



## STUDENT AWARDS LECTURE

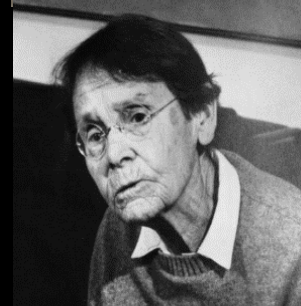


**JAY TOBIN**

Stevenson University Professor

### "Careers in Forensic Science"

Sunday, April 3, 2022



Mae Jemison  
The first African American woman to fly in space. Mae C. Jemison served as a science mission specialist on Space Shuttle Endeavour in 1992. Photo courtesy NASA.

### Gargantuan Achievement

Grace Eldering and Pearl Kenderick

C. J. Rojas, PhD

p. 7

MARCH / APRIL Issue

VOLUME 79 No. 2

*"I will do my best!"*

*Meet Student Awards*

*Committee Chair*

*Sara Narayan*





*From the Editor's Desk...*

## Finally, Spring is here!

After a cold spring, most of us are looking forward to warm weather. I associate warm weather with our annual *Student Awards Celebration* to encourage student achievement in chemistry. This year it will be held on April 3<sup>rd</sup> at 1 PM; Professor Jay Tobin from Stevenson University will be presenting "Careers in Forensic Science". Please join us for the virtual meeting (p 3) and in congratulating all 2022 Award winners (p 6).

March is women's achievements month. Women's International Day was on March 8th. Women have come a long way to have their achievements noticed, accepted and respected. It is interesting to note that this year seventeen out of twenty-one student awardees are women. They were selected by chemistry faculty from diverse universities and colleges across Maryland for their achievements to receive the ACS Student Award. Congratulations! This month we have an article on women in science. *Gargantuan Achievement*, by Dr. Camilo Rojas, (*Chemistry Literature Spotlight* p 7), Women's Achievements in ACS Maryland (p15, 18, 19) and our BOOK's Section celebrating women's achievement as well.

The US National Chemistry Olympiad, USNCO started on March 1st. Forty-one students representing the Maryland Local Section participated in the first virtual USNCO ACS exam on March 26th. The second exam, this time at the national level, will be the first week of April. This year we return to the in-person laboratory Practical Part III of the National competition the last week of April (p11).

Little by little we are returning to normal. ACS Maryland Local Section sponsored six students to attend the ACS National Meeting in San Diego California on March 20-25th. Also, for the first time, the Section sponsored high school students to present posters on their research at the national meeting. Two Local Section councilors attended the ACS National meeting in-person. The Councilor report is on page 12.

A new Pilot Research Project Seed program has recently been created for high school students to experience first-hand how scientists work. This is a paid summer program with direct assistance from a Mentor, a Professor at any Maryland university or college (P10).

Thank all for your contributions to The Chesapeake Chemist Newsletter.

*Beatrice Salazar*

Editor-in-Chief, ACS Maryland Section



## Maryland Local Section Newsletter

Editor-in-chief: [Beatrice Salazar](#)

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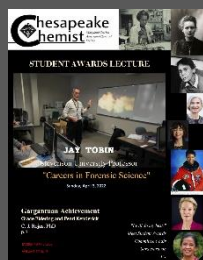
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# Student Awards Lecture

## "Careers in Forensic Science."

**Professor Jay Tobin, PhD**

April 3, 2022, 1:00 P.M.

*"...Prof Tobin is a dynamic teacher who is always challenging his students to "think outside of the box" .... He develops the practice of looking at the problem from all sides and not just the one in front of you..."*

### **Abstract:**

Are you looking for an exciting career after graduation? Do you want a career that is engaging and rewarding? Well, I have a suggestion for you. Forensic science provides many career paths for individuals who wish to apply their knowledge of science to serving the community and helping those who have been decimated by unlawful actions.

Basically, forensic science is defined as the application of science to law; however, a more encompassing definition is unlocking the story that is contained in crime scene evidence. Since this talk is primarily for students pursuing a degree in chemistry, I will narrow my talk to those fields where chemistry is the main job.

The areas of forensic science most sought after by chemistry majors are drug analysis, toxicology, and trace evidence analysis. Drug analysis is a large field involving the use of your analytical minds to determine what drugs, legal and illegal, may be contained in a drug sample. Not only do you have to identify the drug, but you must quantitate it as well. When this is complete, you place the drug into the parameters of the law or schedule. Next, is toxicology. It is basically similar to drug analysis except for the matrix in which the drug is contained, "Blood and Guts." This is quite true. Many human samples such as blood, vitreous humor, and tissue samples are used in the analysis. The last area is trace evidence analysis. This is literally the "catch-all" arena of forensic science. The specialty areas include arson debris examination, gunshot residue determination, hair, and fiber examination, glass, and paint analysis to mention a few. I hope all of this sounds enticing, but wait, the best is yet to come.

When you have completed your examinations and written your scientific report in layman's terms, you know are eligible to testify as an expert witness. Your testimony will be used in a criminal trial. Your main duty is to tie the evidence examined to the crime committed. This is a very challenging aspect of forensic science but is one that many are happy to perform.



*Photo courtesy of ACS*



The last aspect that I will cover is the clandestine laboratory. This is where you get to go out into the field to help identify what is being "cooked" in these labs as well as guide in the dismantling so that explosions don't occur.

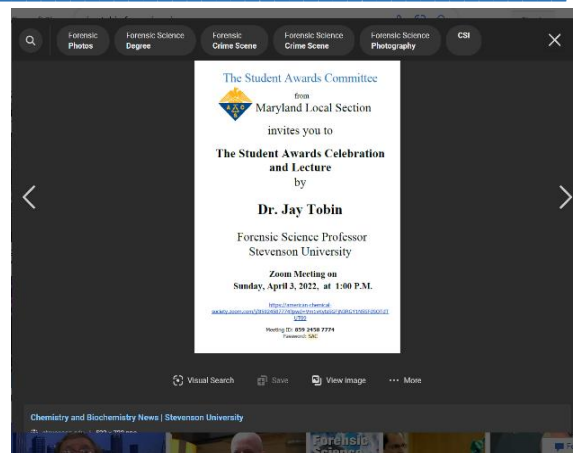
I hope that this sounds interesting to you all and I look forward to engaging you in this talk.

**Contact:**

Jay Tobin, Ph.D., MSFS, D-ABC  
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443-352-4142

**Biography**

*"My passion for science, particularly Forensic Science, coupled with my ability to motivate students, creates a stimulating environment for learning. ...I relish the opportunity to present real-life applications of science to my students and to watch them grow."*



Forensic Science Associate Professor Appointed to NIST's OSAC Gunshot Residue Subcommittee [Learn more about Dr. Jay Tobin](#)

**CONGRATULATIONS TO ALL  
STUDENT AWARDEES**

Photos ...Page 6 Statements... Pages 20; PowerPoint with student videos... online



**CONGRATULATIONS TO ALL THE 2022 STUDENT AWARDEES!**

## *2022 Student Awards Ceremony*

### *44<sup>th</sup> anniversary*

By Sara Narayan,

We are pleased to celebrate the 44<sup>th</sup> anniversary of the Student Awards Ceremony (SAC) virtually on Sunday April 3- from 1-3:00 pm. This year I am honored to be the chair of the Student Awards Committee.

History of Student Awards Committee, SAC:

The Student Awards program started with Professor Carl Minier, Essex Community College of Baltimore in March 1978. Carl Minier was the chair for the American Chemical Society (ACS) Local Section for several years. The program was started to encourage and promote outstanding students in Chemistry to start their career as scientists. Since then, it is being held successfully every year in the month of April.



Dr. Sara Narayan, PhD  
Stevenson University

The ACS Student Awards celebrates each year one outstanding chemistry student at each college or university that participates in the Maryland Section of the ACS. The Award ceremony is usually made at the spring meeting of the Maryland Local Section of the ACS, that is held on Sundays. Due to the current pandemic situation, this year's celebration will also be held virtually.

The award is intended to encourage student interested in chemistry and to recognize students who display a significant aptitude for chemistry. It is intended to encourage further interest in the field. This is one of the most well attended ceremony by students, their families, teachers, and mentors. About 20-22 students are selected from area colleges and universities. Only one Outstanding Chemistry Student is selected from each college and universities by the chair along with other faculties.

This year the student Award ceremony will be addressed by Dr. Jay Tobin a Distinguished Forensic Scientist from Stevenson University, who will talk about "Career in Forensic Science".

Each student awardee will receive an Outstanding Achievement in the Field of Chemistry Certificate along with ACS souvenirs and a copy of the April Edition of Chesapeake Chemist Newsletter (CCNL) with all the awardees pictures.

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# CONGRATULATIONS!

2022 Student Awardees



1. Hannah Claggett  
AA community College



2. Nicole Morant  
Baltimore City  
Community College



3. Ubong-Idara Obot  
CCBC Catonsville



4. Kaylah Castillo  
Coppin State University



5. Emma Watcher  
Frederick Community College



6. Zachary Lafaver  
Goucher College



7. Madison Hall  
Harford Community  
College



8. Kira Bloechl  
Howard Community  
Colleges



9. Brandi Davidson  
Hood College



10. Sydnee Wong  
Johns Hopkins  
University



11. Nikki Hugelmeyer  
Loyola University

2022 Student Awardees



12. Patrick Keane  
McDaniel College



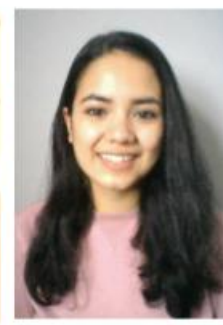
13. Mary Yenca  
Mt. St Marys'  
University



14. Anders Gulbrandson  
Naval Academy



15. Cristina Rosette  
Jimenez - Notre  
Dame University



16. Himsheela Karki  
Morgan State  
University



17. Ny Luong  
St. Mary's College



18. Samantha Rea  
Stevenson University



19. Taylor Shafirovich  
Towson University



20. Aaliyah Khan  
UMBC



21. Brody W. Mann  
Washington College



# CHEMISTRY LITERATURE SPOTLIGHT

*By Camilo Rojas*

Smithsonian Magazine  
**SCIENCE** MARCH 2022

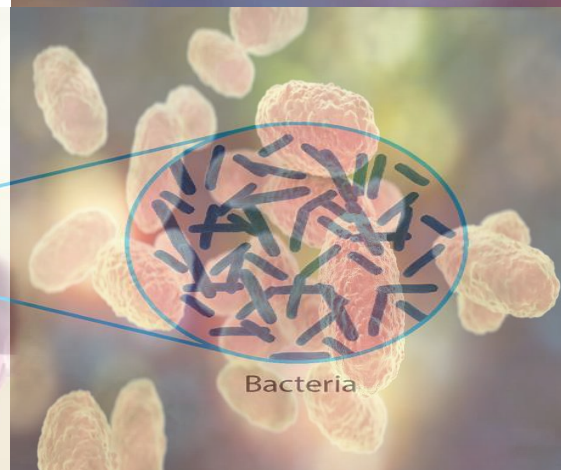
[The Unsung Heroes  
Who Ended a  
Deadly Plague](#)

Article by  
[Richard Conniff](#)  
Photographs by [Lisa Spindler](#)

How a team of fearless  
American women overcame  
medical skepticism to stop  
whooping cough, a vicious  
infectious disease, and save  
countless lives

## Gargantuan Achievement

Grace Eldering  
and Pearl Kenderick





# Gargantuan Achievement

Whooping cough, also known as *Pertussis*, is not familiar to most people today and not a major concern to health officials, at least for now. Back in the 1930s however, up to 7,500 children a year died of whooping cough in the United States. Whooping cough was an infectious disease that would start as a mild runny nose and cough that over the space of one-two weeks would turn into violent spasms that did not allow the child to breathe. Children that survived run the risk of permanent physical or cognitive damage. All of this changed thanks to the work of bacteriologists Pearl Hendrick (1890-1980) and her lifetime collaborator Grace Eldering (1900-1988) with the support of their laboratory assistant Loney Clinton Gordon. Their remarkable story is beautifully told by Richard Conniff in the latest *Smithsonian* (March 2022). Hendrick, Eldering and Clinton Gordon had to deal not only with the challenge of how to handle the disease but also with lack of resources and the prevailing chauvinistic attitude toward women at the time.

The initial focus of their work was to diagnose whooping cough faster and more accurately than what was being done at the time. They implemented the use of a cough plate, in essence a petri dish, for the patient to cough into it. The dish would then be placed in an incubator to grow the bacteria into colonies that could be analyzed. On November 28, 1932, they were able to confirm the first *Bordetella Pertussis* specimens through a comparison of their bacteria against published accounts. They expanded their testing into a citywide cough plate service to help monitor and control the whooping cough outbreak.

Seven weeks after the success of their diagnostic test, Kendrick and Eldering with the assistance of

Clinton Gordon found a suitable strain of *Bordetella* and produced their first experimental pertussis vaccine. Finding the right strain to develop the vaccine was a crucial step because bacteria strains could vary up to 10,000 times in virulence. The vaccine was a whole-cell *Bordetella* bacteria killed with antiseptic, sterilized, and suspended in saline solution. Up until then, the vaccines against whooping cough had been characterized as useless. Kendrick and Eldering systematically addressed problems with lack of information on preparation and dosage as well as preliminary efficacy and safety studies.

Next, Kendrick and Eldering had to design a clinical trial to evaluate the efficacy and safety of their vaccine in a large population. According to Kendrick: “Our midnight work” after business hours. Fortunately, the state laboratory where they worked was in Grand Rapids, Michigan, a community with a reputation for supporting the use new medical findings to save lives. The result of the first round of the field study could be used as a definition of success: 1,592 children took part in the study; 712 were vaccine recipients and 880 were untreated controls. The untreated group had 63 cases of whooping cough, 53 of them serious. The vaccinated group had 4 cases, all of them mild.

The attitude of Wade Hampton Frost, a renowned epidemiologist, was typical among medical experts in the field: “the odds are strongly against Miss Kendrick’s experiment being sound.” After reluctantly going to Michigan to review and advice on additional work, he learned to appreciate the two women’s commitment to science. A new study using 4,212 test subjects repeated the dramatic results of the first study. Another independent clinical trial in New York using their vaccine also



reproduced the results. The American Medical Association in 1944 included Kendrick and Eldering's vaccine to its list of recommended immunizations. Deaths dropped from 7,518 in 1934 to 10 a year in the 1970s.

But Kendrick and Eldering did not stop there. They went on to work on a combined diphtheria, tetanus and pertussis vaccine to minimize the "pincushion effect" when giving too many shots to a child. The combined vaccine was a forerunner of a vaccine that now routinely protects 85% of the world's children.

Drug discovery nowadays includes separate teams of dedicated professionals with different trainings to focus on assay development, efficacy studies, toxicology and clinical studies among others.

Compare that to these two women addressing all these issues and succeeding beyond all expectations. They also had to navigate a condescending environment that thought "*education enhances womanly charm, attractiveness and fitness for domestic happiness*".

Vaccines belong to a group of medicines that prevent, rather than treat disease. This leads people to forget the disease it prevents along with the people that labored persistently to develop the vaccines. Kendrick and Eldering are a case in point. Kendrick and Eldering success may run the risk of being forgotten, but it will remain a gargantuan achievement in the history of medicine. ■

Camilo Rojas PhD

Formerly Associate Professor  
Johns Hopkins University

# ACS Maryland Local section 2022 New Pilot Program



## 2022 PILOT PROGRAM **ACS-MARYLAND RESEARCH PROJECT Seed**

### Announcement

All high school students that have taken chemistry are eligible to attend the Summer Research **Project Seed** program. This program is similar in content and context to Project **SEED**. However, the word **Seed** has a different meaning in the ACS Maryland local Section program, it refers to a germinating seed.

### Contact:

[acsmaryland.org](https://acsmaryland.org)

### Outreach Programs

[Louise Hellwig](#), Morgan State University ACS-MRPS Coordinator

[Kelly Elkins](#), Towson University ACS-MRPS Coordinator

[Beatrice Salazar](#) ACS\_MRPS Committee



## 2022 PILOT PROGRAM

# ACS-MARYLAND RESEARCH PROJECT Seed

## OUR MISSION

To enhance the Core Goals and the Mission of ACS at the local level. To communicate and expand chemistry knowledge with the community to provide STEM research, learning and inspiration for the chemistry field in young high school students. To implement new ACS ideas in particular Diversity, Equity, Inclusion, and Respect, DEIR.

## WELCOME

On February 1, 2022, The ACS Maryland Local Section passed a motion to adopt the ACS Project SEED Program as an example of opportunity for High School students that do not meet the requirements for their program but are qualified and interested on the benefits of the program. It was decided to take the appropriate steps to create a program at the local section level and align the program to the one offered by ACS. And at the same time continue the Project SEED program within the local section as well. To complete this task a committee was created.

The benefits for high school students include to work under the direction of a Mentor, College, or university professor during the summer. Students will have an opportunity to experience how scientific research is conducted, they will work in a laboratory to facilitate their learning and hands-on experience and will receive monetary compensation.

The ACS Maryland local section will be running to different programs every Summer to give opportunities to underprivileged students as well as other high school students.

# ACS-Maryland Research Project Seed starts this summer 2022.

## Apply

### 1. REQUIREMENTS/ Eligibility

- High School student 10-11 grade
- Meet Deadlines - Apply from January 2nd - March 30th of the current year
- Letter of recommendation from the chemistry teacher, in school head paper
  - Include chemistry classes taken with respective grades
- Statement of interest from student (max 200 words)
  - Signature of parents for participation in the program and for photo release
- Letter of acceptance from Mentor and Institution

### 2. COMMITMENT

- ✚ To provide all information required: complete application form and accurate documentation.
- ✚ To attend the entire summer program.
- ✚ To present a report both oral and written of the research completed.
- ✚ Provide a poster, photo or video of the report presentation

ACS Maryland Research Project Seed mirrors the practices of ACS Project SEED, use the [video](#) (website) to become familiar with what students can do.

Maryland Local Section of the  
American Chemical Society, ACS.  
[www.acsmaryland.org](http://www.acsmaryland.org)

## ABOUT...

Our pilot program has been designed for academically qualified high students that have interest in learning laboratory and research techniques at the college and university level.

This summer experience is unique for students pursuing chemistry careers and science related fields.

We encourage teachers and student to apply by complete all required forms found in our website [acsmaryland.org](http://acsmaryland.org)

## THE NAME

The program Name is ACS-Maryland Research Project Seed. It is important to note that seed means in this context the "germination of a chemist" different of project SEED where SEED is "Summer Experience for the Economically Disadvantaged".

## Contacts:

**Louise Hellwig**, ACS Maryland Local Section Secretary, ACS-MD RPSeed, Morgan State University  
**Beatrice Salazar** ACS Maryland Local Section Councilor, ACS-MD RPSeed  
**Kelly Elkins** ACS Maryland Local Section Councilor, ACS-MD RPSeed, Towson University





**U.S. National Chemistry Olympiad**

**INFORMATION ON 2022-USNCO March 1, 2022 - April 30, 2022**

- [The USNCO 2022 Local Section Exam “course” in the ACS Learning Center is now open.](#)
  - Link: <https://learning.acs.org/course/view.php?id=1095> (USNCO Participants only)  
The link to the recording of the webinar: “ACS Learning Center Walk-Through” that was hosted on February 22, 2022 [USNCO and the ACS Learning Center - Zoom](#)
  - Program directors: Lily Raines, Ph.D. Office: +1 202-872-4574 | Cell: +1 202 450 8310  
[L\\_Raines@acs.org](mailto:L_Raines@acs.org) [www.acs.org/outreach](http://www.acs.org/outreach)
  - USNCO Program Director: Margaret Thatcher Program Specialist Phone:202-872-6328  
[www.acs.org/olympiad](http://www.acs.org/olympiad) <[M\\_Thatcher@acs.org](mailto:M_Thatcher@acs.org)>
  - [Beatrice Salazar](#) USNCO Coordinator Maryland local Section

 <p><b>U.S. National Chemistry Olympiad</b></p>		 <p>USNCO Maryland Team, 2019 Beatrice Salazar, Coordinator</p>																						
<p><b>USNCO</b> <u>Join us!</u></p>	<p><b>Local and national exam content:</b></p> <table border="1"> <thead> <tr> <th>Questions</th> <th>Topic</th> </tr> </thead> <tbody> <tr> <td>1 – 6</td> <td>Stoichiometry/Solutions</td> </tr> <tr> <td>7 – 12</td> <td>Descriptive/Laboratory</td> </tr> <tr> <td>13 – 18</td> <td>States of Matter</td> </tr> <tr> <td>19 – 24</td> <td>Thermodynamics</td> </tr> <tr> <td>25 – 30</td> <td>Kinetics</td> </tr> <tr> <td>31 – 36</td> <td>Equilibrium</td> </tr> <tr> <td>37 – 42</td> <td>Oxidation - Reduction</td> </tr> <tr> <td>43 – 48</td> <td>Atomic Structure/ Periodicity</td> </tr> <tr> <td>49 – 54</td> <td>Bonding/Molecular Structure</td> </tr> <tr> <td>55 – 60</td> <td>Organic/Biochemistry</td> </tr> </tbody> </table>	Questions	Topic	1 – 6	Stoichiometry/Solutions	7 – 12	Descriptive/Laboratory	13 – 18	States of Matter	19 – 24	Thermodynamics	25 – 30	Kinetics	31 – 36	Equilibrium	37 – 42	Oxidation - Reduction	43 – 48	Atomic Structure/ Periodicity	49 – 54	Bonding/Molecular Structure	55 – 60	Organic/Biochemistry	<p><b>Announcement</b></p> <p><b>We are planning to include Part 3,</b> the laboratory portion, of the National Exam this year (2022).</p> <p>All students must take all three parts to be eligible for honors, high honors, or study camp designations/invitations.</p>
Questions	Topic																							
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## COUNCILOR'S REPORT

### ACS Spring 2022 National Meeting

#### REPORT By Beatrice Salazar and Jan Kolakowski

Maryland Section Councilor attendees: Kelly Elkins, Jan Kolakowski, Beatrice Salazar, and Stephanie Watson

The Council for the 263rd meeting of the American Chemical Society met virtually on March 23, 2022. Over 450 Councilors and all four Maryland Section Councilors were in attendance. The meeting was called to order at 11:06 AM EDT by ACS President Angela Wilson. The meeting began with a moment of silence to honor the memory of Past President Nancy B. Jackson and recently deceased Councilors. The meeting concluded with a resolution of appreciation to the officers and members of the San Diego Section. The meeting adjourned at 2:05 PM EDT.

#### REPORTS

##### Committee on Nominations and Elections

**ACS President Elect 2023 Candidates:** Frank Blum, Ingrid Montes, Mary Carroll, and Rigoberto Hernandez

After all the four candidates introduced themselves and established their interest and agenda for ACS President Elect 2023, the two ACS nominees selected by councilor's vote were **Dr. Mary Carroll** and **Dr. Rigoberto Hernandez**. These two candidates, along with any candidates selected via petitions, will stand for election in the Fall National Election.

**Director At Large Candidates:** Milagros (Milly) Delgado, Malika Jeffries-El, Will E. Lynch, and Ellene T. Contis

The election of two Directors-at-Large from among these four selected candidates, and any selected via petition, will be conducted in the fall. Ballots will be distributed to all Councilors around October 1, 2022.

**ACS President Dr. A. Wilson** - Among recent and future events: the president is very satisfied with the National Meeting at San Diego; she felt the response from industry and the public has been very positive. Attendance was the largest of any ACS meeting since the last meeting in San Diego in 2019. The Fall 2022 meeting in Chicago will be fully hybrid. The celebration of the 50th year anniversary of [NOBCCHE](#) (The National Organization for the Professional Advancement of Black Chemists and Chemical Engineers focuses on its legacy of resilience) was successful and there will be a memorial Symposium for Nobel Laureate Robert H. Grubbs in Chicago. Another important symposium will be on human vs machine. She congratulated the ACS institution for the 2021-22-year success of the entrepreneur education initiatives. She has several requests which are as follows:



- **Get Engaged at the National Level (beyond Council)** - check out committees.
- **ACS Scholars and Project SEED** - request for greater engagement and recognition of these students by local sections and home institutions.
- **Virtual/In-person Visits (presentations, discussion, listening)** - Chemists Celebrate Earth Day, "The Buzz about Bugs: Insect Chemistry" Extreme National Chemistry Week (virtual) Tour, Local Sections, Divisions, Committees.

**ACS President-Elect Dr. Judith C. Giordan** - Focus for Presidential Succession Term.

Her focus is summarized in the following areas:

**Trust in Science and Scientists** - The greatest of scientific innovations, discoveries, and potential solutions cannot achieve their higher purpose if society does not trust and believe in the science and the scientists telling the story.

- **NeXus of science, career development, and societal needs at ACS Local Section, Regional, and National levels.** - Focusing on Career, Research and Market need. There are two pilot programs on virtual NeXus events for 2022 in collaboration with Business Development and Management, BMGT, ACS Petroleum research Fund, PRF, and Small chemical Businesses, SCHB.
- **Diversity, Equity, Inclusion, Respect (DEIR)** - A foundational element for all work across the breath of DEIR and to help grow and retain membership.

**ACS Immediate Past President Dr. H.N. Cheng**

- **Industrial Engagement** - ACS In-Person connect a program was piloted at the 2022 ACS Spring Meeting in San Diego. A good way to reconnect with friends, consultants, industry members etc. A new platform for younger members and job seekers to connect with other for advice and information.
- **Meetings and collaborations** with universities, local sections, and international engagements (discussions with ACS international chapters, International Activities Committee, and ACS staff). Signing of two Chemistry Enterprise Partnership Agreements.

### Budget and Finance Committee

In 2021, ACS generated a net from operations of nearly \$79 million, which was almost \$48 million higher than budgeted. Total revenues were \$660 million, which was 5.2% or \$32.6 million over budget. Expenses for the year were \$581 million, or 2.5% below budget. This overall result was attributed to strong revenue performance from the Society's Information Services units (Chemical Abstract Service and ACS Publications), reduced spending due to COVID-19 related impacts, and careful management of expenses across the ACS.

The Society's overall financial position strengthened considerably in 2021 as Unrestricted Net Assets, or reserves, increased by \$123 million to \$676 million on December 31. The increase was primarily the result of the \$79 million net from operations and growth of the Society's investments totaling \$71 million.

## COUNCIL ACTIONS

### 1. Committee on Committees Actions (ConC)

- **The Council approved the *Petition to Amend the Duties of the Committee on Chemists with Disabilities (CWD)*.** This petition sought to change the language in the duties of CWD from **students** to **persons** to be more inclusive to ACS members of all levels and backgrounds participating in the Society's meetings and events.

- **The Council approved the continuation of the Committee on Chemists with Disabilities.** The Committee on Committees reviews each Society Committee no less often than every five years and advises the Board of Directors and Council whether they should be continued. ConC completed the performance review for the Committee on Chemists with Disabilities and recommended its continuation.
- **The Council approved the *Petition to Amend the Use of Dues*.** The petition has two major components. The first changes the basis for developing the total pool of allotments available for local sections and technical divisions. The second eliminates the connection between dues revenue and C&EN.

## 2. Committee on Budget & Finance Petition

**The total resource pool available for distribution to Local Sections and Divisions will be funded via a quasi-endowment established from the Society's unrestricted investment balances.** The board of directors authorizes the creation of the quasi-endowment fund from proceeds in the general fund with an initial amount of \$85 million. The amount of funding made available for this purpose will be a standard payout of 4% of the three-year rolling average market value or 3.2 million, whichever is greater. This replaces the previous pool that was funded through the allocation of 20% of dues revenue to local sections and divisions.

## 3. Committee on Divisional Activities Action

**The Council approved a division name change.**

Effective January 1, 2023, the Division of Carbohydrate Chemistry (CARB) will change its name to the Division of Carbohydrate Chemistry & Chemical Glycobiology (CARB).

## 4. Committee on International Activities Petition

**The Council approved a *Petition to Charter an International Chemical Sciences Chapter*.**

This petition, contingent on approval by the ACS Board of Directors, allows for a new International Chemical Sciences Chapter in Switzerland.

## 5. Committee on Membership Affairs

**The Council approved the extension of market testing of the international dues discount program based on World Bank country income levels.**

The test provides reduced dues for international members residing in emerging nations, which host an ACS chapter, and as defined by World Bank income criteria.

The test results to date have suggested a positive impact on membership through new members and the expanded inclusivity that a wider global community provides.

**The Council approved the 2023 Schedule of Membership**

The 2022 Schedule went live a few short months ago, and the 2023 Schedule was designed to add more value and increased choice for membership by adding clarity and a more intuitive explanation of how our membership works.

The 2023 Schedule of Membership did not change any dues, benefits, eligibility, or privileges from the 2022 Schedule.



## CELEBRATING WOMEN AT ACS

### LEADERSHIP: Current and Previous Leaders



Sarah Zimmermann  
Chair 2022  
Web Master 2021  
FDA



Pumtiwitt McCarthy Chair  
2020  
Web Master 2011-2020  
Chem Dept. Chair 2022  
Morgan State Univ.



Beatrice Salazar Chair 2018  
Councilor, Editor-in-Chief  
Chesapeake Chemist  
Outreach HS programs  
USNCO/ Earth Day



Stephanie Watson  
Chair 2016 Councilor  
NIST



Kelly Elkins  
Vice-chair 2022  
Councilor, WCC  
Towson University



Louise Hellwig  
Secretary 2022  
Travel Awards  
Committee Chair  
Project SEED  
Coordinator Morgan  
State Univ.



Angela Sherman  
Formerly Treasurer  
and Chemist of the Year  
Award Chair



Sara Narayan  
Student Awards  
Committee Chair 2022  
WCC Committee  
Co-Chair  
Stevenson Univ.



Rose Pesce-Rodriguez  
Outreach programs  
2022 Treasurer  
Committee  
Chemistry Week



Merle Eiss  
50-60 Year Senior  
Awards Committee  
chair  
Formerly Councilor



Linda Gonzalez  
50-60 Year Senior  
Awards Committee  
Co-Chair  
McCormick



Nicole Carbonaro  
2022 Web Master  
Towson Univ.

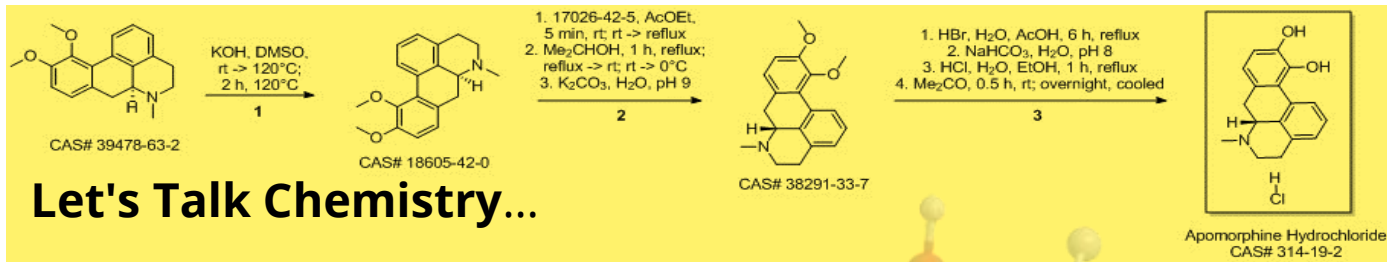


Michele Foss  
Entertainment  
committee Chair

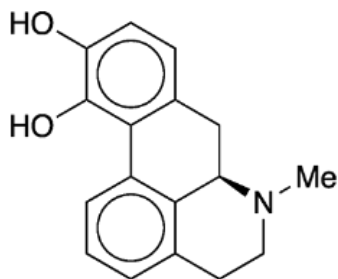


NEW MEMBER  
You!

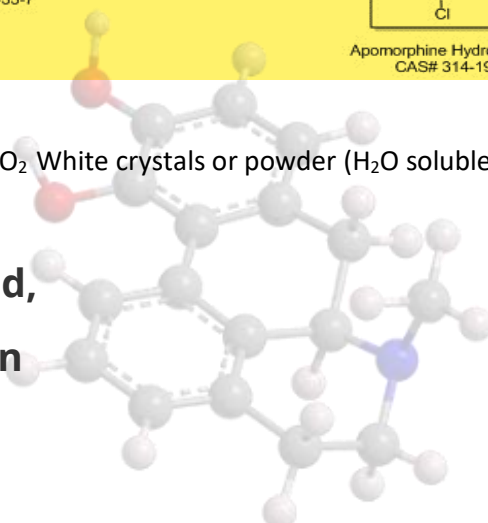
International Women's Day. March 8, 2022, another year to celebrate women achievement, endurance and leadership. Women had come a long way to achieve what a right for them and empower younger generations. Let's continue this task and be an example to our daughters, friends and younger chemist, if we could make it they could it as well. Thank you and congratulations on your leadership.



# Apomorphine - $C_{17}H_{17}NO_2$ White crystals or powder (H<sub>2</sub>O soluble)



**A synthetic opioid,  
not used for pain**



**1871**, known since German researcher E. L. Mayer treated the natural drug [morphine](#) with [zinc chloride in hydrochloric acid solution](#).

**1941**, About 70 years later, Lyndon Small, Burt F. Faris, and James Mallonee at the University of Virginia (Charlottesville) [elucidated the mechanism](#) of this reaction (without ZnCl<sub>2</sub>, which is apparently unnecessary). "The work reported in this paper is part of a unification of effort by a number of agencies having responsibility for the solution of the problem of drug addiction." CAS Reg. No. 115-37-7 - CAS Reg. No. 298-45-3 - CAS Reg. No. 41372-20-7.

**1973**, [John L. Neumeyer](#) and colleagues at [Arthur D. Little](#) (Cambridge, MA) and Sterling-Winthrop Research Institute (New York) reported the [total synthesis of racemic apomorphine](#) and other morphine and codeine derivatives.

**1981**, Vishnu J. Ram and Neumeyer, now at Northeastern University (Boston) [synthesized both apomorphine enantiomers](#) from the natural opiates thebaine<sup>2</sup> and bulbocapnine<sup>3</sup>.

**Medical uses:** Unlike, many opioids, apomorphine has several medical uses not related pain management.

- is a Parkinson's disease drug
  - is an emetic for dogs (injected-against antifreeze)
  - is a treatment for erectile dysfunction
  - is a treatment for heroin addiction (no clinical evidence of effectiveness)
- is unstable; reacts with light and air (turns green). It is much more stable as it is stable as apomorphine hydrochloride hemihydrate<sup>4</sup>, for commerce.

**Apomorphine [hazard information](#)**  Globally Harmonized System (GHS)

**References:** [Molecule of the Week Archive](#) (January 31, 2022)



# "From Ponce to Westminster: A Journey in Chemistry"



**Provost Dr. Rosa Rivera-Hainaj - McDaniel College**

<https://american-chemical-society.zoom.com/join/917111222x39e3QbzhUm.RyxKMHSUwMiis-BM>

Access Passcode: 2mwAJ1s@



Dr. Rosa Rivera-Hainaj  
Provost  
McDaniel College  
2 College Hill  
Westminster, MD 21157  
[www.mcdaniel.edu](http://www.mcdaniel.edu)

Rosa Elena Rivera-Hainaj, born in **Ponce, Puerto Rico**. A graduate of the University of Puerto Rico, Mayagüez Campus, El Colegio. She earned a Magna-Cum-Laude BS in Chemistry. Ph.D. in Biochemistry at Case Western-Reserve University.

## Work

- \_ **Adjunct professor of Chemistry** at both Notre Dame College of Ohio and Baldwin Wallace University.
- \_ **Visiting Assistant Professor of Chemistry** at John Carroll University.
- \_ **Assistant Professor of Chemistry** at James Madison University in Harrisonburg, VA. Purdue University North Central (now Northwest).
- \_ **Associate Professor of**

**Chemistry** at Purdue Univ. Northwest). **Interim Chair of the Department of Biology and Chemistry.**

\_ **Dean of Science and Mathematics** at Lorain County Community College in Ohio.

\_ **Assistant Vice- President of Academic Affairs** at Our Lady of the Lake University in San Antonio, Texas. Then,  
\_ **Promoted to Associate Vice-President of Academic Affairs**

\_ **Provost** at McDaniel College in **Westminster, Maryland**; following a national search, the first Latina to hold the position.

## Awards

She obtained several grants to conduct research: from the National Science Foundation, NSF, the I-TEM program of

Indiana and the Indiana Department of Education,



While at James Madison and Purdue North Central,

## Teacher

Dr. Rivera-Hainaj has taught in the fields of chemistry, physical science biochemistry, mathematics, biology and pharmacology. published her research in various journals; provided professional development at K-12 and institutions of higher education; and presented at numerous conferences and forums around the world.

See further information about Dr. Rivera-Hainaj in our most recent [Chesapeake Chemist](#).

## Presenter

Invited as 2022 WCC Speaker by the Women Chemist Committee.

On February 16, 2022, Dr. Rivera-Hainaj presented an inspiring lecture, empowering young chemists to reach their potential and never give up!

**Thank you for  
a great lecture!**

**T**he Lecture started with a welcome note from Sara Zimmermann, Chair of ACS Maryland Local Section and Kelly Elkins, Vice-Chair and Councilor from the ACS Maryland Local Section. Kelly Introduced the Speaker on behalf of the Women Chemist Committee that she co-chair with Sara Narayan from Stevenson University. In the following page we make an attempt to highlight some educational advice that "the Journey in Chemistry" of Dr. Rivera-Hainaj's lecture, provided for us. The recording of the presentation is included above feel free to use it and share it with students from High School to College level.

# Women and The Nobel Prize in Chemistry

## The Nobel Prize in Chemistry 2020

Emmanuelle Charpentier

“for the development of a method for genome editing”

## The Nobel Prize in Chemistry 2020

Jennifer A. Doudna

“for the development of a method for genome editing”

## The Nobel Prize in Chemistry 2018

Frances H. Arnold

“for the directed evolution of enzymes”

## The Nobel Prize in Chemistry 2009

Ada E. Yonath

“for studies of the structure and function of the ribosome”

## The Nobel Prize in Chemistry 1964

Dorothy Crowfoot Hodgkin

“for her determinations by X-ray techniques of the structures of important biochemical substances”

## The Nobel Prize in Chemistry 1935

Irène Joliot-Curie

“in recognition of their synthesis of new radioactive elements”

## The Nobel Prize in Chemistry 1911

Marie Curie, née Skłodowska

“in recognition of her services to the advancement of chemistry by the discovery of the elements radium and polonium, by the isolation of radium and the study of the nature and compounds of this remarkable element”

## TWELVE FAMOUS FEMALE CHEMISTS

March 8 is International Women's Day. This graphic takes a look at a selection of women who have been pioneers in the history of chemistry!

 <p><b>MARIE-ANNE PAULZE LAVOISIER</b> BORN 1758 DIED 1836</p> <p>Married chemist Antoine Lavoisier and received training in chemistry. Worked with Lavoisier testing and refining his methods so they could be understood.</p>	 <p><b>MARIE SKŁODOWSKA CURIE</b> BORN 1867 DIED 1934</p> <p>Carried out pioneering research on radioactivity. The first woman to win a Nobel Prize, and the only person to win a Nobel Prize in two different sciences.</p>	 <p><b>ALICE AUGUSTA BALL</b> BORN 1892 DIED 1916</p> <p>Developed an injectable oil which was the most effective treatment for leprosy until the 1940s. She died before the results of her work were published.</p>
 <p><b>GERTY THERESA CORI</b> BORN 1896 DIED 1957</p> <p>Helped establish how glycogen is broken down in muscles when animals and humans at an energy source (the Cori Cycle). She jointly won a Nobel Prize for her work.</p>	 <p><b>IDA EVA NODDACK</b> BORN 1896 DIED 1978</p> <p>She was the first person to propose the structure of isotopes. For which she suggested in 1924. She was also the co-discoverer of thulium, in 1925.</p>	 <p><b>IRÈNE JOLIOT-CURIE</b> BORN 1897 DIED 1956</p> <p>Daughter of Marie Curie. A joint Nobel Prize in Chemistry winner in 1935 with Frédéric Joliot-Curie for their discovery of and work on artificial radioactivity.</p>
 <p><b>KATHLEEN LONSDALE</b> BORN 1903 DIED 1971</p> <p>Pioneered use of X-rays to study crystals, and discovered that molecules do conform to a benzene ring. It, a form of carbon, Lonsdaleite, is named after her.</p>	 <p><b>DOROTHY MARY HODGKIN</b> BORN 1910 DIED 1994</p> <p>Used X-ray crystallography to determine the structure of insulin. For which she won a Nobel Prize. She went on to decipher the structure of insulin.</p>	 <p><b>GERTRUDE BELLE ELION</b> BORN 1918 DIED 1999</p> <p>Developed numerous drugs, including the first immunosuppressive drug used for organ transplants. Jointly won the 1988 Nobel Prize in Medicine or Physiology.</p>
 <p><b>ROSALIND FRANKLIN</b> BORN 1920 DIED 1958</p> <p>Made X-ray diffraction images of DNA, crucial in showing DNA's structure to be a double helix. This contribution wasn't fully acknowledged until after her death.</p>	 <p><b>MARIE MAYNARD DALY</b> BORN 1921 DIED 2003</p> <p>Thought to have been the first Black American woman to earn a PhD in chemistry. In 1947, she was recognized for her effects of cigarette smoke on the lungs.</p>	 <p><b>STEPHANIE KWOLEK</b> BORN 1923 DIED 2014</p> <p>Developed the polymer Kevlar and many others. For her work in polymer chemistry. Also developed the high-strength Kevlar chemistry demonstration.</p>

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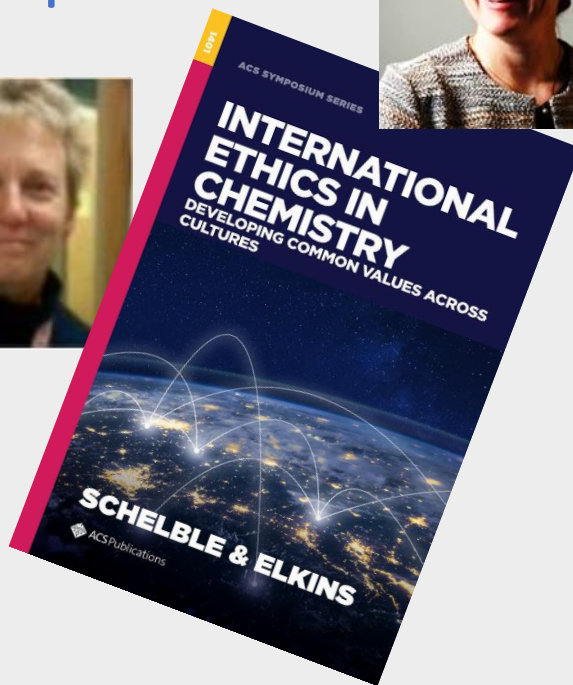


## ACS Women Accomplishments



### BOOKS...

**Editor(s):** Susan M. Schelble,  
University of Denver  
Kelly M. Elkins,  
Towson University



New ACS Symposium Series Book:  
**International Ethics in Chemistry: Developing Common Values across Cultures**

Volume 1401

Publication Date (Web): November 29, 2021

<https://pubs.acs.org/isbn/9780841297982#>

Sponsored by the ACS Division of Professional Relations

**D**eveloping International Ethical Standards and Values. In our global scientific enterprise, we must reconcile cultural differences to share scientific information. This work explores ethical issues across chemistry, focusing on chemical organizations and researchers and how they establish policies and educational strategies for professional ethics. Chapters focus on intellectual property, codes of conduct, relationships with employers and government, and safety in the laboratory and workplace. By viewing both the past and future,

readers will find shared ethical best practices to address international challenges with enormous effects on human and planetary health.

**T**he book is an outgrowth of the work of members of the ACS Division of Professional Relations and ACS Ethics Committee and symposia at the Fall 2020 ACS National Meeting and the Pacifichem 2021 International Meeting. The book has international contributions from scientists in Australia, India, South Korea, and the United States.

#### **Contribution: Preface / Chapters**

Chapter 1. Introduction: Leading a Culture of Ethics in Chemistry, by Kelly M. Elkins and Susan M. Schelble

Chapter 7. Ethics of Data Sharing, by Kelly M. Elkins

#### **Kelly Elkins, Ph.D.**

Associate Professor | Chemistry | Co-Director, TU Human Remains DNA Identification Laboratory (THRIL)

Tri-Editor-in-Chief, *Journal of Forensic Science Education*

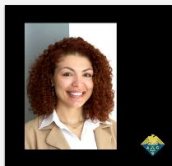
Associate Professor of Chemistry  
Towson University

[Kmelkins@towson.edu](mailto:Kmelkins@towson.edu) | [www.towson.edu/fcsm/departments/chemistry/facultystaff/kelkins.html](http://www.towson.edu/fcsm/departments/chemistry/facultystaff/kelkins.html) | <http://wp.towson.edu/kmelkins/> | <https://www.towson.edu/fcsm/centers/human-remains-identification-laboratory.html>



# AWARDEES STATEMENTS

## 2022 Student Awardee



Congratulations!

### Taylor Shafirovich

*Completing Research in Detection and Quantitative Analysis of Gunshot Residue for Forensic Applications*

Towson University

## 2022 Student Awardee

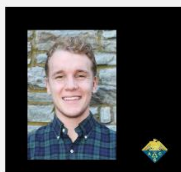


Congratulations!

### Hannah Claggett

- Second-year student at Anne Arundel Community College.
- Transferring to UMD in Fall 2022 majoring in Environmental Science, more specifically Biodiversity and Conservation Biology!

## 2022 Student Awardee



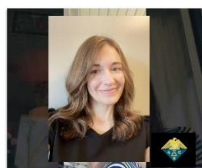
Congratulations!

### Brody Mann

Washington College '22

- Excited to start post-bacc lab position at the National Institute for Allergy and Infectious Disease
- Senior Capstone Experience: A Quest for Lyme Disease Prophylaxis
- Interested in biochemical reactions involved in infectious disease pathogenesis and treatment

## 2022 Student Awardee



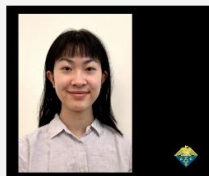
CONGRATULATIONS!

### Kira Bloechl

Howard Community College

As a returning education student, I've realized the importance of passion, courage, and enthusiasm in the education process. I've channeled that knowledge into a more cooperative environment, forming study groups and encouraging a less intimidating relationship between professor and student.

## 2022 Student Awardee



Congratulations!

### Sydnee Wong

*I will be working as a Clinical Researcher in the Hopkins Radiation and Oncology Department*

Johns Hopkins University

## 2022 Student Awardee

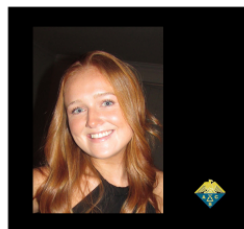


### Samantha Rea

*Completed research internships through the Nathan Schnaper Intern Program (NSIP) at UMB and graduated summa cum laude*

Stevenson University

## 2022 Student Awardee

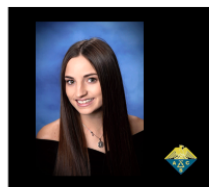


### Nikki Hugelmeyer

I have been researching the transmission of COVID-19 on my campus for the past year!

Loyola University Maryland

## 2022 Student Awardee



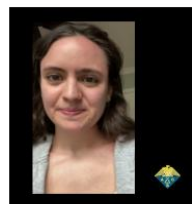
Congratulations!

### Madison Michele Hall

Throughout my college career thus far I have maintained a 4.0 GPA, which has allowed me to be on the Presidents List each semester. With this GPA I have been able to be apart of the Honors Society at my college and also the Phi Theta Kappa Honor Society.

Harford Community College

## 2022 Student Awardee

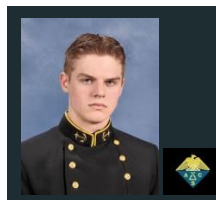


### EMMA WACHTER

My research project last semester focused on the role of free radicals in pollution in the upper and lower atmosphere.

Frederick Community College

## 2022 Student Awardee



Congratulations!

### MIDN 2/C Anders Gulbrandson

I am currently working as a student researcher in the CDR David Durkin/Professor Paul Trulove lab at the Naval Academy. Recently, I was awarded the Trident Scholarship to pursue a two-semester research project during the 2022-2023 academic year. I aspire to serve as a submariner and eventually receive my PhD in nanomaterials or quantum chemistry

#### Recent Publications

Fiber-welded poly(ionic) composite using t-alkyl-3-vinylimidazoliumalkylphosphonate ionic liquid  
 Journal of Ionic Liquids · Feb 21, 2022

Antimicrobial Biocomposite Fiber-Welded with Lignocellulose Containing Silver Nanoparticles  
 Macromolecular Materials and Engineering · Jan 29, 2022

United States Naval Academy



# ANNOUNCeMeNTS

## Video recording of the WCC February Lecture



Provost Dr. Rosa Rivera-Hainaj - McDaniel College

[https://american-chemical-society.zoom.com/rec/share/6e5aTyPLwG5Wp6\\_MbDUXrh285tzlkr2hYjG0DdkiEYhllld2Z4znc39e3QbzHUm.RyxKMHSUwMiis-BM](https://american-chemical-society.zoom.com/rec/share/6e5aTyPLwG5Wp6_MbDUXrh285tzlkr2hYjG0DdkiEYhllld2Z4znc39e3QbzHUm.RyxKMHSUwMiis-BM)  
Access Passcode: 2mwAJ1s@



I am  
McDANIEL

Dr. Rosa Rivera-Hainaj  
Provost  
McDaniel College  
2 College Hill  
Westminster, MD 21157  
[www.mcdaniel.edu](http://www.mcdaniel.edu)



## 2022 PILOT PROGRAM ACS-MARYLAND RESEARCH PROJECT Seed

### OUR MISSION

To enhance the Core Goals and the Mission of ACS at the local level. To communicate and expand chemistry knowledge with the community to provide STEM research, learning and inspiration for the chemistry field in young high school students. To implement new ACS ideas in particular Diversity, Equity, Inclusion, and Respect, DEIR.

**The Department of Defense** is recruiting FY22 **Summer Students Internship program**. Please let people in your respective colleges and universities know about these opportunities. Thank you.

**From:** Dispatches <[usarmy.appg.devcom-cbc.mbx.g6-software-solutions@army.mil](mailto:usarmy.appg.devcom-cbc.mbx.g6-software-solutions@army.mil)>

## Exciting opportunities for 2022 Summer HBCU/MI Faculty Research Fellowship at Army Research Laboratory.

Now accepting Applications

**The Department of Defense** is now accepting applications for their 2022 Summer HBCU/MI Faculty Research Fellowship. This program aims to strengthen the collaboration between the U.S. Department of Defense and STEM faculty affiliated with Historically Black Colleges and Universities and Minority Institutions.

Participation requires a commitment of ten consecutive weeks between May 2 through Sept. 2. Fellows will receive a total stipend of \$24,300, paid on a monthly schedule.

Selected Faculty Fellows will participate in research relevant to the mission of DEVCOM's Army Research Laboratory.

To be eligible for this opportunity, you

- Must be a citizen of the United States; dual citizens and foreign nationals are not eligible for this opportunity.
- Must be a current HBCU/MI STEM Faculty member; not collaborated with a DOD lab within the past five years

**Deadline:** Thursday, March 31

<https://orau.org/usre/>

POC: [patrice.d.collins.civ@army.mil](mailto:patrice.d.collins.civ@army.mil)

### CONTACT:

**Dr. Nirupam J. Trivedi**

Chief, Detonation Science & Modeling (FCDD-RLW-WA)

Weapons Sciences Division

CCDC - Army Research Laboratory

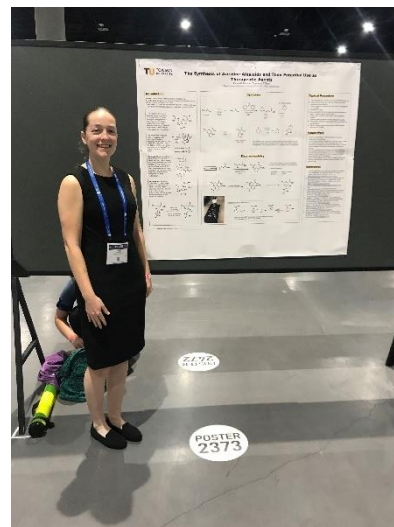
[Nirupam.j.trivedi.civ@army.mil](mailto:Nirupam.j.trivedi.civ@army.mil)

410-306-3108 (office) - 301-367-7765 (cell) - 408-476-5014 (cell - personal)

## Student Travel Award Report Summary:

Through the conference I went to many educational and interesting presentations as well as met some nice people. Below I have highlighted some of my favorite and most memorable parts of the ACS conference and San Diego.

My favorite presenter was Jessica, who presented on environmental film. Many other presenters would jump into the results of the research without introducing it first. However, Jessica, first introduced her research by defining environmental film and explaining the importance and goals of her research. This helped me to understand how environmental film can be released into the environment and how the orientation of the surface the film is on can change the physical shape of it. The amount of film can also change because of the different forces that are affecting its growth in those different orientations. For example, when the surface is in a horizontal orientation the film covers two times the amount of surface as when the surface is vertical. A horizontal orientation releases more material, but vertical orientation creates more acidic wastewater when film is washed off. She explained these results with the fact that the horizontal orientation gives more hydrophilic environmental film.



The most interesting presentation I saw was on "Soft salt-organic solvate cocrystals as a new class of solid electrolyte for lithium and sodium batteries." This is because I will be working with lithium batteries at my new job. The presenter talked about a current drawback to lithium batteries which is the flammable organic electrolytes used, but new solid electrolytes are being explored. I found this very interesting because I will be performing research that involves the improvement of solvent used in lithium-ion batteries.

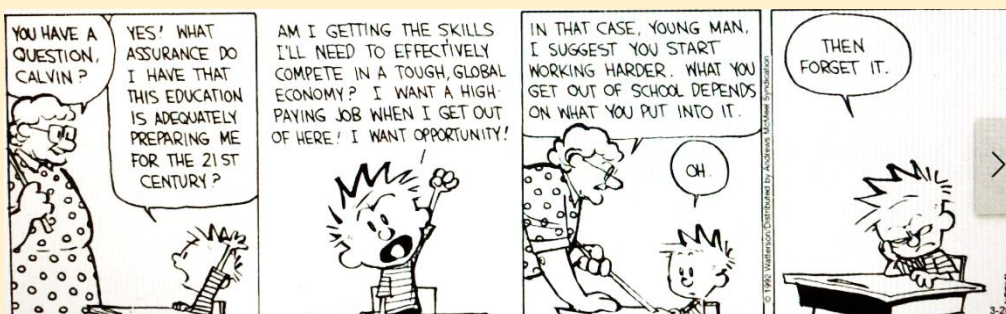
Overall, I had a great time in San Diego, watched many interesting presentations, learned about interesting research, and shared my research. Thank you very much for providing funds that allowed me to go on this trip and learn so much information.

Thank you,  
Pamela Abbott

### Laugh a Little...



- Old Chemist never die, **they just stop reacting.**
- What do you call a tooth in a glass of water? **A one molar solution**
- What did one charged atom say to the other? **I've got my ion you.**
- What element derives from a Norse god? **Thorium.**
- What show do cesium and iodine love to watch together? **Csi**
- I asked the guy next to me if he had any sodium hypobromite. **He said NaBrO**
- Why can't lawyers do NMR? **Bar magnets have poor homogeneity.**



## 2022 ADMINISTRATION OFFICERS

### 2022 SECTION OFFICERS

Chair 2022.....	Sarah Zimmerman, Web Master, <a href="mailto:scatzim@gmail.com">scatzim@gmail.com</a>
Vice-Chair 2022.....	Kelly Elkins <a href="mailto:Kmelkins@towson.edu">Kmelkins@towson.edu</a>
Chair-Elect (Chair 2024)....	Jiangnan Peng, <a href="mailto:jiangnanpeng@morgan.edu">jiangnanpeng@morgan.edu</a>
Secretary 2022.....	Louise Hellwig, Morgan State University, <a href="mailto:louise.hellwig@morgan.edu">louise.hellwig@morgan.edu</a>
Treasurer 2022.....	Lee J. Lefkowitz, <a href="mailto:lee_lefkowitz@hotmail.com">lee_lefkowitz@hotmail.com</a>
Past Chair (2021).....	Eric C. Cotton, Community College, of Baltimore County, <a href="mailto:ccotton2@ccbcmd.edu">ccotton2@ccbcmd.edu</a>

### 2022 SECTION COMMITTEE ON NOMINATIONS and ELECTIONS

Chair of the Committee on Nominations.....	James A. Saunders <a href="mailto:jsaunders@towson.edu">jsaunders@towson.edu</a>
Additional 4 members: .....	Dana Ferraris, Chair-2019, <a href="mailto:dferraris@mcdaniel.edu">dferraris@mcdaniel.edu</a>
.....	Pumtiwitt McCarthy, Chair-2020, <a href="mailto:pumtiwitt.mccarthy@morgan.edu">pumtiwitt.mccarthy@morgan.edu</a>
.....	Beatrice Salazar, Chair-2018, <a href="mailto:beatricesalazar1@gmail.com">beatricesalazar1@gmail.com</a>
.....	Sara Narayan, Stevenson University, Chair-2015, <a href="mailto:SNARAYAN@stevenson.edu">SNARAYAN@stevenson.edu</a>

### COUNCILORS/COMMITTEES

- 2020-2022 Kelly Elkins [Kmelkins@towson.edu](mailto:Kmelkins@towson.edu)
- 2021-2023 Beatrice Salazar [beatricesalazar1@gmail.com](mailto:beatricesalazar1@gmail.com)
- 2021-2023 Jan Kolakowski [jek6042@gmail.com](mailto:jek6042@gmail.com)
- 2021-2023 Stephanie Watson [stephanie.watson@nist.gov](mailto:stephanie.watson@nist.gov)

### ALTERNATE COUNCILORS/COMMITTEES

- 2021-2023 Alexander Samokhvalov [alexandr.samokhvalov@morgan.edu](mailto:alexandr.samokhvalov@morgan.edu)
- 2021-2023 Rob Clapper [rob.clapper@scioninstruments.com](mailto:rob.clapper@scioninstruments.com)
- 2021-2023 Michele Foss [foss.michele@gmail.com](mailto:foss.michele@gmail.com)
- 2020-2022 Paul Smith [pjsmith@umbc.edu](mailto:pjsmith@umbc.edu)

### MEMBERS-AT-LARGE

- Nirupam J. Trivedi, [nirupam.j.trivedi@mail.mil](mailto:nirupam.j.trivedi@mail.mil)
- Fasil Abebe [fasil.abebe@morgan.edu](mailto:fasil.abebe@morgan.edu)
- Nicole Carbonaro, [ncarbonaro@towson.edu](mailto:ncarbonaro@towson.edu)
- Rose A. Pesce-Rodríguez, [rose.a.pesce-rodriguez.civ@mail.mil](mailto:rose.a.pesce-rodriguez.civ@mail.mil)
- Sara Narayan, Stevenson University, [SNARAYAN@stevenson.edu](mailto:SNARAYAN@stevenson.edu)

### Maryland Section on the Website: [www.acsmaryland.org](http://www.acsmaryland.org)

2022 Webmaster..... Nicole Carbonaro, [ncarbonaro@towson.edu](mailto:ncarbonaro@towson.edu)

Chesapeake Chemist Editor-in-Chief... Beatrice Salazar, Chair-2018, [beatricesalazar1@gmail.com](mailto:beatricesalazar1@gmail.com)

Social Media Liaison..... Pumtiwitt McCarthy, Chair-2020, [pumtiwitt.mccarthy@morgan.edu](mailto:pumtiwitt.mccarthy@morgan.edu)

CONTACT US: [acsmarylandsection10@gmail.com](mailto:acsmarylandsection10@gmail.com)

### PROGRAM CHAIRS

#### AWARDS

**Braude Award**, L. Hellwig  
**Remsen Award**, D. Ferraris  
**Maryland Chemist of the Year Award**,  
Open Position  
**Senior Chemist Award**, M. Eiss / L. Gonzalez  
**Student Award**, S. Narayan

#### PROGRAMS

**Women Chemists Committee**, S. Narayan/K. Elkins  
**Student Travel**, L. Hellwig  
**High School Outreach**: National Chemistry Olympiad & Chemists Celebrate Earth Day, B. Salazar  
**Middle and Elementary School Outreach** (National Chemistry Week, Earth Day Week), R. A. Pesce-Rodríguez  
**Publicity**, P. McCarthy / B. Salazar / R. Clapper  
**Entertainment/Tours**, M. Foss / L. Hellwig



# EVENTS CONTACT

The U.S. National Chemistry Olympiad  
USNCO MARYLAND

URL: <http://www.beatricesalazarusncocoordinator.webs.com>

Jan - April

## Student Travel Awards

<https://acsmaryland.org/travel-awards/>

Email: Louise Hellwig <[Louise.Hellwig@morgan.edu](mailto:Louise.Hellwig@morgan.edu)>

Jan – March

**Student Award** <https://acsmaryland.org/student-awards/>

Email: Sara Narayan, [SNARAYAN@stevenson.edu](mailto:SNARAYAN@stevenson.edu)

**Chemists Celebrate Earth Day** - [beatricesalazar1@gmail.com](mailto:beatricesalazar1@gmail.com)

April

## Senior Awards

Email: Merle Eiss, [meiss32@aol.com](mailto:meiss32@aol.com)

Email: Linda Gonzalez <[linda\\_gonzalez@mccormick.com](mailto:linda_gonzalez@mccormick.com)>

May

## National Chemistry Week Events

[Rose Pesce-Rodriguez](#)

<http://www.beatricesalazarusncocoordinator.webs.com>

**Beer Tours:** Louise Hellwig <[Louise.Hellwig@morgan.edu](mailto:Louise.Hellwig@morgan.edu)> & Michele Foss <[foss.michele@gmail.com](mailto:foss.michele@gmail.com)>

May - Sept.

## Braude Award

<https://acsmaryland.org/braude-award/>

Email: Louise Hellwig <[Louise.Hellwig@morgan.edu](mailto:Louise.Hellwig@morgan.edu)>

Oct.

## The Remsen Award

<https://acsmaryland.org/remsen-award/>

Email: Dana Ferraris ([dferraris@mcdaniel.edu](mailto:dferraris@mcdaniel.edu))  
<[dferraris@mcdaniel.edu](mailto:dferraris@mcdaniel.edu)>

Nov.

## The Maryland Chemist of the Year Award

<https://acsmaryland.org/maryland-chemist-of-the-year/>  
Open position

Dec.



Join a chemist from the Army Research Laboratory and the American Chemical Society and participate in hands-on experiments exploring the chemistry of insects.

**Howard County Library System**

- 26 Mar Elkridge 2:00 pm
- 09 Apr Glenwood 10:30 am
- 16 Apr Central 1:00 pm
- 30 Apr E. Columbia 2:00 pm
- 07 May Miller 11:00 am
- 14 May Savage 2:00 pm

**Enoch Pratt Free Library**

- 19 Mar Central 2:00 pm
- 23 Apr Govans 2:00 pm
- 21 May Light St 2:00 pm

**Carroll County Library System**

- 02 Apr Eldersburg 2pm

**Anne Arundel County Library System**

- 28 May Odenton 11:00 am

Contact: Dr. Rose Ann Pesce Rodriguez at [Rose Pesce-Rodriguez](mailto:Rose.Pesce-Rodriguez)



## COMMENTS:

*Thank you for your contributions!*

We sincerely appreciate your contributions and the time you spend writing articles, comments and news for our newsletter. Your Collaboration makes this newsletter an important part of the Maryland Local section activities.

**Useful Links:**

- <https://www.editage.com/insights/a-young-researchers-guide-to-perspective-commentary-and-opinion-articles>
- Senior Chemists presentations: [Dr. G. Lozos, Dr. R. Berninger and Dr. C. Milton](#)
- Chemical demonstrations <https://acsmaryland.org/chemistry-video-links/>

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