

OFFICE OF EXECUTIVE VICE PRESIDENT FOR RESEARCH AND PARTNERSHIPS

To: Board of Trustees

cc: Mitchell E. Daniels, President

Jay T. Akridge, Provost and Executive VP for Academic Affairs and Diversity

Christopher A. Ruhl, Treasurer and Chief Financial Officer

Steven R. Schultz, General Counsel

Matt Folk, President and CEO, Purdue For Life Foundation

From: Theresa Mayer, Executive VP for Research and Partnerships

Re: William D. Young Institute for Advanced Manufacturing of Pharmaceuticals

Date: June 9, 2022

<u>Purpose</u>. This memo requests that the Board of Trustees approve of the creation of the William D. Young Institute for Advanced Manufacturing of Pharmaceuticals as a new Purdue University institute.

Background. This institute represents an opportunity to capitalize on both the unique position of the State of Indiana and Purdue to strengthen pharmaceutical manufacturing in the Midwest. The institute will launch with a gift from William D. Young, a pioneer in pharmaceutical and biotechnology and a Purdue University alumnus, which has been made in recognition of the fact that Purdue University has the skills and experience necessary to improve manufacturing technology to reduce costs and improve access to innovative drugs emerging from biotechnology research.

As required by Purdue policy C-6 (Centers and Institutes), Board approval is required to establish a new university-level institute of this type.

<u>Discussion.</u> The creation of the William D. Young Institute for Advanced Manufacturing of Pharmaceuticals (the "Institute") will enable the university's deep bench of researchers in pharmaceutical analysis, formulation, and manufacturing to conduct research at a manufacturing scale, accelerating the transition from lab to market and offering access to modular and automated facilities for research, development and training.

The Institute is the latest fruit from a \$250 million investment in life sciences as part of the Purdue Moves strategic plan, which included investments in research that improves lives and supports Indiana's critical life sciences business sector. It will continue to elevate Purdue's already leading reputation in areas of pharmaceutical and biopharmaceutical research and advanced manufacturing.

Purdue is internationally recognized for its leading interdisciplinary research and education programs in pharmaceutical manufacturing, ranking in the top 10 by publications and patents (2021 U.S. Industry and Market report). Currently, the total external funding for pharmaceutical and biopharmaceutical research across campus is estimated at over \$19 million. More than 4,000 undergraduate degrees are awarded annually and more than 2,000 doctorate students are enrolled in disciplines related to pharmaceuticals and biotechnology. Purdue's comprehensive program is critical to economy of the State of Indiana, which is among the top 10 states in the U.S. for pharmaceutical and medicine manufacturing (2019 Census Bureau's Annual Survey of Manufacturers) and second for worldwide life sciences exports at more than \$11 billion in 2020.

The gift from William D. Young will help expand Purdue's capacity for this work by funding an initial investment in a 9,600 square-foot leased facility in the Indiana Manufacturing Institute in the Purdue Research Park, to be followed by construction of an approximately 40,000 square-foot building in the Discovery Park District. The gift is further intended to support the Institute into the foreseeable future.

The Institute will be governed by three Co-Directors, who will report to the EVPRP and the Deans of Engineering, Science, and Pharmacy. Co-Directors include Alina Alexeenko, professor of aeronautics and astronautics and chemical engineering and associate dean for undergraduate education within the College of Engineering; Eric Munson, head of the Department of Industrial and Physical Pharmacy within the College of Pharmacy; and Garth Simpson, professor of analytical chemistry in the College of Science.

The Institute will have a faculty advisory group composed of ten faculty members and the three Co-Directors. An Industry Advisory group will also be established.

Requested Action. We respectfully request that the Board authorize the creation of the William D. Young Institute for Advanced Manufacturing of Pharmaceuticals pursuant to Purdue policy C-6.