

2021 WISE Forum October 12, 2021

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Sanofi is proud to support the 2021 Women in Science and Engineering (WISE) Forum.

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Dear Friends,

Welcome to the 2021 WISE Forum!

This annual event that celebrates **W**omen **in S**cience and **E**ngineering, as well as other STEM careers, is unlike any other event in the Lehigh Valley. It brings together women across generations – from high school, college, and at various stages of their careers – to celebrate science, technology, engineering and math. Even the pandemic couldn't stop us from gathering to celebrate the world of opportunity in STEM!

I am sure that we can all agree that we would have preferred to meet in person; however, modern technology is making it possible for us to not only hear about the accomplishments and challenges of the women on our esteemed panel, but also network with others as though we were sitting together at the forum dinner. To make the most of this opportunity, we want to present you with a two-part challenge.

- First, we ask each attendee to exchange information with at least two other WISE Forum attendees. It doesn't matter whether you interact with students or STEM professionals, just connect with other like-minded women who share your passion for STEM... and make sure that you get their contact information, because as a follow-up, we ask that you connect with them again, a few weeks after the event.
- We plan to schedule a special virtual networking event in November to check-in and learn all about the connections that you have made with other STEM enthusiasts. Ultimately, we hope that this is a great way for students to develop networking skills and a great way for professional women in our network to stay connected to one-another.

The WISE Executive Advisory Council wishes to extend its sincere gratitude to the 20 sponsors who have made this event possible, including our legacy sponsor, Sanofi U.S., which has sponsored the WISE Forum every year since its inception in 2014, and our presenting sponsors: ATAS International, Inc., and B. Braun Medical. Please see the full list of our sponsors on page 30 of this program.

Thank you all for making the 2021 WISE Forum a success. We hope you find value in both the networking/mentoring portion of the evening and the WISE panel discussion.

Sincerely,

K. Joy Karnas, Ph.D.
Cedar Crest College
WISE Executive Advisory
Council Co-Chair

Jean Vincent, Ph.D
Evonik Corporation
WISE Executive Advisory
Council Co-Chair



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2021 WISE Forum

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October 21, 2021

Agenda

6:30 p.m. - 6:45 p.m.

This is a good time to orient yourself to the conference platform and update your electronic business card. Log in and go to the floor with your topic. The links to the floors are on your left. The topics for each floor are on the next page. Click on the Remo logo to learn more about using the platform.

6:45 p.m. - 7:20 p.m.

Networking and Mentoring Discussion

7:20 p.m. - 7:30 p.m.

Break. Visit Sponsor Booths.

Click on the button in the upper left-hand corner to enter the panel presentation

7:30 p.m. - 8:30 p.m.

Distinguished Leader Panel Discussion with questions and answers.

Closing Remarks

Floor Topics

- Floor One: Healthcare/Medicine/Pharmaceuticals
- Floor Two: Healthcare/Medicine/Pharmaceuticals
- Floor Three: Genetics/Forensics
- Floor Four: Information Technology/Computer Science/Coding
- Floor Five: Chemistry
- Floor Six: Biology
- Floor Seven: Architecture/ Engineering
- Floor Eight: Finance/Accounting
- Floor Nine: Aeronautics & Space/ STEM Education / General Interest in STEM
- Floor Ten: How to Network and build your connections in STEM fields



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About the WISE Initiative



The Da Vinci Science Center is working to increase the number of girls who participate in STEM programs.

The Da Vinci Science Center established the Women In Science and Engineering - WISE Initiative in 2014 as part of its commitment to supporting young girls and female practicing STEM professionals. The WISE Initiative offers many programs to introduce students to STEM career pathways, to engage female STEM professionals and provide them opportunities to network and to support each other. The WISE Initiative has grown to include more than 300 STEM professionals.

Recent funding allowed the Science Center to partner with stakeholders to identify how they can develop programs that address the needs of area women and girls in STEM fields. Today women hold 49% of the jobs in the region yet represent only 29% of the STEM workforce, with lowest representation in engineering, computer and mathematical sciences where much of the job growth is occurring. The WISE Initiative is positioned to help close that gap and encourage women to not only pursue STEM careers, but to stay in them.

2021 WISE Executive Advisory Council

Co-Chairs	
Name	Professional Affiliation
Joy Karnas, Ph.D.	Professor of Biological Science & Genetic Engineering, Director of the Honors Program, Cedar Crest College
Jean Vincent, Ph.D.	Sr. Vice President, R&D Specialty Additives, Research, Development & Innovation, Evonik Corporation
Members	
Name	Professional Affiliation
Jennifer Allenbach	Chief Mission Delivery Officer, Girl Scouts of Eastern Pennsylvania
Erin Armstrong	Associate Director, Sterilization, B. Braun Medical Inc (past co-chair)
Mary Armstrong, Ph.D.	Charles A. Dana Professor of Women's, Gender & Sexuality Studies and English Chair, Women's, Gender & Sexuality Studies Program, Lafayette College
Fusun Bubernack	President, ET&T Voice, Data, MSP, & Security Services Expert
Lin Erickson	Executive Director and CEO, Da Vinci Science Center
Bonnie Hall	VP, Global Quality & Continuous Improvement, Crayola
Stephanie Hnatiw	Owner, Interim Executive Director and Fund Development Services
Kristen Jellison, Ph.D.	Director, ADVANCE Center for Women STEM Faculty and Associate Professor, Dept. of Civil and Environmental Engineering, Lehigh University
Jodi Koch	VP, Patient Care Services, Lehigh Valley Hospital-Cedar Crest
Tamala Mallett Moore, MD, MBA, ABFP	Therapeutic Area Head Vaccines /Flu, Meninge and Pneumo, Innovative, Nosocomial and COVID19/Global PV & PE, Sanofi Pasteur
Darlene Pors	Special Projects Design Associate, H.T. Lyons
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Kelly Rindock	VP, Wealth Management, Steel Valley Investment Group, Raymond James & Associates, Inc.
Susan Schierwagen	VP, Product Development - Fire Protection, Technology & Product Development, Victaulic
Katy Worrilow, Ph.D.	Founder and CEO, LifeAire Systems, LLC and Adjunct Professor, Penn State University Lehigh Valley (past co-chair)

"I encourage all young women to go for the science! Together, through forums such as these at the DA VINCI Science Center, we can accelerate the status and close the gap of young women pursuing careers in STEM. If the pandemic has taught us anything, we need many more young scientists to help solve some of the biggest challenges we're facing in the world."

- Dr. Julie Louise Geberding



MEET OUR MODERATOR



Dr. Julie Gerberding is Chief Patient Officer and Executive Vice President at Merck, where she is responsible for global public policy, patient engagement and advocacy, strategic communications, population health, and corporate responsibility. She joined Merck in 2010 as president of Merck vaccines.

Dr. Gerberding was Director of the U.S. CDC from 2002-2009, where she led the agency through more than 40 emergency responses to public health crises. She serves on the executive committee of the Biotechnology Innovation Organization (BIO) board and is a board member of Cerner Corporation and MSD Wellcome Trust Hilleman Laboratories, a non-profit that develops new vaccine technologies for developing countries. She also cochairs the CSIS Commission on Strengthening America's Health Security.

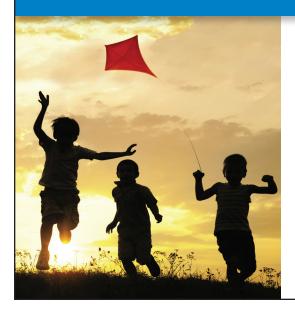
Dr. Gerberding has received more than 50 awards and honors, including the United States Department of Health and Human Services (DHHS) Distinguished Service Award for her leadership in response to anthrax bioterrorism and the September 11, 2001 attacks. In 2018, she was selected as the Healthcare Businesswomen Association's Woman of the Year.

Dr. Gerberding received her undergraduate and M.D. degrees from Case Western Reserve University. She completed her internship and residency in Internal Medicine and fellowship in Clinical Pharmacology and Infectious Diseases at the University of California, San Francisco, where she is currently an Adjunct Associate Professor of Medicine. Dr. Gerberding received a Masters of Public Health at the University of California, Berkeley. She is a member of the National Academy of Medicine, a member of the Council on Foreign Relations, and a fellow of the Infectious Diseases Society of America and the American College of Physicians. She is board certified in Internal Medicine and Infectious Diseases.

My advice to young women would be to identify and cultivate your support system - don't try and do it alone! You need to develop a diverse network that will provide you with the guidance and support that you will most definitely need. Sometimes you need that person that will be blunt and honest with you and other times you need someone to be your cheerleader and tell you that you're great no matter what!

- Kelly Beaver

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Kelly Beaver



Beaver is UGI's Vice President of Energy Marketing & Supply and has 19 years of regulated and unregulated experience in the natural gas and electric utility industry. Ms. Beaver is currently leading the sales, marketing, procurement, and logistics of all gas and electric supply for the retail and wholesale operations at UGIES. She is also responsible for the management and optimization of natural gas storage and associated pipeline transportation, sale of peaking and related services, and purchase and delivery of liquid fuels (oil and propane).

Ms. Beaver previously served as Vice President of Engineering and Operations Support at UGI Utilities (2017-2020), Vice President of Gas & Electric Supply at UGI Utilities (2014-2017) and Director of Supply & Asset Optimization at UGIES (2009-2014).

Ms. Beaver holds a B.S. degree in Industrial Engineering from Lehigh University and an M.B.A. from the Erivan K. Haub School of Business at St. Joseph's University. "Choosing a career in STEM doesn't mean that is what you will do for the rest of your life.

The beauty of a technical education is that it teaches you to solve problems. With those skills, women can be instrumental in solving some of the world's most challenging problems. The key is to find a mentor who can help you explore where your passions lie. When you combine our passions with the analytical skills you get from a STEM education, you can be a force to be reckoned with."

- Victoria Brifo



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Victoria Brifo



Victoria Brifo is senior vice president and chief human resources officer at Air Products. She is responsible for leading all aspects of the company's Human Resources organization, including HR Operations, Diversity and Inclusion, Talent Management, and Compensation and Benefits, as well as Global Health and Wellness, and Corporate Aviation and Corporate Transportation.

Ms. Brifo joined Air Products in 2001 as site leader in Geismar, Louisiana, and progressed through a series of plant leadership positions before becoming Air Products' Global Diversity director in 2005. She was named global manager of Electronics Operations in 2008 and moved to the Merchant Gases group in 2011 to lead the Generated Gases business. In 2014 Ms. Brifo assumed the global transformation lead role for Industrial Gases, where she was an integral part of the business' organizational transformation and operational productivity initiatives. She subsequently was appointed vice president, Global Gases, followed by vice president, Equipment Sales, Plant Support and Central Procurement.

Ms. Brifo holds degrees in chemical engineering and political science from the Massachusetts Institute of Technology.

"Don't eliminate yourself because of what you think others want. The surest way to not achieve something is to never try."

- Dr. Jaye Gardiner

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Dr. Jaye Gardiner



Dr. Jaye Gardiner received her Ph.D. in Cancer Biology in 2017 from the University of Wisconsin - Madison, where she studied how HIV effectively spreads between cells and how that infection changes the cells behaviors. Now, she researches pancreatic cancer's tumor microenvironment, specifically focusing on how the non-tumor cells communicate to support the tumor at the Fox Chase Cancer Center in Philadelphia, PA.

As a first generation American and graduate, Jaye is passionate about and involved in a variety of science communication (scicomm) efforts to increase access, exposure, and IDEA (inclusivity, diversity equity, and accessibility) in STEM; predominantly through art, organizing spaces/platforms for diverse scientists and science communication, and teaching (check out her comics group JKX Comics, #UniqueScientists on twitter/Instagram, and the science communication workshop for graduate students ComSciCon). You could say that in lab and out, Jaye is all about communication.

When not chasing her dreams, you can find Jaye chasing her two pet bunnies, working out, or playing video games.

Ms. Brifo holds degrees in chemical engineering and political science from the Massachusetts Institute of Technology.

"A career in STEM ignites the heart and mind, as you will work on overcoming some of the world's biggest challenges and really making a difference."

- Lisa Nibauer



OraSure Technologies, Inc.

We salute all women in the **STEM** field

And applaud **Da Vinci Science Center's** efforts to promote the field!

Lisa Nibauer



Lisa Nibauer joined OraSure Technologies as Executive Vice President Business Unit Leader, Diagnostics in May 2020. OraSure develops and delivers game-changing, innovative sampling tools, services and diagnostics designed to help its customers and partners get the best answers to their most critical questions, more easily and with more illuminating insights. OraSure is leveraging its global leadership in infectious disease diagnostics to develop tests for COVID-19.

Prior to joining OraSure, Ms. Nibauer spent eight years at BD Becton Dickinson, Inc. ("BD"), most recently as VP/GM, Global Medication Delivery Solutions. In that role, she had general management responsibility for \$1.6 billion in annual revenue and a team of over 300 people globally and was also accountable for the Global Marketing function for the largest business unit in BD. Prior to that, also at BD, Ms. Nibauer held the positions of VP/GM, Global PreAnalytical Systems Business & Global Marketing and Senior Director, Global Blood Collection Acquisition Platform. Prior to joining BD, she held general management, sales and marketing positions with increasing responsibilities at Adlens Beacon Inc., Schering-Plough Consumer Healthcare (Bayer), General Mills, Elf Atochem, and ICI (now part of AstraZeneca, Henkel and AkzoNobel). Ms. Nibauer earned an M.B.A. from UCLA Anderson School of Management and a B.S. in Chemical Engineering from Lehiah University.

"There is no question that a career in STEM offers opportunities to be creative and help to solve many of the world's most challenging problems.

Working together we can help our global community to thrive."

- Dr. Elsa Reichmanis

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Dr. Elsa Reichmanis



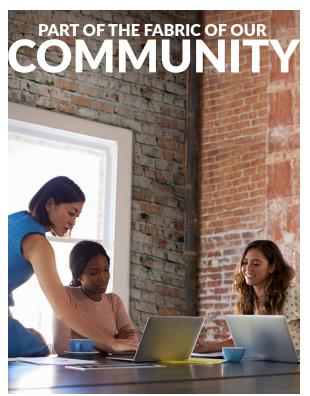
Elsa Reichmanis is Professor and Carl Robert Anderson Chair in Chemical Engineering in the Department of Chemical and Biomolecular Engineering at Lehigh University. Prior to joining Lehigh, she was Professor and Pete Silas Chair in Chemical Engineering in the School of Chemical and Biomolecular Engineering at the Georgia Institute of Technology. She started her independent career at Bell Labs where she was Bell Labs Fellow and Director of the Materials Research Department. She received her Ph. D. and BS degrees in chemistry from Syracuse University. Her research interests include the chemistry, properties, and application of materials technologies for photonic and electronic applications. She has had impact in the design of new imaging chemistries for advanced lithographic applications, and designed one of the first, readily accessible and manufacturable polymers for advanced silicon device manufacturing using 193 nm lithography.

The Reichmanis research group is currently exploring polymeric and hybrid organic/inorganic materials chemistries for a range of electronic device and sustainable energy applications. Her research, at the interface of chemical engineering, chemistry, materials science, optics, and electronics, spans from fundamental concept to technology development and implementation, with particular focus on polymeric and nanostructured materials for advanced technologies.

Elsa Reichmanis was elected as Member to the National Academy of Engineering in 1995 and Fellow of the National Academy of Inventors in 2021. She served as 2003 President of the American Chemical Society, is a past member of the Bureau of the International Union for Pure and Applied Chemistry (IUPAC), and is currently a Member of the Board of the American Institute of Chemical Engineers. Elsa Reichmanis is the recipient of several awards, including the ACS Award in the Chemistry of Materials (2018), the ACS Award in Applied Polymer Science (1999), the ASM Engineering Materials Achievement Award (1996), and the Society of Chemical Industry's Perkin Medal (2001). In other service, she is an Executive Editor of the ACS Journal, Chemistry of Materials.

"Never be afraid to ask questions. As a young engineer I was once told, 'An engineer who thinks they know everything is a dangerous engineer.' After practicing for 26 years, I still come across unique problems and situations that I need guidance on, and I rely on my colleagues for help. We lean on each other. Engineering is a collaborative effort."

- Annette Van Dien



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Annette Van Dien



Annette Van Dien is Senior Engineer at D'Huy Engineering, Inc. Annette began her journey in engineering as an undergraduate at Pennsylvania State University, earning a Bachelor of Science degree in Civil Engineering. She was awarded a prestigious research fellowship by the National Science Foundation to continue her studies at Lehigh University, where she earned a Master of Science degree in Structural Engineering. Annette's research at Lehigh, conducted at Fritz Laboratory, investigated the structural behavior of high-strength concrete columns in compression. Her project encompassed the experimental design, construction, instrumentation, data acquisition, and data analysis of large-scale 22" diameter concrete columns that were tested in the famous five-million-pound universal testing machine at Lehigh's Fritz Laboratory. Her work from this research culminated in a master's thesis and publication in the American Concrete Institute Journal.

Upon completion of her master's degree in 1995, Annette joined D'Huy Engineering, Inc., which provides project and construction management, facilities engineering, infrastructure design, forensic engineering and structural design services. At DEI, Annette's primary work is in the structural design of buildings but she also works on forensic engineering projects providing the analyses for expert reports and testimony in legal cases involving construction-related failures. Most often, Annette serves as the lead engineer responsible for the structural design of high-end residential renovation projects in Manhattan and Brooklyn. In recent years, she has also applied her extensive knowledge to the design of structures specific to wastewater treatment facilities.

It was Annette's love of math and her older brother's encouragement, which led her to the field of Structural Engineering. She is a practitioner and proponent of work-life balance, choosing to build her 26-year career almost exclusively at DEI, a family-oriented company, while raising two children with her husband, Jim.

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Did you know...

- STEM careers have the potential to pay twice as much as non-STEM careers.
- Women make up half the workforce but only one-third of STEM professionals
- During the next decade, the United States demand for scientists and engineers is expected to increase at four times the rate for all other occupations.
- The United States ranks 20th among all nations in the proportion of 24-year-olds who earn degrees in natural science or engineering.
- The United States ranked 28th in math literacy and 24th in science literacy, according to a 2008 report by the Congressional Research Service.



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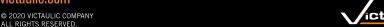


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The Da Vinci Science Center is a national award-winning nonprofit organization based in Allentown, PA, that has brought science to life and lives to science since 1992. The Center's hands-on exhibits, programs, and partnership efforts present the STEM subjects of science, technology, engineering, and mathematics to kids informally, playfully, and in ways that relate to their popular interests. These active and engaging experiences awaken interest, promote fundamental skills, and inspire students to consider exciting STEM careers that meet growing industry demands. The Center also promotes creativity, artistry, and current-day applications of the qualities of greatness embodied by Leonardo da Vinci and the innovators who have succeeded him.