

# Newsletter

## MEYERHOFF PARENTS ASSOCIATION



### SUMMER ESCAPE: A STRESS-BUSTING EDITION

With the help of parent volunteers, Meyerhoff Office staff, MPA Board members, students, and generous donations from many, summer fun-and-games were provided to incoming Freshmen as an opportunity to decompress before exams at the Summer Bridge Stress Buster on July 8th. Camaraderie and new friendships were evident as the students competed with rival pillar groups in games of tug-a-war, water balloon toss, limbo, and more. Students were able to embrace the sunny side of self-care!



DECEMBER 2023



### Newsletter Highlights

**Summer Escape: A Stress-  
Busting Edition**

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**MPA Town Hall and  
Scholar Research  
Exhibition**

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**2023 Meyerhoff Fall  
Retreat**

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**Meyerhoff Student Council**

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**MPA at UMBC  
Homecoming**

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**Annual Biomedical  
Research Conference for  
Minoritized Scientists  
(ABRCMS)**

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**Announcement**

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**Your Support Makes a  
Difference**

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**Contact Us**

MEYERHOFF  
PARENTS  
ASSOCIATION

HELPING OUR STUDENTS  
HOLD FAST TO THEIR DREAMS.



## DID SOMEONE SAY SUMMER FUN?

From interactive games that sparked creativity to team-building challenges that fostered new friendships, the Summer Bridge Stress Buster was not **just** about keeping our students active; it was a celebration of growth and learning through play!

We thank all who supported in making this event a success, particularly our M-34 cohort parents who led and organized the activities!

*We  
thank  
you!*



## 2023 SUMMER BRIDGE STRESS BUSTER





## MPA Town Hall and Scholar Research Exhibition

On September 16, the MPA organized a Town Hall Meeting and Scholar Research Exhibition in the UC Ballroom, aiming to strengthen connections with parents and guardians. This year's event included a review of MPA business, the election of 2023-2024 MPA Board Officers, annual reports from the program office, and research presentations from the Scholars. The event commenced with inspirational remarks from Mr. Keith Harmon, Director, and Mrs. Earnestine Baker, Executive Director Emerita, of the Meyerhoff Scholars Program. The overall outcome was highly successful.

### 2023-2024 MPA Board Officers

**President:** Michelle Brooks (M33)

**Vice President:** Jill Bispels (M33)

**Assistant V. President:** Rosalind Muchiri (M32)

**Recording Secretary:** Anthea Seymour (M35)

**Corresponding Secretary:** Yani Peyton (M34)

**Treasurer:** Sherene Maitland (M32)

**Assistant Treasurer:** Tiffany Byrd (M34)

**Editor:** Rochelle Matthews-Somerville (M33)

### 2023-2024 Cohort Representatives

**M33:** Florence Parry, Rosemary Dayie

**M34:** Veronica Hill, Monica Chiduzo, Ama Halm and Valerie Shelton

**M35:** Okey Ukairo, Alessandra Aloisi, Melonise Battle and Margarita Bojórquez



### 2023-2024 Alumni Representative

Darlene Brooks (M29), Denise Johnson (M29), Alisa Wallace (M29), Kenneth Dixon (M27), Regina Bracey (M25), Karen Furman (M25), Darlene Pernell-Bunkley (M31), Antonios Seas (M25 and M29), Deborah Nazon (M23), Edie Windsor (M13)



## Congratulations, Scholar Research Presenters

**Garret Hill (M32) Biochemistry and Molecular Biology** - "Investigating Hydrogel Desalination of Egyptian Limestone Objects Using NMR Spectroscopy"

**Daniel Williams (M32) Computer Science** - "Optimizing MUSE: Optimizing Permanent Magnets for Nuclear Fusion with Machine Learning"

**Dahne Pluck (M32) Physics** - "Are Hubble Residuals a Product of Poor Mass Estimates? Improving The Pantheon SN Ia Host Galaxy Characterization"

**Bella Guardado (M32) Chemistry** - "Synthesis of Amine Terminated MXene Thin Film via Epichlorohydrin Crosslinking"

**Pavan Umashankar (M32) Chemical Engineering** - "Determining Regions in USP15 that Regulate its Stability and Turnover in Ovarian Cancer Cells"

**Nicholas Pugh (M33) Mechanical Engineering** - "Digital Micromirror Devices Characterization in the Ultraviolet Wavelength Spectrum"

**Casey Hanks (M32) Computer Science** - "Leveraging Optogenetic Stimulation Data to Validate Local Field Potentials and Their Features"

**Anna Adelstein (M33) Biochemistry and Molecular Biology** - "Structural Studies of an HIV-1 Packaging Inhibitor that Targets the Viral RNA"

**Sean Starkloff (M32) Biological Sciences** - "Genetic Strategies for Selective Manipulation of TDP43 Isoforms in HEK293T Cells"

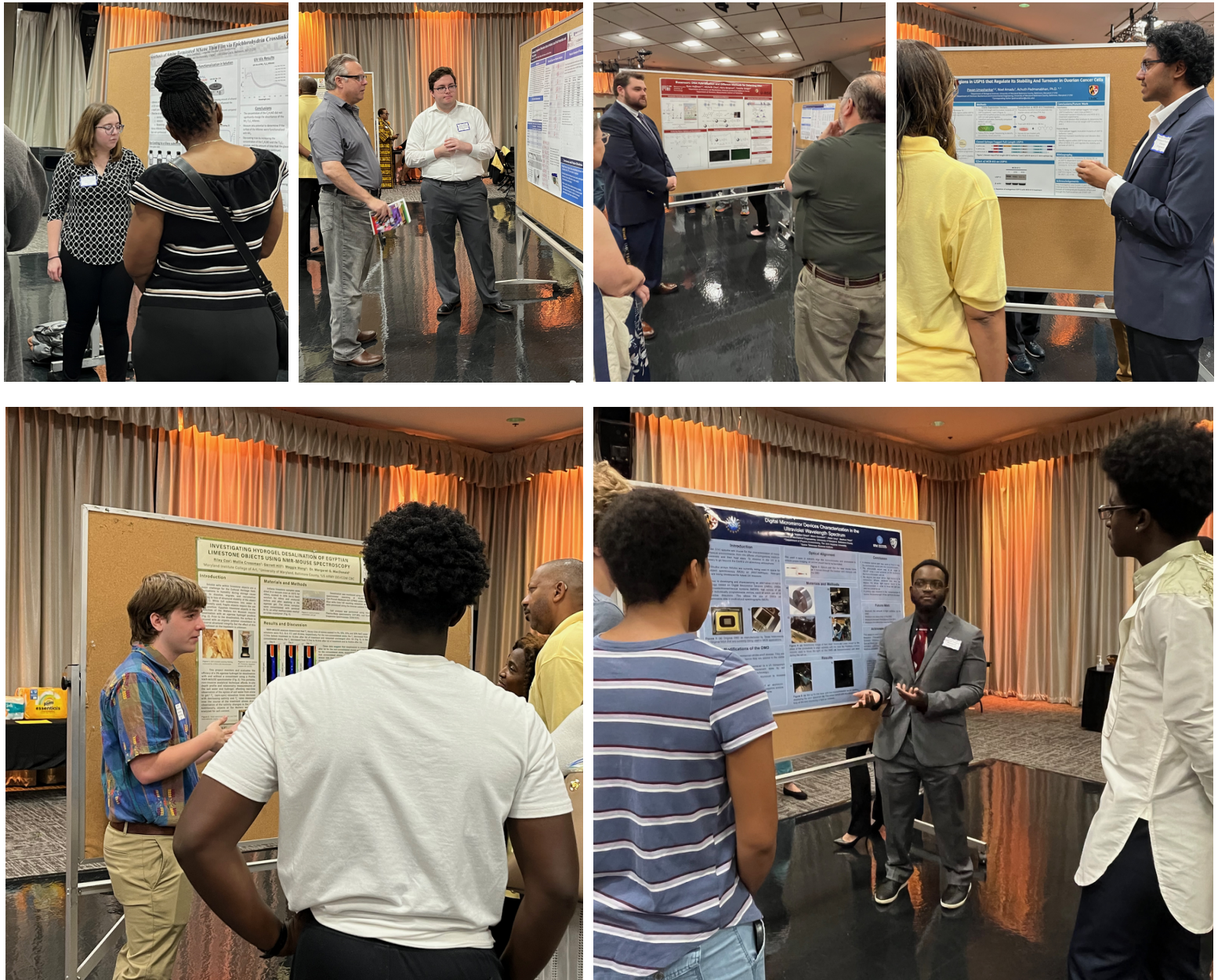
**Ryan Hoffman (M32) Chemistry** - "Biosensors: DNA Hybridization and Different Methods for Detecting DNA"

*PMV*



2023 MPA Town Hall and Scholar Research Exhibition Presenters





2023 MPA Town Hall and Scholar Research Exhibition

## Thank you for your support!

The MPA would like to express our heartfelt gratitude to those who dedicated their time to planning, organizing, and attending the MPA Town Hall/Meyerhoff Scholars Research Exhibition. Your collaborative spirit and enthusiasm amplify the spirit of unity that makes our community exceptional. If you are interested in volunteering to support any of the upcoming MPA activities or the Meyerhoff Program in general, please complete the [MPA Contact Form](#). Your support is important and always welcome!



## 2023 MEYERHOFF FALL RETREAT

On September 9, scholars gathered for yet another unforgettable trip to Centennial Park for the 2023 Meyerhoff Fall Retreat - an immersive experience designed to foster camaraderie, ignite intellectual curiosity, and create lasting connections. The day began with an inspirational conversation with UMBC President Valerie Sheares Ashby and from there, it was non-stop food, fellowship, and fun!

We thank everyone who contributed to making this day a success for our Scholars.







2023 MEYERHOFF FALL RETREAT







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2023 MEYERHOFF FALL RETREAT





# Meyerhoff Scholars Council



## Executive Board

President - Caylee Brown (M32)

Vice President - Gabriel Otubu (M33)

Secretary - Ryan Hoffman (M32)

Treasurer - Sydnee Vance (M33)

Communications Chair - Evalynn Ellison (M33)

## Cohort Reps

**M31** Ishanathan Guteng, Naiyah Lewis, D’Juan Moreland

**M32** Daniel Williams, Anya Viswanathan,

**M34** Tadiwa Chiduza, Nathan Dayie, Katherine Carver

**M35** Ben Bazarsuren, Deeya Mistry, Kendall Clark, Owen Tolbert



## MPA AT UMBC HOMECOMING

On Saturday, October 14, the new MPA board joined together for the first time for UMBC's Homecoming festivities. This was a day of fun and fellowship for everyone.

Members of the MPA enjoyed:

- the Family Breakfast,
- an MPA hosted Meet & Greet for families at the Sports Zone in the Commons, and
- a collaborative gathering of the Family Advisory Board and MPA Board members, parents, and guardians.

Future MPA parent and guardian events will be planned with opportunities to meet and learn from each other as we strive to support the mission of MPA, the Meyerhoff Scholars Program, and our students. Feel free to contact us with any questions or comments: [umbcmpa@gmail.com](mailto:umbcmpa@gmail.com)





## ANNUAL BIOMEDICAL RESEARCH CONFERENCE FOR MINORITIZED SCIENTISTS (ABRCMS)

For over 20 years, the Annual Biomedical Research Conference for Minoritized Scientists (ABRCMS) has been the go-to conference for historically excluded community college, undergraduate and post-baccalaureate students in STEM. This year, forty-two Scholars spent four days showcasing their innovative research at the ABRCMS conference in Phoenix, Arizona, and connecting with peers and mentors to discuss the challenges that diverse students and scientists in STEM face.

**Please join us in congratulating all our Meyerhoff and URISE Scholar presenters!**

- |                              |   |
|------------------------------|---|
| • Suzi Agyako-Wiredu (M34)   | • Synthesis and Analysis of Spherical Gold Nanoparticles  |
| • Maxwell Amoh-Mayes (M34)   | • Using the Novel Database from the Champaign-Urbana Population Study (CUPS) to Compare 7T MRI with 3T MRI  |
| • Rusham Bhatt (M34)         | • Enabling Computational Biology Research Using Python-Based Applications   |
| • Jalane Campbell (M34)      | • Sleep and Physical Activity and its Effects on the Synaptic Protein NPTX2   |
| • Sera Chase (M32)           | • Cataract Opacity as an Independent Predictor of Visual Outcome Following Congenital Cataract Surgery  |
| • Sophia Conrad (M32)        | • The Effects of Lisinopril on the Motor Network of Aging Drosophila M. Lacking App-Like Protein  |
| • Kate Ejimogu (M34)         | • Protein Kinase D1 Plays a Role in Sodium Reabsorption Homeostasis   |
| • Caly Ferguson (M34)        | • Decoding Hand Movements from Electromyographic Signals Toward a Near-Natural Prosthesis   |
| • Raine Gibson (M34)         | • Using Transcriptome-wide Structural Equation Modeling to Understand the Genetic Factors of Obesity  |
| • Lily Handwerger (M34)      | • Effect of genetic background on gene expression in a genetically engineered mouse model of prostate cancer                                      |
| • Liana Hill (M33)           | • False Positives and False Negatives in Cancer Registry Linkage: When Do They Matter?  |
| • Andrew Ireland (M32)       | • Design, Synthesis, and Characterization of Gallium Complexes as Novel Therapeutic Agents for the Treatment of Pseudomonas aeruginosa Infections |
| • Jan Shanelle Iringan (M34) | • Effect of ARID1A Knockout Mutation on Tumor Immunogenicity of Bladder Cancer Cells  |

*“Love life. Engage in it. Give it all you’ve got...because life truly does give back, many times over, what you put into it.” – Maya Angelou*



## Congratulations Meyerhoff and URISE Scholar presenters!

- |                               |  |
|-------------------------------|--|
| • Gelila Isayas (M34)         | • How does the brain make us sick during infections?   |
| • Jariatu Kargbo (M34)        | • Using the Novel Database from the Champaign-Urbana Population Study (CUPS) to Compare 7T MRI with 3T MRI                                 |
| • Gabriel Kengni (M34)        | • Enabling Computational Biology Research Using Python-Based Applications  |
| • Oluwasuen Kintunde (M33)    | • Evaluating the Function of Set6 in Proteostasis  |
| • Michael Mann (M34)          | • Females are sweeter: Sex, O-GlcNAc, and Physiology   |
| • Abel Melese (M34)           | • Solid Microneedle Manufacturing Through Fiber Laser-Cutting  |
| • Lea-Pearl Njei (M35)        | • Protein Kinase D1 Plays a Role in Sodium Reabsorption Homeostasis  |
| • Olanna Nwozo (M34)          | • Characterizing the Function of Adam10a During the Production of Hematopoietic Stem Cells   |
| • Emmanuel Okusanya (M34)     | • Characterizing Motility in Neurons Derived from iPSC Cells   |
| • Brandon Onochie (M33)       | • E-047 - SMYD3 Inhibition Used to Identify and Block Main Metastatic Pathways Within Prostate Cancer                                      |
| • Tithi Prajapati (M34)       | • Low-cost, next-generation optical nitrate sensor for environmental water monitoring  |
| • Ella Reinders (M34)         | • Examining Learned Associations Between Contextual Cues and Stress-Inducing Experiences   |
| • Mesha Shajahan (M34)        | • Polymer-Carbon Composite for Wearable Transcutaneous CO <sub>2</sub> Sensor  |
| • Rayal Smith (M32)           | • Data-Enabled Computational Chemistry to Better Understand Water  |
| • Drake Thompson (M34)        | • Development of analytical pipelines for performing differential expression analysis in multifactorial single nucleus RNA-sequencing data |
| • Pavankumar Umashankar (M32) | • Determining Regions in USP15 that Regulate its Stability and Turnover in Ovarian Cancer Cells  |
| • Ariel Wilson-Gray (M34)     | • Optimizing Fc-Specific Antibody-Oligonucleotide Conjugation to Improve Sensitivity of Immunoassay Probes                                 |



# Congratulations Meyerhoff and URISE Scholar participants!

- |  |   |
|--|---|
| • Anjayooluwa Adegboyo (M33) (M'hoff/URISE)      | • Investigation of Anti-Migraine Drugs' Effect on Migraine Circuits and Symptoms and Identifying Factors that Affect Calcitonin Gene-Related Peptide's Ability to Initiate Acute Migraine Attacks |
| • Zam Cing (oral) (M33) (URISE)                  | • Unveiling the Diversity of Fusobacterium in Colorectal Cancer: Isolation, Characterization, and Subspecies Analysis in a Malaysian Cohort   |
| • Courtney de Leon (M33) (URISE)                 | • The Effects of Lifelong Nicotine Consumption on Growth and Reproduction in Wild Type and Mutant <i>Caenorhabditis elegans</i>   |
| • Evalynn Ellison (M33) (M'hoff/URISE)           | • In-Frame Cloning of Chimeric Antigen Receptors to Improve Cancer Therapeutic Discovery  |
| • Leila Ghaffari (M32) (M'hoff/URISE)            | • Analyzing Longitudinal Measures of Anxiety and Depression to Inform Clinical Outcomes   |
| • Emmanuel Mekasha (M33) (URISE)                 | • Developing a Cell Deconvolution Pipeline for the Investigation of Alzheimer's Disease Pathways  |
| • Rameesha Mustafa (M32) (URISE)                 | • The Effect of Anxiolytic Changes on Mitophagy in an ALS Model   |
| • Munachiso Nkeonye-Mbaekwe (M33) (M'hoff/URISE) | • Identifying Ectopic Synapses in Neuromuscular Junctions of <i>Drosophila</i> Larvae Carrying Candidate Autism Genes Manipulations   |
| • Daisy Parry (M33) (M'hoff/URISE)               | • Temporal Regulation of AQP1 Protein Expression in Human Lung Microvascular Endothelial Cells (HLMECs) in Response to Shear Stress   |
| • Viviana Smart (M32) (URISE)                    | • Does <i>ttl11</i> -induced tubulin glutamylation enhance metastatic phenotypes to promote breast cancer metastasis in vitro and in vivo?  |
| • Ayeoritse Tuedon (M33) (URISE)                 | • Hemostatic Nanocapsules Decrease Blood Loss in Traumatic Injuries and Serve as Extended Drug Delivery System  |
| • Nathan Zekarias (M33) (M'hoff/URISE)           | • Investigating the Impact of Shiny Cowbirds on Puerto Rican Orioles  |





## Announcement

### Volunteers and Donations Needed for Spring Stress Buster

The Stress Busters are student-only events, organized by the MPA parent cohorts, designed to help the Scholars unwind from academic pressures and recharge with a day of delicious food, games, music, and more! Wondering how can you help?

If interested, complete the [MPA Contact form](#) or email us at [umbcmpa@gmail.com](mailto:umbcmpa@gmail.com) with the subject line STRESS BUSTER.

### Parents can help by ...

- ✓ Volunteering at the event
- ✓ Donating needed items



## Don't Miss Out!



The MPA has joined UMBC Family Connect to bring you the latest news. Be sure to check your email and set your preference so you don't miss out on important information that affects you and your Scholar.



# YOUR SUPPORT MAKES A DIFFERENCE!

## MEYERHOFF SCHOLARS PROGRAM

UMBC's Meyerhoff Scholars Program, which was established in 1989, has supported more than 1,600 scholars in fields of science, engineering, and other related fields. With the numbers growing and the goal of increasing diversity amongst future leaders, the success of the program is built upon the support of family and friends who understand the value of the program.



### Make an Annual Gift

You may make an annual gift to the UMBC Foundation to benefit the MPA via check, postal mail or [online](#).



### Volunteer your Time

If you are interested in volunteering to support any of the upcoming MPA activities or the Meyerhoff Program in general, please complete the [MPA Contact Form](#)

**Show your MPA Pride**  
[order a polo shirt!](#)

### Stay Connected...

Update your contact information [here](#) and never miss out on important information.

**All funds raised will be administered by the UMBC Foundation, Inc., for the benefit of UMBC.**



On behalf of the Meyerhoff Parent Association, we extend our deepest gratitude for the unwavering support of those who have supported the program in any way this year.

Your commitment and involvement make a significant impact on our community, contributing to the success and well-being of our Scholars. Together, we are building a strong foundation for their future success.

Your support is not only appreciated; it is vital to the growth and vitality of our association and the Meyerhoff Program. We look forward to continuing this journey together.

*We  
thank  
you!*



## Contact Us

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Meyerhoff Program Office Staff