graduate Center preserved the multidisciplinary character of biomedical engineering, existence as a center limits certain educational opportunities and serves as a source of continuing confusion regarding what this center truly is (both on campus and off). The long-term potential for growth and excellence in the biomedical engineering programs at UK are best served by a change from the Graduate Center for Biomedical Engineering to the Department of Biomedical Engineering.

**Academic Merits**

Graduate

Quality graduate students are critical to a successful program. Competition for top-level students is an ongoing challenge. UK's biomedical engineering program must not only compete with perennially top-ranked programs (e.g., Johns Hopkins, Georgia Tech, and the University of Washington) but with benchmark institutions as well (e.g., addressed in a later section). These universities have departments of bioengineering or biomedical engineering.

The center designation at UK is a frequent source of confusion. Many view a center as a diffuse collection of faculty from different departments. Historically, across the country, a biomedical engineering center served as an umbrella under which educational and research activities took place, yet students receive degrees in their respective "home" departments. Even though UK's administrative and governing regulations clearly state that Graduate Centers are "equivalent to a department" (AR 1:3, GR Part VII), people on campus generally do not know this. And the misunderstanding is exacerbated when speaking with colleagues at other institutions.

When prospective students consider graduate programs, the ambiguity in the meaning of "center" can prevent high-quality students from enrolling in UK's biomedical engineering programs in favor of those offered by traditional departments. Becoming a department would eliminate one of the obstacles in graduate student recruitment.

Undergraduate

Approximately \$700M in support from the Whitaker Foundation resulted in establishment of 38 new bioengineering and biomedical engineering programs and growth of many others during the 1990s and early 2000s. Nearly 80 accredited undergraduate programs now exist, with most of those



universities also offering graduate programs. A much smaller number of institutions (including UK) have only graduate programs.

Based on reports from the Bureau of Labor Statistics (BLS) and news stories from sources such as Forbes and US News & World Reports (USNWR), demand for biomedical engineers continues to increase. The BLS projects nearly 62% growth in job opportunities for biomedical engineers through 2020. Forbes lists biomedical engineering as the #1 “most valuable college major”, and USNWR listed it as one of the “best careers”.

The College of Engineering receives inquiries from prospective UK undergraduates about biomedical engineering. Because UK does not offer a B.S. in biomedical engineering; however, students must either attend the University of Louisville or leave the state to enroll in an undergraduate biomedical engineering program.

The UK Senate Rules Committee determined that Graduate Centers cannot offer undergraduate courses, and thus even though well-qualified biomedical engineering faculty are available, an undergraduate minor or certificate cannot be provided. Becoming a department would enable creation of a minor or certificate that would be an excellent complement to students enrolled in traditional engineering departments.

### **Non-Academic Merits**

The proposed change from a Graduate Center to a Department will not affect operational resources. As a unit “equivalent to a department”, the center already has a director, staff, and physical resources. Within the organizational structure of the College of Engineering, the center functions alongside seven departments, and the director already serves on the Chairs Team.

Regarding current students, the change would not affect the existing graduate programs. Furthermore, the change does not have implications for SACS accreditation, because the center’s programs currently conduct the required assessments that are monitored at the college level.

Becoming a department would eliminate the obstacles that Center faculty face from not have a traditional departmental appointment when applying for highly competitive federal research funding. (While impossible to quantify, such obstacles almost certainly exist.) This lack of core affiliation in a biomedical engineering department can, rightly or wrongly, be perceived as a lack of devotion on the part of the faculty researcher to biomedical engineering research or as a lack of institutional commitment to the research area. There is no reason to risk this perception bias, and every reason to avoid it.

### **Procedure**

The proposed change was discussed at the Center’s faculty meetings in September, October, and November of 2012. Faculty with primary appointments unanimously approved the proposal on November 14, 2012. The document was subsequently distributed to faculty with secondary appointments in the Center along with the link to a SurveyMonkey poll. The vote was for overwhelming approval, with 86% of responses in support and 14% abstentions.

### **Benchmark Comparison**

As shown in the following table, the vast majority of UK’s CPE or Top 20 Business Plan benchmarks have departments of biomedical engineering or bioengineering. The exceptions are Michigan State and the University of Georgia, which do not have standalone biomedical engineering programs, and Purdue, which has a school of biomedical engineering.

CPE Benchmarks		Business Plan Benchmarks	
Michigan State University	N/A (option under Mechanical Engineering)	Georgia Institute of Technology	The Wallace H. Coulter Department of Biomedical Engineering
North Carolina State University	UNC/NCSU Joint Department of Biomedical Engineering	Ohio State University	Department of Biomedical Engineering
Ohio State University	Department of Biomedical Engineering	Pennsylvania State University	Department of Bioengineering
Pennsylvania State University	Department of Bioengineering	Rutgers University - New Brunswick	Department of Biomedical Engineering
Purdue University	Weldon School of Biomedical Engineering	Texas A&M University	Department of Biomedical Engineering
Texas A&M University	Department of Biomedical Engineering	The University of Texas at Austin	Department of Biomedical Engineering
University of Arizona	Department of Biomedical Engineering	University of California - Berkeley	Department of Bioengineering
University of California - Los Angeles	Department of Bioengineering	University of California - Davis	Department of Biomedical Engineering
University of Florida	J. Crayton Pruitt Family Department of Biomedical Engineering	University of California - Los Angeles	Department of Bioengineering
University of Georgia	N/A (emphasis under Biological Engineering)	University of California - San Diego	Department of Bioengineering
University of Illinois - Urbana-Champaign	Department of Bioengineering	University of Florida	J. Crayton Pruitt Family Department of Biomedical Engineering
University of Iowa	Department of Biomedical Engineering	University of Illinois - Urbana-Champaign	Department of Bioengineering
University of Maryland - College Park	Fischell Department of Bioengineering	University of Maryland - College Park	Fischell Department of Bioengineering
University of Michigan - Ann Arbor	Department of Biomedical Engineering	University of Michigan - Ann Arbor	Department of Biomedical Engineering
University of Minnesota - Twin Cities	Department of Biomedical Engineering	University of Minnesota - Twin Cities	Department of Biomedical Engineering
University of North Carolina - Chapel Hill	UNC/NCSU Joint Department of Biomedical Engineering	University of North Carolina - Chapel Hill	UNC/NCSU Joint Department of Biomedical Engineering
University of Virginia	Department of Biomedical Engineering	University of Pittsburgh - Pittsburgh Campus	Department of Bioengineering
University of Washington	Department of Bioengineering	University of Virginia	Department of Biomedical Engineering
University of Wisconsin - Madison	Department of Biomedical Engineering	University of Washington	Department of Bioengineering
		University of Wisconsin - Madison	Department of Biomedical Engineering



