Purdue School of Engineering and Technology, IUPUI

Dean’s Industry Advisory Council

December 16, 2013
Today’s Agenda

• Meeting Convened (Vince Newsom, Chair)
• Introduction of New Members
• 2013 Highlights (Vince Newsom)
• School Update (Dean Russomanno)
• Recognition of Service (Dean Russomanno)
• Break & Networking
• DIAC 2014 Goals and Objectives (Frank St. John)
• Committee Updates
  - General Administration
  - Research
  - Diversity, Recruitment & Retention
  - Student Services
• Wrap-Up, Adjourn and Networking
Welcome

New DIAC Members

Wayne Payack
Vice President of Engineering
Stanley Security

Brad Wuerch
Business Development Officer
Sensory Technologies

Daron Dryer
Director of Engineering, FAA DER
Comlux Aviation

Russ Atkins
Vice President of Engineering
Duke Energy
DIAC Highlights of 2013

- DIAC Scholarship Fund
  - Principal $19,866; Income $3,887
  - Awarded two $500 scholarships in each of last five years

- Letters of Support provided for School proposals to NSF and Tau Beta Pi application
  - Thank You to Raytheon, Cummins, Rolls-Royce, Applied Engineering Services, IPL, Enerdel, Lilly

- Strong Support for Capstone Design Projects
  - Thank You Raytheon, Stanley Security, Belcan, Roche, Carrier, Enerdel

- DIAC Committees are quite active
  - 22 DIAC members supporting Committees (up from 20 in 2011)
Dean’s Report to the DIAC

Purdue School of Engineering and Technology, IUPUI

December 16, 2013
Recognition of Service

Thank You Vince Newsom!
Congratulations!

Frank St. John
2014 DIAC Chair
Thoughts for 2014

- **Meeting topics for next year**
  - Dialog with Dean Russomanno
  - Maintain alignment with the School’s Strategic Plan and DIAC’s Long Range Plan
  - Presentations on school research activities
  - Presentations from students/student activities
  - Department advisory board activities/status

- **Meeting Frequency**
  - Planning for four meetings in 2014
  - Continue effective committee involvement
General & Administration Committee Update

- Committee:
  - Kevin Zaletel - Chairman
  - Joe Bentley
  - Stephen Hundley
  - Cary Marston
  - Malcolm Thomas
  - Joe Abella
  - Frank St. John - Past Chairman

- 6 teleconference meetings held this year
Filled Four Key DIAC Leadership Slots
- DIAC Chairman: Frank St. John
- G&A Committee Chair: Kevin Zaletel
  - Kevin will Chair the DIAC in 2015
- Career Services Chair: Jill Mendoza
- Diversity, Retention & Recruitment Chair: Cindy Munerol

Added Five New Members
- BSA LifeStructures, Duke Energy, Stanley Security, Sensory Technologies and Comlux Aviation

Develop Regional DIAC Members
- List of 200 Currently Being Screened
- Will Develop Short List of 10-20 for Consideration

DIAC Membership Guidelines
- Established Mechanism for Emeritus Members
- Established Suggested Member Contribution of $1,000
Research Committee
Research Committee

- Wayne Eckerle - Chairman
- Bernie Sepaniak
- Jorge Schreiber
- Joe Kitterman
- Bill Wylam
- Jim Wheeler
- Steve Wellborn
- Debra Burns – Interim Assoc. Dean for Research

*Primarily Supports Associate Dean for Research*
Research Committee

Prepared Strategic Research Recommendations for Dean Russomanno

- Identified Issues
- Explored & Identified Candidate Solutions
  - Faculty Focused
    - One Pagers, Capability Map, Industry SIG, Mentorship
  - Industry Collaborations
    - Forums, Industry Needs, Clusters, IABs, Summer Internships
  - Increasing Visibility and Awareness
    - Engage with various consortia
- Developing Specific Plans
  - Short Term (six months)
  - Medium Term (six months to two years)
  - Long Term (greater than two years)
Develop a Clear, Precise Description

- **Description**
  - Process, product or technology description

- **Functionality**
  - Process, product or technology purpose

- **Market Driver**
  - Process, product or technology market necessity

- **Value Proposition**
  - Process, product or technology differentiation/distinction versus existing methods
Debra S. Burns, PhD, MT-BC

- **Research Program/Expertise**
  - Intervention evaluation within hospice to determine impact on quality indicators

- **Functionality**
  - Hospice care can be improved with well-designed interventions targeting end of life communication and symptoms distress

- **Market Driver**
  - Patients who disenroll from hospice are more likely to be hospitalized, admitted to ER, more likely to die in hospital. Hospice disenrollees incurred higher per-day Medicare expenditures ($124/day).

- **Value Proposition**
  - Current research focuses on hospice care as a package and does not differentiate the individual interventions. We are proposing to evaluate interventions within hospice to determine best practices in order to decrease disenrollment and improve family satisfaction.
Christian Rogers, PhD

- **Description**
  - Virtual reality to display and interact with neuroscience imaging in three dimensions

- **Functionality**
  - Users can walk around and interact with complex medical data within an immersive environment

- **Market Driver**
  - Complex medical imaging can be easily presented to the physician/patient within clinical spaces
  - Virtual reality can be used to educate and visually explain complex systems and data in accessible format

- **Value Proposition**
  - Translate current high end equipment and research facilities to more accessible and usable formats to improve patient care and education
Ben Smith, DMA

• **Description**
  - Artificial Intelligence for Creative Problem Solving

• **Functionality**
  - Designing software to discover create solutions to known problems or in known domains

• **Market Driver**
  - Facilitate more effective user (consumer, employee) interaction

• **Value Proposition**
  - Expand the capabilities of computers into more intelligent partners rather than complex tools.
LIFE SCIENCES

TRANSPORTATION

MOTORSPORTS

ENERGY

INFORMATION TECHNOLOGY

DIGITAL SIGNAL PROCESSING

STEM EDUCATION
Diversity, Retention and Recruitment

Kevin Zaletel
Diversity, Retention and Recruitment

- **Membership (combined two sub-committees)**
  - Kevin Zaletel, *Chairman* – UPS
  - Cindy Munerol, Co Chair - Former AT&T
  - Clayton Nicholas – IUPUI
  - Chris O’Keefe – Hill-Rom
  - Neal Montour - Belcan
  - Terri Talbert–Hatch – Asst. Dean Student Services
  - Julie Ji – IUPUI
  - Darrel Nickolson - IUPUI
DIAC Highlights of 2013

• Diversity Recruitment and Retention Committee
  • Supporting the initiatives in the DIAC Long-Range Plan
  • Supported 3nd Annual Student Recognition Awards Luncheon for student organizations
    • Meeting regularly with these student groups
  • Decision to develop and support a marketing campaign to recruit more female students
    - More strategic approach to recruiting women
    - Add female outreach information to IUPUI web site
    - Obtain female SAT scores for recruiting
    - Determine baseline data for women and minority students
  • Adding energy and merging with the School’s Diversity Council
  • Supporting student summer programs
    • MEAP, POWER Camp, Women in Technology
2014 DDR Chair – Cindy Munerol

- Revisit Long Range Plan and determine if we need to update subcommittee goals and areas of focus (take into account the newly formed subcommittee)
- Continue mentoring student groups
- Support PhD mentoring program by exposing minority PhD students to student organizations, for example
- Develop recommendations for the Dean
DIAC
Student Support Committee
DIAC STUDENT SUPPORT COMMITTEE

• Membership
  • Jill Mendoza, Chair – i.d.o. Inc.
  • Sohel Stanbouly – Carrier
  • Mike Martin - Lilly
  • Bruce Wylam – Hunt Construction
  • Bill Klenk – Allison Transmission
  • Dale Jacobs – BSA LifeStructures
  • Sam Reed – BSA LifeStructures
  • Terri Talbert–Hatch – Asst. Dean Student Services
  • Jennifer Williams – E&T Career Services Specialist
Student Support Committee Goals

- Increase the number of opportunities for student interaction with discipline professionals (Career Forums, Coop & Intern Opportunities, Resume Reviews & Mock Job Interviews)
- Increase the number of opportunities for internships or recruitment with DIAC member firms
- Examining issues related to “Just Below 3.0” GPA students (Gap Students)
  - Developing recommendations for process improvements addressing:
    - Early Influences
    - Early Identification
    - Early Exposure to opportunities for Mentorship Program & Peer Group Study Programs
  - Pilot Job Shadowing Opportunities for Gap Students
- Make proposals and implement a more robust process for bringing together students and potential employers in areas outside of Engineering & Engineering Technology.
Student Support Committee Update

• Recommendation to appoint student members to Department IABs has been implemented
• Mechanism to maintain Advisor Rosters implemented
• Expanded the distribution of the Career Services Involvement Survey to include DIAC members
• Provided timeline of important dates and opportunities to interact with students to DIAC
• Expanded notice to DIAC Members to include key events such as Career Fairs & Externship program opportunities
  ▪ Provided a “menu like” document detailing all the ways Industry can get involved
• Career Services Presentation at the Joint Board of Advisors Retreat promoted services and recruitment activities available
Wrap-Up

Important Dates 2014

- **February 27, Thursday**: DIAC Meeting, 3:30 – 5:30 p.m.
- **April 4, Friday**: School of Engineering and Technology Honors Convocation & Dinner, Crowne Plaza at Union Station
- **May 15, Thursday**: DIAC Meeting, 3:30 – 5:30 p.m.
- **September 15, Monday Afternoon**: Alumni Golf Outing
- **October 3, Friday**: Joint Board of Advisors Retreat, 12:00 p.m. – 4:00 p.m.
- **December 4, Thursday**: DIAC Meeting, 3:30 – 5:30 p.m.

*Thank You For Your Contributions and Have a Great Holiday!*