

Purdue School of Engineering and Technology, IUPUI

Dean's Industry Advisory Council

February 27, 2014

Today's Agenda

- Meeting Convened (Frank St. John, Chair)
- Committee Updates
 - General Administration
 - Research
 - Diversity, Recruitment & Retention
 - Student Services
- Mentoring for “Gap Students” (Terri Talbert-Hatch)
- Break & Networking
- DIAC Industry Profile – Elevator Speech (Frank St. John)
- School Update (Dean Russomanno)
- Wrap-Up, Adjourn and Networking

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

- Met February 24th

- **Priorities**

- Update DIAC Long Range Plan
- Progressing – Examine DIAC Expansion to Regional/National
- Ongoing – Recruit Representative Membership
- Progressing – Link to Dept. Advisory Boards & Alumni Board

Work Plan & Metric (example)

General & Administration Committee

Strategy → Initiative	Task	Measurement
<p>Maintain Vibrant and Relevant DIAC</p> <p>→ Examine DIAC Expansion to Regional/National</p>	<ul style="list-style-type: none"> • ✓ Assess pros and cons • ✓ Review benchmark information • ✓ Consider potential DIAC membership composition • Evaluate meeting format changes • ✓ Review Companies hiring graduates • Prepare report 	<ul style="list-style-type: none"> • Complete assessment and report finding to the Dean and DIAC • Recommend new DIAC members consistent with the plan • Develop and recommend a new meeting format

What should be the make-up of DIAC?

– Organizations

- Diversity (firm size, type, region, technology, cluster/technology intensity)
- Organizations that hire IUPUI graduates & interns (now and future)
- Organizations who employ the central Indiana workforce (now and future)
- Firms whose research and development interest blend with IUPUI
- Organizations considered leaders in their industries
- Individuals and organizations that bring strategic interests to the school
- Organizations that support state initiatives (Life Science, Transportation, Logistics and Advanced Manufacturing)

– Members

- Leaders in their companies and community
- Influential within their organization
- A diverse membership that brings insight and different points of view to the School
- Members who are engaged and who demonstrate a personal commitment to the School
- Members that may be affiliated with the school already (alumni, etc.)
- Willing to advocate for the School within their companies and communities

**Research
Committee**

- Wayne Eckerle - Cummins
- Bernie Sepaniak – former D&M
- Jorge Schreiber – White Arrow Consulting
- Joe Kitterman – 180 Skills
- Bill Wylam - Electrocore
- Jim Wheeler – TP Miller
- Steve Wellborn – Rolls Royce
- Daron Dryer – Comlux Aviation
- Tom Stephens - Raytheon
- Debra Burns - IUPUI

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)

	Life Sciences	Energy	Advanced Mfg/Transportation	Motorsports	Infrastructure/Buildings	Aerospace & Defense	Entertainment (Music/Graphics)	All Sectors
Nanotechnology	Agarwal, Shrestha, Varahramyan		Agarwal, Shrestha, Varahramyan				Ryu	
Artificial Intelligence			Russomanno			Russomanno		
Computing/Machine Learning/Programming	Wu		Chien, J. Lee, Frieje, Fernandez			King	Cox, Deal, Drews, Chuiyuan, Smith	Elliott, Starks
Imaging & Sensor Processing	Christopher, Salama		El-Sharkawy			Christopher, Salama		
Wireless Networks/Security/Encryption			Kim, King, S. Lee, Lin			King		Justice, Feng, Liu
Sensors			Rizkalla					
Controls/Mechatronics/Devices/Neural Science	Berberi, Combs, Yoshida, Schild	Goodman	Y. Chen, Li, Anwar, Yang, Freije, Izadian					
Power Systems		Dos Santos, Rovniak, Izadian, Goodman	Dos Santos, Izadian					
Electro-chem/Batteries/Fuel Cells		Xie, R.Chen						
System Design, Modeling & Analysis				Hylton, Raymond	McLaughlin, Frank			
Modeling/CAD/CAE/CAM/BIM			Acheson	Raymond	Cowan, Nicholson, White			
Materials	Higbee, Lin, Xie	Jones, Zhang	Dillager		Iseley, Koo			
Mechanics/Mechanical	Ji, Na, Wallace, Yokota, J. Chen, Katona, Salehpoor	J. Chen, Fu, Razban, Salehpoor	El Mounayri, Tovar, Wasfy, Durkin	Hylton, Raymond		Wasfy		
CFD/Fluids	Zhu	Zhu	Nalim, Yu, Durkin			Nalim, Yu		
Combustion/Energy Conversion		Schubert, Goodman	Nalim			Nalim		
Manufacturing/Quality/Process Efficiency & Improvements	Rennels	Goodman	Durkin, Silvian, Yearling					
Education/Instruction/STEM		Huffman	Tabas, Diemer, Feldhaus, Little-Wiles, Mott, Sorge, Worley, Fernandez		Nicholson, Frank		Shayesteh, Bailey, Choe, Cooney	
Entrepreneurship								Jafari, Zhao
Behavioral/Leadership/Human Resources/Training	Burns, Christie	Fox	Hundley, Egan, Markoff, Wolter					
IT/Graphics/Technical Communications	Renguette		Hovde, Renguette, Worley				Munson, Baldwin, Guan, Guy, Rogers	
			Nicholich	Finch	Ray			

Research Committee

Research Areas	History/Background and Evidence of Effectiveness/Capability	Peer and Aspirational Benchmark Programs or Institutions	Future Trends or Direction	Potential Collaborators and/or Sources of Support/Funding
Health & Life Sciences				
Advanced Mfg/Transportation				
Information Technology				
STEM Education				
Renewable and Alternative Energy				
Aerospace & Defense				

Diversity Retention and Recruitment

Cindy Munerol

- Membership (combined two sub-committees)
 - Cindy Munerol, Chair - Former AT&T
 - Vince Newsom - Delphi
 - Clayton Nicholas – IUPUI
 - Chris O’Keefe – Ernie Greene Industries
 - Neal Montour - Belcan
 - Terri Talbert–Hatch – Asst. Dean Student Services
 - Julie Ji – IUPUI
 - Darrel Nickolson - IUPUI
 - Student Representatives from NSBE, SHPE and SWE

Focus for 2014

Targeting increased enrollment and retention of females with three pronged strategy.

- **Website** - Improve ET Website to attract young female students. Template currently under review.
- **Programming**- Effort to retain current students in E&T programs. *Connection* event is the first item in this area. Also looking at increasing involvement in SWE, tutoring, etc.
- **Recruitment** –Work with Admissions office to purchase additional data lists for recruiting. Target females on visit days. Obtain historical data to establish baseline. Multiyear effort with long-term payoff.

Status

- Met on January 29 and meetings are scheduled through July of 2014
- Connections Event held February 13
 - Total of 60 students and alumni at event
 - Tours of Tower
 - Great event for interaction between students and alumni
- Check out the posters in hallway outside the Student Services office in the ET Building.
- Working to get historical data for measurement purposes
- Meeting set with Office of Diversity, Equity, & Inclusion director in April

DIAC Student Support Committee

- Membership
 - Jill Mendoza – i.d.o. Inc.
 - Sohel Stanbouly – Carrier
 - Mike Martin – Lilly (New Assignment in China)
 - 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/Activity*

- *Increase the number of opportunities for student interaction* – Develop a DIAC communications plan
- *Increase the number of opportunities for internships or recruitment with DIAC member firms*
- *Make proposals on how to improve “marketability” and employment opportunities for students with 2.6 – 2.9 GPAs* – Mentoring 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.
- Coordinate efforts with DIAC Diversity, Recruitment & Retention Committees

Mentoring for Gap Students

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**Emphasis on careers with Industry Coach
Office of Career Services held call outs
Six (6) Students expressed interest**

- 1 Computer Graphics**
- 1 Motorsports**
- 1 Biomedical**
- 1 Energy**
- 2 Mechanical**

Career Coaching Program Expectations

Industry Partner Profile aka “Your Elevator Speech”

February 27, 2014

Industry Partner Profile

- One of the best testimonials for the School comes from a member of industry.
- Members of industry have great reach within the community, professionally and socially.
- Your charge is to develop a brief “elevator speech” which succinctly describes your positive experience with the School of Engineering & Technology
- We will post on the School website, possibly make up a small brochure and use for promotion of the School when recruiting students, faculty, industry partners, research collaborators, etc.

Industry Partner Profile

Your favorable impression can come from:

- Your experience as a recent student
- Your experience with our interns or graduates as an employee, a supplier, a customer or a colleague
- Your experience sponsoring student projects
- Your experience collaborating on research
- Your experience serving on a DIAC Committee or attending School events
- Your knowledge of relatives or neighbors who went or are attending the School
- Your visibility into IUPUI and the difference it is making in the community
- Your knowledge of our faculty and a positive impression that they may have made on you or someone you know

Industry Partner Profile

We will need:

- **A photo of you (.jpeg file)**
- **Your brief elevator speech or bullets**
- **A photo of your product or project or company (.jpeg file)**
- **A brief write-up of your company**
- **A short bio on you**
- **A few bullets mentioning your education or accomplishments**

See examples!

Industry Profile

Frank St. John

President and Founder, Applied Engineering Services

“The new IUPUI is not your father’s IUPUI.”

You are missing the boat if you have not recently visited the IUPUI campus or interacted with one of their faculty members, engineering graduates, or co-op students. Let me know if you want to learn more about their research capabilities, engineering programs, or co-op opportunities. I would be pleased to connect you with the appropriate faculty member at IUPUI.



Engineering Better Lives Technology that Drives the Future



Company

Applied Engineering Services is an engineering solutions company providing mechanical, electrical, and instrumentation engineering services for the industrial, health care, higher education, and government markets since 1998. The goal and focus of Applied Engineering Services is to provide superior engineering services by utilizing a time-proven approach for delivering the right engineering solution for each project.

Mr. St. John has over 35 years of consulting engineering experience. He has been involved in numerous utility-related studies, master plans, and design projects involving chillers, pumps, cooling towers, air compressors, boilers, and heat exchangers. In addition, he also has extensive experience with a number of facility expansions and renovations for industrial, hospital, and higher education clients that have required HVAC, fire protection, plumbing, power, lighting, telecommunications, and building commissioning. As president of the firm, his current responsibilities include office operations, marketing, project management, and technical support.

Advisor

- Registered Professional Engineer - IN, OH, IL, MD, MI, AL, CA, TX
- LEED Accredited Professional
- Purdue School of Engineering and Technology, IUPUI, Alumnus of the Year, 2012

Education

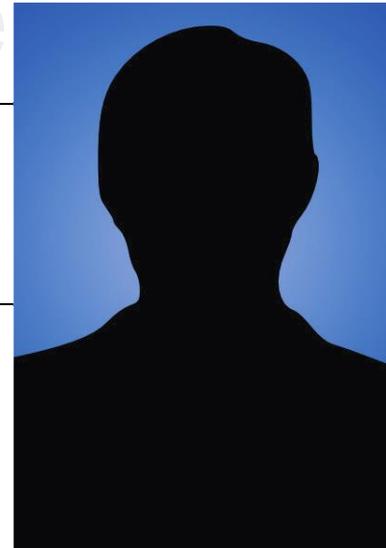
- Bachelor's of science degree in interdisciplinary engineering (mechanical option), Purdue School of Engineering and Technology, IUPUI

Industry Profile

Bill Klenk

Executive Director Off Highway and Hybrid Electric Products,
Allison Transmission, Retired

- Last year Allison employed more interns from the Purdue School of Engineering and Technology, IUPUI than any other institution
- Our experiences with the interns from IUPUI has really exceeded our expectations
- The IUPUI interns match up very well with students from all other engineering schools



Engineering Better Lives Technology that Drives the Future



Company

Allison Transmission is the premier global provider of commercial-duty automatic transmissions and hybrid propulsion systems. The quality and reliability of an Allison transmission is unrivaled, as is our commitment to our customers, investors, employees and the communities around the world in which we live and work. Throughout our long history, Allison Transmission has been a leader in innovation, creativity and continually pushing toward new advances in technology. Our heritage, starting in 1915 with James Allison, has been strong and steady throughout the decades that we've been creating fully automatic transmissions. We were there from the beginning, with the invention of the world's first heavy-duty automatic transmission, and even now Allison is the premier designer, developer and manufacturer of medium- and heavy-duty fully automatic transmissions and hybrid propulsion systems.

Advisor

- Received 2004 SAE Sid Olsen Engineering Manager Award
- Member of the Dean's Advisory Council, Krannert School of Management, Purdue University
- Member and former Chair, Dean's Industrial Advisory Council, Purdue School of Engineering and Technology, IUPUI

Education

- Bachelor's of science degree, Purdue University, Krannert School of Management
- Graduate of Lacy Leadership Program
- Graduate, University of Michigan Executive Development Program

Dean's Report to the DIAC

**Purdue School of Engineering and
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Important Dates 2014

- February 27, Thursday: DIAC Meeting, 1:45 – 3:30 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 Continued
Contributions !***