

## Department of Chemistry & Biochemistry

### Fall 2023 Newsletter

Dear Alumni & Friends-

It has been another eventful year for research accomplishments and faculty and student awards, many of which are highlighted below. We are excited to share with you the [new departmental website](#) which has undergone a redesign with a fresh new look and updated content. On the website, you can also find the new chemistry & biochemistry [online marketplace](#) if you would like to purchase any department related merchandise like sweatshirts, t-shirts, or hats. The marketplace can also be accessed by visiting the chemistry homepage, scrolling to the blue bar at the bottom, and selecting "Merch."

If you would like to read more about the highlights below, just follow the links to access detailed stories. As always, we love to hear from you if you have any news to share or feedback, and you can find this and previous editions of the newsletter under the ["News"](#) tab on the website.

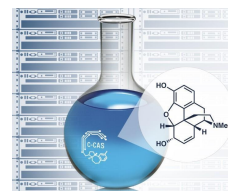
If you would like to include Notre Dame in your giving, undergraduate alumni can follow [this link](#), and graduate alumni can follow [this link](#). Thank you for supporting the efforts of the department!



#### Research News

The [Center for Computer-Assisted Synthesis \(C-CAS\)](#), led by Olaf Wiest, was selected as the first NSF Center for Chemical Innovation in Indiana.

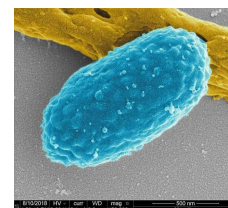
[Recently published findings](#) from the Stack group have shed light on the reasons why obesity increases the risk of ovarian cancer and decreases the likelihood of survival.



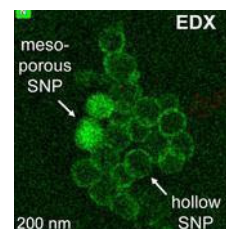
Arnaldo Serrano and Katharine White received [NSF CAREER awards](#) for their projects entitled "Nonlinear Infrared Studies of Biomolecular Coacervation" (Serrano) and "Molecular Mechanisms of pH-Sensitive Proteins, Pathways, and Cell Behaviors" (White).

Brittany Morgan received the highly-selective [Burroughs Wellcome Fund Award](#) for her project entitled "Cracking the Molecular Recognition Code: Capturing Dynamic Substructures with Small Molecules."

The Chang and Mobashery labs [reported an oxadiazole antibiotic](#) that can kill *Clostridioides difficile* bacteria and prevent germination of its spores, thereby breaking the cycle of infection.



The Smith group discovered a [new technique](#) to modify the structure of silica particles to fine-tune the loading of pharmaceuticals or other compounds in their surfaces, potentially creating pathways to improve the effectiveness of existing drugs.



Laurie Littlepage received a 2022 [METAvivor Translational Research Award](#) for her proposal entitled "Targeting Endocrine Therapy Resistance in Bone Metastasis," which focuses on strategies to overcome the gene ZNF217's induced endocrine therapy resistance.

---

## Faculty & Staff News

Holly Goodson was elected as a [Fellow of the American Society for Cell Biology](#) for her research on the microtubule cytoskeleton and her service to the cell biology community through the ASCB Public Policy Committee and various educational initiatives at Notre Dame.



Prashant Kamat was chosen as the 2024 winner of the ACS Henry H. Storch Award in Energy Chemistry and as the 2023 [Crano Memorial Lecturer](#) from the Akron Section of the ACS for his work in developing and understanding materials for energy applications.



Patricia Clark is the recipient of the 2023 [Dorothy Crowfoot Hodgkin Award](#), given by The Protein Society to recognize exceptional contributions to protein science.



Paul Bohn was selected as a [Fellow of the American Chemical Society](#) based on his work in molecular nanotechnology, personal health monitoring, and microbial community imaging.



Jon Camden was elected as a [Fellow of the American Association for the Advancement of Science](#) for his studies using surface-enhanced Raman spectroscopy and on the properties of plasmonic nanostructures.



Four faculty members received [University](#) or [College of Science](#) awards in the spring. Dan Gezelter received the 2023 Provost's Award for Teaching Excellence in the Core Curriculum, Bahram Moasser received a 2023 Joyce Award for Excellence in Undergraduate Teaching, Allen Oliver received the inaugural College of Science Outstanding Research Scientist Award, and DeeAnne Goodenough-Lashua received the inaugural Sister Kathleen Cannon Award for Excellence in Undergraduate Advising.

[Juan del Valle](#) was promoted to William K. Warren Family Professor for the Warren Family Research Center for Drug Discovery & Development, [Dan Gezelter](#) was promoted to Senior Associate Dean for Education & Undergraduate Programs, and [Mijoon Lee](#) was promoted to Research Professor.

---

## Student & Alumni News

[Julia Spear](#), graduate student in Katharine White's lab, was profiled by the Journal of Cell Science for her recent publication entitled "Single-cell intracellular pH dynamics regulate the cell cycle by timing G1 exit and the G2 transition."

[Madeline Glennon](#), graduate student in Jessica Brown's lab, received a predoctoral fellowship from the American Heart Association.

Carmen Chamberlain and Wedage Lakna Nuwanthi Dayaratne received [Patrick and Jana Eilers Graduate Student Fellowships](#) for Energy Related Research, and Raul Torres-Cadena received a [Forgash Fellowship](#) for Research in Solar Energy.

[Janeala Morsby](#) (PhD '23) received a 2023 Governor-General's Achievement Award, one of the most prestigious awards granted by the Jamaican government.

[Audrey Mills](#) (BS '23) was named a 2023 Churchill Scholar, a first for the department. She was also the recipient of the 2023 College of Science Dean's Award.

Jeffrey DuBose (PhD '22) received the 2023 ACS Division of Inorganic Chemistry Young Investigator Award and the Inter-American Photochemical Society Gerhard Closs Award.

Paul Hergenrother (BS '94) was appointed to the Scientific Advisory Board of ArrePath.

[John Gordon](#) (PhD '90) was named Chemistry Division Chair at Brookhaven National Lab.

Aaron Bartlone (MS '92) was appointed Chief Operating Officer of Cybin, Inc.

In May, degrees were conferred on 35 PhD graduates, 8 MS graduates, and 45 BS graduates. Congratulations to our newest group of alumni!

(\* indicates July 31, 2022 graduation date; \*\* indicates January 8, 2023 graduation date)



## PhD recipients

- Savannah Elizabeth Benjamin (Peter Burns)
- \*Adrianna Bickner (Merlin Bruening)
- \*\*Christopher Fitzgerald Cain (Juan Del Valle)
- \*Aaron Michael Forbes (Paul Helquist)
- \*\*Eva Marie Gulotty (Brandon Ashfeld)
- \*\*Shanghai Huang (Jonathan Whitmer)
- Xiuyu Jin (Haifeng Gao & Na Wei)
- \*\*Bradley Michael Keegan (Brian Blagg)
- \*Charlotte Nicole Kunkler (Jessica Brown)
- Joseph James Liberko (Jon Camden)
- \*Jieye Lin (Anthony Serianni)
- Kangling Ma (Haifeng Gao)
- Michael Patrick Maloney (Paul Helquist & Olaf Wiest)
- Preethi Susan Mathew (Prashant Kamat)
- \*Maria Cristina Miranda Vergara (Laurie Littlepage)
- Ricardo M. Morales (Paul Helquist & Olaf Wiest)
- Janeala Jazene Morsby (Brad Smith)
- Campbell Bruce Mousseau (Matt Champion)
- Himani Nikhilkumar Patel (Paul Helquist & Olaf Wiest)
- Keaton Volney Prather (Emily Tsui)
- Yuanyuan Qian (Mayland Chang & Shahriar Mobashery)
- Benjamin Maxwell Rathman (Juan Del Valle)
- Jordan Michael Roach (Peter Burns)
- Kendall Allen Ryan (Merlin Bruening)
- Parinda B. Tennakoon (Laurie Littlepage)
- Timothy Joseph Tetrault (Anthony Serianni)
- \*Kathryn N. Trentadue (Richard Taylor)
- Cristhian Andres Umana Gamboa (Richard Taylor)
- \*\*Craig Waitt (William Schneider)
- Yujia Wang (William Schneider)
- \*\*Alexander Wright Weig (Christian Melander)
- Heather Dawn Whitehead (Marya Lieberman & Graham Peaslee)
- Katherine June Woolard (Christian Melander)
- Hui Xu (Brandon Ashfeld & Casey O'Brien)
- Zhuoming Zhang (Masaru Kuno)

## MS recipients

- \*\*Homero I. Dominguez-Cisneros
- \*Seth Allen Flatt
- \*Eliza Kate Hanson
- \*Eman Mohammed Mahmoud Mohammed Hassan
- \*Yongyi Liu
- \*\*Taylor Dawn Merfeld
- \*Naviya Ratnachira Schuster-Little
- \*Chien-Wei Wang

## BS recipients

- \*\*Adviti Bali, *cum laude*
- Michael Bektas
- Amy Bernard, *magna cum laude*
- Sarah Bohling, *magna cum laude*
- Emilia-Maria Bondarenko
- Ashley Bullington, *magna cum laude*
- Nicholas Buranicz
- Matthew Cauley
- William Cheong
- William Chin, *magna cum laude*
- Phoebe Dodge
- Zachary Fandel
- David Fletcher, *cum laude*
- Alexa Fowler
- Collin Funck, *cum laude*
- Jerome Gan Shih Yi
- Lillian Gile
- Gabriela Gunka
- David Haungs, *summa cum laude*
- Theresa Heidenreich, *magna cum laude*
- Elias Issa
- Katherine Jennings
- Jack Jerit
- Dane Juarez
- Jenna Kautzky
- John Kelly
- Nolan Kinahan
- Casey Knuth
- Dylan Leupi
- Jiaqi Lu, *cum laude*
- Isabelle Lukau
- Gabe McKenna, *cum laude*
- Audrey Miles, *magna cum laude*
- Patricia Miller
- \*\*Nicolas Mjaess, *summa cum laude*
- Brenden O'Brien
- Kathleen Pankow, *cum laude*
- Sarah Steadman
- Ian Tibbals, *magna cum laude*
- Christina Troll
- Jordan Walker
- Natalie Waschbusch
- Katelyn Wendt
- George Yacu
- Edward Zornow

## In Memoriam

[Sister Lorraine Forster](#) (MS '58) passed away July 25, 2023 at the age of 99. She taught chemistry in a number of high schools, ending her teaching career at Bishop Gorman High School in Las Vegas.

[Thomas Francis Moran](#) (PhD '62) passed away July 17, 2023. He was a professor at Georgia Tech for 38 years before becoming a real estate agent alongside his wife Joan.

[Leslie Kozak](#) (PhD '67) passed away July 13, 2023. He spent his career in molecular biology with multiple organizations including The Jackson Laboratory, Pennington Biomedical Research Institute, and the Polish Academy of Sciences.

[Daniel Winicur](#), former ND chemistry professor and registrar, passed away on March 12, 2023.

[Charley Raley](#) (BS '43, MS '47) passed away on October 24, 2022. He worked for DuPont, Southwest Research Institute, and Dow Chemical and invented flame-retardant foamed polyethylene.

[Sister Denise Macko](#) (MS '68) passed away December 25, 2022. She worked as a chemistry teacher and computer programmer.

[Charles Barcelona](#) (MS '67) passed away December 28, 2022. He worked as a chemistry professor at Community College of Allegheny County.

[Karen Miller](#) (MS '71) passed away August 26, 2022. She was a long-time chemistry teacher at Marinette High School in Wisconsin.

[Richard Stanton](#) (PhD '57) passed away August 23, 2023. He was a long-time physical chemistry professor at Canisius University.

**Copyright 2023 University of Notre Dame Department of Chemistry & Biochemistry**

**251 Nieuwland Science Hall, Notre Dame, IN 46556**

**Phone (574) 631-7058 Email: [chemistry@nd.edu](mailto:chemistry@nd.edu) web: [chemistry.nd.edu](http://chemistry.nd.edu)**

[Manage](#) your preferences | [Opt Out](#) using TrueRemove™

Got this as a forward? [Sign up](#) to receive our future emails.

View this email [online](#).

215 Jordan Hall of Science | Notre Dame , IN 46556 US

This email was sent to [rhicks2@nd.edu](mailto:rhicks2@nd.edu).

To continue receiving our emails, add us to your address book.