In June of 2017, John J. Kopchick, Ph.D., and his wife, Charlene, presented the Graduate School with a transformative $10.5 million gift to establish student fellowships and research awards to accelerate the school’s continued success in educating medical and research trailblazers. For 2018, these funds supported the creation of the following yearly fellowships:

**Dr. John J. Kopchick Fellowships** are awarded to six students who demonstrate exceptional character, extracurricular leadership, research excellence, and scholarly merit. Each fellowship provides $7,500 directly to the student and an additional $7,500 to support their research and training. These fellowships may be renewed for a total award period of up to two years.

**Charlene Kopchick Fellowship** is given to a GSBS student who demonstrates unique characteristics beyond merit and financial need. Such characteristics may include but are not be limited to first-generation college graduates entering graduate research, students who exhibit exemplary personal character, uniqueness of background and culture, strong work ethic, perceived leadership qualities, and an enthusiastic scientific curiosity. This fellowship provides $8,250 of direct aid to the student and an additional $8,250 to support the student’s research and training. This is a one-time award to the student and is not renewable.

**Dr. John J. Kopchick Summer Undergraduate Research Fellowship** is awarded to a junior or senior undergraduate student with a preference for students from Indiana University of Pennsylvania, Indiana County, Jefferson County, or Armstrong County, Pennsylvania and/or greater Western Pennsylvania majoring in cell and molecular biology or biochemistry. Preference will also be shown for junior and senior undergraduate students from Ohio University majoring in molecular and cellular biology or translational biomedical research. Funds distributed may be used for associated travel, room and board, and scholarships.

**Dr. John J. Kopchick Research Award** is presented to a GSBS student and their advisor. This award provides up to $50,000 of research expenses over a one-year period, which is intended to provide pilot funding for innovative research projects in any area of biomedical science.
Charlene and Dr. John J. Kopchick, center, are surrounded by the inaugural fellowship recipients. Clockwise from the top: Lalit Patel, Rachel Dittmar, Barbara Diaz-Rohrer, Marimar de la Cruz Bonilla, Elisa Vesely, Sara Siegel, Denali Davis, and Marisa Aitken.
2018 Dr. John J. Kopchick Fellows

Barbara Diaz-Rohrer
Advisor: Ilya Levental, Ph.D.
Research project: Molecular mechanisms of microdomain-dependent protein trafficking
Summary: Her research focuses on sorting during endocytic traffic is facilitated by cargo partitioning into specific membrane microdomains, with raft-mediated trafficking comprising a pathway for protein and lipid recycling to the plasma membrane.

Rachel Dittmar
Advisor: Subrata Sen, Ph.D.
Research project: Driver mutation signatures and exosomal biomarkers in the development of pancreatic ductal adenocarcinoma
Summary: Her project characterizes how driver mutations found in pancreatic cancer affect exosome content and how we can exploit exosome content to detect pancreatic cancer before it metastasizes.

Marisa Aitken
Advisor: Sean M. Post, Ph.D.
Research project: hnRNP K: a driver of myeloid malignancy
Summary: Her work investigates treatments for acute myeloid leukemia (AML), a complex group of hematologic malignancies characterized by recurrent genetic and/or chromosomal aberrations.

Lalit Patel
Advisor: Dean Michelle C. Barton, Ph.D.
Research project: Recurrent tissue-specific DNA lesions cause TRIM24 overexpression in human solid tumors through trans-effects
Summary: He studies the genetic basis for TRIM24-overexpression in human solid tumors using a combination of computational and functional genomics.

Sara Siegel
Advisor: Hung Ton-That, Ph.D.
Research project: Mechanism of pilus hijacking and adherence by the coaggregation factor CafA in Actinomyces oris
Summary: Her work focuses on the study of molecular details of cell surface components that contribute to oral biofilm formation in the Gram-positive bacterium, Actinomyces oris.

Elisa Vesely
Advisor: Michael C. Lorenz, Ph.D.
Research project: RNA sequencing of phagocytosed Candida albicans reveals new virulence determinants
Summary: Her research investigates the roles for a group of previously uncharacterized genes that she has discovered to be important in interactions between the fungal pathogen Candida albicans and the innate immune system.

2018 Charlene Kopchick Fellow

Marimar de la Cruz Bonilla
Advisor: Helen Piwnica-Worms, Ph.D.
Research project: Elucidating the role of fasting in GI radioprotection: applications in a preclinical pancreatic cancer model
Summary: Her work studies fasting as a potential mechanism to prevent radiation-induced toxic side effects in the small intestine.

2018 Dr. John J. Kopchick Summer Undergraduate Research Fellow

Denali Davis
Indiana University of Pennsylvania
Advisor: Don L. Gibbons, M.D., Ph.D.
While working at the Graduate School as a summer student, Davis’s research focused on the NTRK3 gene and identifying drivers of tumor progression and metastasis in non-small cell lung cancer.

2018 Dr. John J. Kopchick Research Award
Pranavi Koppula and her advisor Boyi Gan, Ph.D.
The team is performing experiments to test if drugs that block glucose uptake or metabolism may be effective for treating patients with lung cancer that have KEAP1 mutation or deficiency using lung cancer patient-derived mouse models.