Unit Executives Committee
Meeting Minutes
October 20, 2016

Attendees: Anthony Atchley, Kultegin Aydin, Peter Butler, Chita Daz, Cheng Dong, Amr Elnashai, Pat Fox, Tom LaPorta, Philip Morris, Kevin Parfitt, Phillip Savage, Janis Terpenny, Karen Thole, Judith Todd

Guests: Patrick Tunno

Absent: Sven Bilen, Paul Heinemann, George Lesieutre, Chris Rahn

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<thead>
<tr>
<th>Dean’s Update</th>
<th>Lead: Amr</th>
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<td><strong>Global Engineering Engagement Update</strong></td>
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<td>Patrick Tunno, Director of the Office Global Engineering Engagement (GEE), provided an update on the protocol for visiting delegates, GEE’s activities and discussed the rebranding of the office. He noted the change in name from Global Engineering Education to Global Engineering Engagement. One of the goals is to increase the number of students who graduate with a study abroad—from the current 11% to 25%. Several initiatives are underway with other colleges and universities to enhance our programs. Beyond study abroad, GEE is expanding the following programs: 3+1+1 (MEF, CUMTB, Khalifa, DUT); Sponsored Programs; Global Students Program; Internationalization; and, Global Collaborations. They strive to be the central liaison for the college of all things global. The GEE website is a work in progress, but will eventually contain information concerning their initiatives.</td>
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| Voluntary Retirement Program Update                |           |
| Amr advised that the College had 22 members of the faculty/staff who took advantage of the Voluntary Retirement Program. Amr circulated to the heads and deans a list of those confirmed who applied by the deadline of Friday, September 30, 2016. The College has been working on a University HR form to apply for rehiring with funding from (faculty and staff) the provost. We sent our comments on the forms on October 7, 2016. We are working with the provost to try to get a quick decision on critical and pressing hiring needs, especially where departments had already launched searches based on known retirements in their units. We are also trying to get quick decisions on critical staff positions. The rest will take a bit longer to negotiate with the provost, but Amr is hopeful. |

| Recommendations: Patrick is asking Department Heads to alert GEE of their global initiatives and when they have visiting delegations. |

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<tr>
<th>Senior Associate Dean’s Update</th>
<th>Lead: Anthony</th>
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<td><strong>Update on Leadership Searches</strong></td>
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<td>Department Head Searches:</td>
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<td>• Aerospace Engineering (external) – <a href="http://www.aero.psu.edu/department/department-head-aerospace-engineering.aspx">http://www.aero.psu.edu/department/department-head-aerospace-engineering.aspx</a></td>
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<td>• Architectural Engineering (external) - <a href="http://www.ae.psu.edu/department-head-opening.aspx">http://www.ae.psu.edu/department-head-opening.aspx</a></td>
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<td>• Computer Science and Engineering (internal) - <a href="http://www.eecs.psu.edu/departments/EECS-Departments-Employment-Opportunities.aspx">http://www.eecs.psu.edu/departments/EECS-Departments-Employment-Opportunities.aspx</a></td>
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<td>Director:</td>
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<td>• Penn State Facilities Engineering Institute – Jim Myers, Director of FEI, has announced his retirement. The ad will be posted soon.</td>
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| ASEE Women in Engineering Division Announcement   |               |
| Anthony shared a letter from Gerald Holder, Chair, ASEE Engineering Deans Council. The Women in Engineering Division is very interested in broadening the participation of men in the division activities. As seen in programs both in academia and industry, collaborations that include men offer |
distinct benefits in efforts to achieve gender equity. Through the Women in Engineering Division, they hope to advance these programs and conversations and demonstrate advocacy and allyship within ASEE. As you encourage your faculty this year to join ASEE or renew their ASEE memberships, please reach out to your male faculty and colleagues to consider demonstrating their support for gender equity in engineering by joining the Women in Engineering Division.

2016/17 Education and Research Review Slides
In follow-up to Anthony’s discussion at the August 18, 2016 Executive Committee, meetings will begin in February for the Education and Research reviews. A template has been provided. As Anthony indicated, we are asking for quite a bit of data—some of it is more straightforward than others. The key to remember as we go forward with these reviews is that this data will be important in helping the deans manage the departments of the College.

Awards
1. **Distinguished Professor (Senior Associate Dean)**
   - CoE now has 15 slots, down from 16 due to decrease in the number of full professors.

2. **The President’s Award for Excellence in Academic Integration (Senior Associate Dean)**
   - Notify SAD by Friday, November 11, 2016
   - Complete packages due to SAD by Friday, December 16, 2016
   - Packages to Old Main by Monday, January 9, 2017

3. **The President’s Award for Engagement with Students (Associate Dean for Education)**
   - Each college dean or campus chancellor may nominate one person. Nominations should be submitted to Sally Butts at sbg108@psu.edu or 417 Old Main and must include:
     - Completed nomination form
     - Narrative statement, not exceeding two pages, stating why the professor qualifies for the award (please do not append letters of support from colleagues, the nominee’s CV, or other materials.)
     - Submission deadline - December 9, 2016

4. **Undergraduate Program Leadership Award (Associate Dean for Education)**
   - Each college dean or campus chancellor may nominate one person. Nominations should be submitted to Susan Ake at sja1@psu.edu or 417 Old Main and must include:
     - Completed nomination form
     - Narrative statement, not exceeding two pages, describing the qualities that distinguish the faculty member nominated (please do not append letters of support from colleagues, the nominee’s CV, or other materials).
     - Submission deadline - December 9, 2016

5. **2017 Curtis W. McGraw Research Award (Associate Dean for Research)**
   - Nomination guidelines on the award can be found at: [http://www.asee.org/member-resources/awards/full-list-of-awards/council-awards](http://www.asee.org/member-resources/awards/full-list-of-awards/council-awards)
   - Nominations should be submitted as a single PDF file by email with the subject line: “2017 Curtis W. McGraw Research Award Nomination” to John Leonard
   - Submission deadline: nominations will be accepted through December 2, 2016

6. **Global Engineering Leadership Program (GELP) (Senior Associate Dean)**
   - [http://www engr psu edu/grantrequest GrantID COEGELP2016](http://www engr psu edu/grantrequest GrantID COEGELP2016)
   - Submission deadline: November 11, 2016
7. **ENGineering for Innovation & ENTrepreneurship (ENGINE) Grants (Associate Dean for Innovation)**
   - [ENGINE submission website](#)
   - Submission deadline: November 23, 2016

8. **Multidisciplinary Research Seed Grants (Associate Dean for Innovation)**
   - [Seed Grant Submission link](#)
   - Submission deadline: November 23, 2016

9. **Faculty Scholar Medal Program for Outstanding Achievement (Senior Associate Dean)**
   - Notify SAD by Monday, October 31, 2016
   - Complete packages due to SAD by Monday, November 21, 2016
   - Packages to Old Main by Monday, December 5, 2016

**Recommendations:** N/A

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<th>Research</th>
<th>Lead: Chris, George</th>
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**Associate Dean for Research Update**

1. **Upcoming Proposal Deadlines**
   
   As of October 10, OERA had almost 150 proposals in the queue. Staff members are working long hours to help faculty members meet proposal deadlines. October 17 was a big NIH deadline, and NSF has a couple on October 19/20 and November 16.

2. **ADR Visits to Department Faculty Meetings**
   
   The ADR continues to welcome invitations to visit faculty meetings to discuss topics related to: COE proposal submission processes; OSP award negotiations; resources for funding opportunities and project administration; industry relations; overhead rates; and others as helpful. Some improvements in departmental SIMS budgeting and industrial contracting are expected in the not-distant future.

**Associate Dean for Innovation Update**

1. **New Faculty Workshop**
   
   Per Chris Rahn’s October 6 email, the COE Office of Engineering Research Administration (OERA) invites new faculty to a New Faculty Workshop to be held on November 18 from 3 – 6 p.m. in the Hintz Alumni Center. The purpose of the workshop is twofold. First, Chris Wilson, COE Director of Grants and Contracts, will give you an overview of the pre- and post-award process in the COE, including a question and answer session. Second, Chris Rahn, COE Associate Dean for Innovation, will introduce the COE Strategic Research Thrusts and solicit input on potential emerging teams in the thrust areas. The COE provides Multidisciplinary Seed Grant funding that targets teams that address the Strategic Research Thrusts so the workshop may provide new opportunities for collaboration with potential internal and external funding sources. The workshop will end with a reception so you will have a chance to mingle with and get to know your new colleagues. Please RSVP to Susie Sherlock ([sjs10@engr.psu.edu](mailto:sjs10@engr.psu.edu)) by October 21 if you are able to attend. Participants are to indicate your first and second choice thrusts so we can allocate attendees to appropriate breakout groups. **Department Heads are to encourage faculty participation.**

2. **Strategic Thrust Working Groups and their new role in Strategic Research Team Formation**
   
   Per Chris Rahn’s October 14 email, the Strategic Thrust Working Groups will be asked to identify one interdisciplinary, multi-university team in their thrust area. These Strategic Thrust Teams (STTs) may or may not be distinct from the working groups. The selection process will be left to the STTs, but our office will be 100% behind their efforts. Ultimately, the goal is for the STTs to compete for center-level funding (on the order of $1M/year in PSU funding for 5 years). The COE will be investing in the STTs with logistical support, funding agency visits, and funding for travel and workshops.
2016 COE Strategic Research Thrust Working Groups

a) Cyberenvironments: Network and system design, vulnerability assessment/detection, quarantine, and optimization; Cybersecurity and cyberphysical engineering and healthcare services systems; Data analytics, informatics, data modeling in health, physical and life sciences; Multiscale, multiphysics systems modeling and simulation; Cyberethics and cultural-technical system integration.

Tom La Porta (CSE, chair)
Soundar Kumara (IE)
Costas Maranas (CHE)
Patrick McDaniel (CSE)
Aylin Yener (EE)

b) Advanced Manufacturing: Bioprinting, biomedical sensing, and imaging; 3D printing, additive manufacturing and product development systems; New materials characterization and applications for sustainability and enhanced performance.

Tim Simpson (IE/ME, chair)
Jian Yang (BME)
Judy Todd (ESM)
Adri van Duin (ME)
Siyang Zheng (BME)

c) Resilient Infrastructure: Autonomous, optimized, and adaptive infrastructure systems; advanced land, sea, air, and space vehicles for civil and military applications; Infrastructure system integration including technology, management, and finance.

George Lesieutre (Aero, chair)
Peggy Johnson (CEE)
Martin Pietrucha (CEE)
Uday Shanbhag (IE)
New Member

d) Energy-Water-Food Nexus: Tri-system modeling, optimization and management of interacting systems; Water resources sustainability, management, treatment, desalination, energy consumption; Energy efficiency, harvesting, alternative energy sources, biofuels, natural gas cycle; Food production, harvesting, storage and transportation management, losses, optimization; Ethical energy, water food policies, socially-responsible production, and distribution.

Bruce Logan (CEE, chair)
Monty Alger (CHE)
Paul Heinemann (Ag)
Arthur Motta (MNE)
Chaopeng Shen (CEE)

Recommendations: N/A

Summary of Discussions

UGs, MS/MEng and PhDs Enrollments: Fall 2016 (non-WC)

Peter provided an update on the newest graduate numbers. He noted that the actual enrollment numbers are not official until week 8 this year. He is working with Jennifer Wu to create queries on what we are sampling.

- Undergraduate: 8,380 (not official: official enrollment numbers are delayed by two weeks due to LionPath)
- Graduate: 1,515
2016 COE graduate Enrollment; Breakdown by Degree Type
(Does not include IGDP)

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<tr>
<th>Degree Type</th>
<th>Count</th>
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<tr>
<td>MAE</td>
<td>41</td>
</tr>
<tr>
<td>MENG</td>
<td>104</td>
</tr>
<tr>
<td>MS</td>
<td>472</td>
</tr>
<tr>
<td>PHD</td>
<td>898</td>
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<tr>
<td>OYM*</td>
<td>189</td>
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* OYM=one year masters

Likely Level of Funds Associated with the MS/MEng Program
Peter provided an estimate relative to last year’s income and an estimate of timing. A version of the business plan was provided by Jody Heckman in the Provost’s Office.

- Notes: 20% of students are PA; 80% non-PA
- Tuition differential between RAs and those paying tuition is not included (so amounts are overestimated)
- Assumes growth of 600 students over 5 years (120 students per year)
- 2014 baseline is subtracted
- Enrollments are average of spring and fall

We should have actual fall enrollments in week 8 of the fall (delayed due to LionPath).

Outline of Plans for MS/MEng Online and Resident Education in the College
Peter advised that program proposals will be solicited for online delivery in Fall 2017. New programs will be provided 1 year free of revenue sharing + ~$20K seed money. Proposal for new framework for master’s education combining disciplinary and leadership curricula is being developed.

- From the World Campus:
  “The WC Marketing group recommended that the four topics of Civil Engineering, Computer Science, Mechanical Engineering and Industrial Engineering are retained for canned/packaged online format delivery. The WC does not intend to do more than the current Mechanical Engineering online degree for the time-being. The WC approves of the CoE offering four online degrees in any of the following: Biomedical Engineering, Chemical Engineering, Aerospace Engineering, Facilities Engineering, Real Estate Engineering, Architectural Engineering, and Nano-scale Engineering, in any format the CoE chooses, using the 80-20 model (80 for the CoE and 20 for the WC). In this case, the WC will not support the CoE in any way other than registering the students, advertising the degrees, collecting and transferring to the CoE 80% of the gross tuition revenue.”

There may also be support for online Additive Manufacturing. He is working with Darryl Farber on Resident Masters in Engineering Leadership and Policy. Peter noted that he is working on an idea of a facilitated entrance to one-year masters where students can take courses in their senior year, not count them toward their undergraduate degree, but move right into their master’s when they graduate.

Plans for the Office of Distance Learning
Peter noted that Terry Reed, Director of Continuing and Distance Education, has announced his retirement. The office will be restructured to have a budget and defined duties and resources as opposed to fee for service budget. Peter is meeting with all of the graduate coordinators to see what the impact and needs are. The office will be supported in part with COE portion of revenue sharing.

Recommendations: N/A