



STEM Division's ninth annual STEM Week connects students to opportunities, academic pathways, and careers in Science, Technology, Engineering, and Mathematics (STEM).

Explore STEM fields and careers through fun research talks, career panels, hands-on activities and demonstrations, and a field trip. Prepare for your success with skill-building workshops, information panels on scholarships and college resources, and get crucial tips to promote your success and overall well-being.

Students—attend two or more sessions and receive a digital certificate!

There will be a **raffle** for a gift in **every session**.

### MONDAY 4/1

10–11 a.m. [Register](#)

#### Panel: My Passion for STEM V

Mr. David Achu; Ms. Sarah Alhawamdeh; Ms. Oyindamola Dada; Mr. Clint Hinostrza; Ms. Zenobia McBride; Mr. Brian Myers (PGCC Students)

11 a.m.–12 p.m. Chesapeake Hall, Rm. 309 | [Register](#)

#### Résumé, Interview, and Dressing for Success H

Paul Van Cleef, Ed.D. (PGCC)

12–1 p.m. [Register](#)

#### Journeys in STEM - Hosted by the Vivien Thomas Scholars Initiative V

Noelle Vargas, Ph.D. (JHU); JHU Students: Mr. Victor Omoniyi; Ms. Alyssa Rorie; Ms. Sierra Williams-McLeod

1–2 p.m. [Register](#)

#### Recognize Your Power, Overcome Weakness, and Achieve Success V

Edward Gonzales (NASA GSFC)

2–3 p.m. Chesapeake Hall, Rm. 309 | [Register](#)

#### Unlocking Opportunities: The PGCC-MSU B2B Scholarship Program H

Yuda Anriany, Ph.D. (PGCC); Dr. Lisa Brown, Ph.D. (MSU); Amber Hodges, Ph.D. (MSU); Victoria Taylor, Ph.D. (PGCC)

3–4 p.m. Chesapeake Hall, Rm. 309 | [Register](#)

#### Becoming a Competitive Applicant H

Prof. Paul Assanah (PGCC); Prof. Michelle Klein (PGCC)

4–5 p.m. [Register](#)

#### Applications of Chemistry in Human Molecular Toxicology V

Michael Stone, Ph.D. (Vanderbilt)

5–6 p.m. [Register](#)

#### The Future of Data Science V

Anna Englesone, Ph.D. (BDT)

### TUESDAY 4/2

10–11 a.m. Chesapeake Hall, Rm. 309 | [Register](#)

#### The Solar Eclipse of 2024 H

David Simpson, Ph.D. (NASA GSFC)

11 a.m.–12 p.m. Chesapeake Hall, Rm. 109 | [Register](#)

#### The Importance of Academic Advising H

Prof. Jay Lee (PGCC); Devin Richards, Th.D. (PGCC); Paul Van Cleef, Ed. D. (PGCC)

12–1 p.m. Chesapeake Hall, Rm. 309

#### NASA Engagement Opportunities: Internships and Beyond I

Lisa Adams, Ph.D. (NASA GSFC)

1–2 p.m. [Register](#)

#### Panel: Why I Love My Student Organization V

Ms. Celine Anong; Mr. Esmail Esayed; Ms. Daniela Herrera; Ms. Adanna Ogba; Ms. Deborah Olaoye (PGCC Students)

2–3 p.m. [Register](#)

#### Take the Escher Stairs to the Vermeer Floor - Mathematics and the Visual Arts V

Prof. Radu Georgescu (PGCC)

3–4 p.m. [Register](#)

#### Navigating the PGCC Cyber Landscape: How Our Cybersecurity Program Paves the Way for Success V

Prof. Patricia Okorie (PGCC)

4–5 p.m. Chesapeake Hall, Rm. 309 | [Register](#)

#### Ethnomathematics H

Prof. PremRaj Ruffin (PGCC)

5–6 p.m. [Register](#)

#### Panel: Careers in Chemistry V

LaKesha Perry (NIST); Solomon Quansah Ph.D. (WSSC); Cassandra Taylor, Ph. D. (FDA)

6–7 p.m. [Register](#)

#### Building Information Modeling (BIM): Digital Transformation In Architecture, Construction and Engineering V

Prof. Maya Srinivasan (PGCC)

### WEDNESDAY 4/3

10–11 a.m. [Register](#)

#### Information Session: American Society of Mechanical Engineers (ASME) V

Hossein Besharatian, D. Sc. (PGCC); Daniel Pino (ASME); Ms. Andrea Willey (PGCC)

11 a.m.–12 p.m. [Register](#)

#### UMD Chemistry Undergraduate Research Labs V

Leah Dodson, Ph. D. (UMD); with UMD Students: Ms. Raina Morley; Ms. Emma Neiswender; Mr. Andrew Norris

12–1 p.m. Chesapeake Hall, Rm. 309 | [Register](#)

#### Keys to Success H

Prof. Deborah Bowles (PGCC)

1–2 p.m. [Register](#)

#### Certification: The Game Changer V

Prof. Mary Roberts (PGCC)

1–2 p.m. Chesapeake Hall, Rm. 305 (Limited Seats) | [Register](#)

#### Let's Print in 3D! I

Mr. David Lloyd (PGCC)

2–3 p.m. Chesapeake Hall, Rm. 309 | [Register](#)

#### The Multi-Disciplinary Nature of Fire Safety H

James Milke, Ph.D., P.E. (UMD)

3–5 p.m. [Register](#)

#### Panel: Careers in Health Sciences V

Dr. Cynthia Cheng, MD (ARMC); Dr. Catie Donovan, DDS (ADA); Anna Gearing, RN, CM (FHH); Dr. Natalie Little OTD, OTR/L (AOTA, CPST)

5–6 p.m. Chesapeake Hall, Rm. 309 | [Register](#)

#### Crafting Your Personal Statement H

Prof. Paul Assanah (PGCC); Prof. Michelle Klein (PGCC)

6–7 p.m. [Register](#)

#### Multi-Angle Imaging Spectroradiometer (MISR)

Mission: Clouds and Climate V

Ms. Catherine Moroney (NASA JPL)

### THURSDAY 4/4

10–11 a.m. Chesapeake Hall, Rm. 309 | [Register](#)

#### Physics and Astronomy: Exciting Research and Careers! H

Katya Leidig (UMD)

11 a.m.–12 p.m. [Register](#)

#### Academic Advising: Bridging the Gap V

Prof. J. Lee (PGCC); Prof. Michelle Klein (PGCC); Devin Richards, Th.D. (PGCC); Paul Van Cleef, Ed. D. (PGCC)

12–2 p.m. [Register](#)

#### STEM Career and Internship Fair V

Office of Career Development and Internships (PGCC)

12–1 p.m. [Register](#)

#### What is ChatGPT? V

Koudjo Koumadi, Ph.D. (PGCC)

1–2 p.m. [Register](#)

#### Heliophysics Big Year V

Antti Pulkkinen, Ph.D. (NASA GSFC)

2–3 p.m. [Register](#)

#### Everything You Wanted to Know About the STEM Student Learning Community but Were Afraid to Ask V

Cassandra Moore-Crawford, Ph.D. (PGCC)

3–5 p.m. [Register](#)

#### Panel: Careers in Engineering V

Wilbur Dahn (UMBC, PGCC Alumnus); Felix Forcho (Cognizant, Merck, PGCC Alumus); Ashley Henriquez (L3Harris, PGCC Alumna); Prof. Rocco Mennella (PGCC); James Milke, Ph.D., P.E. (UMD); Jonathan Ransom, Ph.D. (NASA LaRC); Michael Walder (NRL, PGCC Alumnus)

5–6 p.m. [Register](#)

#### Panel: Benefits of Student Organizations V

Godson Chukwuma, Ph.D (PGCC); Lorraine Clarke, Ph.D. (PGCC); Prof. Tracy Ring (PGCC)

6–7 p.m. [Register](#)

#### Introduction to Web Development V

Homer Sharafi, Ph.D. (PGCC)

### FRIDAY 4/5

10 a.m.–12 p.m. [Register](#)

#### Field Trip: Fire Protection Engineering Laboratory, UMD I

James Milke, Ph.D., P.E. (UMD); Ms. Liana Stiegler Orndorff (UMD)

11 a.m.–12 p.m. Chesapeake Hall, Rm. 309 (Limited Seats) | [Register](#)

#### Anatomy in Clay I

Paria Parto, Ph.D., DVM (PGCC)

12–1 p.m. Chesapeake Hall, Rm. 109 | [Register](#)

#### Programs and Support for Transfer Students in the Center for Minorities in Science and Engineering at UMD-CP H

Jarad Modaber-Alvarado (UMD)

12–1 p.m. [Register](#)

#### Studying Bull Shark Nursery Dynamics in Texas V

Prof. Amanda Lofthus (MiraCosta)

1–2 p.m. [Register](#)

#### STEM's Brightest Stars: Our Students V

Ms. Sara Negussie (LANL, PGCC Alumna); Mr. Brian Myers (PGCC Student); Ms. Daisy Navarro (PGCC Student); Dr. Roland Zama, M.D. (GUSOM, PGCC Alumnus)

2–3 p.m. Chesapeake Hall, Rm. 109

#### M^3: Making Math Magnetic I

Prof. Julie Gordon (PGCC); Prof. Kameswari Tekumalla (PGCC); Prof. Maria Thoundayil (PGCC)

3–4 p.m. [Register](#)

#### We Have Scholarships! V

Harry Christian III (PGCC); Prof. Lindsey Dodson, J.D. (PGCC)

4–5 p.m. [Register](#)

#### A Virtual Field Trip to NASA's Wallops Flight Facility V

Patricia Benner (NASA WFF)

### KEY FOR PRESENTER AFFILIATIONS

ADA	Adelphi Dental Associates
AOTA	American Occupational Therapy Association
ARMC	Arrowhead Regional Medical Center
ACH	Annapolis Cat Hospital
BDT	Benefits Data Trust
BRAH	Bay Ridge Animal Hospital
Cognizant	Cognizant Technical Solutions
CPST	Child Passenger Safety Technician
DESC	The Defense Science, Technology, Engineering, and Mathematics Education Consortium
FDA	The Food and Drug Administration
FHH	Frederick Health Hospice
GSFC	Goddard Space Flight Center
GUSOM	Georgetown University, School of Medicine
HSD	Heliophysics Science Division
JHU	Johns Hopkins University
JPL	Jet Propulsion Laboratory
LANL	Los Alamos National Lab
LaRC	Langley Research Center
L3Harris	L3Harris Technologies, Inc.
MC	MiraCosta College
MSU	Morgan State University
NASA	National Aeronautics and Space Administration
NIH	National Institutes of Health
NIST	National Institutes of Standards and Technology
NRL	The Naval Research Laboratory
PGCC	Prince George's Community College
RDMS	Registered Diagnostic Medical Sonographer
SHSU	Sam Houston State University
UMBC	University of Maryland, Baltimore County
UMD	University of Maryland, College Park
WFF	Wallops Flight Facility

### FOR MORE INFO

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 Ms. Ka Man Francis Fu (kfu@pgcc.edu)  
 Dr. Calvin Stansbury, Dean of STEM Division (stansbce@pgcc.edu)

# STEM WEEK 2024

April 1-5



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## MONDAY 4/1

10–11 a.m.

[Register](#)

### Panel: My Passion for STEM

Panelists: PGCC students Mr. David Achu, Ms. Sarah Alhawamdeh, Ms. Oyindamola Dada, Mr. Clint Hinostroza, Ms. Zenobia McBride, and Mr. Brian Myers

Students are the most important part of our college community. A few of these students will be graduating soon. Join us to hear their stories – what attracted them to STEM, was it easy or difficult for them to reach the finish line, and were the challenges worth it? What exactly is their passion in STEM? Ask them for some tips on what to prepare for and how to succeed!

11 a.m.–12 p.m.

Chesapeake Hall, Rm. 309 | [Register](#)

### Résumé, Interview, and Dressing for Success

Presented by: Dr. Paul Van Cleef (Academic and Career Advisor, Embedded STEM Advisor, PGCC)

Do you have an eye on an internship or a career opportunity? Come learn how to prepare, dress for success, and “knock ‘em dead” in interviews! This is a STEM Pathway Advising presentation.

12–1 p.m.

[Register](#)

### Journeys in STEM - Hosted by the Vivien Thomas Scholars Initiative

Presented by: Dr. Noelle Vargas (Assistant Director, the Vivien Thomas Scholars Initiative, JHU) and JHU Students Mr. Victor Omoniyi, Ms. Alyssa Rorie, and Ms. Sierra Williams-McLeod

Dr. Vargas will provide a brief overview of the Vivien Thomas Scholars Initiative. Then a few Vivien Thomas graduate students will discuss their STEM career journeys and attending graduating school at JHU.

1–2 p.m.

[Register](#)

### Recognize Your Power, Overcome Weakness, and Achieve Success!

Presented by: Mr. Edward Gonzales (Program Manager for People, Culture and Equity, NASA GSFC)

In this enlightening presentation, Edward Gonzales, Program Manager for Culture, People, and Equity at NASA, delves into his remarkable journey to the space agency, offering invaluable insights into navigating career success. With a focus on key ingredients for professional advancement, Gonzales shares his recipe for success, emphasizing the significance of networking and forging meaningful connections. Additionally, he addresses the pervasive challenge of imposter syndrome, providing strategies and empowering anecdotes on overcoming self-doubt (imposter syndrome), and thriving in one's chosen field. Join us for an engaging discourse that promises to inspire and equip attendees with actionable guidance for their own career trajectories.

2–3 p.m.

Chesapeake Hall, Rm. 309 | [Register](#)

### Unlocking Opportunities: The PGCC-MSU B2B Scholarship Program

Dr. Yuda Anriany (Professor, Natural Sciences, PGCC), Dr. Lisa Brown (Director, Office of Undergraduate Research and Associate Professor of Biology, MSU), Dr. Amber Hodges (Associate Professor & Associate Department Chairperson, Psychology, MSU), and Dr. Victoria Taylor (Associate Professor, Social Sciences, PGCC)

The PGCC-Morgan State University Bridge to the Baccalaureate

(PGCC-MSU B2B) Program facilitates the transition of research-oriented students from Prince George's Community College to Morgan State University to complete their STEM degrees. Find out how participants benefit from financial and academic support, mentoring, research opportunities, and professional development activities. Through these initiatives, the program provides aspiring STEM professionals with the resources and support necessary for success. This program is funded by the National Institutes of Health (NIH).

3–4 p.m.

[Register](#)

### Becoming a Competitive Applicant

Presented by: Prof. Paul Assanah (Professor, Natural Sciences, PGCC) and Prof. Michelle Klein (Associate Professor, Natural Sciences, PGCC)

Applying to a graduate program (medicine, physical therapy, pharmacy, etc.) can be challenging, time consuming, and expensive! Therefore, applicants should plan this experience years before entering the application cycle. Learn how to plan ahead so that you are the best possible applicant in this seminar.

4–5 p.m.

[Register](#)

### Applications of Chemistry in Human Molecular Toxicology

Presented by: Dr. Michael Stone (Professor of Chemistry, Vanderbilt University)

Aflatoxins are fungal toxins that can contaminate human foods. Dietary exposures to these compounds leads to increased cancer risk. I will discuss the interesting chemistry by which aflatoxins interact with DNA and how cells process the damaged DNA.

5–6 p.m.

[Register](#)

### The Future of Data Science

Presented by: Dr. Anna Englesone (Data Scientist, Benefits Data Trust)

What is data science? What are the required skills of a data scientist, and how does one acquire them? What kind of work do data scientists perform, and how will that change with the advent of AI? Can AI replace data scientists?

## TUESDAY 4/2

10–11 a.m.

Chesapeake Hall, Rm. 309 | [Register](#)

### The Solar Eclipse of 2024

Presented by: Dr. David Simpson (Physicist, NASA GSFC)

There will be a total solar eclipse on April 8, 2024. Come discover where and when the eclipse will be visible, and what science we hope to learn from this rare event.

11 a.m.–12 p.m.

Chesapeake Hall, Rm. 109 | [Register](#)

### The Importance of Academic Advising

Presented by: Prof. Janghyuk Lee (Academic and Career Advisor, PGCC), Dr. Devin Richards (Academic and Career Advisor, PGCC), and Dr. Paul Van Cleef (Academic and Career Advisor, STEM Advisor, PGCC)

Don't miss this opportunity to speak with STEM academic advisors and ensure you are on the right pathway. This is a STEM Pathway Advising presentation.

# STEM WEEK 2024

April 1-5



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12-1 p.m.

Chesapeake Hall, Rm. 309

## NASA Engagement Opportunities: Internships and Beyond

*Presented by: Dr. Lisa Adams (Student Services Manager and Center Internships Lead, NASA GSFC)*

This session will present opportunities for students to engage with NASA. Learn about internships, competitions, challenges, and other available programs! Internships are paid opportunities to work alongside mentors in a range of disciplines, full-time or part-time, at a NASA location or from home! There are Spring, Summer and Fall sessions. Additional ways to connect with NASA include challenges and competitions that are routinely posted. The session will also review programs for students from Minority Serving Institutions, including the NASA Community College Aerospace Scholars (NCAS) and MUREP Innovation Tech Transfer Ideas Competition (MITTIC).

1-2 p.m.

[Register](#)

## Panel: Why I Love My Student Organization

*Panelists: PGCC Student Club/Organization Officers Ms. Celine Anong (Women in Cyber Security Club), Mr. Esmail Esayed (Muslim Students Association), Ms. Daniela Herrera-Michaca (Research Students Club), Ms. Adanna Ogba (National Society of Black Engineers), and Ms. Deborah Olaoye (Student Government Association)*

Hear directly from the officers of a few student organizations and learn what it means to be a part of them.

2-3 p.m.

[Register](#)

## Take the Escher Stairs to the Vermeer Floor - Mathematics and the Visual Arts

*Presented by: Prof. Radu Georgescu (Associate Professor, Mathematics, PGCC)*

Take the Escher Stairs to the Vermeer Floor - Mathematics and the Visual Arts.

3-4 p.m.

[Register](#)

## Navigating the PGCC Cyber Landscape: How Our Cybersecurity Program Paves the Way for Success

*Presented by: Prof. Patricia Okorie (Associate Professor, Technology, Engineering, and Construction Department, PGCC)*

Our College's cybersecurity program is designed to equip students with the knowledge, skills, and hands-on experience needed to excel in the rapidly evolving field of cybersecurity. With a curriculum built on a foundation of cutting-edge theory and practical application, our program prepares students to address the increasingly sophisticated challenges posed by cyber threats. Students delve into core topics such as network security, cryptography, ethical hacking, incident response, and risk management. Through hands-on projects and real-world scenarios, they gain practical experience in identifying vulnerabilities, mitigating risks, and defending against cyberattacks. Upon completion of the program, students are well-prepared to pursue careers in a variety of cybersecurity roles.

4-5 p.m.

Chesapeake Hall, Rm. 309 | [Register](#)

## Ethnomathematics

*Presented by: Prof. PremRaj Ruffin (Adjunct Physics Instructor, Natural Sciences, PGCC)*

This presentation introduces the student to the cultural phenomena of

patterns that lie within mathematics. These patterns allow for rapid calculation techniques and help to develop critical thinking skills and open neuro pathways.

5-6 p.m.

[Register](#)

## Panel: Careers in Chemistry

*Panelists: LaKesha Perry (Physical Scientist/Academic Program Manager, NIST), Dr. Solomon Quansah (Western Branch WRRF Superintendent Production, WSSC), and Dr. Cassandra Taylor (Public Health Advisor, FDA)*

Experts from various fields will talk about a wide variety of careers in chemistry and discuss "What does the future look like for chemists?"

6-7 p.m.

[Register](#)

## Building Information Modeling (BIM): Digital Transformation In Architecture, Construction And Engineering

*Presented by: Prof. Maya Srinivasan (Assistant Professor, Technology, Engineering, and Construction Department, PGCC)*

Building Information Modeling (BIM) is a process that integrates 3D modeling and cloud computing to manage information about a built asset. Professionals in the Architecture, Engineering, and Construction (AEC) industry use BIM to create a digital representation of a building that can be used for planning, design, construction, and operations.

## WEDNESDAY 4/3

10-11 a.m.

[Register](#)

## Information Session: American Society of Mechanical Engineers (ASME)

*Presented by: Dr. Hossein Besharatian (Professor, Technology, Engineering, and Construction Department, PGCC), Daniel Pino (Program Coordinator, Workforce Development, ASME), and Andrea Willey (Internships and Employer Relations Coordinator, Office of Career Development and Internships, PGCC)*

This information session will explain free student membership to ASME.

11 a.m.-12 p.m.

[Register](#)

## UMD Chemistry Undergraduate Research Labs

*Presented by: Dr. Leah Dodson (Assistant Professor, Dept. of Chemistry and Biochemistry, UMD) and UMD Students: Ms. Raina Morley; Ms. Emma Neiswender; Mr. Andrew Norris*

Come for a tour of some chemistry undergraduate research labs at the University of Maryland, College Park's campus.

12-1 p.m.

Chesapeake Hall, Rm. 309 | [Register](#)

## Keys to Success

*Presented by Prof. Deborah Bowles (Adjunct Professor, Instructional Designer, Teaching and Learning Technology, PGCC)*

In this interactive workshop participants will discuss 21st century skills and ways to apply them to be successful. We'll talk about critical thinking, collaboration, creativity, character, and more. Participants will learn ways to improve their lives and walk away with ideas to implement to be successful.

# STEM WEEK 2024

April 1-5



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1-2 p.m.

[Register](#)

## Certification: The Game Changer

*Presented by: Prof. Mary Roberts (Associate Professor, Technology, Engineering, and Construction Department, PGCC)*

In today's competitive job market, obtaining a certification has become a game changer, offering professionals a clear advantage by validating their expertise and skill level. Employers increasingly value certified individuals for their specialized knowledge and commitment to professional development. Certifications boost credibility, open doors to new opportunities, and enhance earning potential. They demonstrate a dedication to excellence and ongoing learning, positioning individuals as valuable assets in their fields. By exploring the significance and impact of certifications, this presentation will underscore how they can truly be the game changer in one's career advancement and success.

1-2 p.m. Chesapeake Hall, Rm. 305 | Limited Seats | [Register](#)

## Let's Print in 3D!

*Presented by: Mr. David Lloyd (Computer Technician, Technology Client Support, PGCC)*

Learn how to use a 3D printer and then print a design in 3D! Support for this hands-on activity came from PGCC's past NASA MISTC grant 80NSSC18M0126.

2-3 p.m.

Chesapeake Hall, Rm. 309 | [Register](#)

## The Multi-Disciplinary Nature of Fire Safety

*Presented by: James Milke, Ph.D., P.E. (Professor Emeritus, Department of Fire Protection Engineering, UMD)*

Incorporating fire safety into the design of engineered products is inherently multi-disciplinary. The fire protection engineer (FPE) specializes in understanding the performance of fire protection designs. To do so, it's important that the FPE understands the product being protected. For example, designing fire safety in an aircraft requires a knowledge of the operation and design of an aircraft. In smart buildings, utilizing an array of sensors managed by artificial intelligence to assist firefighters requires an understanding of sensors and AI. Using drones to surveil wildfires to determine the location of fires requires an understanding of sensors, drones and wildfires.

3-5 p.m.

[Register](#)

## Panel: Careers in Health Sciences

*Panelists: Dr. Cynthia Cheng, MD (ARMC), Dr. Catie Donovan, DDS (ADA), Anna Gearing, RN, CM (FHH), and Dr. Natalie Little OTD, OTR/L (AOTA, CPST)*

Learn about a variety of careers in health science fields. Get motivated by our panelists' journeys and find a role model.

5-6 p.m.

Chesapeake Hall, Rm. 309 | [Register](#)

## Crafting Your Personal Statement

*Presented by: Prof. Paul Assanah (Professor, Natural Sciences, PGCC) and Prof. Michelle Klein (Associate Professor, Natural Sciences, PGCC)*

Did you know that a personal statement can account for 10-25% of one's college or program application evaluation? You are the only person who can tell your story to an admissions committee. Learn how to plan, construct, and craft this valuable statement with a mind mapping activity.

6-7 p.m.

[Register](#)

## Multi-Angle Imaging Spectroradiometer (MISR) Mission: Clouds and Climate

*Presented by: Ms. Catherine Moroney (Scientific Applications Software Engineer and Operations Engineer, NASA JPL)*

Clouds are the biggest source of uncertainty in the climate models as they vary greatly in height, thickness, and reflectivity, and the models currently do not take this into account. Due to MISR's unique configuration with nine cameras covering viewing angles from 70° forward to 70° aft, we can employ unique algorithms to more accurately measure clouds and provide this valuable information to modellers. This talk will give a brief overview of MISR, its algorithms, and the importance of the data.

THURSDAY 4/4

10-11 a.m.

Chesapeake Hall, Rm. 309 | [Register](#)

## Physics and Astronomy: Exciting Research and Careers!

*Presented by: Katya Leidig (NSF Graduate Research Fellow, Co-Lead of GRAD-MAP, UMD)*

Come to learn about a variety of exciting careers in physics and astronomy. Hear about some of the latest cutting-edge research, and find out how you can travel the world to present your research in these important subjects.

11 a.m.-12 p.m.

[Register](#)

## Academic Advising: Bridging the Gap

*Panelists: Prof. Janghyuk Lee (Academic and Career Advisor, PGCC), Prof. Michelle Klein (Associate Professor, Natural Sciences, PGCC), Dr. Devin Richards (Academic and Career Advisor, PGCC), and Dr. Paul Van Cleef (Academic and Career Advisor, STEM Advisor, PGCC)*

PGCC has academic advisors who will help you choose the courses that are required for your career pathway. But there is no single recipe that fits all. This panel will discuss how advising helps and where we can bridge the gap between academic advising and students' career pathways. Come and express your thoughts, needs, and concerns. You may make a difference in this excellent process that is designed to help you!

12-2 p.m.

[Register](#)

## STEM Career & Internship Fair

*Organized by: The Office of Career Development and Internships (PGCC)*

Meet with hiring employers and recruiters. Learn about qualifications, open positions, and the application process. Gain industry insights and make professional connections.

12-1 p.m.

[Register](#)

## What is ChatGPT?

*Presented by: Dr. Koudjo Koumadi (Professor, Technology, Engineering, and Construction Department, PGCC)*

What exactly is ChatGPT? How can you use it ethically to improve your learning?

# STEM WEEK 2024

April 1-5



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1-2 p.m.

## Heliophysics Big Year

*Presented by: Dr. Antti Pulkkinen, (Director of Heliophysics Science Division, NASA GSFC)*

In this presentation, Dr. Antti Pulkkinen will discuss The Heliophysics Big Year and how it represents a groundbreaking endeavor in the field of solar and space physics aimed at advancing our understanding of the dynamic interactions between the Sun, Earth, and space environment. This collaborative initiative brings together scientists, researchers, and space agencies from around the world to undertake a comprehensive exploration of solar phenomena. The Heliophysics Big Year promises to uncover new insights into the fundamental processes driving space weather dynamics, ultimately enhancing our ability to forecast and mitigate the effects of solar disturbances on Earth and space-based assets. In addition, Dr. Pulkkinen will discuss his academic journey and all the hurdles along the way to his eventual path to NASA.

[Register](#)

Come to learn about the STEM Collegian Center, the IT Clubs, and the Student Research Club.

2-3 p.m.

## Everything You Wanted to Know About the STEM Student Learning Community but Were Afraid to Ask

*Presented by: Dr. Cassandra Moore-Crawford (Professor, Natural Sciences, PGCC)*

This presentation will provide an overview of the opportunities available to students who engage with the STEM Student Learning Community (SLC) at PGCC. The STEM SLC is a Department of Defense (DoD) grant funded organization that works to support students in their STEM journey. We offer workshops and presentations, attend conferences, go on field trips and college visits, as well as help students explore internship, scholarship, and career opportunities. We provide the support to help you thrive in STEM and have fun along the way! Work for this presentation was supported by The Defense Science, Technology, Engineering, and Mathematics Education Consortium (DSEC) under contract number 30-312-0216908-66552L.

[Register](#)

3-5 p.m.

## Panel: Careers in Engineering

*Panelists: Mr. Wilbur Dahn (Computer Engineering Major at UMBC, PGCC Alumnus), Mr. Felix Forcho (Automation Engineer at Cognizant, Merck, PGCC Alumus), Ms. Ashley Henriquez (Electrical Engineer, L3Harris, PGCC Alumna), Prof. Rocco Mennella (Professor, Natural Sciences, PGCC), Dr. James Milke (Professor Emeritus, Department of Fire Protection Engineering, UMD), Dr. Jonathan Ransom, (Deputy Director, Engineering Directorate, NASA LaRC), and Mr. Michael Walder (Superintendent, Radar Division, NRL, PGCC Alumnus)*

Come learn about a variety of careers in engineering. Get motivated by our panelists' journeys and find a role model. Get inspired by the success of PGCC alumni! Ask questions and "make it happen" for you.

[Register](#)

5-6 p.m.

## Panel: Benefits of Student Organizations

*Panelists: Dr. Godson Chukwuma (Professor, Technology, Engineering, and Construction Department, PGCC), Lorraine Clarke, Ph.D. (Associate Professor, Natural Sciences, PGCC), and Prof. Tracy Ring (Associate Professor, Natural Sciences, PGCC)*

Getting involved with college organizations outside of the classroom can boost your chances for success in your studies and in life. Learn about a few STEM student opportunities at PGCC—and the benefits of being supported and connected as you continue your STEM journey.

[Register](#)

6-7 p.m.

## Introduction to Web Development

*Presented by: Homer Sharafi, Ph.D. (Professor, Technology, Engineering, and Construction Department, PGCC)*

In this presentation, students will learn the fundamentals of web development. Students will learn the basics of HTML, "the language of the Web," to set up scripts. The session is set up as a "hands-on" session, where the students are encouraged to participate in the process of web development.

[Register](#)

FRIDAY 4/5

10 a.m.-12 p.m.

## Field Trip: Fire Protection Engineering Laboratory, UMD

*Facilitated by: Dr. James Milke (Professor Emeritus, Department of Fire Protection Engineering, UMD) and Ms. Liana Stiegler Orndorff (Recruitment & Advising Coordinator, Department of Fire Protection Engineering, UMD)*

Is this the first time that you are learning about Fire Protection Engineering? Are you fascinated by the complex and crucial world of Fire Protection Engineering? Do not miss this exciting field trip!

How this works:

- Register by using the above "Register" link.
- You will receive further instructions in email.
- The group will depart from the College in a bus. At the end of the trip, the group will return to the College.

Partial support for this activity came from PGCC's NASA MUREP Curriculum Awards grant 80NSSC23M0194 (PI: Thakur). The STEM Week Team thanks the PGCC Athletics Department for lending us buses for this trip.

[Register](#)

11 a.m.-12 p.m.

Chesapeake Hall, Rm. 309 (Limited Seats)

## Anatomy in Clay

*Presented by: Dr. Paria Parto (Professor, Natural Sciences, PGCC)*

Building body organs in clay help the students to gain a dynamic understanding of anatomy! From the inside out, students study and develop the organs at the same time, discovering and appreciating interactive links. This makes it easier to gain a three-dimensional grasp of the body's systems. Also, one of the great features of this learning system is its reusability. Unlike dissection where we need to constantly purchase, use, and dispose of specimens, the clay and models can be used repeatedly for years.

[Register](#)

12-1 p.m.

Chesapeake Hall, Rm. 109 | [Register](#)

## Programs and Support for Transfer Students in the Center for Minorities in Science and Engineering at UMD-CP

*Presented by: Mr. Jarad Modaber-Alvarado (UMD)*

Discuss opportunities for research funding for undergraduate students pursuing STEM-focused degrees and other support that is offered by the CMSE for students looking to transfer into an engineering bachelor's program.

# STEM WEEK 2024

April 1-5



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12-1 p.m.

[Register](#)

## Studying Bull Shark Nursery Dynamics in Texas

*Presented by: Prof. Amanda Lofthus (Faculty, MiraCosta College, Sam Houston State University)*

Come learn about marine ecology and shark biology! Why do estuaries commonly serve as bull shark nurseries? Do juvenile bull sharks avoid habitats with higher densities of predators? This talk will discuss how researchers investigate important abiotic and biotic factors influencing habitat use decisions of juvenile bull sharks along the Texas gulf coast.

1-2 p.m.

[Register](#)

## STEM's Brightest Stars: Our Students

*Panelists: Ms. Sara Negussie (LANL, PGCC Alumna); Mr. Brian Myers (PGCC Student); Ms. Daisy Navarro (PGCC Student); Dr. Roland Zama, M.D. (GUSOM, PGCC Alumnus)*

STEM Week is all about our students. Let's talk to some of them—alumni and current—so we can get inspired by their journeys. Every single student is important and inspires us to strive for excellence. This will be the first in a new series of sessions where we talk to PGCC students in different points of their educational journeys.

2-3 p.m.

Chesapeake Hall, Rm. 109

## M<sup>3</sup>: Making Math Magnetic

*Presented by: Prof. Julie Gordon (Associate Professor, Mathematics, PGCC), Prof. Kameswari Tekumalla (Professor, Mathematics, PGCC), and Prof. Maria Thoundayil (Associate Professor, Mathematics, PGCC)*

M<sup>3</sup>: Making Math Magnetic consists of student presentations on mathematics and using research to engage the mind. We will also have a MATH FUN game covering math concepts taught across all levels.

3-4 p.m.

[Register](#)

## We Have Scholarships!

*Panelists: Mr. Harry Christian III (Director of Development, Office of Institutional Advancement, PGCC) and Prof. Lindsey Dodson, J.D. (Associate Professor, English Department, PGCC)*

Learn about the scholarships available to you and how to make them yours! Don't miss this opportunity to speak with two scholarship experts.

4-5 p.m.

[Register](#)

## A Virtual Tour of NASA's Wallops Flight Facility

*Presented by: Ms. Patricia Benner (Education Coordinator, NASA WFF)*

Come for a virtual tour of NASA's Wallops Flight Facilities located in the Wallops Island in Virginia. Hear about their Sounding Rockets and Balloon programs. Also, learn about exciting NASA careers and student opportunities where you can get involved!

## Virtual, Hybrid, or In-Person

### Virtual Session

Listed with a link to register. You will get a Zoom link in email after registration.

### Hybrid Session

Listed with a room number. Attend in-person or click the link to register and attend on Zoom.

### In-Person Session

Listed with room numbers without any links.

## Acknowledgments

1. We are grateful to our presenters and panelists for sharing their invaluable time and expertise with us.
2. Some of the work presented by PGCC faculty was supported by grants from The Defense Science, Technology, Engineering, and Mathematics Education Consortium (DSEC) and the National Institutes of Health (NIH).
3. We thank the National Aeronautics and Space Administration (NASA) for participation of four NASA centers in STEM Week. Support for some of the event activities came from our NASA MUREP Curriculum Awards (MCA) grant 80NSSC23M0194 and NASA MISTC grant 80NSSC18M0126.