32nd Annual
FCSM HONORS
CONVOCATION

Celebrating student accomplishments for 2021-2022
April 24th, at 1:30PM University Union Ballrooms

The Jess and Mildred Fisher College of Science and Mathematics
Dear Fisher College Students, Families, Faculty, Staff and Friends:

Welcome to the 32nd Annual FCSM Honors Convocation. We are celebrating the accomplishments of our FCSM students during the 2021-2022 academic year – a year that saw a return to the classroom and face-to-face teaching after the devastating coronavirus pandemic of 2020-2021. It has been clear that most students were ready to return and to recover from what was delayed or lost during the pandemic closure.

I want to applaud the faculty and staff of the Fisher College for their professionalism and hard work as they returned to campus and went above and beyond to serve our students. And I applaud our students for their accomplishments under less-than-ideal circumstances. As the spring semester comes to an end, we continue our long tradition of the Honors Convocation, recognizing the remarkable achievements of our students in the classroom, the field and the laboratory. We are so happy to once again hold an in-person Honors Convocation!

To those who will be graduating in four weeks, congratulations and best wishes! To those who will return to campus next fall to continue your studies, we eagerly look forward to seeing you again. I hope that everyone remains safe and healthy and has a great summer.

Sincerely,

David A. Vanko, Ph.D.
Dean
Towson University

Mission

Towson University fosters intellectual inquiry and critical thinking preparing graduates who will serve as effective, ethical leaders and engaged citizens. Through a foundation in the liberal arts, an emphasis on rigorous academic standards, and the creation of small learning environments, we are committed to providing a collaborative, interdisciplinary and inter-professional atmosphere, excellence in teaching, leadership development, civic engagement, and applied and sponsored research opportunities at the undergraduate and graduate levels. Our graduates leave Towson University with the vision, creativity and adaptability to craft solutions that enrich the culture, society, economy, and environment of Maryland, the region, and beyond.

Dr. Kim E. Schatzel, President
Dr. Melanie L. Perreault, Provost and Executive Vice President for Academic and Student Affairs

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.
The Jess and Mildred Fisher
College of Science and Mathematics

AGENDA

Opening
Dr. David A. Vanko, Dean

Introduction of Student Speaker
Dr. Vonnie Shields, Associate Dean

Undergraduate Student Speaker
Alexandria Jupinka

Departmental Awards & Scholarships
Dr. Laura Gough, Department of Biological Sciences
Dr. Ryan Casey, Department of Chemistry
Dr. Michael McGuire, Department of Computer & Information Sciences
Dr. Michael O’Leary, Department of Mathematics
Dr. David Schaefer, Department of Physics, Astronomy & Geosciences

Program Awards & Scholarships
Dr. Linda Cooper, Towson UTeach
Dr. Sharlene Roberson, Towson Opportunities in STEM
Dr. Chris Salice, Environmental Science and Studies Program
Ms. Kristin Pinkowski, Hill-Lopes Program Director

Scholarships, Travel & Research Awards
Dr. Vonnie D. C. Shields, Associate Dean

Closing
Dr. David A. Vanko, Dean

Reception to follow
Betty Kennedy Dale Scholarship
Rochelle Matheson

Biology Alumni Scholarship
Rachel Prosser
Tsion Mekonnen

Carl Henrikson Memorial Award
Ashley Mark

Compton N. Crook Award
Rochelle Matheson

Dr. Ruth Stocking Lynch Memorial Scholarship
Britney Erickson

James Edward Ewig Memorial Scholarship for Academic Achievement by a Senior
Britney Erickson

James Moniodis Scholarship for Returning Major
Mitchell Haddad

John David Horst Memorial Award for Outstanding Student Research Project
Lauren Pahutski
Samantha Wudtke

Lois D. Odell Scholarship for Outstanding Transfer Student
Rachel Prosser
Stephen Davies

Lois D. Odell Award for Outstanding Biology Senior
Rachida Koudjra

Mary Scarbrough-Carr Scholarship
Morgan Phillips
Meghan Ely

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

Wilfred B. Hathaway Award for Outstanding Biology Graduate Student
James Sodano
Zeguela Kamagate
DEPARTMENT OF CHEMISTRY  
Dr. Ryan Casey, Chairperson

Alan and Eileen Wingrove Endowment Scholarship for Chemistry Scholars
   Cierra DiSabato
   Emma Niner
   Matthew Vollmuth
   Samantha Topka
   Solangel Ayala Senzano

American Chemical Society Division of Analytical Chemistry Award
   Michael Jones

American Chemical Society Division of Organic Chemistry Award
   Emma Niner

CRC Press Freshman Chemistry Achievement Award
   Nicole Green

Excellence in Inorganic Chemistry Award
   Kathryn Foreman

Floyd Blankenship Memorial Award
   Vincent DiPietro

Frank B. Milio Book Award
   Jillian Bishop
   Caroline Wisler

Gibbs Award for Excellence in Chemistry
   Solangel Ayala Senzano

Greater Washington Institute of Chemists Student Award
   Tionna Harris

Maryland Section of the American Chemical Society Achievement in
Chemistry Award
   Taylor Shafirovich

Ronald and Linda Raspet Undergraduate Research Fellowship
   Thomas FitzGibbon

Student Affiliates of the ACS Scholarship
   Taylor Shafirovich
The AOC (Aberdeen Proving Ground Susquehanna Association of Old Crows Chapter) Scholarship
  Alexander Cochrane
  Brandon Yeo
  Christine Adams
  Katya Doersam
  Trevor Amburgey

Applied Information Sciences Scholarship
  MacKenzie Andrews

CyberCorps® Scholarship
  Adedoyin Mariam Adegbuyi
  Adam Atkins
  Dalton Brown
  Erik Nilson
  Lisa Marshall
  Oluwasetemi Owoeye
  Ralph Pisciotta
  Shane Homick
  Trevor Appelt

CySP Scholarship-Department of Defense Cyber Scholarship Program
  Alexander Cochrane
  Turhan Kimbrough

Doris K. Lidtke Excellence in Service Award
  Leilani Mason

James W. Smith Scholarship
  Jay Clute

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

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

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

Mid-Atlantic CIO Forum Scholarship
  Garrett Partenza
  Georgia Coleman
  Moshe Goldstein
Samuel Peacock  
Sean McGuire  
Skylar Gayhart  
William Freeman

**Wendy and Larry Letow Endowed Scholarship**  
Kimmy Polefka

**Porter Family Scholarship in Mathematics and Computer Science**  
Brandon Grabowski

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**DEPARTMENT OF MATHEMATICS**  
*Dr. Michael O'Leary, Chairperson*

**Ann L. Wagner Scholarship in Mathematics**  
Amy Augustino

**Eunice Bowers Schmied and Otto Karl Schmied Memorial Scholarship in Mathematics**  
Erin Stales

**Joyce C. Neubert Award in Mathematics**  
Yoon Seo Cheng

**Mary Hudson Scarborough Award for Excellence in Mathematics**  
Avery Schweitzer  
James Della-Giustina

**Mary Hudson Scarborough Award for Excellence in Secondary Mathematics Education**  
Amy Augustino  
Kaylee Fillers

**Marie D. Rutenbergs Scholarship in Mathematics**  
Matthew Brubaker

**Mildred T. Becker Scholarship**  
Ashleigh Alves  
Avery Schweitzer  
Dana Iskhakova  
Logan Call  
Serena Wernert  
Zachary Lynchard

**Porter Family Scholarship in Mathematics and Computer Science**  
Bailey VanBuren
Reza Sarhangi Scholarship
Rachel Schmitz

DEPARTMENT OF PHYSICS, ASTRONOMY AND GEOSCIENCES
Dr. David Schaefer, Chairperson

Eddie Loh Undergraduate Physics Scholarship
Benjamin Kist
Cody Miller
Daryna Soloviova
Nathaniel Christopher

Eddie Loh Graduate Physics Scholarship
Maegan Jennings

Edward I. Rubendall Physics Achievement Award for Outstanding Juniors
Benjamin Kist

Edward I. Rubendall Physics Achievement Award for Outstanding Seniors
Cody Miller

Geosciences Achievement Award
Elizabeth Arnold
Rebecca Molkau

Mineralogical Society of America Undergraduate Prize
Matt Gordon

William F. Pelham Award for Geoscience
Emily O'Donnell

William F. Pelham Award for Physics
Colin Choudhary

TOWSON UTEACH AWARDS
Dr. Linda Cooper, Program Director

Dollenberg Family Endowed Scholarship
Stephanie Newman

Dr. Carol L. and Robert E. Daihl Endowed Scholarship
Noah Baumann
Dr. George E. Hohl '55 & Anne S. Hohl Endowed Scholarship for Towson UTeach
   Nicolette Colona

The Kahlert Foundation Scholarship for Towson UTeach
   Catherine Smith
   Christina Freeman
   Elliot Rittenhouse
   Jailene Carela
   Kaylee Fillers
   Makenzie Vasquez
   Natalie Flanders
   Nicolette Colona
   Philip Dickson

R. Elizabeth Remsberg '27 Endowed Scholarship for Towson UTeach
   Jailene Carela

Towson UTeach General Endowment
   Alanna Andrews
   Amy Augustino
   April Mangaoil
   Ashleigh Alves
   David Johnson, Jr.
   Jaclyn Desz
   Jailene Carela
   Kaylee Fillers
   Logan Call
   Makenzie Vasquez
   Megan Lutz
   Nicolette Colona
   Noah Baumann
   Samantha Williscroft
   Stephanie Newman
   Thea Zurek
The Francis Borrelli Johnson Endowed Environmental Scholarship
Jacob Damrow

STEM Scholars Aspiration Award
Marques Claiborne

STEM Scholars Award for Academic Excellence
Kali Ferguson
Katherine Tan
Patience Odeh

STEM Scholars Residential Learning Community Peer Mentor Award
Anthony Saporito
Jamyra Thomas

TOPS Aspirations Award
Tyrique Baker

TOPS Outreach Award
Michael Ojo
Mohammed Abduljalil

TOPS Peer Mentor Award
Jailene Carela

TOPS Scholar Award
Andrew Mandahl
Elizabeth McMillan
Michael Ojo
Mohammed Abduljalil
HILL-LOPES SCHOLARSHIPS
Ms. Kristin Pinkowski, Program Director

Alpha Cohort (Third Year in the Program)
Aaliah Burney
Alexandria Jupinka
Kayla Cubernot
Meghan Ely
Priscilla Hounkponou
Samira Vuchula
Stephanie Prem

Beta Cohort (Second Year in the Program)
Briana Hutchins
Caroline Etherton
Jordan Brooks
Kelsey Evans
Maya Larbi
Olivia Sager
Olufunto Ayoku
Renee Ofori
Samantha Frias
Skylar Gayhart
Tionna Harris

Gamma Cohort (First Year in the Program)
Annie Keele
Britney Whittington
Carissa Memmel
Ebunoluwa Adelola
Elaina Piccicuto
Glory Omodia
Grace Wilson
Hailey Bartolomeo
Maliya Baxter
Morgan Hawkins
Sumra Chaudhry
Taylor Pettaway
FCSM COLLEGE-LEVEL AWARDS
Dr. David A. Vanko, Dean & Dr. Vonnie D. C. Shields, Associate Dean

Jess Fisher, Class of 1934, College of Science and Mathematics Scholarship in Memory of Cecilia Fisher Rudman
  Alexandra Reifer
  Angelique Sumilang
  Brett Weeks
  Grace Larocque
  Hannah Little
  Leonard Johnson
  Phuong Dinh Nguyen

Jess Fisher, Class of 1934, Pre-engineering Scholarship in Memory of Robert M. Fisher
  Clarence Powell
  Colin Choudhary
  Elizabeth Miller
  Jacob Weagly
  Kali Ferguson
  Taylor Pettaway

Michele M. Cooper, M.D. Scholarship
  Katie Gouty
  Zuri Mosley

L. Melvin Roberts Scholarship
  Taylor Shafirovich

Richard E. Burdette, Jr. Scholarship
  Maria Puglese

Maryland Space Grant Scholarship
  Akeem Laurence
  Cedric Wang
  Kyle Abrahams

Willard Hackerman Scholarship
  Amina Daniels
  Ashley Mark
  Ausar Weefur-Coleman
  Christopher Solano
  Kaitlynn Beahn
  Kemetrias Snowden
  Mekalae Nish
  Michael Aladejebi
  Nour Arnaout
  Patience Odeh
  Theresa Abalum
Abra Koudjra  
“Effect of Specific Amino Acid Mutations on AbT1R NADase Activity”  
Mentor: Dr. Michelle Snyder (Biological Sciences)

Adelabu Afe  
“Comparing Methods of Measuring Sodium Ion Concentrations in Solution”  
Mentor: Dr. Ana Maria Soto (Chemistry)

Ahmed Ahmed  
“Single Particle Tracking in Poly(ethylene glycol): How the Water Content Defines the Transport in Hydrogels”  
Mentor: Dr. Khanh-Hoa Tran-Ba (Chemistry)

Alex Pellegrini  
“The Role of Exposure Route on the Toxicity of PFOS to the House Cricket”  
Mentor: Dr. Christopher Salice (Environmental Science & Studies Program)

Anique Aaron  
"Complement Immune Response Activation in TLR4 Knockout Cells"  
Mentor: Dr. Erin Harberts (Biology)

Briana Porter  
"Designing and Building Semi-Natural Amazonian and North American Freshwater Ecosystem Exhibits"  
Mentor: Dr. Christopher Oufiero (Biology)

Cedric Wang  
“Mechanically Optimizing Light Scattering Optomechanics”  
Mentor: Dr. Jeffrey Simpson (Physics, Astronomy & Geosciences)

Cody Miller  
“Electromagnetic Surface Waves at Gold-Silver Interface”  
Mentor: Dr. Vera Smolyaninova (Physics, Astronomy & Geosciences)

Daryna Soloviova  
"Photolithography for Gold-Silver Interface"  
Mentor: Dr. Vera Smolyaninova (Physics, Astronomy & Geosciences)

Emma Niner  
“Synthesis of Halichonic Acid A and Halichonic Acid B”  
Mentor: Dr. Keith Reber (Chemistry)

Hannah Little  
“Base Substitution and Structure/Dynamics of Fis-DNA Complex”  
Mentor: Dr. Stephen Hancock (Chemistry)
Jacob Damrow
"Kinetics of Halosalicylate Chlorination at Low pH"
Mentor: Dr. John Sivey (Chemistry)

Javier Arteaga
"Polarization Reflectometry for Multilayered Metamaterials"
Mentor: Dr. Vera Smolyaninova (Physics, Astronomy & Geosciences)

Joseph Fowler
"Investigating Competition Between Fungi and Termites"
Mentor: Dr. Mark Bulmer (Biology)

Junela Hunat
"Investigation of DMTN Gene Expression Using a Cell Culture Model of Endotoxemia"
Mentor: Dr. Erin Harberts (Biology)

Kathryn Nunez
"The Molecular Response of Alternative Pathways Activated During Septic Shock"
Mentor: Dr. Erin Harberts (Biology)

Maria Webster
“Utilizing Galvanic Exchange to Synthesize Gold Based Ferrofluids”
Mentor: Dr. Mary Devadas (Chemistry)

Mehnaz Falguni
"Complement Immune Response Activation in TLR4 Knockout Cells"
Mentor: Dr. Erin Harberts (Biology)

Michael Lukianenko
"Generation of Structurally Diverse Lipid A"
Mentor: Dr. Erin Harberts (Biology)

Michel Kane-Jackson
"Generation of Structurally Diverse Lipid A"
Mentor: Dr. Erin Harberts (Biology)

Nathaniel Christopher
"Higher Resolution Imaging and Analysis of Nonlinear Effects of Transmission of Infrared Light through Ferrofluids as a Gravity Analog"
Mentor: Dr. Vera Smolyaninova (Physics, Astronomy & Geosciences)

Phoebe Calkins
"Complement Immune Response Activation in TLR4 Knockout Cells"
Mentor: Dr. Erin Harberts (Biology)

Samantha Greenbaum
"Termite Social Defenses Against Pathogens"
Mentor: Dr. Mark Bulmer (Biology)
Samantha Topka
“Synthesis of Mixed Bi-Icosahedron Nanoclusters with Increased Fluorescence”
Mentor: Dr. Mary Devadas (Chemistry)

Solangel Ayala Senzano
"Quantification of Air Pollutants Found in Tree Leaf Samples"
Mentor: Dr. Katheryn Kautzman (Chemistry)

Taylor Shafirovich
"SERS Detection of Gunshot Residue using a Portable Raman Spectrometer"
Mentor: Dr. Ellen Hondrogiannis (Chemistry)

Tsion Mekonnen
“Factors Affecting the Transition and Stabilization of B to A DNA”
Mentor: Dr. Ana Maria Soto (Chemistry)

Vincent DiPietri
"Quantifying Active Halogen Residuals using TMB"
Mentor: Dr. John Sivey (Chemistry)

Zachary Williford
"Generation of Structurally Diverse Lipid A"
Mentor: Dr. Erin Harberts (Biology)

Zara Freeland
“Water Soluble Bimetallic Gold Nanoclusters”
Mentor: Dr. Mary Devadas (Chemistry)

Zolani Grady
“Synthesis and Characterization of Fe(acac)3 and Co(acac)2 Ferrofluids for Sensing Applications”
Mentor: Dr. Mary Devadas (Chemistry)

UNDERGRADUATE TRAVEL AWARDS
Undergraduate Research Grants in 2021–2022

Alexandria Jupinka
“High-Polyphenol Sorghum Bran Extracts Decrease Glutathione Peroxidase Expression and Activity in Colon Cancer cells”
American Society for Biochemistry and Molecular Biology, Philadelphia, PA
Mentor: Dr. Peko Tsuji (Biology)

Alexis Garloff
“A Comparison of Five DNA Extraction Methods to Extract Genomic DNA from Human Body Fluid and Fly Artifact Samples”
Christopher Pamah
“Creating Infrastructure for Celestial Observations in Support of Community Outreach”
American Astronomical Society, Salt Lake City, UT
Mentor: Dr. Jenifer Scott (Physics, Astronomy & Geosciences)

Jacob Damrow
“Catalysis of Aromatic Compound Halogenation by Chloride, Bromide, and Hydronium Ion”
American Chemical Society, San Diego, CA
Mentor: Dr. John Sivey (Chemistry)

Nguyen Tien Anh Quach
“Can a Maryland Piedmont Trout Stream be Protected from Rapid Urban Development? A Long Term View”
Joint Aquatic Sciences Meeting, Grand Rapids, MI (virtual)
Mentor: Dr. Susan Gresens (Biology)

Seth McCoy
“Halogenation of Para-Hydroxybenzoate Esters (parabens) in Chlorinated and Brominated Waters Under Simulated Drinking Water Disinfection Conditions”
American Chemical Society 2021, Atlanta, GA
Mentor: Dr. John Sivey (Chemistry)

Seth McCoy
“Investigation of Acid/Base Speciation and Halogenation Kinetics for Parabens in Simulated Drinking Water”
American Chemical Society 2022, Atlanta, GA
Mentor: Dr. John Sivey (Chemistry)

Tionna Harris
“Catalysis of Aromatic Compound Halogenation by Chloride, Bromide, and Hydronium Ion”
American Chemical Society 2022, Atlanta, GA
Mentor: Dr. John Sivey (Chemistry)
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 ad 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 Scholarship for Outstanding Transfer Student and 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, 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 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 and 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.
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 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

STEM Scholars Aspiration Award is awarded to the student who most embodies the values of the STEM Scholars Residential Learning Community (RLC) program.

STEM Scholars Award for Academic Excellence is awarded to the student with an excellent grade point average.

STEM Scholars Residential Learning Community Peer Mentor Award is awarded to the students who consistently work closely with their peers sharing personal knowledge and assisting students to excel.

TOPS Aspiration Award is awarded to the students who most embody the values of the TOPS Program.

TOPS Outreach Award is awarded to the students who work to educate their peers about opportunities available in the STEM fields and are positive ambassadors for the TOPS Program.

TOPS Peer Mentor Award is awarded to the student who consistently works closely with his/her peers sharing their personal knowledge and assisting students to excel.
TOPS Scholar Award is awarded to the student with an excellent grade point average.

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.
Department of Biological Sciences

Women in Science Club
Presidents: Hailee Peters
Vice President: Muriana Fleming
Secretary: Madison Gamble
Treasurer: Mya Spivey
Outreach Committee Chair: Mehnaz Falguni
Creative Committee Chair: Joycelyn Adeoye
Faculty Advisors: Dr. Beth Kautzman and Dr. Peko Tsuji

Towson University Chapter of the American Society for Biochemistry and Molecular Biology (TU ASBMB) Club
President: Dorian Arrindell
Vice President: Mohammed Abduljalil
Secretary: Jisela Ramos
Treasurer: Faith Omoteye
Fundraising Chair: Gabrielle Stuart
Media Director: Ivana Singh
Programming Director: Jia Yin Zheng
Recruiting Director and ASBMB Liaison: Trinity Soto
Volunteer Coordinator: Jisela Ramos
Faculty Advisor: Dr. John E. Weldon
Email: TUASBMB@gmail.com

Department of Chemistry

Forensic Science Student Organization (FSSO)
Primary Contact: Brianna Watts
Faculty Advisor: Dr. Dana Kollmann
https://involved.towson.edu/organization/FSSO

Pre-Pharmacy Club
President: Brianna Darbasie
Vice President: Alyssa Braithwaite
Secretary: Kemetrias Snowden
Faculty Advisor: Dr. Ana Maria Soto
https://involved.towson.edu/organization/prepharmacyclub

Student Affiliates of the American Chemical Society (SAACS)
President: Emma Niner
Vice President: none/vacant
Secretary: Maria Webster
Treasurer: Desmond Smith
Faculty advisor: Dr. Keith Reber
https://involved.towson.edu/organization/SAACS

Computer and Information Sciences
Cyber Defense Club
Contact: Mike O'Leary
https://www.towson.edu/fcsm/departments/computerinfosci/resources/studentorgs/club.html

The iTech Club
President: David Guy-Decker
Vice-President: Bethel Hailu
Co-Web Developer: Donald Johnson Jr
Co-Web Developer: Britney Whittington
Secretary: Soham Sen
Faculty Advisor: Dr. Willie Sanders
For more information go to: http://wp.towson.edu/itech/

The Software Engineering Club
President: Jenna Porter
Vice President: Ian Smith
Committee Chair: Joe Adrian
Committee Chair: Alia Herndon
Committee Chair: Tyree Adams
Faculty Advisor: Dr. Josh Dehlinger
https://involved.towson.edu/organization/softwareengineeringclub

The Women in Tech Club
Contact: Justine Caylor and Victoria Arhavbarien
https://involved.towson.edu/organization/womenintech

Doctoral Students Computer Science Association (DSCSA)
Contact: Dr. Chao Lu
https://www.towson.edu/fcsm/departments/computerinfosci/resources/studentorgs/dscsa.html

The Pledge of the Computing Professional
Contact: Dr. Alfreda Dudley
https://www.towson.edu/fcsm/departments/computerinfosci/resources/studentorgs/pledge.html

Upsilon Pi Epsilon Honor Society (UPE)
President: Justine P. Caylor
Faculty Advisor: Dr. Nam Nguyen
https://www.towson.edu/fcsm/departments/computerinfosci/resources/studentorgs/honorsociety.html

Department of Mathematics
Actuarial Science and Risk Management Club (ASRM)
Co-Presidents: Erin Stales and Serena Wernert
Secretary: Lea de Lausnay
Fundraising and Treasurer: Serena Wernert
Community Service Coordinators: Matthew Brubaker, Adam Powell,
Daniel Neman
Public Relations Coordinators: Dana Iskhakova, Austin Raymond, and Grace Larocque
High School Recruitment Coordinator: Matthew Brubaker
Job Fair: Erin Stales and Serena Wernert
Leader for Exam P and Exam FM Study Group: Bailey VanBuren, Zachary Lynchard, John Morrow, Dana Iskhakova
Faculty Advisor: Dr. Min Deng

Department of Physics, Astronomy and Geosciences
Society of Physics Students/SPS
President: Christopher Pamah
Vice President: Jasmine Patel, Jennifer Scheiderer
Secretary and Social Media Coordinator: Chester Jackson
Treasurer: Shannon Markward
Outreach coordinator: Greggor Hines
Graduate Student Liaisons: Benjamin Moore, Cody Miller
Co-Advisor: Dr. James Overduin
Co-Advisor: Dr. Rajeswari Kolagani

Geology Club
President – Emily O'Donnell
Vice President – Patrick Schneider
Secretary – Abram Jeremenko
Advisors are Dr. Andrew Hawkins and Dr. Michelle Casey