

Position	Candidates
Chair-elect (1)	Danielle Tullman-Ercek
Secretary (1)	Elizabeth Goodrich
Councilor (1)	William Kelly
	Anurag Rathore
Alternate Councilor (1)	Michelle O'Malley

Candidates for 2025 ACS BIOT Officers

Division Chair-Elect

Danielle Tullman-Ercek



Danielle Tullman-Ercek, Ph.D., is a Professor in the Department of Chemical and Biological Engineering at Northwestern University, Co-Director of the NU Center for Synthetic Biology, and Director of the Master of Science in Biotechnology Program. She is also Director of SynBREU, which is the first NSF-funded Synthetic Biology undergraduate research program. Outside of Northwestern, she was also a founding council member of the Engineering Biology Research Consortium, serves as an Editor for mSystems, and is active in the American Chemical Society Biochemical Technology Division. She is also co-founder of a company, Opera Bioscience, which is built on her research innovations related to biomanufacturing. She received her B.S. in

Chemical Engineering at Illinois Institute of Technology in Chicago, and her Ph.D. in Chemical Engineering from the University of Texas at Austin. She carried out postdoctoral research at the University of California San Francisco and the Joint Bioenergy Institute, while part of the Lawrence Berkeley National Laboratory. Tullman-Ercek's research focuses on building biomolecular devices for a wide range of applications, including energy, materials, manufacturing, and medicine. She is particularly interested in engineering multi-protein complexes, such as virus capsids and the machines that transport proteins and small molecules across cellular membranes. She received several awards for this work, including the Searle Leadership Award, an NSF CAREER award, and the Biochemical Engineering Journal Young Investigator award, and she was inducted as a Fellow of the American Institute of Medical and Biological Engineering in 2023.

Statement of interest:

The first conference I presented at as a graduate student was the ACS BIOT meeting held in New Orleans in 2003. It was an excellent way to be introduced to the field, and to this day remains an intellectual home and professional community for me. I recognize the value of continuing to build this community, particularly because it is a uniquely balanced combination of highly active and prominent industry and academics working in the biotechnology space. I also understand the challenges, which include finances due to the rising costs of running events, as well as maintaining our community growth amid ever-increasing options for scientists that are either more niche-specific, or specific to either industry or academia in scope and network. In short, we must continue to show the value of BIOT, and I want to do all I can to help in these efforts while maintaining our popular events and activities. Given an opportunity to work in leadership in BIOT, I would like to continue initiatives that keep BIOT top-of-mind for the community and develop new initiatives to re-capture former BIOT members and recruit early-career scientists and engineers.

Selected ACS and BIOT service activities:

2022: 263rd Spring National Meeting BIOT Program Chair 2014-2021: Spring National Meeting BIOT Area Coordinator for three meetings 2013, 2015: Spring National Meeting BIOT Session Chair 2013: ACS National Meeting Theme Committee Multiple years: various BIOT Award committees

Division Secretary

Elizabeth Goodrich



Elizabeth Goodrich is a chemical engineer with over 35 years of experience in the biotechnology industry. She began her career at Genentech, spending 9 years in the Late-Stage Recovery Process Development organization where she was responsible for tangential-flow filtration development, optimization, scale-up, implementation, and troubleshooting at bench, pilot, and industrial scales. During her subsequent 25-year tenure at MilliporeSigma, she has led the Worldwide Applications Engineering group and the Process and Analytical Technology Innovation R&D group, encompassing upstream, downstream, and PAT capabilities. Beth is currently a Technical R&D Director in the Single-use and Integrated Systems team within

MilliporeSigma's Process Solutions Division. She is focused on bringing novel and sustainable process and PAT solutions to the industry to advance productivity and performance in biomanufacturing and help accelerate the transition to intensified and continuous biomanufacturing. She holds a Bachelor of Science degree in Chemical Engineering from the Massachusetts Institute of Technology.

Summary of prior BIOT experience:

I have been a full member of ACS and BIOT since 2011 and have consistently attended national meetings. I became involved with the annual meeting starting in 2019 as a session chair. After two years as a session chair, I accepted the role of Area Coordinator in 2021 and 2022 and then went on to serve as Industrial Program chair in 2023. For 2024 and the upcoming 2025 National meeting, I am back to participating as Area Coordinator. I was honored to be appointed to serve the remaining term of Secretary for the Division starting in January 2024 when it was vacated by Aaron Noyes as he was elected to the role of Chair-Elect.

Statement of Interest:

Throughout my experiences with the BIOT division, I have been inspired by both the advancing science as well as the strong community. The world of biopharma comes together in BIOT, and it is an ideal group for staying in touch with friends and keeping up with exciting developments. It helps me feel part of something that is larger than a single company and, as such, I would like to give back by serving on ExComm. As Industrial Program chair in 2023, I began attending meetings of the BIOT Executive Committee and developed a strong interest in remaining involved with this dynamic team. I feel that the position of Secretary is a good fit for my organizational skills, I am enjoying fulfilling my current responsibilities as acting Secretary, and I would be honored to be considered for official election into the role.

Councilor

William Kelly

William Kelly, Ph.D.



- B.S.ChE Clarkson University, 1985
- M.S. University of Virginia, 1988
- Ph.D. Pennsylvania State University, 1998

Dr. William Kelly is a professor of Chemical Engineering at Villanova University, and Director of the Center for Cell Therapies Research at Villanova (NovaCell). Prior to being at Villanova, he worked as a biochemical engineer at Merck and Company for ten years. At Villanova, Dr. Kelly teaches and does

research in the areas of upstream and downstream bioprocessing, primarily for Biopharmaceutical production. Dr. Kelly and his colleagues at Villanova are past winners of the ASEE Martin award for classroom innovation. Dr. Kelly's research most recently has focused on microbioreactor design and novel cell purification strategies in support of CART applications. For the 2021 ACS annual meeting, Dr. Kelly served as co-area coordinator for the Cell and Gene Therapy symposium. As a member of BIOT's EXCOMM, Dr. Kelly served as BIOT liaison to ESBES (European Symposium for Biochemical Engineering Sciences); leading the committee that organized four International Biotechnical Design Competitions as well as the ESBES-BIOT working group on Covid. Dr. Kelly also started up the first BIOT graduate student chapter (the mid-Atlantic chapter) in 2016 and has been the sole academic advisor for this very active chapter since its inception. Dr. Kelly is currently serving in his first term as Councilor on the BIOT EXCOMM. As Councilor, he currently serves on the ACS International Activities Committee (ACS-IAC) and leads BIOT's newly formed IAC (BIOT-IAC) committee. Dr. Kelly is committed to increasing opportunities and activities for students within BIOT as well as expanding and strengthening BIOT's connections with international organizations (such as ESBES) and other ACS divisions.

Councilor

Anurag S. Rathore



Anurag S. Rathore, Ph.D.

Professor, Department of Chemical Engineering Indian Institute of Technology, Delhi Hauz Khas, New Delhi, 110016, India Phone: +91-9650770650 Email: asrathore@biotechcmz.com

ANURAG S. RATHORE is an Institute Chair Professor at the Department of Chemical Engineering, Indian Institute of Technology, Delhi, India. He is also the Coordinator for the DBT

COE for Biopharmaceutical Technology. His previous roles included management positions at Amgen Inc., Thousand Oaks, California and Pharmacia Corp., St. Louis, Missouri. His areas of interest include process development, scale-up, technology transfer, process validation, biosimilars, continuous processing, medical image analysis, process analytical technology and quality by design. He has authored more than 600 publications and presentations in these areas. He is presently serving as the Editor-in-Chief of *The AAPS Journal* and Associate Editor for *Journal of Chemical Technology and Biotechnology*. He also serves on the Editorial Advisory Boards for *Biotechnology Progress, Electrophoresis, BioPharm International, Journal of Chromatography B, Journal of Chromatography Open, Pharmaceutical Technology Europe,* and *Separation and Purification Reviews*. Dr. Rathore has edited books titled *Preparative Chromatography for Separation of Proteins and Peptides (2017), Quality by Design for Biopharmaceuticals: Perspectives and Case Studies (2009), Elements of Biopharmaceutical Production (2007), Process Validation (2005), Electrokinetic Phenomena (2004),* and *Scale-up and Optimization in Preparative Chromatography (2003)*. He has a Ph.D. in Chemical Engineering from Yale University.

Prof. Rathore has been a member of ACS for over 25 years and of BIOT Division for over 20 years. He served as the BIOT Program Chair for the 2006 and 2007 meetings. Prof. Rathore has been a regular attendee of ACS BIOT meetings for the last 20 years. Over the past 5 years, he has worked with ACS BIOT ExComm towards increasing engagement between ACS BIOT and the Indian scientific community (industry, academia, and students). Prof. Rathore worked with ACS BIOT ExComm in successfully getting the "Technical Division Innovative Project Grant" two times over the past 5 years. These funds were used to get BIOT representatives to travel to India and participate in the Annual Training Event organized by the DBT COE for Biopharmaceutical Technology at IIT Delhi. In 2023, ACS BIOT has launched the ACS BIOT Student Chapter for which Prof. Rathore is the Faculty in Charge.

Alternate Councilor

Michelle O'Malley



Michelle O'Malley, Ph.D.

University of California, Santa Barbara Vice Chair of Bioengineering Professor of Bioengineering Professor of Chemical Engineering Scholle Chair in Chemical Engineering

Michelle O'Malley, Ph.D., is the Cliff R. Scholle Professor of Chemical Engineering at the University of California, Santa Barbara. She earned a B.S. in Chemical Engineering and

Biomedical Engineering from Carnegie Mellon University in 2004, a PhD in Chemical Engineering from the University of Delaware in 2009 and was a USDANIFA postdoctoral fellow at MIT. At UCSB, her research group engineers anaerobic microbes and consortia for sustainable chemical production, bioremediation, and natural product discovery. O'Malley's research has been featured on NPR's *Science Friday*, the *BBC Newshour*, the *LA Times*, and several other media outlets. She was named one of the 35 Top Innovators Under 35 in the world by *MIT Technology Review* in 2015, one of the 10 "Scientists to Watch" by *Science News* in 2019 and is the recipient of the Presidential Early Career Award for Scientists and Engineers (PECASE). She has also been recognized with the ACS BIOT Division Young Investigator Award, and an ACS Women's Chemists Committee "Rising Star" Award. O'Malley has been involved with the BIOT Division for 15+ years, first as a graduate student volunteer, then as a Session Chair and Area Coordinator, and later as Programming Co- Chair of the 2017 Annual Meeting in San Francisco. O'Malley most recently served as Chair of the BIOT Division in 2023 and is now serving as Past-Chair. She sees BIOT as a unique community that fosters collaboration, career development, and exchange between professionals in academia and the biotechnology industry. As Alternate Councilor, O'Malley seeks to build on her ample experience leading the division to spearhead new efforts that re-engage academics with the BIOT annual meeting and other BIOT initiatives throughout the year.