



2024

**Jess & Mildred Fisher
College of Science &
Mathematics**

**34th ANNUAL
HONORS
CONVOCATION**

Celebrating student accomplishments for 2023-2024
Sunday, April 21st, at 1:30PM
University Union Ballrooms

The Jess and Mildred Fisher College of Science and Mathematics



Fisher College of Science and Mathematics
Inspiring Student Exploration in
Science and Mathematics for the 21st Century

Mission

Through rigorous and high-quality undergraduate programs in a wide variety of scientific, computing and mathematical disciplines and graduate programs in research-based, practice-based, applied and interdisciplinary fields, FCSM prepares its students to live and work productively in a scientific and technological world and to pursue learning throughout their lives. Faculty members engage both their undergraduate and graduate students through interactive teaching, advising, basic and applied research, and collaborative activities internally and externally. They form partnerships both to serve the metropolitan community as well as to meet regional, national and international needs. The result is dedicated, innovative, flexible, and highly prepared individuals who excel in graduate school, professional school, and careers in industry, government and teaching.

LETTER FROM THE DEAN

DR. NUGENT

Dear Fisher College Students, Families, Faculty, Staff, and Friends:

Welcome to the 34th Annual Fisher College of Science and Mathematics Honors Convocation! Today we have come together to celebrate the outstanding accomplishments of FCSM students during the 2023-2024 academic year. In the Fisher College, we pride ourselves on fostering a dynamic environment that gives our students the tools that they will need to become the next generation of thinkers and problem solvers. Looking at our students here today I am more confident than ever that our future is in good hands.

Our students' success is also a reflection of the care and effort of the dedicated faculty and staff of the Fisher College. Their mentorship, support and commitment to our students paved the way for the amazing accomplishments of our students. As we continue our long tradition of the Honors Convocation, it is a distinct honor to recognize the achievements of our students in the classroom, the field, and in the laboratory. I speak for all of us in the Fisher College when I say that our students' success is our greatest source of pride.

To those who will be graduating in a few weeks, congratulations and best wishes! To those who will return to campus next fall to continue their studies, I hope you have an enjoyable and productive summer. We look forward to seeing you back on campus soon. I wish you all a great summer and continued success in the future.

Sincerely,

Matthew A. Nugent, Ph.D.
Dean



PROGRAM

OPENING

Dr. Matthew Nugent, Dean

INTRODUCTION OF STUDENT SPEAKERS

Dr. Vonnie D. C. Shields, Associate Dean

UNDERGRADUATE STUDENT SPEAKER

Dajaha Kenney

GRADUATE STUDENT SPEAKER

Daryna Soloviova

DEPARTMENTAL AWARDS & SCHOLARSHIPS

Dr. Peko Tsuji, Department of Biological Sciences

Dr. John Sivey, Department of Chemistry

Dr. Michael McGuire, Department of Computer & Information Sciences

Dr. Sandy Spitzer, Department of Mathematics

Dr. Jennifer Scott, Department of Physics, Astronomy & Geosciences

PROGRAM AWARDS & SCHOLARSHIPS

Dr. Linda Cooper, Towson UTeach

Dr. Sharlene Roberson, Towson Opportunities in STEM

Dr. Christopher Salice, Environmental Science and Studies Program

Dr. Nadim Alkharouf, Molecular Biology, Biochemistry & Bioinformatics Program

Dr. Cindy Ghent, Hill-Lopes Program

SCHOLARSHIPS, RESEARCH & TRAVEL AWARDS

Dr. Vonnie D. C. Shields

CLOSING

Dr. Matthew Nugent

DEPARTMENT OF BIOLOGICAL SCIENCES

Dr. Peko Tsuji, Chairperson

Betty Kennedy Dale Scholarship

Samantha Fritter

Biology Alumni Scholarship

Aislinn Bloom

Glory Omodia

Carl Henrikson Memorial Award

Laura Gaffney

Compton N. Crook Award

Tatah Lamin

Dr. Ruth Stocking Lynch Memorial Scholarship

Zaida Holloway

James Edward Ewig Memorial Scholarship for Academic Achievement by a Senior

Zaida Holloway

James Moniodis Scholarship for Returning Major

Glory Omodia

John David Horst Memorial Award for Outstanding Student Research Project

Eber Guzman-Cruz

Lois D. Odell Biology Scholarship

Madison Hall

Morgan Franz

Lois D. Odell Award for Outstanding Biology Senior

Joel Detwiler

Mary Scarbrough-Carr Scholarship

Eric Chattin

Madison Hall

Wendy M. & Jeffrey C. Miller, D.D.S. Scholarship

Madison Hall



Wilfred B. Hathaway Award for Outstanding Biology Graduate Student

Lohitashwa Garikipati
Elizabeth Service

DEPARTMENT OF CHEMISTRY

Dr. John Sivey, Chairperson

Alan and Eileen Wingrove Endowment Scholarship for Chemistry Scholars

Cierra DiSabato
Desmond Smith
Emily Brown
Julian Maycock
Raphael Zeldin
Scott Bernota

American Chemical Society Division of Analytical Chemistry Award

Julian Maycock

American Chemical Society Division of Environmental Chemistry Award

Julian Maycock

American Chemical Society Division of Inorganic Chemistry Award

Scott Bernota

CRC Press Freshman Chemistry Achievement Award

Dayannara Alvarado

Floyd Blankenship Memorial Award

Lea Kosanovic

Frank B. Milio Book Award

Cameron Inglis
Natalie Underwood

Gibbs Award for Excellence in Chemistry

Nicole Green

Greater Washington Institute of Chemists Student Award

Jakob Winterle

Maryland Section of the American Chemical Society Achievement in Chemistry Award

Scott Bernota

DEPARTMENT OF COMPUTER & INFORMATION SCIENCES

Dr. Michael McGuire, Chairperson

The AOC (Aberdeen Proving Ground Susquehanna Association of Old Crows Chapter) Scholarship

Blair Thomas
Caleb Blomquist
Jordan Strickland
Phuong Dinh

Applied Information Sciences Scholarship

Katherine Lim

CyberCorps® Scholarship

Brian Chen
Graeme Dickerson-Southworth
Jaelyn McCracken

CySP Scholarship-Department of Defense Cyber Scholarship Program

Gabriel Huber
Sarah Welsh

Doris K. Lidtke Excellence in Service Award

Jordan Strickland

Dr. Harry Zhou CIS Graduate Scholarship

Honghe Zhou

James W. Smith Scholarship

Abdul Oluwadamilola

Mary Hudson Scarborough Award for Excellence in Computer Science (IS)

Lauren Bolen

Mary Hudson Scarborough Award for Excellence in Computer Science (CS)

Josue Molina Morales

Mary Hudson Scarborough Award for Excellence in Computer Science (IT)

Jacob Miller

Mid-Atlantic CIO Forum Scholarship

Anthony Saporito
David Allen Santos

Mid-Atlantic CIO Forum Scholarship (cont.)

Jayden Morgan
Jenna Wright
Julian Halsey
Oreoluwa Williams
Priscilla Nornoo
Ruth Wireduwah
Ryan Gilbert
Taylor Webb
Toyin Olujumu

Wendy and Larry Letow Endowed Scholarship

Sydney Chandler

Porter Family Scholarship in Mathematics and Computer Science

Kapil Regmi

DEPARTMENT OF MATHEMATICS

Dr. Sandy Spitzer, Chairperson

Ann L. Wagner Scholarship in Mathematics

Nicholas Ryder-Bullock

Eunice Bowers Schmied and Otto Karl Schmied Memorial Scholarship in Mathematics

Adam Powell
Ganesh Khanal

Joyce C. Neubert Award in Mathematics

Natalie Flanders

Mary Hudson Scarborough Award for Excellence in Mathematics

Thomas Dale
Kristin Lloyd

The Mary Hudson Scarborough Award for Excellence in Secondary Mathematics Education

Natalie Flanders

The Mary Hudson Scarborough Award for Excellence in Elementary School Mathematics Education

Devani Sharma

Marie D. Rutenbergs Scholarship in Mathematics

Austin Farr



Mildred T. Becker Scholarship

Cameron Baker
Leonard Johnson
Ryan Neil

Porter Family Scholarship in Mathematics and Computer Sciences

Rebecca Cooper

Reza Sarhangi Scholarship

Kira Lutz

**DEPARTMENT OF
PHYSICS, ASTRONOMY & GEOSCIENCES**

Dr. Jennifer Scott, Chairperson

Eddie Loh Undergraduate Physics Scholarship

Lukas Hamann

Eddie Loh Graduate Physics Scholarship

Daryna Soloviova
Jacob Buchman
Marcus Rose
Michael Bravo
Richard Seabrease

Edward I. Rubendall Physics Achievement Award for Outstanding Juniors

Lukas Hamann

Edward I. Rubendall Physics Achievement Award for Outstanding Seniors

Aaron Torster
Shannon Markward

Geosciences Achievement Award

Erica Evans
Erica Wattanarungsikajorn
Rohanna Bowers

Maryland Space Grant Scholarship

Britney Whittington
Lukas Hamann
Scott Bernota

Mineralogical Society of America Undergraduate Prize

Sierra Arche



William F. Pelham Award for Geoscience

Simon Buchholz

William F. Pelham Award for Physics

James Minter

Zachary Dietz

TOWSON UTEACH AWARDS

Dr. Linda Cooper, Program Director

Dollenberg Family Endowed Scholarship

Jean Ciscell

Dr. George E. Hohl '55 & Anne S. Hohl Endowed Scholarship for Towson UTeach

Xinhui (Eason) Zou

The Kahlert Foundation Scholarship for Towson UTeach

Aidan Powell

Al Alderton

Alyssa Geddie

Christina Freeman

Colin Crawford

Elizabeth McMillan

Hailey Bartolomeo

Heidi Bronson

Jean Ciscell

Julia Sundsvold

Lance Owen

Mary Grace Lucas

Melissa Cignatta

Natalie Flanders

Nicholas Ryder-Bullock

Nicole Kim

Rebecca Cooper

R. Elizabeth Remsberg '27 Endowed Scholarship for Towson UTeach

Jorge Diaz-Mendez

Natalie Flanders

Towson UTeach General Endowment

Aidan Powell

Andrew Kutz

Christina Freeman

Colin Crawford

Jean Ciscell

Jorge Diaz-Mendez

Towson UTeach General Endowment (cont.)

Nicole Kim
Rebecca Cooper
Stephen Hernandez
Xinhui [Eason] Zou

ENVIROMENTAL SCIENCE STUDIES

Dr. Chris Salice, Program Director

Charlie Conklin Scholarship

Emily McCarthy

The Francis Borrelli Johnson Endowed Environmental Scholarship

Seleru Owens
Steven Vrolijk

MOLECULAR BIOLOGY, BIOCHEMISTRY & BIOINFORMATICS PROGRAM

Dr. Nadim Alkharouf, Program Director

Linda Sweeting Endowment for Undergraduate Research in Science Award

Scott Gallagher

TOWSON OPPORTUNITIES IN STEM

Dr. Sharlene Roberson, Program Director

TOPS Program Scholarship

Abdoul Toure
Abiodun Akanni
Alexandra Cerpas
Aniya Alston
Ethan Bunkley
Jayla Sturdivant
John Smith
Jordan McNeill
Jumoke Omoshebi
Kenzyl Gelpi-Quinones
Kevin Tchatat
Mustafa Abduljalil
Pia Bhunia
Sanaa Jamison
Yonairy Morel Mendoza

TOPS Program Scholarship (cont.)

Yvette Egbunine

Yvonne Egbunine

HILL-LOPES SCHOLARSHIPS

Dr. Cindy Ghent, Program Director

Epsilon Cohort (1st year in the Program)

Emily Aguirre

Felistus Karanja

Kylie Newton

Lily Tsomos

Michelle Luna Lopez

Oreoluwa Williams

Patience Odeh

Rayab Lee

Susan Njoya

Tatah Lamin

Taylor Webb

Delta Cohort (2nd year in the Program)

Aaliyah St. Jules

Dajaha Kenney

Darrel Abang

Emily Brown

Jaelyn McCracken

Jazmin Sharp

Kaitlin Conway

Kali Ferguson

Karollmae Tan

Katherine Tan

Maya Cowling

Phoebe Calkins

Rohanna Bowers

Urja Desai

Gamma Cohort (3rd year in the Program)

Annie Keele

Britney Whittington

Glory Omodia

Grace Wilson

Morgan Hawkins

Sumra Chaudhry

FCSM COLLEGE-LEVEL AWARDS

Dr. Matthew Nugent, Dean

Dr. Vonnie D. C. Shields, Associate Dean

FCSM Dean's Scholarship

Rebecca Akhigbe

Jess Fisher, Class of 1934, College of Science and Mathematics Scholarship in Memory of Cecilia Fisher Rudman

Annalise Bocklage

Gabriella Trincia

Jennafer Buckshaw

Leonard Johnson

Vi Nguyen

Jess Fisher, Class of 1934, Pre-engineering Scholarship in Memory of Robert M. Fisher

Clarence Powell

Kali Ferguson

Brady Nathison

Michele M. Cooper, M.D. Scholarship

Sevona Sims

L. Melvin Roberts Scholarship

Manyaka Anjorin

Richard E. Burdette, Jr. Scholarship

Glory Omodia

Willard Hackerman Scholarship

Amina Daniels

Asia Trogdon

Christopher Solano

Cristofer Duarte

Gianna Saunders

Jazmin Sharp

Kaitlynn Beahn

Kemetrias Snowden

Kendall Muse

Michael Aladejebi

Muswe Pembamoto

Patience Odeh

Shaniya Plummer

Theresa Abalum

John B. '71 and Sharon Hafner Yingling '71 Scholarship

Shae Downes



UNDERGRADUATE RESEARCH GRANTS

The following students were awarded undergraduate student research grants from the Fisher College in the 2023–2024 Academic Year.

“*Rosselia* and Depositional Processes in the Juniata Formation”

Student: **Bilel Abderrahim**

Mentor: Dr. Andrew Hawkins (Physics, Astronomy & Geosciences)

“Tunable Dye Laser for Optical Scattering Spectroscopies”

Student: **Foysal Ahmed**

Mentor: Dr. Jeffrey Simpson (Physics, Astronomy & Geosciences)

“Behavioral Effects of Natural Compounds Using an Insect Model”

Mentor:

Student: **Rasha Alzyoud**

Dr. Vonnie Shields (Biological Sciences)

“Utilizing Planaria as a Model Organism to Investigate the Bacterial Virulence Factor TCPC”

Student: **Victoria Akingbehin**

Mentor: Dr. Michelle Snyder (Biological Sciences)

“Identifying the Role of Apoptosis in Sea Anemone Fission”

Student: **Sydney Bayne**

Student: **Trinity Mays**

Mentor: Dr. Wilbur Ryan (Biological Sciences)

“Uncovering the Hidden Heroes of Dung Beetle Dynasty: A Metagenomic Study of Rood Ball Microbiomes”

Student: **Preeti Biraji**

Mentor: Dr. Anne Estes (Biological Sciences)

“Population Genetics of Northern Map Turtles”

Student: **Aislinn Bloom**

Mentor: Dr. Steve Kimble (Biological Sciences)

“Does a Potential Termite Recognition Molecule Vary in Fungal Pathogens?”

Student: **Makaelan Bond**

Mentor: Dr. Mark Bulmer (Biological Sciences)

“Skewing of UV-induced Cell Death Pathways Using TLR4 Ligands”

Student: **Sumra Chaudhry**

Mentor: Dr. Erin Harberts (Biological Sciences)

“Fluorescence Imaging of Single-particle Dynamics at Oil-watered Lateral Infection”

Student: **Mac Crimmins**

Student: **Mary McDonald**

Mentor: Dr. Khanh-Hoa Tran-Ba (Chemistry)

“Identifying Counterfeit Semaglutide”

Student: **Amina Daniels**

Mentor: Dr. Kelly Elkins (Chemistry)

“Analyzing the Impact of HLA-C on the KSHV Viral Lifecycle”

Student: **Mariam Diallo**

Mentor: Dr. Elana Ehrlich (Biological Sciences)

“Water Soluble Magic Numbered Gold Nanoclusters for Cancer Therapy”

Student: **Zara Freeland**

Mentor: Dr. Mary Sajini Devadas (Chemistry)

“Identification of Bacteriophage Alexphander's Immunity Repressor”

Student: **Margaret Galo**

Mentor: Dr. Stephen Hancock (Chemistry)

“Non-Destructive DNA Quantification on Au₂₅ and Plasmonic Gold Nanoclusters”

Student: **Steven Gerguis**

Mentor: Dr. Mary Sajini Devadas (Chemistry)

“Developing a Bispecific T-cell Engager to Eliminate Anti-FVIII B-cells”

Student: **Eber Guzman-Cruz**

Mentor: Dr. John Weldon (Biological Sciences)

“The Search for Metal-insulator Transition in Fe-B Compounds”

Student: **Lukas Hamann**

Mentor: Dr. Vera Smolyaninova (Physics, Astronomy & Geosciences)

“Investigating Nonspectral Color Discrimination in Sugar Gliders”

Student: **Morgan Hawkins**

Mentor: Dr. Harald Beck (Biological Sciences)

“qPCR Assay Exploring Planarian Ability to Clear *Escherichia Coli* in the Presence of Protein TcpC

Student: **Lenora Ingram**

Mentor: Dr. Michelle Snyder (Biological Sciences)

“Investigating Small Proteins in a Δ lonclpP Mutant in *E.coli*”

Student: **Nicole Kahler**

Mentor: Dr. Matthew Hemm (Biological Sciences)

“The Investigation of Fga during the Course of Murine Endotoxemia.”

Student: **Annie Keele**

Student: **Rachel Kramer**

Student: **John Scoffone**

Mentor: Dr. Erin Harberts (Biological Sciences)

“Analyzing the Gut Microbiome of Captive Polar Bears”

Student: **Dajaha Kenney**

Mentor: Dr. Peko Tsuji (Biological Sciences)

“Detection of *Salmonella* in Lettuce Using Mouse Toll-Like Receptor 4”

Student: **Areej Khan**

Student: **Jisela Ramos**

Mentor: Dr. Erin Harberts (Biological Sciences)

“Understanding Metal Ion Influence on Mer/DinB-like DNA Binding Protein of *Mycobacterium Alexphander*”

Student: **Lea Kosanovic**

Mentor: Dr. Stephen Hancock (Chemistry)

“The Effects of Salt Concentration on the Expression of TcpC, a Virulence Factor Found in Uropathogenic *Escherichia coli*”

Student: **Tatah Lamin**

Mentor: Dr. Michelle Snyder (Biological Sciences)

“Digital Twins Research”

Student: **Samuel LaPree**

Mentor: Dr. Akshita Maradapu Vera Venkata Sai (Computer & Information Sciences)

“One Microbe's Waste is Another Microbes's Meal: How do Bacteria Interact to Degrade Cellulose in the Bull-headed Dung Beetle?”

Student: **Chloe Mateleska**

Mentor: Dr. Anne Estes (Biological Sciences)

“Investigating Protein Localization in the Liver of Endotoxemic WT and TLR4-/- Mice”

Student: **Glory Omodia**

Mentor: Dr. Erin Harberts (Biological Sciences)

“Structural Characterization of the TIR Domain of TirB, a *D. discoideum* TIR Domain Containing Protein”

Student: **Ayotunde Omomo**

Mentor: Dr. Michelle Snyder (Biological Sciences)

“The Quantification of Organic Smokeless Powder Analytes using Gas Chromatography with a Quadrupole Mass Spectrometer”

Student: **Mackenzie Overholser**

Mentor: Dr. Ellen Hondrogiannis (Chemistry)

“Effects of Fluorination on CMnO₃ Thin Films”

Student: **Madison Previti**

Mentor: Dr. Rajeswari Kolagani (Physics, Astronomy & Geosciences)

“Toll-Like Receptor Four and Sepsis-Induced Cardiomyopathy in Murine Endotoxemia Models”

Student: **Cristal Salgado**

Mentor: Dr. Erin Harberts (Biological Sciences)

“Total Synthesis of Acremostrictin”

Student: **Olivia Sipes**

Mentor: Dr. Keith Reber (Chemistry)

“Au₂₅ Nanocluster Modification with Anthracene-Based Ligands”

Student: **Desmond Smith**

Mentor: Dr. Mary Sajini Devadas (Chemistry)

“Using Negative Photoresist in Fabrication of Silicon/Titanium Interface for Study of Interfacial Electromagnetic Waves”

Student: **Thomas Snarski**

Mentor: Dr. Vera Smolyaninova (Physics, Astronomy & Geosciences)

“Analysis of Variation of DNA Methylation Between Smokers, E-cigarette Users, Occasional Users and Non-users Employing PCR High Resolution Melt”

Student: **Madison Strasser**

Mentor: Dr. Kelly Elkins (Chemistry)

“Comparison of Fluorination Effects on La_{0.67}Ca_{0.33}MnO₃ and CaMnO₃”

Student: **Luke Thress**

Mentor: Dr. Rajeswari Kolagani (Physics, Astronomy & Geosciences)

“Measuring Germinal Center Activation to Evaluate Efficacy of Allergy Immunotherapy”

Student: **Nathan Usi**

Mentor: Dr. Erin Harberts (Biological Sciences)

“Amide Semi-Reduction”

Student: **Grace Vaillancourt**

Mentor: Dr. Keith Reber (Chemistry)

“sORFs as Genes Encoding Small Proteins in Lonclp Mutants”

Student: **Samantha Walunas**

Mentor: Dr. Matthew Hemm (Biological Sciences)

“Gold Nanoclusters Synthesized with an Electroactive Ligand”

Student: **Jakob Winterle**

Mentor: Dr. Mary Sajini Devadas (Chemistry)

“Metabolic Characterization of Anaerobes in the *Onthophagus taurus* Microbiome”

Student: **Aron Winton**

Mentor: Dr. Anne Estes (Biological Sciences)

“Ingestion Rate Variation Among Distinct Species of Habitat Mimicking Ecomorph Praying Mantises and Relations to Mandible Morphology”

Student: **Marlena Wood**

Mentor: Dr. Chris Oufiero (Biological Sciences)



AWARD NARRATIVES

DEPARTMENT OF BIOLOGICAL SCIENCES

The Betty Kennedy Dale Scholarship Endowment Fund provides scholarship awards for students studying the biological sciences. Dale was an alumna of the Class of 1942. She died in the spring of 2007.

The Biology Alumni Scholarship is awarded to the student who has excelled academically, has served the University and has been involved in research.

The Carl Henrikson Award for Academic Achievement by a Junior honors Dr. Carl Henrikson earned a bachelor's degree in chemistry and biology and a Ph.D. degree, both from the University of North Dakota. In 1970, he joined the biology department with a specialty in tissue culture, immunology and microbiology. He died at the end of the spring term in 1991.

The Compton N. Crook Award for Outstanding Junior honors Dr. Compton Crook who came to Towson State Teachers College in the 1940s. A national park ranger in Yellowstone before coming to Towson, Dr. Crook taught ecology and ornithology and wrote science fiction books under the pseudonym "Stephen Tall" while in the biology department. The Baltimore Science Fiction Society still awards the Compton Crook Award for their best new science fiction writer.

The Dr. Ruth Stocking Lynch Memorial Scholarship for Biology Scholars was established by Dr. Morton M. Kreiger, Class of 1943, to honor professor and former science division chair Dr. Lynch. Sixty-two years following his graduation, Dr. Kreiger continues to count Dr. Lynch among his most memorable teachers and as someone who helped influence his decision to pursue his career in medicine.

The James Ewig Memorial Scholarship honors Dr. Jim Ewig, who was a neuroendocrinologist and mammalian physiologist trained at the Pennsylvania State University. He served the biology department from 1971 until his untimely death in the fall of 1990.

The James Moniodis Scholarship was created in memoriam of James Moniodis, a biology major and member of the TU men's gymnastics team. Following his untimely death in a trampoline accident, the scholarship was established by his friends and family.

The John David Horst Memorial Scholarship Endowment provides awards to biology majors who have completed outstanding research projects in the previous academic year. This scholarship was established in 1974 by John Horst '42, Director of Alumni Services at, former, Towson State, in memory of his son, John David Horst '70. John David Horst was serving in the U.S. Marine Corps as a 1st Lieutenant when he was killed in 1974 while flying in a helicopter during the Vietnam conflict. Horst's father endowed this scholarship in memory of his son who was a biology major.

The Lois D. Odell Biology Award for Outstanding Senior Biology Student. A native of New York State, Dr. Odell joined the Science Department of what was then the Maryland State Teacher's College at Towson in 1947. She taught botany, natural science, and science education, serving the department with distinction until her retirement in 1981. Dr. Odell died in December 2002.

The Mary Scarbrough-Carr Scholarship was established in 1990 with gifts from friends and family of the late Towson University employee to provide scholarship support to full-time outstanding Biology majors. It is awarded to a junior or senior biology major who has earned a GPA of 3.5 or higher after completing 75 or more credits at Towson. Preference is given to students who are actively involved in research and/or are carrying out biologically oriented volunteer service to the department or the broader community.

The Wendy M. and Jeffrey C. Miller, D.D.S. Endowed Scholarship was established in 2013 to honor Dr. Jeffrey Miller's Towson University legacy and to honor his wife, Wendy M. Miller. Dr. Miller graduated Summa Cum Laude from Towson in 1978 with a Bachelor of Science degree in biology and went on to receive his Doctor of Dental Science degree from the University of Maryland School of Dentistry in 1982. Mrs. Wendy M. Miller graduated from the University of Maryland School of Nursing in 1984 with a Bachelor of Science in Nursing degree. The Wendy M. and Jeffrey C. Miller, D.D.S. Endowed Scholarship provides scholarship support for students enrolled as Biology majors in the Department of Biological Sciences. Eligible students must have achieved at least junior class standing and have a cumulative GPA of 3.5 or higher.

The Wilfred B. Hathaway Award is given to an outstanding graduate student in the Department of Biological Sciences. The Hathaway awardee is selected based on outstanding achievement in research, teaching and/or service. The award is named for Dr. Wilfred B. Hathaway, an entomologist and botanist, who joined the College's science department in 1950. He left the department in 1967 to become dean of the graduate program. He retired in 1980.

DEPARTMENT OF CHEMISTRY

The Achievement in Organic Chemistry Award is awarded to student with demonstrated outstanding performance in Organic Chemistry having earned a grade of "A" in both CHEM 331/332 as well as the highest GPA of eligible students.

The Alan and Eileen Wingrove Endowment for Chemistry Scholars honors Dr. Alan Wingrove who was a Professor of Organic Chemistry. His wife Eileen was a graduate of the Department of Chemistry. Dr. Wingrove had a passion for teaching chemistry, particularly to undergraduate students. He established the Alan and Eileen Wingrove Chemistry Scholars program to encourage students to study chemistry. The scholars can be either freshmen, sophomores, juniors or seniors majoring in Chemistry. The Scholars' stipends are awarded annually on a competitive basis, based on merit, and may be used to cover tuition and fees. Dr. Wingrove died in January 2007.

The American Chemical Society Division of Analytical Chemistry Award is presented to the student who demonstrates remarkable aptitude and success in analytical chemistry.

The American Chemical Society Division of Organic Chemistry Award is presented to the top graduating senior who demonstrates excellence in organic chemistry.

The CRC Press Freshman Chemistry Achievement Award is presented to the student who demonstrated outstanding achievement in general chemistry.

The Excellence in Inorganic Chemistry Award is awarded to a student who has demonstrated excellence in inorganic chemistry at the undergraduate level in CHEM 323 Inorganic Chemistry. The student nominee must also have demonstrated keen interest in the subject either through advanced coursework, research or other enriching activities that are related to the field of Inorganic Chemistry in either a pure or applied setting.

The Floyd Blankenship Memorial Award is designed to recognize remarkable aptitude and demonstrated ability in physical chemistry. Floyd Blankenship was one of the founding fathers of the department of chemistry and taught physical chemistry here for many years.

The Frank R. Milio Book Award honors the memory of Professor Frank R. Milio, who served for 43 years and whose many contributions included development of the Medicinal Chemistry and Forensic Chemistry programs, directing the Premedical/Predental program, leading the effort to save the Chemistry major when it was threatened with elimination and coauthoring several chemistry textbooks. As a revered teacher, he touched the lives of thousands of students during his career. The award is used toward the cost of books for chemistry majors who intend to pursue careers in chemistry, forensic chemistry or professional programs in medicine, dentistry or pharmacy. In recognition of Dr. Milio's commitment to students who exhibited determination and hard work, recipients shall be those who show promise in their chosen discipline, are in good academic standing, and who have demonstrated financial need.

The Gibbs Award for Excellence in Chemistry was created by Joy Blitz, a graduate of the Chemistry Department, to honor her parents and her family for the support they gave her as she worked to earn a second bachelor's degree in chemistry.

The Greater Washington Institute of Chemists Student Award is presented to the Chemistry major, usually in their Junior Year, with outstanding scholastic achievements and professional growth in chemistry. The award is presented by the Greater Washington Institute of Chemists to outstanding students in the greater Washington area on behalf of the American Institute of Chemists Foundation.

The Linda Sweeting Endowment for Undergraduate Research in Science Award was established in 2007 with a bequest from Dr. Linda Marie Sweeting. During her 33 years at Towson, Dr. Sweeting achieved a record of distinction in research, teaching and service. She received a B.S. in 1964 from the University of Toronto with Honors in Physics and Chemistry; an M.A. the following year in Chemistry; and a Ph.D. in 1969 from the University of California, Los Angeles in Chemistry. The purpose of Dr. Sweeting's gift is to provide student stipends for undergraduate research in science.

The Maryland Section of the American Chemical Society Achievement in Chemistry Award for the overall achievement in chemistry by a senior.

The Ronald and Linda Raspet Undergraduate Research Fellowship was created by Ron class of 1974, and Linda Raspet class of 1975, to help a new generation of students become involved in a research experience.

The Student Affiliates of the American Chemical Society Endowed Scholarship is presented to a Chemistry major in their junior or senior year with a minimum GPA of 2.65 in Chemistry and 3.00 GPA overall. The student must be active in at least one campus or community-based activity outside of the classroom.

DEPARTMENT OF COMPUTER AND INFORMATION SCIENCES

The AOC (Association of Old Crows) Scholarship - Susquehanna Chapter at Aberdeen Proving Ground awards scholarships to students majoring in the computing and engineering fields from local universities and colleges each year. Founded in 1964, the AOC is a not-for-profit international professional association with over 13,500 members and 185+ organizations in 47 countries. AOC's membership includes military and industry executives, scientists, engineers, operators, and educators who have common interests in Electronic Warfare (EW), Electromagnetic Spectrum Management Operations, Cyber Electromagnetic Activities (CEMA), Information Operations (IO), and other information related capabilities.

The Applied Information Sciences Scholarship is awarded to the Computer Information Sciences majors with the highest GPA.

The CyberCorps® Scholarship Awards are funded through a grant by the National Science Foundation Scholarship for Service (SFS) program, provide scholarships for undergraduate students pursuing studies in computer science with a track in computer security. The scholarship benefits cover full tuition and fees, a stipend, professional development support and a book allowance. The scholarship is

renewable for a total of two years.

The CySP Scholarship – the Department of Defense (DoD) Cyber Scholarship Program (CySP) is to support the recruitment of new cyber talent and the retention of current highly skilled professionals within the DoD cyber workforce. This program serves to enhance the national pipeline for the development of cyber personnel by providing grants to institutions of higher education.

The Doris K. Lidtke Excellence in Service Award is awarded to undergraduate seniors enrolled in any existing or future program within the Department of Computer and Information Sciences, who have a minimum grade point average of 3.5 and who have provided volunteer service to a computer club or organization on campus, served as a volunteer tutor, or have provided some similar type of volunteer service in the area of computer science. Funds for this award result from a locally-held national conference on computer science education organized by Dr. Lidtke. Her desire in providing such an award is to encourage and reward exceptional students who have demonstrated significant leadership and/or service in their discipline.

The Dr. Harry Zhou CIS Graduate Scholarship was established by Donors to memorialize Dr. Harry Zhou, former TU professor of Computer and Information Sciences.

The James W. Smith Scholarship honors the memory of a beloved of former faculty member. Jim was a native of Troy, New York, and received his B.S. degree in mathematics from the University of Rochester and his M.S. in mathematics from the University at Buffalo of the State University of New York. He came to TU to teach in the Department of Mathematics in 1967. When computer science classes began a few years later, Jim was first a student, then a teacher, in those classes. In 1984 when the Department of Computer and Information Sciences was formed, Jim joined the new group, and completed a M.S. degree in computer science at Johns Hopkins University. Jim was then instrumental in curriculum development, course design, and the establishment of computer laboratories. Even in later years, he continued his collaboration to develop more new courses: first with mathematics colleagues to develop Mathematics of Information Science, and later with computing colleagues to develop Computers and Creativity. He was awarded advancement to “extraordinary status” as a faculty member on the basis of his personal and faithful service, his outstanding record of teaching, and his continued love of scholarship and learning. As a very real expression of this love, the primary endowment for this award was personally established by Jim at his untimely death on August 11, 2001. His bequest has been supplemented by the thoughtful gifts of many others.

The Mary Hudson Scarborough Award for Excellence in Computer and Information Sciences is awarded to outstanding graduating seniors. Mary Hudson Scarborough was a native of Worcester County, Maryland and entered the State Normal School (now Towson University) in 1889. In that year, she became principal of the Model School, an elementary school operated by the Normal School. In 1907, she became a faculty member of the Normal School and taught mathematics there for thirty years. Following her retirement, she served as Alumni Field Secretary until 1947. She died in 1953.

The Mid-Atlantic CIO Forum Scholarship with Towson University, in a partnership with information technology executives (Chief Information Officers) in the Mid-Atlantic region, became host to the Mid-Atlantic CIO Forum in 2003. The Forum fosters

excellence in business and information technology in an environment that promotes educational and networking opportunities for CIOs facing similar challenges and issues. Since 2006, the Mid-Atlantic CIO Forum has awarded scholarships to many well-deserving Towson University students. Candidates must be full-time sophomores, juniors, or seniors with a 3.6 or higher GPA, who are studying Computer Science, Computer Information Systems, Information Technology, and E-Business, and who have completed at least one full year of study at Towson University.

The Wendy and Larry Letow Endowed Scholarship was created in 2014 by Mrs. Wendy Letow and Mr. Larry Letow to provide for students pursuing a career in computer science and information systems. Eligible students must have achieved at least junior class standing and have a cumulative GPA of 3.0 or higher. From the students who meet these criteria, additional consideration is given to students who participate in an intercollegiate sport at Towson University.

DEPARTMENT OF MATHEMATICS

The Ann L. Wagner Scholarship in Mathematics honors Ann Wagner who was born and raised in Manitowoc, Wisconsin. She graduated from Silver Lake College with a bachelor's degree in mathematics. Wagner received her master's degree in mathematics from Bowling Green State University in Ohio and joined the faculty at Towson University in 1968. Wagner often taught seminars and workshops for Elderhostel programs and for youngsters. She designed and taught the first courses for girls in the Program for Mathematically Precocious Youth, and she ran several other programs for the Maryland Science Center. Wagner is fondly remembered for her caring and mentoring of students. She was also helpful to women coming back to school many years after high school. Wagner taught at Towson University for twenty-five years until her early death in 1993.

The Department of Mathematics Scholarship recognizes the superlative academic achievement of a Mathematics student.

The Eunice Bowers Schmied (Class of 1930) and Karl Otto Schmied Memorial Scholarship honors Eunice Bowers Schmied who graduated in 1930 from State Normal School (now Towson University) with a major in elementary education. She was a mathematics teacher and later a mathematics supervisor in the Baltimore City Public Schools. Her late husband, Otto Karl Schmied, taught modern languages in Baltimore City. Mrs. Schmied was active in alumni events for many years. She died in 2003.

The Mary Hudson Scarborough Award for Excellence in Mathematics; The Mary Hudson Scarborough Award for Excellence in Middle School Mathematics Education; The Mary Hudson Scarborough Award for Excellence in Secondary Mathematics Education are awarded to outstanding graduating seniors. Mary entered the State Normal School (now Towson University) in 1889. In that year, she became principal of the Model School, an elementary school operated by the Normal School. In 1907, she became a faculty member of the Normal School and taught mathematics there for thirty years. Following her retirement, she served as Alumni Field Secretary until 1947. She died in 1953.

The Porter Family Scholarship in Mathematics and Computer Science began in 2017 thanks to a generous donation from E. Clarke Porter '76 and Phyllis A. Thomson. The award alternates yearly between a mathematics major and a computer science major.

The Mildred T. Becker Scholarship was established by Mark Becker '80 and Laura Voisinet '81 in 2005 to honor his mother and to encourage promising mathematics students. Mrs. Mildred T. Becker passed away in 2011. Dr. Mark Becker is currently the President of Georgia State University in Atlanta, Georgia.

The Joyce C. Neubert Award in Mathematics was established in memoriam of Joyce C. Neubert who was born and raised in Baltimore, Maryland. She graduated from The Catholic High School of Baltimore and Mount St. Agnes College. She received her master's degree in mathematics from The Catholic University of America in Washington, D.C., and joined the mathematics department at Towson University (then Towson State College) in 1968. Among her many accomplishments: Neubert earned a Towson State University Merit Award for Outstanding Faculty and a Student Government Award for Teaching Excellence. Neubert was a volunteer with the House of Ruth and the National Organization for Women. She also supported the work of HERO (Health Education Research Organization). Neubert taught at Towson University for twenty years before her untimely death on May 29, 1987.

The Marie D. Rutenbergs Scholarship in Mathematics was established in 2014 by Assistant Professor Marie D. Rutenbergs, who taught at Towson University from 1967 until her retirement in 1999.

The Dr. Sarhangi Endowed Scholarship honors the memory of Dr. Reza Sarhangi, Professor of Mathematics Education in the Department of Mathematics. The recipient is a mathematics major who demonstrates a special interest in the mathematical connections in art, music, architecture, education and culture.

DEPARTMENT OF PHYSICS, ASTRONOMY AND GEOSCIENCES

The Eddie Loh Undergraduate and Graduate Physics Scholarships were established in 2017 with a generous gift from Professor Emeritus Eddie Loh, who taught physics and chaired the Department of Physics, Astronomy and Geosciences at Towson University for many years.

The Edward I. Rubendall Physics and Geosciences Achievement Awards and The Edward I. Rubendall Endowment honors the memory of the late Professor Edward I. Rubendall, who shepherded the development of Towson's Physics Program in its early days. Today this endowment provides the Department of Physics, Astronomy and Geosciences support for its programs and students. Expendable income may be used for scholarships, awards, and other activities that directly benefit the Department and its students.

The Geoscience Achievement Award recognizes the notable academic achievement of a geoscience student.

The Mineralogical Society of America Undergraduate Prize is provided by the Mineralogical Society of America to recognize academic achievement in the field of

mineralogy and petrology. Students must be nominated by a faculty member who is a member of the MSA.

The William F. Pelham Award for the Outstanding Junior honors the late Professor Bill Pelham, who played an important role in faculty governance of Towson University. Pelham epitomized the department's diversity: educated in chemical engineering, he came to Towson as a science educator and left as a mainstay of the physics program. The Pelham award goes to the outstanding junior in the Department of Physics, Astronomy and Geosciences irrespective of his or her major.

TOWSON UTEACH

The Dollenberg Family Scholarship was established by P. Douglas and Kathleen Dollenberg in 2008 to provide support to students who are pursuing a career in teaching mathematics and who are graduates of a Baltimore City or Baltimore County high school.

The Dr. Carol L. and Robert E. Daihl Endowed Scholarship was established in 2007 with a gift from Carol Daihl in memory of her late husband, Robert. He taught at Towson University for nearly 30 years. The scholarship is for science majors within the Fisher College who intend to teach in a secondary school and is awarded during the semester they are student teaching.

The Dr. George E. Hohl '55 and Anne S. Hohl Endowed Scholarship for Towson UTeach was established in 2014 to provide scholarships for undergraduate students planning to pursue a career as a secondary teacher in one or more STEM disciplines. Dr. George Hohl was a previous President of the Towson University Alumni Board. His long and successful career with Baltimore County Schools included many years as a school Principal.

The Kahlert Foundation Scholarship for Towson UTeach began in 2015 to reflect the support of Greg and Roberta Kahlert for the success of Towson UTeach students. Roberta Kahlert '69 is retired from the Baltimore County Public School System where she taught middle school English at Arbutus Middle School.

The R. Elizabeth Remsberg '27 Endowed Scholarship for Towson UTeach began in 2013 thanks to a generous gift from Dr. Dudley and Mrs. Angela Smith of College Station, TX. Established in recognition of their parents (Dudley & Verta Smith and Charles & Elizabeth Remsberg) all of whom were trained as teachers. This scholarship is named for Elizabeth Remsberg who was educated in Frederick County and graduated in 1927 from the Maryland State Normal School.

Towson UTeach General Endowment Scholarship recognizes the superlative academic achievement of a UTeach student.

ENVS-ENVIRONMENTAL SCIENCE & STUDIES

The Charlie Conklin Scholarship was established from the generosity of Charlie E. Conklin, Jr in tribute to the many volunteers, interns, and employees from TU that have supported the Gunpowder Valley Conservancy over the years.

The Francesca Borrelli Johnson Endowed Environmental Scholarship was established on behalf of Francesca Borrelli Johnson (BS, Natural Science, 1993) who was an engaging student, an eager learner, a committed volunteer, and a passionate environmentalist. At the time of her tragic death on December 26, 2004, she was a graduate student in Environmental Science, studying water resource management. The scholarship provides support for undergraduate or graduate environmental science or environmental studies students who demonstrate the same values of engaged learning and environmental protection.

TOPS – TOWSON OPPORTUNITIES IN STEM

TOPS Program Scholarship

Towson Opportunities in STEM (TOPS) is a learning community program committed to celebrating diverse experiences and perspectives. The TOPS Program is a unique opportunity available to students majoring in Science, Technology, Engineering and Mathematics (STEM) at Towson University and provides peer support and mentoring, career exploration and other student success initiatives.

FISHER COLLEGE - OFFICE OF THE DEAN

The Fisher College Scholarships are to honor Jess Fisher who was a student at Towson University 90 years ago. A Baltimore native, he attended TU in the early 1930s, when it was known as the State Normal School. He was a member of both the school basketball and football teams. Although he did not complete his degree, his classes left a lasting impression. Had he completed his degree, he would have been a member of the class of 1934. Fisher founded and was president of Jess Fisher & Co., a real estate and development corporation in Washington, D.C. He founded the Robert M. Fisher Memorial Foundation in honor of his son who died in 1969. A strong believer in the importance of science and mathematics education, Fisher guided the foundation in support of many local programs, including research endeavors and scholarships. In June 2005, the Fisher Foundation made a \$10.2M gift to the university, for which this college is named. As part of that gift two scholarships were specified: one in memory of his son Robert and the other in memory of his daughter Cecilia.

The Jess Fisher, Class of 1934, College of Science and Mathematics Scholarship in Memory of Cecilia Fisher Rudman was established to honor the memory of the Fisher Family, and in particular, Cecilia Fisher Rudman, by providing annual full-tuition scholarships for exceptional undergraduate students in the Fisher College of Science and Mathematics. Preference is given to incoming freshmen.

The Jess Fisher, Class of 1934, Pre-Engineering Scholarship in Memory of Robert M. Fisher was established to provide annual full-tuition scholarships for exceptional undergraduate students planning a career in engineering. Preference is given to incoming freshmen.

The Richard E. Burdette, Jr. Scholarship was established for continuing full-time undergraduate junior or senior year students who demonstrate significant leadership and service to the university through student organizations, university committees, participation in study abroad programming or outstanding contributions to campus life. Richard Burdette III (Physics '96) funded this scholarship in honor of his father, Richard E. Burdette, Jr. Recipients may be majors in any program of the Fisher College of Science and Mathematics.

The Michele M. Cooper, M.D. Scholarship was established in 2011 with a gift from Dr. Michele M. Cooper. Dr. Cooper is a plastic surgeon who earned her B.S. in Biology from Towson University in 1991. She was a graduate of Anne Arundel County Public Schools, and she was the first person in her family to attend college (a “first generation” college student). Dr. Cooper’s gift is intended to award a scholarship to a similar science or math student from Anne Arundel County.

The Willard Hackerman Scholarship was established by Willard Hackerman for incoming freshmen students from Baltimore Polytechnic Institute who are committed to major in a program housed in the Fisher College of Science and Mathematics. A graduate of Baltimore Polytechnic Institute he had a profound impact on the Baltimore community and passionately supported the STEM disciplines.

The Hill-Lopes Scholarship was established by Barbara Hill and Ancelmo Lopes, friends of Towson University, to support diversity in science and mathematics. The Hill-Lopes Scholars Program provides dedicated, transformational support for Fisher College of Science and Mathematics majors to support the advancement and retention of women in the science and mathematics workforce.

The L. Melvin Roberts Memorial Scholarship was established by Mr. Melvin Roberts, a friend of Towson University, to provide financial support to worthy students in any program of the Fisher College of Science and Mathematics. The awards, under the direction of the dean, are made to students in their junior or senior year, and may be based on merit, financial need, or both.

The Goldwater Scholarship Program, administered by The Barry Goldwater Scholarship and Excellence in Education Foundation, supports outstanding sophomores and juniors who show exceptional promise of becoming the nation’s next generation of research leaders in the natural sciences, engineering and mathematics. Recipients have a strong commitment to a research career, display extraordinary intellectual intensity, and show great potential for significant future contributions in their chosen field.

The Maryland Space Grant Consortium Scholarship is awarded to support full-time students who are attending an affiliate institution (including Towson University), who need financial support, and who are pursuing studies in mathematics, computer science, the biological and life sciences, chemistry, geological sciences, physics, or astronomy, and whose career aspirations are related to aerospace or may lead to a NASA-relevant career.

The John B. '71 and Sharon Hafner Yingling '71 Scholarship is awarded to support students studying the natural sciences in the Jess and Mildred Fisher College of Science and Mathematics. Established in March of 2022 in honor of Sharon Hafner Yingling’s time as a biology major and her long-time career in science.

The Jess and Mildred College of Science and Mathematics
2024 Honors Convocation

Towson University
8000 York Road
Towson, Maryland 21252-0001
T. 410-704-2121

fesm@towson.edu | www.towson.edu/fesm

