

Purdue School of Engineering and Technology

Dean's Industry Advisory Council

June 5, 2008

Indiana University Purdue University Indianapolis

Agenda

- **Meeting Convened (Clayton Nicholas, Chair)**
 - Introduction of new members
 - Scott Peer, Hill-Rom
 - Dr. Malcolm Thomas, Rolls-Royce
 - 2008 Goals & Pulse Check
- **The New Indianapolis Airport (Dale Jacobs)**
- **Subcommittee Reports**
 - General Administration - Dale Jacobs
 - Industry Resources and Networking – Craig Edlin
 - Research – Wayne Eckerle
 - Diversity, Retention and Recruitment – Vince Newsom
- **IPS Internship (Ms. Donna Chastang)**
- **Career Services (Josh Killey)**
- **School Update (Joe Abella)**
- **Wrap-Up, Adjourn and Networking**

Themes for 2008

- Re-examine DIAC Mission, Vision and Activities
 - Based on School's Strategic Plan
 - Members to be fully acquainted with objectives
 - Re-energize & restructure sub-committees
- Expand on Diversity and Innovation
- Promote the School's capabilities and successes
- Increase mutual awareness of School and member companies
 - Some DIAC meetings at company sites

So how are we doing?

The New Indianapolis Airport

Dale Jacobs

BSA Life Structures

Subcommittee Status

- General Administration - Dale Jacobs
- Industry Resources and Networking – Craig Edlin
- Research – Wayne Eckerle
- Diversity, Retention and Recruitment – Vince Newsom

Sub Committee Report to DIAC

June 5th, 2008

Stated Charter

- Vehicle to achieve continuity in DIAC leadership
- Led by DIAC Chair Elect
- School Infrastructure & Operation
- Indoctrination of new DIAC members
- Membership terms & attendance

Subcommittee Members

- Dale Jacobs- Vice Chair
- Karl Kuehner
- Cindy Munerol
- Cary Marston

**GENERAL ADMINISTRATION SUBCOMMITTEE
TASK CHECKLIST**

- Appoint Vice-Chair for Next Term
- Establish Bench Marking Questions
- Submit BM Questions to Outside DIAC's
- Receive BM Responses
- Evaluate & Suggest Changes to DIAC
- Chairman Term (one or two years)
- DIAC Membership Commitment
- Required Attendance for Members
- Membership Spectrum
- New Member "Training"
- ICHE Report Review & Comment
- New Member Review & Recommend to ExComm
- Development of Five-Year Plan for DIAC

Industry Resources and Networking

Subcommittee Report

to

DIAC

June 5, 2008

Craig A. Edlin
Subcommittee Chair

Subcommittee Membership

- Craig Edlin
- Brad Wuerch
- Bill Klenk
- Mike Cyb
- Richard Pfile
- Joe Abella

Review – Conference Call June 3

- Brainstorming...
 - How can we improve DIAC attendance?
 - How can we improve DIAC meetings, in terms of...
 - Venue
 - Subject matter
 - Etc.
 - How can DIAC members get better acquainted with other DIAC members and their companies?
 - How can the DIAC website be improved?

Conference Call Takeaways

- Observation – DIAC has evolved into a reporting meeting
 - Suggest more emphasis on seeking/giving of advice – bidirectional communication
 - Need an environment of no-holds-barred discussion
- Observation – Not many strong working relationships between DIAC members
 - Suggest encouraging small groups/coalitions to bring political will to the advisory function

Conference Call Takeaways (cont.)

- Observation – Not much DIAC member interaction outside of the formal DIAC meetings
 - Suggest one-on-one meetings with the Dean and DIAC members (Could be two or three-on-one)
- Observation – Encourage more up-front involvement of DIAC on problems and issues
 - Suggest DIAC members attend various departmental planning sessions
 - Suggest that the college “float out” ideas to DIAC members as “trial balloon”

Conference Call Takeaways (cont.)

- Observation – DIAC members need better connection to students to monitor “the product” that is produced!
 - Suggest – one-on-one mentoring or group mentoring

DIAC needs to spend time with the product (students) to see if the product quality meets industry needs and quality standards!!!

Conference Call Takeaways (cont.)

- Observation – DIAC website is convenient for occasional reference but not actively used
 - Suggest – more of a Sharepoint collaborative resource is possible but would require substantial work

Where do we go from here?

- VO DIAC – “Voice of DIAC”
- Each Subcommittee member will call or meet with 4-5 DIAC members to seek input to the “four

Expect a Call!

- Individual or group meetings
- Timeframe – now to mid-summer
- Rollup of input and presentation to the Dean – late summer

Sub Committee Report to DIAC

Wayne Eckerle

June 5th, 2008

Research Subcommittee Agenda

Continue to advise and guide research activities of the School, especially collaboration with Industry

- Agenda Items for DIAC Research Subcommittee for 2008
 - Guide Industry Relations research marketing plans
 - ☑ Help define School competitive advantage and research strategy
 - ✓ Critique Engineering Professional Practice Plan
 - Work with department Industry Advisory Boards to establish focal points from industry to help with departmental research plans
 - Critique Departmental Research Plans
 - ☑ Review concepts for the proposed Innovation Center

Research Committee

- Membership
 - Wayne Eckerle – Cummins
 - Jorg Schreiber – Quadraspec
 - Bernie Sepaniak – D&M Holdings
 - Jim Wheeler – Thomas P. Miller & Assoc.
 - Bill Wylam – Electricore
 - Joe Kitterman – Oxygen Education
 - Hasan Akay – Chair, Mechanical Engineering
 - Yaobin Chen – Chair, Electrical & Computer Engineering
 - Andrew Hsu – Associate Dean for Research & Graduate Programs
 - Joe Abella – School Director of Industry Relations

Research Committee

- Last met on Tuesday, April 8
- Agenda Items for June meeting
 - Review of School Department Research Plan Template
 - Discussion of Technology & Export Control
 - School wants to update procedures in this complex area
 - Needs to include the industry perspective
 - Mission of a university is to discover and disseminate knowledge
 - “Right to Publish”
 - Company sponsors often desire to control technology
 - Gain & maintain competitive advantage
 - US Government controls the export of dual use and military technology
 - EAR Export Administration Regulation
 - ITAR International Traffic in Arms Regulation
 - Need to address all interests

Diversity, Recruitment & Retention Committee Update

IUPUI

SCHOOL OF ENGINEERING
AND TECHNOLOGY

A PURDUE UNIVERSITY SCHOOL
Indianapolis

- Committee:
 - Vince Newsom
 - Frank St. John
 - Sam White
- Met once since last update:
 - Update from Patrick Gee on his programs
 - Reviewed metrics

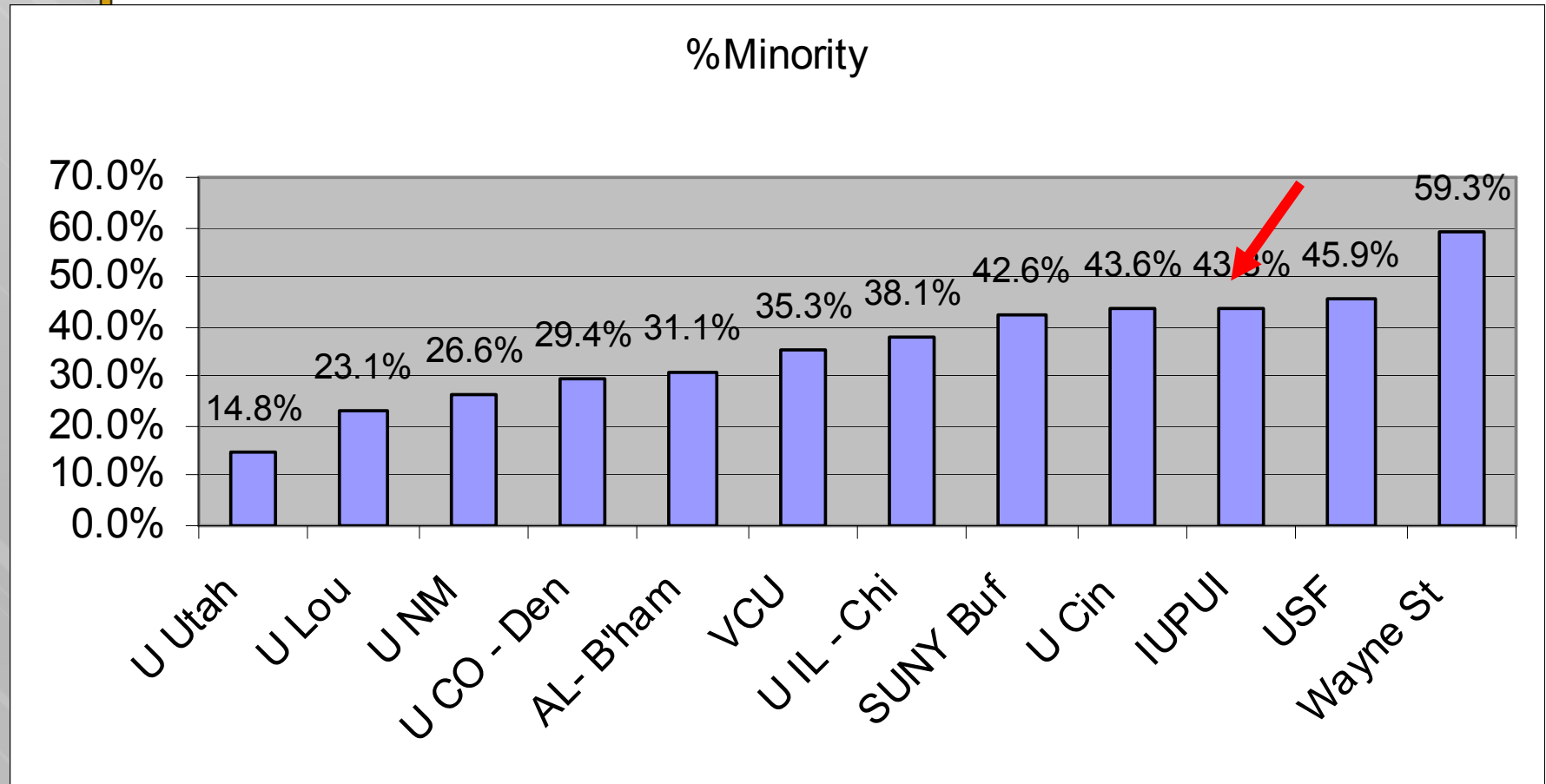
Diversity, Recruitment & Retention Committee Update

Guide and advise the school on DRR matters by..

- ✓ Reviewing of goals and metrics
- ✓ Recommending and supporting programs and activities
- Critiquing schools activities and initiatives
- Providing an industry perspective
- Providing a link to the school's Diversity Council

Full-time Faculty-Tenure track

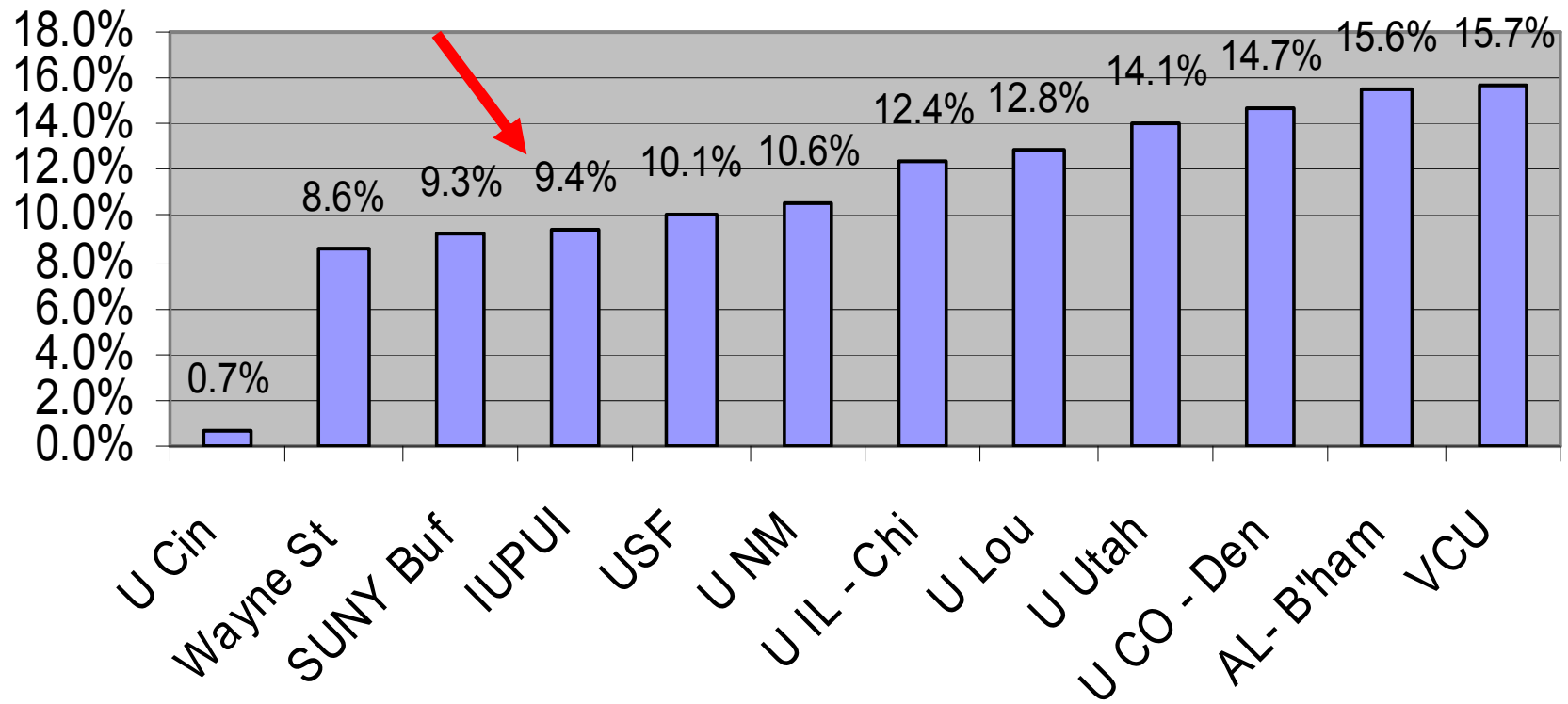
Full, Associate, Assistant Professor



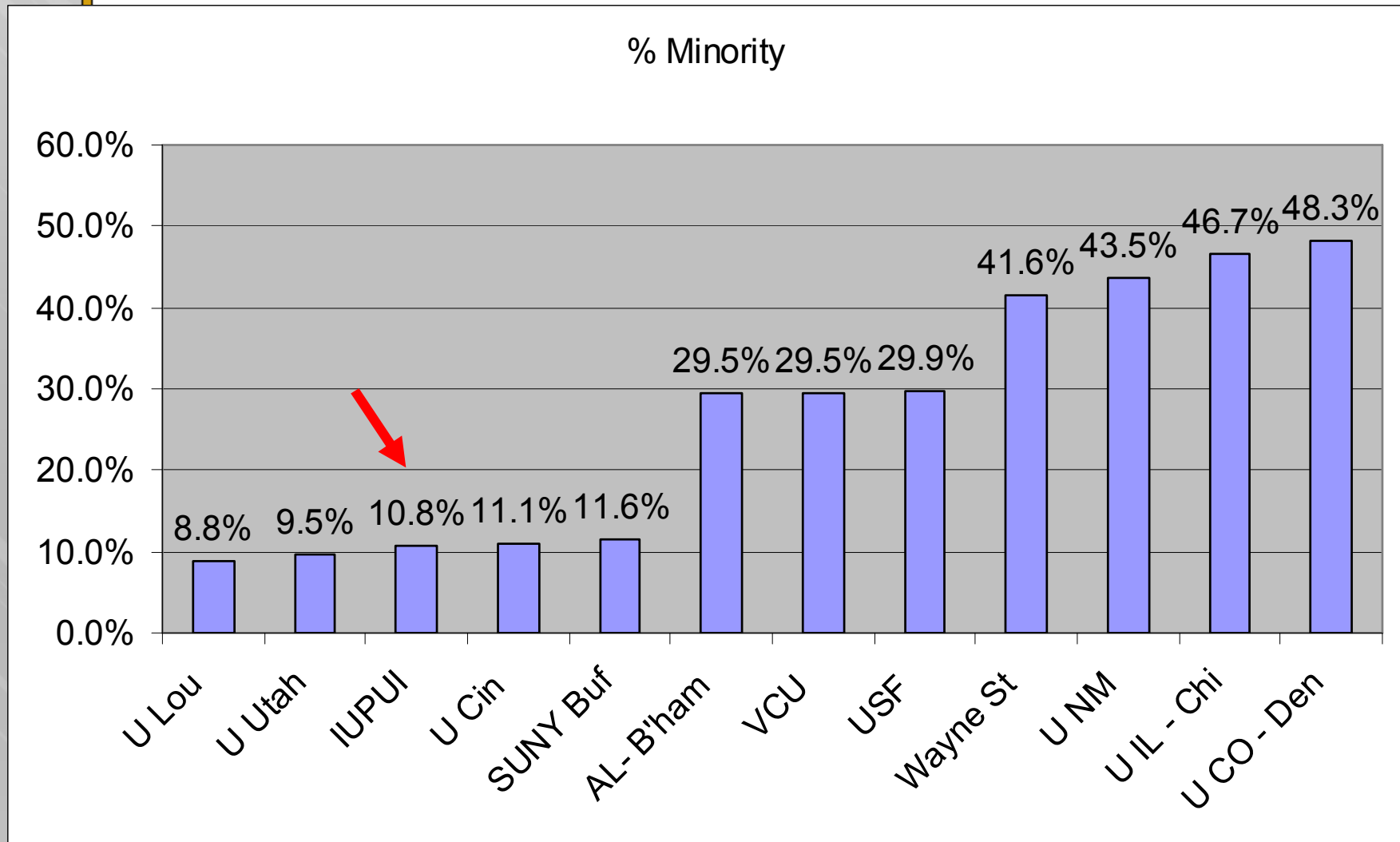
Full-time Faculty-Tenure track

Full, Associate, Assistant Professor

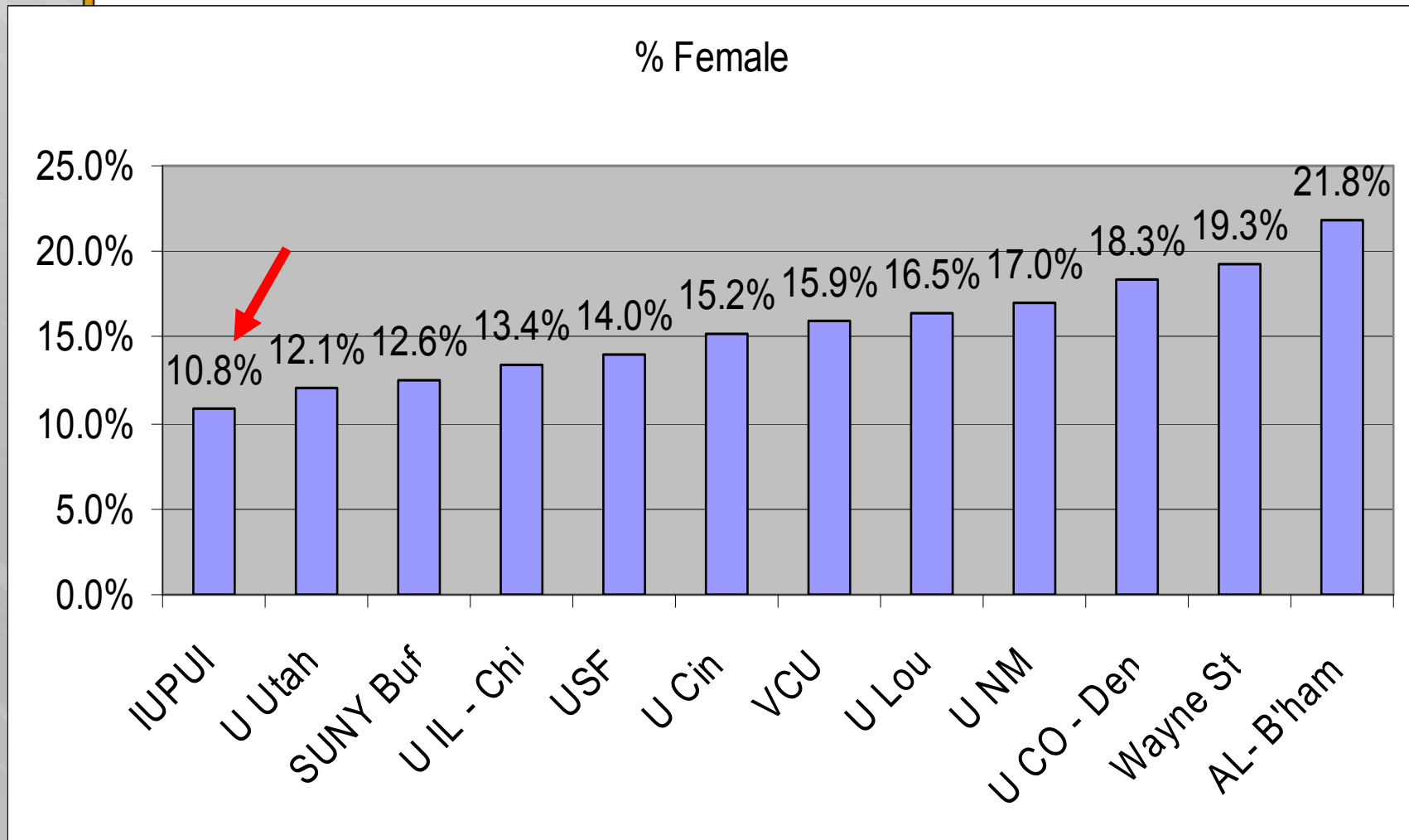
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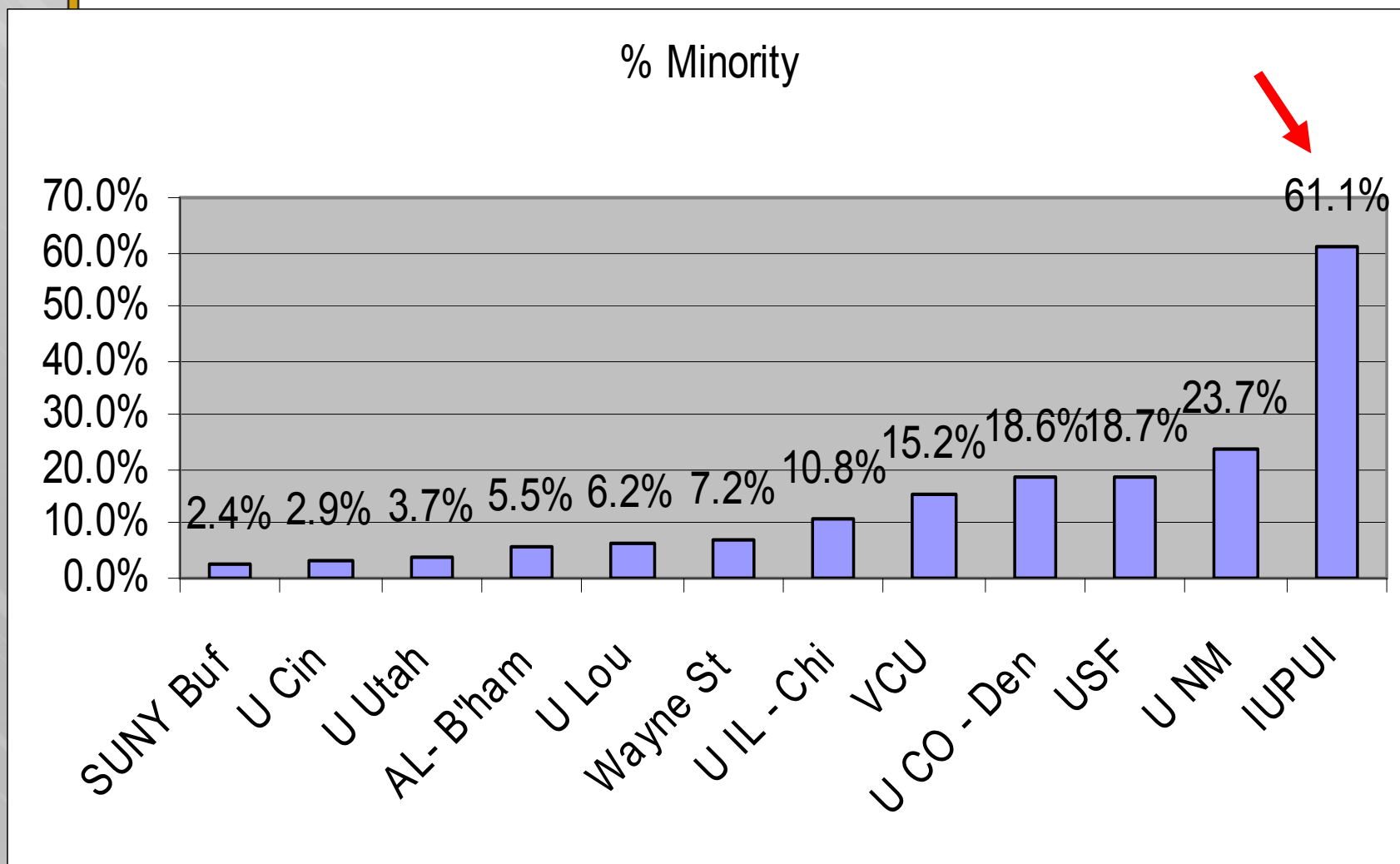
Full-time 1st Year Enrollment



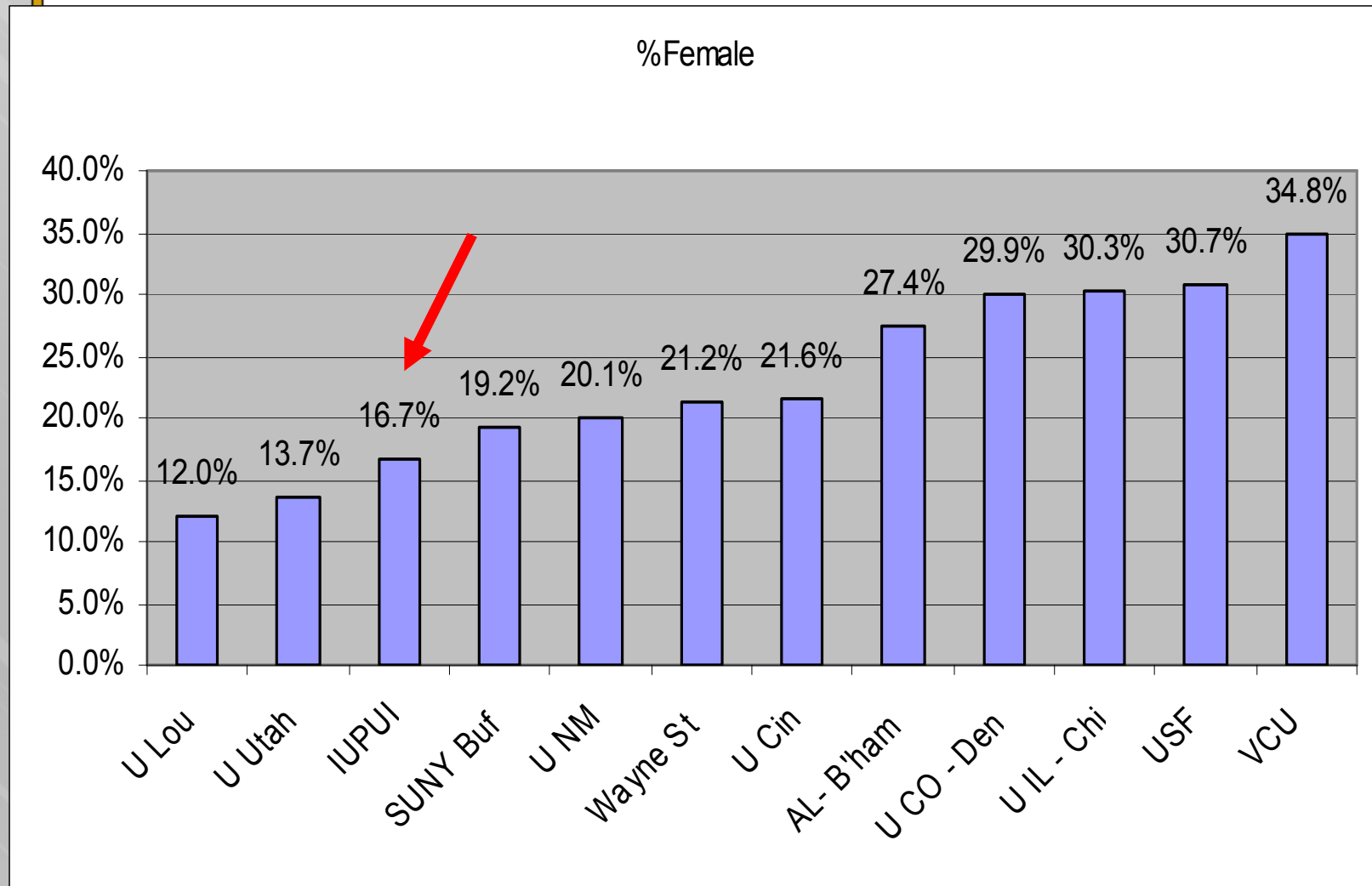
Full-time 1st Year Enrollment



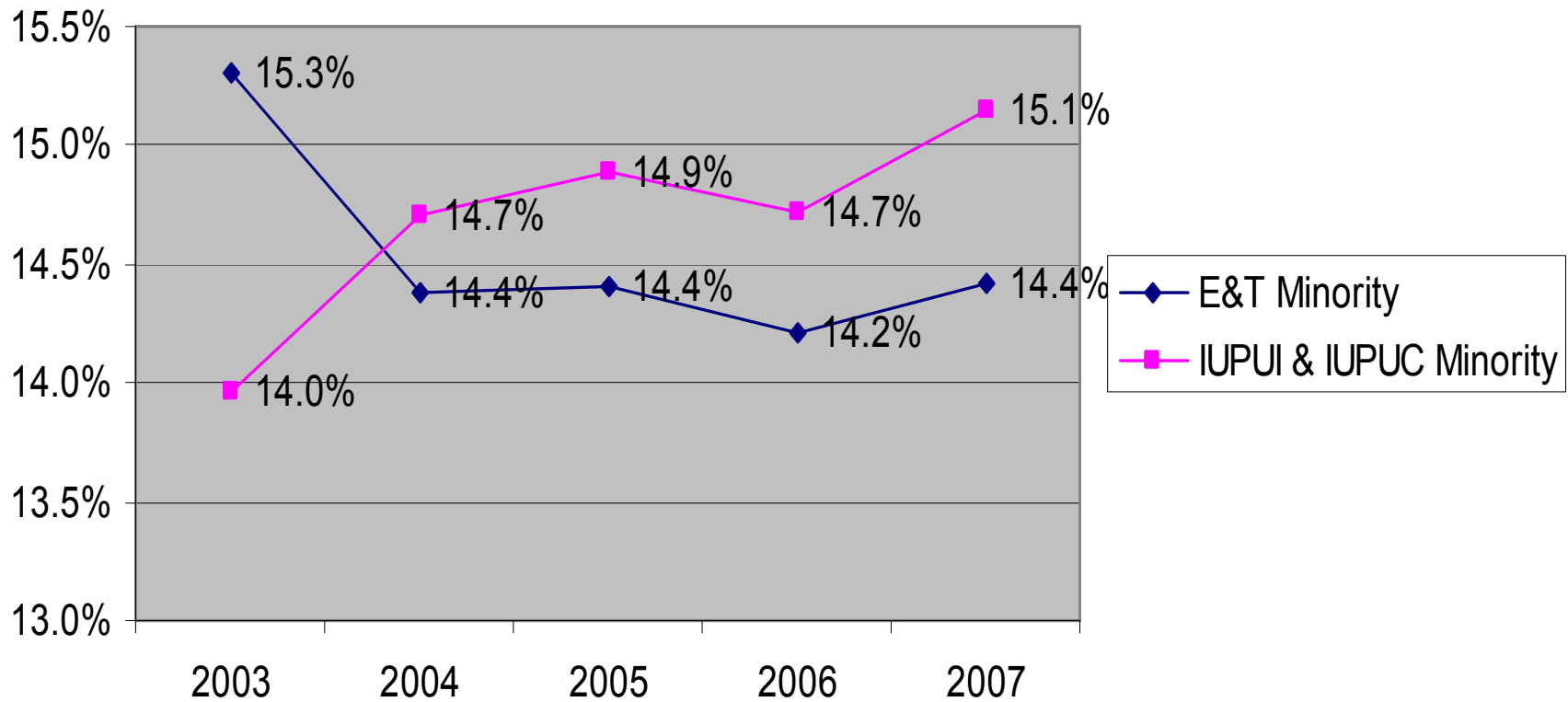
Full-time Graduate Enrollment



Full-time Graduate Enrollment



E&T vs. IUPUI/IUPUC Minority Enrollment



Engineering & Technology Retention

	2002	2003	2004	2005	2006
<i>African American</i>	72%	76%	71%	67%	69%
<i>American Indian/Alaskan Native</i>					
<i>Asian/Pacific Islander/Hawaiian</i>	85%	75%	80%	76%	81%
<i>Hispanic</i>	62%	63%	73%	74%	80%
<i>International</i>	76%	80%	82%	77%	88%
<i>White</i>	74%	73%	76%	76%	76%
<i>Others/Unknown ethnicity</i>		57%	65%	83%	79%
<i>Total Headcount</i>	74%	73%	76%	76%	76%

Summer Programs

Indiana Summer Transportation Institute (ISTI)

- What: Indiana Summer Transportation Institute. This 5-day enrichment program is designed to create awareness and stimulate interest in the opportunities that exist in the transportation industries.
- When: Monday June 9th – Friday June 13th
- Where: IUPUI campus in downtown Indianapolis
- Participant Cost: Free to IPS students
- Website: <http://www.engr.iupui.edu/isti/>

Summer Programs

Minority Engineering Advancement Program (MEAP)

- **What:** The Minority Engineering Advancement Program (MEAP) was designed to identify minority students who are talented in mathematics and science and then introduce them to exciting educational opportunities in engineering and technology related fields.
- **When:**
 - **Workshop 1, Monday June 23 – Friday June 27, 2008 (Grades 9,10, and 11)**
 - **Workshop 2, Monday July 7 - Friday July 11, 2008 (7th grade returning students and 8th grade new and returning students)**
 - **Workshop 3, Monday July 21 – Friday July 25, 2008 (6th grade and 7th grade students new to the program)**
- **Where:** IUPUI campus in downtown Indianapolis
- **Cost:** \$60
- **Website:** <http://www.engr.iupui.edu/meap/>

Summer Programs

Pathways to Engineering Summer Camp

- What: A three day, fun-skilled camp experience promoting engineering ideas, computer skills, critical thinking, and teamwork for Engineering Magnet bound IPS students.
- When: Monday June 30th – Wednesday July 2nd
9:00 AM to 3:00 PM
- Where: IUPUI campus in downtown Indianapolis
- Cost: No fees. All materials provided. Transportation provided. Lunch provided.

Summer Programs

Preparing Outstanding Women for Engineering Roles (Power)

- What: The Preparing Outstanding Women for Engineering Roles (POWER) Summer Camp gives you the opportunity to explore engineering through hands-on, learn-by-doing experiences.
- When: June 15th – June 21st
- Where: IUPUI campus in downtown Indianapolis
- Cost: \$100
- Website: <http://www.engr.iupui.edu/power/>

Summer Programs

Project Lead the Way

- **What:** Students are given the opportunity to earn scholarships and college credit. To earn college credit, students must apply and be admitted to the Purdue School of Engineering and Technology, IUPUI. Students must meet with an academic advisor in the school and provide evidence of successful completion of the appropriate high school course(s). The university classes will be added to the student's college transcript and applied toward the plan of study at no cost to the student.
- **When:** Now!
- **Where:** IUPUI campus in downtown Indianapolis
- **Cost:** No cost with a savings of \$592.38!!
- **Website:** <http://www.engr.iupui.edu/prostu/PLTW.pdf>

Scholarships

Project Lead The Way (PLTW) Scholarships

- **Computer Graphics Technology PLTW Scholarship**
- **Mechanical Engineering Technology PLTW Scholarship**
- **Construction Technology PLTW Scholarship**
- **Electrical and Computer Engineering Technology PLTW Scholarship**

Proposed

IUPUI E&T SAT Preparation

- **IUPUI wants to host SAT preparation and training for existing MEAP high school students**
- **Goal: Improve SAT scores and prepare students for tests**
 - **Due to national SAT test score results, minority students are in the 1%-2% range of being admitted to higher ranked institutions.**
- **Collaboration with IPS, IUPUI E&T & Education**
- **Budget: \$13,200**

IPS Teacher Internship

Ms. Donna Chastang
Developing Engineering Teacher
Harshman Middle School
Indianapolis Public Schools

chastand@ips.k12.in.us

**Office of Career Services &
Professional Development
Josh Killey**

June 5th, 2008

Dean's Report for DIAC

June 5th, 2008

IU and IUPUI News

- Campus Master Plan is progressing well.
- Detailed space plans for IUPUI Innovation Center are in the works.
- Campus agreed to be one of the sponsors of Sarah Fisher Racing for Indy 500.

School News

- Fall 2008 enrollment is up
 - Headcount +7.1%
 - Credit hours +4.2%
- Motorsports Engineering-BS degree program approved May 9 at the Indiana Commission for Higher Education meeting.
 - Campus provided some base funds to jump start the motorsports program.
 - Program will start admitting students in fall 2008.
 - Looking for internship positions in motorsports or related industries
 - Internships are mandatory.

School (cont'd)

- The School of Music at IUPUI will join our school effective July 1, 2008 as Department of Music and Arts Technology.
 - 15 full-time and 25 part-time faculty members
 - 5 full-time staff
 - 75 MS students (MS in Music Technology)
 - 11,000 student credit hours per year
 - BS in Music Technology degree is pending approval.
 - All degrees from this department will be IU degrees.

School (cont'd)

- This year (May and August 2008) our school awarded 568 degrees
 - 114 AS (Technology)
 - 281 BS (Technology)
 - 7 BSBME
 - 10 BSCmpE
 - 34 BSEE
 - 46 BSME
 - 7 MSBME
 - 32 MSECE
 - 26 MSME
 - 3 MSE
 - 8 MS (Technology)
- In addition, awarded 102 certificates.
- Graduated 7 dual degree students with Butler University.

School (cont'd)

- 34th Bepko Honors Convocation held April 11 at the Crowne Plaza Hotel.
 - Over 400 guests attended
 - Recognized 170 students and 15 faculty & staff
 - School gave out awards and scholarships totaling \$177,000.
 - Same group of students received additional \$292,000 from campus this academic year.
 - Distinguished Alumni Award went to Bret Barnhart (BSME 1981).

- Spirit of Philanthropy Luncheon took place on April 17 at the Campus Center.
 - School recognized Omni-site.net
 - web-to-wireless telemetry company
 - products and services for remote control and monitoring of equipment & machinery.
 - Additional recognition went to Robert and Marjorie Begeman
 - established the Robert and Marjorie Begeman Scholarship for deserving international students from developing countries in the continuation of their education.

Important Dates

- September 11, 2008 DIAC Meeting, TBD, 3:30 – 5:30 p.m.
- September 12, E&T Golf Outing, Saddlebrook Golf Course, Registration 11 AM; Start 12:30
- October 17, 2008: Joint Board of Advisors Retreat, TBD, 12:00 p.m. – 5:00 p.m.
- December 4, 2008: DIAC Meeting, TBD, 3:30 – 5:30 p.m.