Friends of PACE,

Welcome to the 17th Annual PACE Research Seminar. Held annually, this seminar is a forum for interaction and exchange of ideas between industry, students, and faculty. We are delighted that you could join us for this discussion and learning experience.

The theme for this year is *Investing in People*. Topics for discussion focus on the following areas: Energy and the Economy, Investing in Teams, BIM-strategies, and BIM-Tech Case Studies. During each session, there will be presentations from both the university and industry communities. Select students will present results from their research projects, and you will hear from industry members with relevant occupations and experiences. Throughout the seminar, you will have several opportunities to interact with your industry colleagues and the senior class to discuss their research work.

At the conclusion of the seminar, please take some time and complete the seminar evaluation form located on the last page of this booklet. Please make sure to comment on ideas for student research that is critical to your business. This information will help next year’s students in discovering topics for further research.

Thank you for supporting our students.

David Riley
Director, PACE
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Tuesday April 21st – Agenda

9:00 a.m.  Registration for Annual PACE Golf Outing  
            Penn State Golf Courses

10:10 a.m.  Golf Outing Begins  
            White Course

6:00 p.m.  Registration and Opening Reception  
            Deans Hall 1&2

6:30 p.m.  Welcome Address and Banquet

7:30 p.m.  Awards Presentation
            Hettema Leadership Awards
            PACE Excellence Award  
            Mr. Michael Miller, Southland Industries
            PACE Hall of Fame Inductee  
            Mr. William Moyer, Davis Construction

7:45 p.m.  Speaker  
            Mr. Gregg Garrity, All Hands on Deck Construction  
            1982 National Championship Penn State Football Team
WEDNESDAY APRIL 22ND – MORNING AGENDA

All events on this day will be held in President’s Hall I, unless otherwise specified.

7:00 a.m.  CONTINENTAL BREAKFAST

8:15 a.m.  KICK-OFF AND PLENARY ADDRESS
Energy Leadership and Innovation
  Mr. Larry Eisenberg, Los Angeles Community College District

  Green Schools
  Maria Piergallini, 5th Year AE-CM Student

  Owner Engagement in LEED
  Charlie Miller, 5th Year AE-CM Student

  Pushing LEED Forward
  Mr. Steve Maruszewski, Penn State

9:45 a.m.  BREAK AND POSTER SESSION

10:15 a.m.  ENERGY AND THE ECONOMY
AE-CM Senior Thesis Finalist
  Lindsay Hagaman, 5th Year AE-CM Student

  Demand Response Systems
  Adam Houk, 5th Year AE-CM Student

  Chilled Beam Case Study
  Dan Weiger, 5th Year AE-CM Student

11:00 a.m.  BREAK AND POSTER SESSION

11:15 a.m.  INVESTING IN TEAMS
Emotionally Intelligent Teams
  Mike Webb, 5th Year AE-CM Student

  Tightening the Ship
  Brent Darnell, Brent Darnell International

  AE-CM Senior Thesis Finalist
  Ralph Kreider, 5th Year AE-CM Student

12:15 p.m.  LUNCH IN THE GARDENS RESTAURANT
WEDNESDAY APRIL 22\textsuperscript{ND} – AFTERNOON AGENDA

All events on this day will be held in \textit{President’s Hall 1}, unless otherwise specified.

1:30 p.m. \textbf{BIM STRATEGIES}
3D Laser Scanning
\textit{Mr. Joe Romano, Langan Engineering}

AIA Headquarters Renewal
\textit{Mr. Tom Krajewski, DPR}

Collaboration and Media
\textit{Mr. Rob Leicht, AE Graduate Student}

2:30 p.m. \textbf{BREAK AND POSTER VOTING}

2:45 p.m. \textbf{BIM-TECH CASE STUDIES}
Field Technology
\textit{Jeramy McGrath, 5\textsuperscript{th} Year AE-CM Student}

BIM Case Study
\textit{Chris Renshaw, 5\textsuperscript{th} Year AE-CM Student}

BIM Execution Planning
\textit{Shawn Goodman, 5\textsuperscript{th} Year AE-CM Student}

3:30 p.m. \textbf{CLOSING STATEMENTS}
Summary, Adjourn
Gregg Garrity is a former professional wide receiver in the National Football League for the Pittsburgh Steelers and the Philadelphia Eagles. He played college football at Penn State University. In 1981, he led the Nittany Lions in receptions and became the second Penn State player ever featured on the January 1983 cover of *Sports Illustrated*. He was a member of first National Championship team at Penn State and he caught the winning touchdown in the Sugar Bowl against Georgia to clinch the title. Gregg received his bachelor's degree from Penn State in 1983.

Now making his home in Wexford, Pennsylvania, Gregg owns and operates "All Hands On Deck" renovation firm. The company which began with decks and exterior structures has expanded to additions and renovations including plumbing, electrical and roofing. Gregg has been married for 21 years to Linda. Their daughter, Samantha, is 18 years old and deciding on colleges now and their son, Gregg, Jr. is 14 years old.
Mr. Larry Eisenberg

Executive Director, Facilities Planning and Development

Larry Eisenberg is Executive Director for Facilities Planning and Development for the Los Angeles Community College District. LACCD is the largest community college district in the United States and is currently implementing a $5.7 billion construction and renovation program under Larry’s supervision. In this capacity, Larry oversees all planning, facilities development, maintenance and real estate activities of the District. The hallmark of the LACCD program is its commitment to sustainability, making it one of the largest sustainable development programs in the world at the present time.

Larry currently serves on the sustainability advisory committees of several national organizations including the American College and University Presidents Climate Commitment, the Association for the Advancement of Sustainability in Higher Education, and The National Association of College and University Budget Officers.

Larry received a Bachelor of Science in Urban Studies from the Massachusetts Institute of Technology, and a Master of Public Affairs from the LBJ School of Public Affairs, part of the University of Texas at Austin. Larry was born and raised in the San Fernando Valley. He attended North Hollywood High School. Larry is married and has a 29-year-old son, who presently lives in the Seattle area.

Presentation Abstract

Years in development, the LACCD, the largest community college district in the United States, is currently implementing a comprehensive strategic plan to achieve climate neutrality in 2009. Through the use of cutting edge renewable energy generation and energy storage technology, the LACCD will be supported 100% by non-carbon based energy. Innovative financing techniques that have allowed this to occur at no additional capital cost with a reduced overall energy operating budget.
Mr. Brent Darnell
Brent Darnell International

Brent Darnell is a leading authority on emotional intelligence and a pioneer in its use in the construction industry. Over the years Brent has helped to improve the social competence and leadership skills of thousands of people in over 70 companies in more than 20 countries around the world. His book, The People-Profit Connection, How Emotional Intelligence Can Maximize People Skills & Maximize Your Profits, has sold thousands of copies around the world. He believes in a holistic approach to personal development, creating fundamental and lasting change. Brent is a graduate of the Georgia Institute of Technology. He practices yoga and tai chi, and is an avid reader. He lives in Atlanta, Georgia with his wife Andrea and their dog Ginger.

Presentation Abstract

Tightening Up the Ship: Quality and Productivity

When you run a tight ship everyone works together, following the captain’s orders, each playing their individual role, but with the capability of stepping in for others when they are needed in a different capacity. While this is the ideal way to run a company, how many times does work-in-place have to be removed because of other work that has been installed out of sequence? How many times do we improperly handle the architect’s and the owner’s expectations only to be ambushed during closeout and forced into reworking the finishes? The Construction Industry Institute’s research estimates that re-work costs on average 3% of total construction costs. Find out how relationships can improve quality and productivity on your projects and tighten up your ship.
Steven Maruszewski is the Deputy Associate Vice President for Physical Plant at Penn State University. His responsibilities include overseeing the operations and budgets associated with the Office of Physical Plant which has a staff of over 1300 professional, technical and administrative employees. He is also the chair of the University’s Environmental Stewardship Strategy, is a co-leader of the Universities Integrated Capital Planning system development and is responsible for developing and executing a plan to address the campus deferred maintenance and capital renewal needs. He is a Penn State graduate from the Architectural Engineering program, worked as a consulting engineer for major Architectural Engineering firms and was a principal in two mechanical electrical consulting firms prior to joining Penn State.
Mr. Tom Krajewski,  
P.E., DBIA, LEED AP

Mr. Krajewski is a project executive for DPR Construction, Inc., a forward-thinking national general contractor and construction manager specializing in technically challenging and sustainable projects.

With over 28 years in the construction industry, Tom has worked throughout the United States on projects ranging from high-rise buildings to interior renovations, specializing in healthcare, corporate office and biopharmaceutical projects utilizing various collaborative project delivery methods. Over the past twelve years, he has focused on healthcare renovation projects in California and Virginia, and he is currently leading the team for AIA Headquarters Renovation, one of the most significant IPD projects in the eastern United States. Coupled with his extensive design-build experience, he has successfully integrated DPR’s IPD systems and methodologies and is helping to change owners’ expectations, subcontractor attitudes and worker productivity within the construction industry in the metropolitan Washington, DC area.

Tom graduated from Purdue University with a degree in Civil Engineering. He is a registered Professional Engineer in the Commonwealth of Virginia and a Designated Design-Build Professional.

Contact Information  
DPR Construction, INC.  
2941 Fairview Park Drive  
Suite 100  
Falls Church, VA  
www.dprinc.com
Mr. Joseph Romano,  
Langan Engineering & Environmental Services

Mr. Romano has a broad range of experience in construction related fields. Starting his career as a title searcher, he developed his expertise working as a draftsmen, construction inspector, rodman and survey party chief.

His experience in land surveying includes topographic and boundary surveys as well as wetland location and delineation, G.P.S. Surveys, construction stake-out, monitoring, development of asbuilt site plans and ground control for aerial photography surveys. His experience in all phases of surveying procedures also includes: drafting, note reduction, historical record research, deed analysis, dimensional control and sub-division plans, and preparation of legal property descriptions. Mr. Romano is responsible for developing and implementing proprietary survey software used on Langan’s advanced CADD and computer systems.

As Director of Surveying and Manager of the Langan Survey Department, His areas of special interest include boundary law, G.P.S/G.I.S. technologies, scanning, and BIM modeling. As a member of various State and National societies he has lectured on advanced surveying technologies including High Definition Laser Scanning and its applications.

Contact Information
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River Drive Center 1
Elmwood Park, NJ 07407
201-794-6900
www.Langan.com
INDUSTRY STUDENT SPONSORSHIPS

We would like to thank the following companies for helping support student attendance.

Balfour Beatty Construction
   Mr. Jason Reece

Buch Construction
   Ms. Kristen Hlopick

Foreman Program and Construction Managers
   Mr. Michael Arnold

Forrester Construction Company
   Mr. Michael Barnhart

James G. Davis Construction Corporation
   Mr. Jonathan Dougherty

Turner Construction Company
   Mr. Mike Prioleto
S:PACE

S:PACE is the chapter of PACE which represents student membership. The goal of S:PACE is to help place quality construction management oriented students in full-time productive careers.

Membership in S:PACE offers the following opportunities to promote excellence in the field of construction through innovation, research, and interaction among students, faculty, and the industry.

S:PACE officers for the 2008-2009 academic year:

Matthew Smiddy, President  
Shane Goodman, Vice President  
Brittany Muth, Events Coordinator  
Natalie Bryner, Treasurer  
Justin Wingenfield, Placement Officer  
Ralph Kreider, Communications Officer  
Tom Horensky, 3rd Year representative  
Jonathan Rumbaugh, 2nd Year Representative

S:PACE officers for the 2009-2010 academic year:

Tom Horensky, President  
Brittany Muth, Vice President  
Jason Brognano, Events Coordinator  
Mike Gilroy, Treasurer  
Drew Heilman, Placement Officer  
Dan Preston, Placement Officer  
Matt Hedrick, Communications Officer  
Sonali Kumar, Graduate Representative  
Jonathan Raumbaugh, 3rd Year Representative  
Jeff Sopinski, 2nd Year Representative

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rlb5002@psu.edu  
jew5002@psu.edu  
rkg5000@psu.edu  
tdh5016@psu.edu  
jrr5114@psu.edu

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bnn5016@psu.edu  
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deh5022@psu.edu  
drp5014@psu.edu  
msh5020@psu.edu  
suk189@psu.edu  
jrr5114@psu.edu  
jds5326@psu.edu
The 17th Annual PACE Research Seminar

UPCOMING PACE EVENTS

PACE ADVISORY BOARD MEETING

June 4, 2009

Representatives from PACE Member companies meet to discuss key issues facing the building industry, and establish a research agenda for the next year.

PACE ROUNDTABLE

October 14-15, 2009

An open forum discussion in which key topics selected by the advisory board are discussed by students and industry practitioners. Specific and target research topics are defined to be pursued by research teams.

GENERATIONS REUNION 10-20-30

April 21, 2010


PACE RESEARCH SEMINAR

April 21-22, 2010

Held each spring, the research seminar combines presentations of research results and timely industry speakers for a diverse audience of building industry professional.
PACE MEMBER BENEFITS

LEADER
An annual contribution to the PACE program of $20,000 or more.

Benefits: In addition to the benefits of a Partner, Leaders will be recognized as named sponsors of a distinctive student program in the construction management and/or AE curriculum.

PARTNER
An annual contribution to the PACE program of $10,000-$19,999.

Benefits: In addition to the benefits of an Associate, Partners will be invited to participate in an annual Internship Workshop held annually for AE undergraduate students in conjunction with the PACE Roundtable meeting each Fall.

ASSOCIATE
An annual contribution to the PACE program of $5,000-$9,999.

Benefits: In addition to the benefits of a Donor, Members will be offered first right of refusal for a premium booth location at the AE career fair and will receive an annual invitation to provide a guest presentation in an AE course.

DONOR
An annual contribution to the PACE program of $1,000-$4,999.

Benefits: Free advertising in the form of the company name and logo included on the Active PACE Member list on the PACE website and an invitation to PACE Advisory Board Meeting where companies gain the ability to influence the direction of AE student research.
2008-2009 PACE Members

We would like to thank the following companies for their continued support of PACE:

Leaders

Balfour Beatty Construction
Penn State Office of Physical Plant
Southland Industries

Partners

Barton Malow Company
Benchmark Construction Company
Clark Construction Group
Forrester Construction Company
James G. Davis Construction Corporation
The Roofing Industry Alliance for Progress

Donors

Alexander Building Construction, LLC.
Brent Darnell International
EdiS Company
Foreman Program and Construction Managers
McClure Company
The Quandel Group
Reynolds Construction Management

Associates

Gilbane Building Company
Haskell Company
Hensel Phelps
Skanska USA
Tishman Speyer
Trammell Crow Company
# SEMINAR EVALUATION

Please complete the following questionnaire in order to help us plan future PACE activities.

## Indicate your status:

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<th>Attendee</th>
<th>Speaker</th>
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## Seminar Format

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## Organization

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List one topic for student research that is most critical to your business:

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

Please give one suggestion to improve this seminar:

________________________________________________________________________

________________________________________________________________________

If you are interested in becoming more involved with the PACE organization, please leave a business card with the word PACE written on the back.

**PLEASE RETURN THIS FORM AT THE REGISTRATION TABLE**