First and Foremost,

Thank you to all of our faculty, staff, and students for another outstanding year in which the quality, size, and impact of our programs have continued to grow.
Secondly, some congratulations:
Some of our Teaching Award Winners
Our Third Year of Winning the First Source Commercialization Award
Our Faculty and Students won 1st Place in the McCloskey Business Plan Competition
Cathy Pieronek Named Assoc Dean
Mike Shafer Selected as Hands-on Teaching Award Winner
Please Congratulate Eduardo Wolf

The Tony and Sarah Earley Professor of Energy and the Environment
Please Congratulate Ed Maginn

The Dorini Family Chair in Energy Studies
Overview of Talk

Where we are today + Where we want to be in 2020 + How do we get there = Strategic Plan
Where we are today...
Engineering and our Catholic Mission

Our mission is to strive to secure a common good corresponding to the *real needs* of our neighbors. “Every Christian is called to practice this charity, in a manner *corresponding to his vocation and according to the degree of influence he wields in society.*”

Pope Emertius Benedict XVI

*Caritas in Veritate*
At Notre Dame, consistent with our Catholic identity, we engineer a peaceful, healthy, and sustainable world.
Class of 2017

Largest Incoming Class in College History

Should Produce Over 400 Graduates

Up 70% Over the Last 8 Years
Engineering – World Class

① Computational and Data Science and Engineering
② Electronic Materials and Devices
③ Natural Hazard Mitigation
④ Flow Physics and Control
⑤ Sustainable energy: clean fossil, wind, solar, nuclear
⑥ Bioengineering
⑦ Biometrics
⑧ Wireless
Center for Low Energy Systems Technology

- 70 White Papers, 12 Proposals, 6 Centers awarded
- $30 Million over 5 years
- ND Team: Carnegie Mellon, Purdue, UCSD, UCSB, Berkley, Georgia Tech, UT Austin, UT Dallas, Penn State
- ND Lead: Alan Seabaugh
- 26 PI’s
- Focus: Energy efficient transistors for computing, sensor networks, portable healthcare, autonomous control…
- Sponsor: Semiconductor Research Corporation and DARPA
Engineering – Force for Good

Sustainable Housing in Haiti

Counterfeit Drugs in Africa

Chronic Diseases in Developing Countries

Bridges in Central America
Engineering – Force for Good

Natural Hazard Mitigation

Hydro Power in Nepal

Hybrid Microgrids in Africa

Hand-held Diagnostics in Developing Countries
Saint Joseph Scholarship Fund

- 9 New First-Year Students
- 5 Female, 4 Male
- All Top HS Performers
Where we want to be in 2020...
Improved Rankings

- NAE Faculty Members (Up 160%)
- Peer Assessment (Up 6.6%)
- PhD's Graduated (Up 14.3%)
- Research Expenditures (Up 128%)
- 2007 – 2014 USNWR Ranking

The College of Engineering at the University of Notre Dame
Improved Rankings

USNWR Rankings

College  Aero  CBE  Civil  CPE  CPS  EE  ME

2007

2013
College of Engineering

- Human Health & Well Being
- Personal and National Security
- Sustainability
- Energy
- Economic Development

The College of Engineering at the University of Notre Dame
How do we get there...
Research Quad
Superdisciplinary Research Centres & Institutes College of Engineering College of Science
Development – New Chairs

Myron and Rosie Noble Professor of Structural Engineering

Tony and Sarah Earley Professor of Energy and the Environment
Development – New Chairs

Sheehan Family Professor of Engineering

Dennis and Dawn Doughty Professor of Engineering
Development – New Chairs

Joseph (Bud) and Nona Ahearn
Professor in Computational Engineering

Fr. Ed Anderson Professor of Engineering

The College of Engineering
at the University of Notre Dame
Center for Portable Nanosensor Diagnostics - PANDA

• Proposed NSF Engineering Research Center
• Vision: Multi-institution, public-private research, education, and technology transfer initiative dedicated to creating transformative diagnostic platforms based on nanotechnology for improved public and environmental health around the world, with a particular initial emphasis on applications in developing countries
• ND Lead: Chia Chang
• Partner Institutions: Purdue, Ohio State, Imperial College London, RMIT Melbourne
Strategic Plan

- Focus Research Efforts on Areas of Highest Societal and Academic Impact
- Form and Educate Engineering Leaders of Unsurpassed Ability
- Develop Innovative and Effective Opportunities Beyond the ND Classroom For All Students
- Drive Economic Impact Through Technical Innovation
Focus Research Efforts on Areas of Highest Societal and Academic Impact

Focused Hiring
Grad Fellowships
Bioengineering
PhD and MS Programs

Form and Educate Engineering Leaders of Unsurpassed Ability
Flexible Programs
Experiential Learning
SPF Hires
Humanities
PhD Development

Develop Innovative and Effective Opportunities Beyond the Classroom For All Students
Overseas Expansion
Trading Partner
Local Partnerships
Communication

Drive Economic Impact Through Technical Innovation
Innovation Incentives
Links to ESTEEM and MSPL
Commercialization Funds
Local Partnerships

The College of Engineering
at the University of Notre Dame
Campaign Goals

- Additional Space – ca. 200,000 NASF
- Cluster Hires in Bioengineering, Computational and Data Sciences, Materials
- Graduate Fellowships
- Teaching Faculty Hires
- Strategic Research Area Support
- Undergraduate Research
- MEP/WEP
- Undergraduate Teaching Lab Fund
Questions/Comments?