Board of Trustees Meeting

April 14, 2023

Resolutions of Appreciation

Avrum Gray College of Liberal Arts	$21M
Raytheon Technologies Mitchell E. Daniels, Jr. School of Business	$4M
Michael Byers Mitchell E. Daniels, Jr. School of Business / Intercollegiate Athletics	$3.54M
Anonymous College of Veterinary Medicine / Purdue Research Foundation / Purdue Institute for Cancer Research	$3M
Scott Kozuch Mitchell E. Daniels, Jr. School of Business	$2M
Anonymous College of Agriculture	$1.5M
Nathan and Beth Gabhart Mitchell E. Daniels, Jr. School of Business	$1M
Margery Ellen Hoffman Lyles School of Civil Engineering	$1M
Norman and Lioubov Gilsdorf College of Engineering	Undisclosed

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Purdue Online Learning 2.0

Vision Statement

Online Learning at Purdue consists of two coordinated efforts: Purdue Global as a virtual campus and Purdue University Online as the online version of the West Lafayette campus. Differentiated in their offerings, Purdue Global and Purdue University Online share Purdue's strategic focus and long-standing commitment to student success, learning technology innovation, and growth with quality. Collectively, Purdue Global and Purdue University Online expand Purdue's land-grant mission this century through a continuum of integrated and trusted online learning opportunities, with unparalleled excellence at scale.

PURDUE GLOBAL + **PURDUE UNIVERSITY** | Online = *Purdue Online 2.0*

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PWL Faculty and Staff Salary Increase

History and FY24 Recommendation
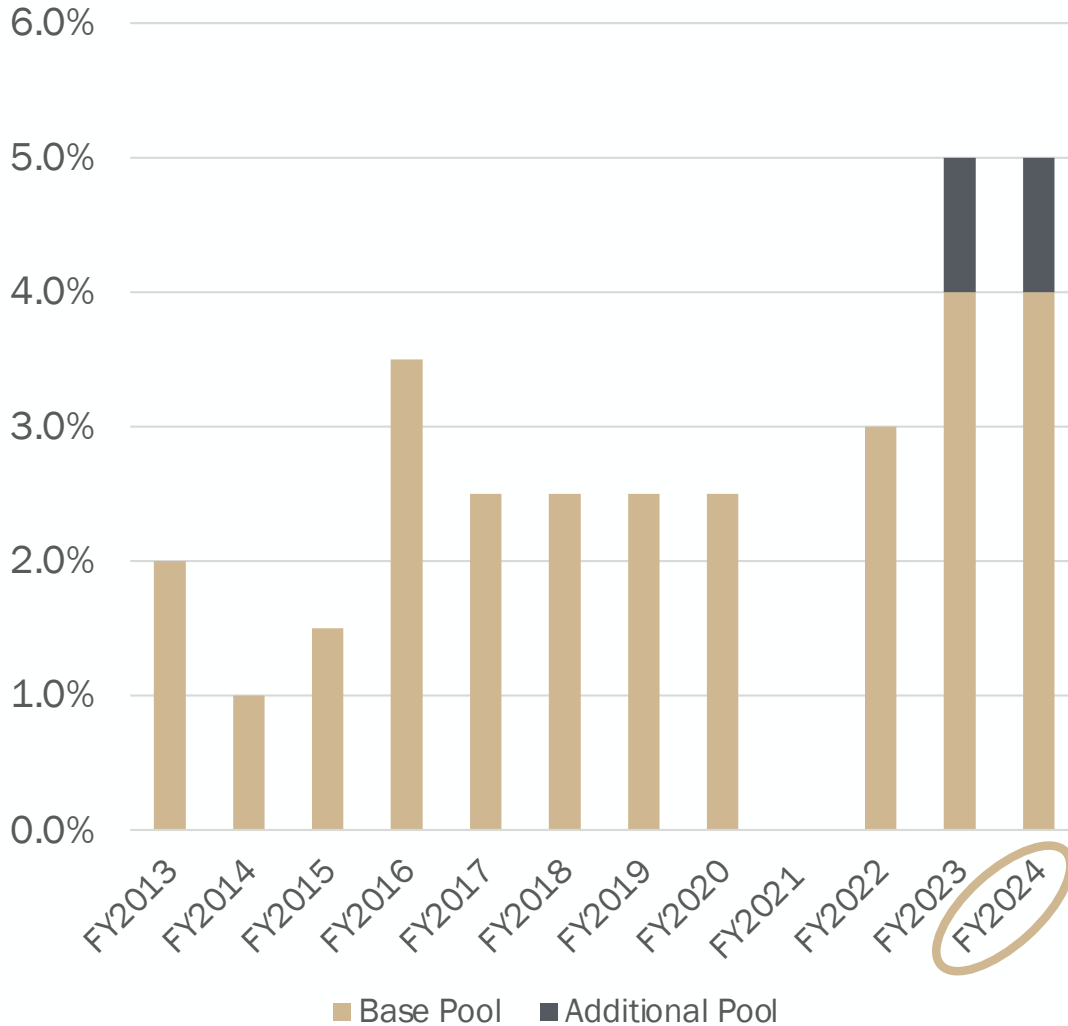
FY 24 RECOMMENDATION:

- 4% Salary Pool* (recurring)
- 1% Pool for Rewards, Recognition and Retention (non-recurring)

OTHER:

- FY23: $225 Healthcare appreciation payment
- FY22: $500 Appreciation payment
- FY21: $750 Appreciation payment
- COVID freeze in FY21
- FY23 1% additional pool for recurring increases based on market competitiveness

Purdue Applied Research Institute CEO

Dr. Mark Lewis

- Renowned researcher and professor with leadership in academia and government
- One of the world's foremost experts on hypersonics
- Acting deputy undersecretary of defense for research and engineering
- Director of defense research and engineering for modernization in the Defense Department
- Chief scientist of the U.S. Air Force
- Served as the chair of the Department of Aerospace Engineering at the University of Maryland
- First executive director for the Emerging Technologies Institute of the National Defense Industrial Association

Purdue Applied Research Institute

Non-profit applied research arm of Purdue University

PARI extends the reach and impact of Purdue's research strengths and top-ranked academic programs in engineering, agriculture, science, and technology.

Through PARI, Purdue will advance technologies critical to the **economic prosperity** and **national security of the U.S.** and the world by translating discoveries into innovative solutions and services. It will also serve as an incubator for advanced development and transition of leading ideas and technology.

PARI divisions and strategic areas of focus:

National Security and Defense	Infrastructure Research and Innovative Solutions	Global Development	Technology Acceleration
▪ Hypersonics ▪ Microelectronics ▪ Energetics ▪ Cyberphysical Security	Innovation, efficacy, and efficiency in construction of next-gen facilities for: ▪ National security and defense application ▪ Energy / power infrastructure	Science, Technology, Innovation, Research (STIR) global development and humanitarian assistance in: ▪ Youth and education ▪ Digital technology and innovation ▪ Entrepreneurship ▪ Economic growth	Initial Platform in Digital Innovation in Agri-Food Systems ▪ Microelectronics ▪ Energetics ▪ Cyberphysical Security

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Purdue Computes: Three Pillars

Computer Science

Grow with excellence

Demand for growth in bachelor's and master's computer science and computer engineering degrees

AI

Good to great

Institute of Physical AI to reach across the university to benefit all colleges on campus

Chips

Great to greatest

Purdue dominates semiconductors, which are the foundation of all computing

Significant R&D opportunities exist here in education, research and economic development

Purdue Computes

Investment

Faculty lines 2023-2028

- 50 in computing
- 50 in AI

Facilities: $100M

- $49M Phase 1 (includes both capital and equipment procurement)

Purdue Computes: 1. Computing

America's first Computer Science Department, founded in 1962-63

- Goal: Top 10 CS in US this decade
  - 60th Anniversary Celebration – April to December 2023
- Maximize external projection and minimize internal friction
  - "51-49 variant" of the ABE Model
  - Primary college: Science; Secondary college: Engineering
  - Enhance collaboration in faculty, student, courses, fund-raising
- 50 Faculty lines
  - Primary appointment in Computer Science/Engineering, joint/secondary appointment across many colleges
  - Some will overlap with Institute of Physical AI

Purdue Computes:
2. AI: Focus and Leapfrog

- University wide "Institute of Physical AI" (IPAI)
  - Research Centers/Labs (current ones + new ones)
  - Workforce development
  - Industry collaboration
  - Open data sets
- Faculty Steering Committee
  - Alumni Advisory Board
  - Institute Founding Director search
- 50 Faculty lines over 5 years, shared with colleges/departments
  - Affiliated faculty (current and new ones) and industry joint recruiting
  - PhD Fellowships

Purdue Computes:
2. AI: Current/Emergent Assets

Centers/Labs
- Open Ag Tech and Systems (and data set)
- Pharma AI Center
- Manufacturing AI Center
- Transportation AI Center (and data set)
- Neuromorphic Computing Center
- Semiconductor Manufacturing Automation Center
- Deep Fake Detection Lab
- Edge AI Lab

Physical AI: Steering Committee

Stephan Biller – Digital Manufacturing with AI

Sabine Brunswucker – Next generation autonomous systems

Dennis Buckmaster – Digital Agriculture and Open Ag Technology systems

Eugenio Culurciello – AI for engineered systems

Ed Delp – Deep Fake detection

Petros Drineas – Health Data Science

Jingjing Liang - Forest advanced Computing and Artificial Intelligence Lab

Shaoshuai Mao – Institute for Control Optimization and Networks

Anand Raghunathan – Integrated Systems Lab

Bruno Ribeiro – Data mining and network science

Kauchik Roy - Foundational AI

Daniel Schiff – Sociotechnical aspects of AI

Greg Shaver – Connected and automated vehicles

Wojciech Szpankowski – Foundational AI

Pavlos Vlacho – Digital Health

Richard Voyles – Robotics

Dongyan Xu – Cybersecurity

Yang Yang – AI for plant systems

Purdue Computes:
3. Chips@Purdue

- Two-phase facility update to maximize capture of CHIPS resources

- Learning: SDP + SCALE + nanoHub + Purdue Online

- Research leadership

- Private sector investment and economic development

- National leadership: NSTC, NAPMP, Workforce

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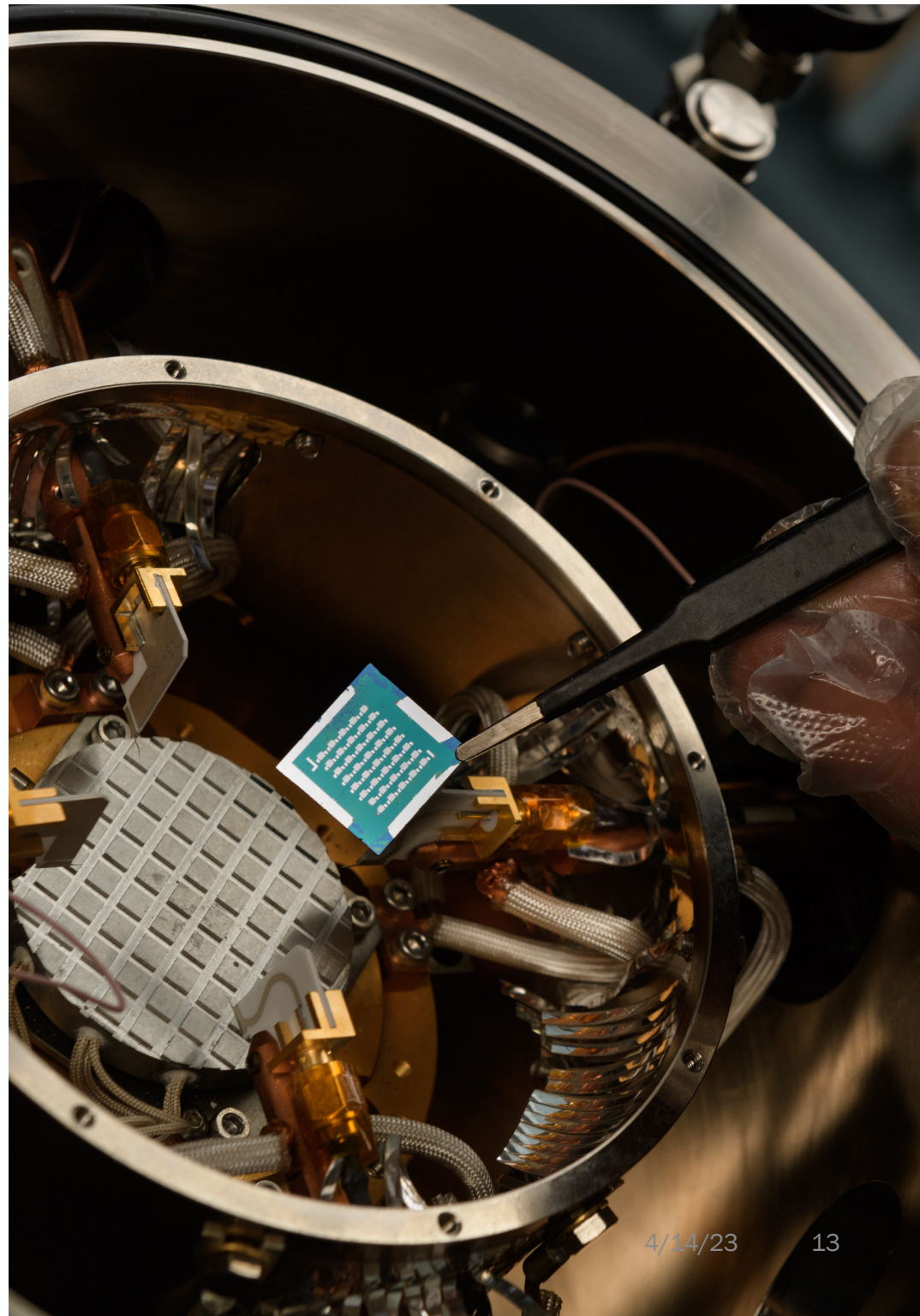
Purdue Leads the Country in Semiconductors

From left, Indiana Gov. Eric J. Holcomb, U.S. Secretary of State Antony Blinken, Mitch Daniels, U.S. Secretary of Commerce Gina Raimondo and U.S. Sen. Todd Young participate in a fireside chat following a tour of Purdue's microelectronics facilities in September 2022.

Thank You

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