

The Biotechnology Board
brings Academia, Industry, and Elected Leadership,
together to make Pittsburgh a hub for
Global Partnerships in Biotechnology

26TH OCTOBER THURSDAY 2023

9:00 AM - 5:00 PM

O CAI

CARNEGIE SCIENCE CENTER -

HOSTED BY



THE BIOTECHNOLOGY BOARD

For details get in touch with KANAK IYER Ph.D :: +1 (412) 953-1141

Pittsburgh and our region has seen several pioneers in Biotechnology. Jonas Salk pioneered polio vaccin at University of Pittsburgh. Also Thomas Earl Starzl performed the first human liver transplant, and has often been referred to as "the father of modern transplantation."

Pittsburgh is globally renowned for research in

Pittsburgh is ranked among top emerging ecosystems globally, with its advanced manufacturing/robotics, life sciences and space tech sectors recognized.

Pittsburgh has also notably experienced 42.6% growth in ecosystem value, per Startup Genome.

We showcase the leaders in Biomedicine, Bioengineering and Business of Biotechnology and how our region is poised to lead in these areas.

Visit www.biotechnologyboard.com to register for the event







THE BIOTECHNOLOGY BOARD

BRINGING LIFESAVING INNOVATIONS TO LIFE

PITTSBURGH BIOTECHNOLOGY SUMMIT 2023 | 26th OCTOBER, 9:00 - 5:00 PM CARNEGIE SCIENCE CENTER

AGENDA

8:30 am 9:00 am

Welcome 9: 10 am

Pittsburgh- A hub for global 9: 30 am - 10:30 pm partnerships in Biotechnology

10: 30am - 10: 45am

BIOMEDICINE PANEL 10: 45 am - 12: 15 pm

10: 45 am - 11: 20 pm Growing a biomedical company in Pittsburgh: Challenges and Solutions The Entrepreneur's perspective

Registration

11: 20 am - 12: 15 pm

Kanak Iyer, Ph.D Opening remarks-

County Executive Rich Fitzgerald Jake Pawlak, Deputy Mayor for the City of Pittsburgh

BRINGING LIFESAVING INNOVATIONS TO LIFE

Moderated by Bill Flanagan, TV Producer

Moderated by Susan Catalano Ph.D

PANELISTS

Teresa Whalen, Rph | Member Board of Directors at St.Clair Hospital and Founder & CEO at CytoAgents

Dr. Leanne Labriola - President InnSight Technology, Inc Ophthalmologist, Sewickley Eye Group and Southwest PA Eye Center

Dr. Ron Jankowski, Vice President Scientific Affairs CookMyosite

Sam Rothstein, CEO and Cofounder Duo Oncology

Dr. Hank Safferstein, CEO, Generian Pharmaceuticals

Max Fedor - Director of Portfolio Commercialization, LifeX Ven Raju- President and CEO- Innovation Works

Dr. Arvind Venkat - Emergency Physician and

Pennsylvania State Representative, 30th Legislative District

Dr.Jeff Cohen- Allegheny Health Network

Donald Very Ph.D. Director

Biotechnology program Duquesne University

Dr. Matthias Kleinz, Executive Vice President -

Head of Translational Sciences Investments, UPMC Enterprises

12: 15pm- 1: 15pm

-The Institutional perspective

1:15 pm - 3:00 pm

BIOENGINEERING PANEL

Session Goals: The Bioengineering Session at the 2023 Pittsburgh Biotechnology Summit will focus on biomedical innovation-related research and associated biomedical technology translation-related activities in Pittsburgh

Lunch Break

Pittsburgh)

Moderated by Dr. Sanjeev G. Shroff, PhD (Interim Dean, Swanson School of Engineering, Distinguished Professor of and McGinnis Chair in Bioengineering, Professor of Medicine, University of Pittsburgh)

Dr. Chandan K. Sen, PhD (University Endowed Professor and Director, McGowan Institute for Regenerative Medicine, Associate Vice Chancellor - Life Sciences Innovation and Commercialization, Chief Scientific Officer - Wound Care, University of Pittsburgh Medical Center, University of

Dr. John A. Viator, PhD (Professor and Chair, Department of Biomedical Engineering, Duquesne University; Founder, Acousys Biodevices Inc; Co-Founder, J3RM, LLC)

Dr. Adam W. Feinberg, PhD (Professor, Departments of Biomedical Engineering and Materials Science & Engineering, Carnegie Mellon University; Co-Founder, FluidForm Inc)

Dr. Evan Facher, PhD, MBA (Vice Chancellor, Innovation and Entrepreneurship and Associate Dean, Commercial Translation, Pitt School of Medicine, University of Pittsburgh)

Maria Geraghty, MS Program Manager, AlphaLab Heath, Pittsburgh

3: 00pm - 3: 15pm

BUSINESS OF BIOTECHNOLOGY PANEL

Tea/Coffee Break

3: 15 pm - 4: 45 pm

Moderated by Bill Flanagan, TV Producer

PANELISTS

Neil Campbell, Ph.D - Mosaigen Corporation and Duquesne University

Craig Markowitz - Carnegie Mellon University

Christian Manders - Promethean Lifesciences, Inc

Kathryn Romano - Krystal Biotech, Inc Sreekar Gadde - Bluetree Angel's

4: 45 pm - 5: 00 pm

Conclusion

Parul Nisha Ph.D

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WELCOME NOTE BY Dr. KANAK IYER

9:00 am

Kanak Iyer, Ph.D

President, Asian American Chamber of Commerce, Pittsburgh Executive Director The Biotechnology Board

Dr.lyer is President and CEO of Kanakadhara Financial Enterprise - Registered Investment advisors providing individual and business financial advice regarding estate planning, retirement planning, college education, charitable giving and others (www.Kanakfinancial.com). Prior to becoming a financial entrepreneur, Dr.lyer completed a PhD and did Postdoctoral research in Neuroendocrinology at the National Institutes of Health, and has published in leading journals.

She also has a Masters in Public Health in genetic epidemiology from Johns Hopkins University, to take advantage of completed mapping of the human genome and help in disease prevention. Her journey health to wealth is profiled at magazine.jhsph.edu/. Utilizing her biotech background, Dr.lyer has also launched Three Rivers 3D Biotechnologies Inc. There is an urgent need for biological solution such as joint re-surfacing or a biological prosthesis to be developed using tissue engineering approach.

It is a multi-billion dollar problem and possible intervention to alleviate pain due to dysfunctional organs/ tissues. Across almost every country there are too few transplant organs available relative to demand. Bioprinting offers possibility of creating implantable functioning replacement tissue that is being pursued through this company.

Dr. Iyer actively promotes Asian-American interest through her following roles -

- Commissioner with PA Governor's Commission on Asian Americans;
- Founder and President of Asian American Chamber of Commerce, Pittsburgh;
- Member of the Advisory Council of the Office of Mayor, City of Pittsburgh, providing the Mayor with a road map to make
 - Pittsburgh welcoming to all and take it to the next level as a Global City;
- Mentor Johns Hopkins University Bloomberg School of Public Health; Swartz Center for Entrepreneurship Tepper School of Business, Carnegie Mellon University with Pittsburgh's very own life sciences ambassadors.

As quoted in https://www.bizjournals.com > news Jul 24, 2021 —

Personalities of Pittsburgh: Kanak Iyer is building ... Kanak Iyer founded the Asian American Chamber of Commerce, Pittsburgh, and hopes to see the city become a gatewayto Asia in the next two decade



OPENING REMARKS by COUNTY EXECUTIVE RICH FITZGERALD

9:30 am

County Executive Rich Fitzgerald

Rich Fitzgerald was elected County Executive in 2011 and is in his third and final term. The first executive to serve three full terms, Rich is the last member of the inaugural Home Rule government to hold county office. Elected to council in 1999, he served the body for 12 years, eight as president.

Rich's work to provide economic opportunities resulted in county population growth in the 2020 census, the first increase in 60 years. The 25-34 age group grew by 20% (double the national average) while Asian American and Hispanic populations grew by approximately 80%. The county also boasts a 3%, 50-year low unemployment rate and a 40-year high bond rating.

While growing the economy, Rich also focused on air quality. In 2020, all monitors – including Mon Valley – met EPA standards for the first time in the county's history. The county was in attainment again in 2021 and 2022 and expects to fare even better in 2023. In fact, air pollutants have decreased by 80% over the last decade.

Strategic infrastructure investments mean 40 road miles are now paved annually and bridges have been significantly improved. In 2012, 72 county bridges were rated in "poor" condition. That number is now 5 and will be 0 next year. Rich has also overseen the development and construction of hundreds of trail miles, and major county park improvements.

He has accomplished these things without raising taxes as property values increase. In 2012, an average \$100,000 house would have a \$388 county property tax bill. Today, that same house is valued at \$250,000, but still has the same tax bill.

Rich Fitzgerald's passion and love for his family and home motivated him to enter government. Now, after nearly 24 years in public service, he still embraces and relishes his role working with others to make our county a great place to live, work, play, and stay.



OPENING REMARKS by JAKE PAWLAK

9:30 am

Jake Pawlak,Deputy Mayor for the City of Pittsburgh

Jake Pawlak currently serves as Deputy Mayor for the City of Pittsburgh and Director for the Office of Management and Budget. Prior to joining the Administration, Pawlak served as Transition Director for Mayor Gainey. He has worked at all levels of government, as well as on numerous civic advocacy efforts. Jake previously served as program director for the Pennsylvania Alliance Foundation.

He also held roles with the Urban Redevelopment Authority of Pittsburgh and the Pittsburgh Water and Sewer Authority, where he was responsible for each Authority's engagement with the Mayor's Office, City Council, City Departments, and other government agencies and outside partners. Pawlak received his Bachelor of Arts in Political Science and Economics from the University of Pittsburgh. He currently lives in Highland Park.



Bill Flanagan TV, Producer

PITTSBURGH- A HUB FOR GLOBAL PARTNERSHIPS IN BIOTECHNOLOGY by BILL FLANAGAN

9: 30 am - 10:30 pm

Bill Flanagan, an experienced broadcast journalist, has told the story of the transformation of the economy across the ten county Pittsburgh region for more than 40-years, originally for KDKA-TV. He serves as host and producer of "Our Region's Business," a weekly business public affairs program now in its 20th year on WPXI-TV in Pittsburgh, PA, WPXI.com/ORB, the Pittsburgh Cable News Channel (PCNC), and YouTube.

The program is produced in partnership with the Allegheny Conference on Community Development, which Bill serves as a Special Advisor after 21-years as Chief Corporate Relations Officer, focused on institutional advancement. The non-profit civic leadership organization has been bringing together public and private sector partners for more than 75 years to improve the economy and quality of place across the Pittsburgh region.

In 2009, Bill was president of *The Pittsburgh G-20 Partnership*, the public-private partnership that welcomed the world to Pittsburgh for the G-20 Summit.

From 2004-2008 Bill served as the Executive Director of *Pittsburgh 250*, the 14-county commemoration of the 250th anniversary of the naming of Pittsburgh.

Bill is a member of the boards of The Advanced Leadership Institute, the Pittsburgh Economic Club, the Pittsburgh Technical College Foundation, La Promesa Foundation, Rivers of Steel, and WQED, and is a past member of the boards of Leadership Pittsburgh, Inc. and Life's Work, the Penn State Greater Allegheny Advisory Board, and the National Academies of Science and Engineering Ambassador Advisory Committee.

Bill and his wife, Ann Devlin Flanagan, are the parents of two children, Will and the late Mara Catherine.

BIOMEDICINE PANEL



Dr. Susan Catalano Ph.D

GROWING A BIOMEDICAL COMPANY IN PITTSBURGH:

CHALLENGES AND SOLUTIONS

- The Entrepreneur's perspective
- -- The Institutional perspective

MODERATED by Dr. SUSAN CATALANO

10: 45 am - 12: 15 pm

Dr. Catalano is a pharmaceutical industry executive with over 20 years of experience in strategic and operational scientific leadership of neurobiology and oncology drug discovery and development companies. She currently serves as the Chief Scientific Officer of Capsida Biotherapeutics. Previously she served as the Chief Scientific Officer of CODA Biotherapeutics. Prior to this, she guided the discovery and development programs for Cognition Therapeutics, Inc. as co-founder, Chief Science Officer and member of the Board of Directors.

The company made substantial progress under her leadership, progressing from an idea through a full Phase 2 clinical program to an initial public offering in October 2021 (NASDAQ: CGTX). Previously, she held scientific leadership positions at Acumen Pharmaceuticals, Inc., Rigel Pharmaceuticals and Roche. Dr. Catalano received her B.A. from Barnard College and Ph.D. in neurobiology from U.C. Irvine, with postdoctoral training at U.C. Berkeley and Caltech. She has authored numerous publications and patents and served as principal investigator of several NIH preclinical and clinical awards.

She is a recipient of the Pittsburgh Venture Capital Association Outstanding Entrepreneur award, the Carnegie Science Center Entrepreneur award, and the EY Entrepreneurial Winning Women award. At the national level, she serves on the External Advisory Board for several NIH clinical initiatives, NIH review panels in the areas of drug discovery and clinical development for neurodegenerative diseases, and peer reviewed scientific journal editorial boards.



GROWING A BIOMEDICAL COMPANY IN PITTSBURGH:
CHALLENGES AND SOLUTIONS

- The Entrepreneur's perspective

PANESLIST - TERESA WHALEN

10: 45 am - 11: 20 pm

Teresa Whalen, Rph
Member Board of Directors at St.Clair Hospital
and Founder & CEO at CytoAgents

Teresa Whalen, RPh, has had a 20+ year career in Life Sciences. As a biotech innovator, healthcare technology leader, life sciences investor, hospital board trustee and clinical pharmacist; she has a successful track record of bringing life-changing healthcare products to market.

As the CEO of CytoAgents, she leads a team who are at the forefront of groundbreaking treatment for Cytokine Releasing Syndrome (CRS), an overreaction of the immune system causing systemic inflammation.



GROWING A BIOMEDICAL COMPANY
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- The Entrepreneur's perspective

PANESLIST - DR. LEANNE LABRIOLA

10: 45 am - 11: 20 pm

Dr. Leanne Labriola

President InnSight Technology, Inc

 Ophthalmologist, Sewickley Eye Group and Southwest PA Eye Center

Leanne Labriola is CEO and Co-Founder of InnSight Technology, Inc. Dr. Labriola is a board-certified ophthalmologist as well as entrepreneur. With her expert multidisciplinary team, Dr. Labriola created the OcuCheck, a breakthrough technology in tear film diagnostics. A key advantage of technology developed by InnSight is that every aspect of the company and their products is focused on addressing the unmet clinical needs from the physician perspective.

Dr. Labriola has experience in clinical and translational research and has published numerous, nationally peer-reviewed articles. Her past training includes undergraduate at Duke University, medicine training at the Philadelphia College of Osteopathic Medicine, ophthalmology residency at the University of Pittsburgh Eye Center Residency, and medical retina fellowship at the University of Southern California, Doheny Eye. In addition,

Dr. Labriola received her MBA degree in 2018 from Haub Business School in Philadelphia. During her time in Illinois, Dr. Labriola started the Ophthalmology Clinical Trial Department at Carle Hospital where she led over 20 different nationally sponsored trials as the Principal Investigator. Under the leadership of Dr. Labriola, InnSight Technology has received over \$1.2 Million from the National Science Foundation and is currently raising additional funding that will be used to commercialize the OcuCheck. InnSight was relocated to Pittsburgh in 2020 and is affiliated with LifeX and AlphaHealth Labs.



GROWING A BIOMEDICAL COMPANY IN PITTSBURGH:
CHALLENGES AND SOLUTIONS

- The Entrepreneur's perspective

PANESLIST - DR. RON JANKOWSKI

10: 45 am - 11: 20 pm

Dr. Ron JankowskiVice President Scientific Affairs CookMyosite

Ron Jankowski has been with Cook MyoSite since its founding and has more than 20 years' experience in translational medicine and broad experience in biologic drug development comprising regulatory, clinical, and manufacturing strategy. He currently leads the company's clinical development programs, investigates new indications for existing products, and evaluates the formation of strategic research partnerships with a focus on translational research.

Throughout his career he has authored and coauthored numerous peer-reviewed manuscripts, reviews, book chapters, and abstracts across a wide variety of medical and cellular-based applications and remains actively involved in community promotion of innovation and entrepreneurism. He is a graduate of the University of Pittsburgh (BS ChE, MS/PhD BioE).



GROWING A BIOMEDICAL COMPANY
IN PITTSBURGH:
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- The Entrepreneur's perspective

PANESLIST - DR. SAM ROTHSTEIN

10: 45 am - 11: 20 pm

Dr. Sam Rothstein, PhDCEO and Cofounder Duo Oncology

Dr. Sam Rothstein, PhD is the CEO and cofounder of Duo Oncology. He has 20 experience researching and developing nanoparticle products like the ones licensed by Duo Oncology. Since founding and bootstrapping his first company in 2010, a particle CDMO, Dr. Rothstein has continuously worked in life science startups as a CSO or CEO. During this time, he led \$5 million of contracts and Small Business Innovation Research projects developing particle drug products. As a CEO, he has also raised over \$4M in private investment since 2020.

Prior to founding Duo Oncology, Dr. Rothstein began working at the interface of cancer immunotherapy and drug delivery as the CEO of Qrono Inc in 2017. Dr. Rothstein holds chemical engineering degrees from Bucknell University and the University of Pittsburgh.



GROWING A BIOMEDICAL COMPANY IN PITTSBURGH:
CHALLENGES AND SOLUTIONS

- The Entrepreneur's perspective

PANESLIST - DR. HANK SAFFERSTEIN

10: 45 am - 11: 20 pm

Dr. Hank Safferstein, MBA, PhD, JD

Chief Executive Officer

Hank is the Chief Executive Officer of Generian and serves as Executive-in-Residence at UPMC Enterprises. Previously, he was founding CEO of Cognition Therapeutics, Inc. and Complexa, Inc. He is a board director at Ariel Precision Medicine and Adjunct Professor at Carnegie Mellon University.

Hank served as VP, Business Development for both Omrix and Acorda Therapeutics, Inc. and was an Investment Advisor at Pittsburgh Life Sciences Greenhouse. Hank was also Director, Lifecycle Management, Metabolics Marketing and Director, Licensing, Cardiovascular with Bristol-Myers Squibb. From 1991-1997, he was Director, Technology Transfer at the National Heart, Lung and Blood Institute and Cooperative Venture Manager for the National Institute of Allergy and Infectious Diseases, National Institutes of Health. He was an NIH Post-Doctoral Fellow and Fellow of the Multiple Sclerosis Society. Hank received a BA in biochemistry from Rutgers University, a PhD in human anatomy and neurobiology from the University of Louisville, a JD from the American University, Washington College of Law and an MBA from Columbia University.

He is a member of the Maryland Bar and is RAPS Certified.



GROWING A BIOMEDICAL COMPANY IN PITTSBURGH:
CHALLENGES AND SOLUTIONS

-The Institutional perspective

PANESLIST - MAX FEDOR

11: 20 am - 12: 15 pm

Max FedorDirector of Portfolio Commercialization, LifeX

Executive and entrepreneur with 30 years experience leading operations and product commercialization teams. He has led product planning, development and launch activities for companies ranging from start-ups to Fortune 500 firms. Collaboration and strategic partnering is a cornerstone of my career.

Specialties: Strategic product and market planning, operations management, early stage financing, engineering management, outsourcing and strategic partnering, contracts, team leadership.

Domain Expertise: Medical products, analytical software, diagnostic testing, biotechnology, specialized materials, automation systems and instrumentation.



GROWING A BIOMEDICAL COMPANY IN PITTSBURGH:
CHALLENGES AND SOLUTIONS
—The Institutional perspective

PANESLIST - VEN RAJU

11: 20 am - 12: 15 pm

Ven RajuPresident and CEO- Innovation Works

Ven is the President & CEO, Innovation Works and the Managing Director, Riverfront Ventures. Mr. Raju has more than 20 years of experience in venture capital and private equity investing having led/co-led all facets of the investment process, including origination, due diligence, transaction structuring and portfolio management with strategic and operational oversight via board of director and executive-level participation.

Previously, Mr. Raju served as managing director at Northwell Ventures, the corporate venture arm of Northwell Health (one of the largest health systems in the country). At Northwell Ventures, Mr. Raju led the investment team to deploy capital to early and growth stage companies in health tech, digital health and med tech verticals. Prior to that, Mr. Raju served as partner at Chestnut Street Ventures, a vertical agnostic growth equity fund. At Chestnut, Mr. Raju led the investment team to deploy growth equity capital in health tech, internet of things (IOT) computing devices, software as a service (SaaS), Al/machine learning, robotics and life sciences companies. Prior to that, Mr. Raju served as partner at Choate Capital, where he led middle market direct investments totaling more than \$800 million in equity. Over the course of his career, Mr. Raju has helped to shepherd a number of companies to a strategic/public exit including Domo, Bloom Energy, Accolade, Freshly, Relayr and Unity Biotechnology. Mr. Raju began his career as a strategy consultant, advising Fortune 100 clients in mergers and acquisitions.

Mr. Raju serves as adjunct faculty member at the Lebow School of Business, Drexel University and guest lecturer at The Wharton School, University of Pennsylvania. Mr. Raju also serves on a number of for profit and nonprofit boards.

Mr. Raju holds an MBA from The Wharton School and a Master of Science in Systems Engineering from the School of Engineering and Applied Science at the University of Pennsylvania. He also received an MSc from University of Oxford, St Hugh's College and a Bachelor of Science in Engineering, with honors, from The George Washington University.



GROWING A BIOMEDICAL COMPANY IN PITTSBURGH:
CHALLENGES AND SOLUTIONS
—The Institutional perspective

PANESLIST - DR. ARVIND VENKAT

11: 20 am - 12: 15 pm

Dr. Arvind Venkat

Emergency Physician and Pennsylvania State Representative, 30th Legislative District

Rep. Arvind Venkat, an emergency physician, was elected to serve his first term in the state House of Representatives in November 2022. He is the first Indian American to be elected to the state House and the first physician to serve in the General Assembly in nearly 60 years.

He serves as State Representative for the 30th Legislative District, which includes part of Hampton Township, and all of McCandless, Franklin Park, Ohio Township, Emsworth, Ben Avon, Ben Avon Heights, and Kilbuck.

Rep. Venkat is a fighter for accessible and affordable healthcare, investing in our first responders, protecting reproductive rights, curbing gun violence, expanding access to the ballot box for all voters, and getting more people back into the workforce. His parents immigrated to the United States, and it was their hard work and commitment to service that inspired him to become a physician.

Rep. Venkat completed his undergraduate and graduate education at Harvard University, his medical education at Yale University, and his emergency medicine residency at the University of Cincinnati/University Hospital. He served as a member of the Board of the McCandless-Franklin Park Ambulance Authority and is a former president of the state emergency physicians organization.

Rep. Venkat currently lives in McCandless with his wife and three children.



Dr.Jeff CohenAllegheny Health Network

GROWING A BIOMEDICAL COMPANY IN PITTSBURGH:
CHALLENGES AND SOLUTIONS
—The Institutional perspective

PANESLIST - DR.JEFF COHEN

11: 20 am - 12: 15 pm

Dr. Cohen is a practicing urologist with a concentration in oncology. He graduated in 1976 from Syracuse University with a BS in Biology. He earned his medical degree from SUNY – Upstate Medical Center in 1979. Dr. Cohen completed a residency in urology at Case Western Reserve in 1984 after which he completed a fellowship in urology at The M.D. Anderson Cancer Center. Upon completion he entered a clinical practice at Allegheny General Hospital (AGH) in 1985.

Dr. Cohen was president of Triangle Urological Group, which joined Allegheny Health Network (AHN) in 2013. While at Triangle he started and managed other companies aligned with health care, including Triangle Medical Meetings, American Cryosurgical Enterprises, and two mobile capital equipment delivery companies which provided services to hospitals.

Dr. Cohen has developed and introduced several technologies and procedures including Laser Lithotripsy, fiber optic based endoscopy, piezoelectric biplanar transrectal ultrasound and Cryosurgery. Dr. Cohen was director of urology at AGH from 1998 until 2016 and chief medical officer of AGH from 2013-2014. He became president of AGH in June of 2016 and served until 2020, when he became chief physician executive, community health and innovation of AHN.

Dr. Cohen is president of ChemImage, a privately held company specializing in hyperspectral identification of chemical/biological agents, drugs, explosives, anatomic structures and/or malignancies. He is married and has four children and resides in Pittsburgh, Pennsylvania.



GROWING A BIOMEDICAL COMPANY IN PITTSBURGH:
CHALLENGES AND SOLUTIONS
—The Institutional perspective

PANESLIST - DR. DONALD L. VERY, JR.

11: 20 am - 12: 15 pm

Dr. Donald L. Very, Jr., Ph.D.

Director
Biotechnology program Duquesne University

Director, M.S. Degree Program in Biotechnology, Duquesne University President, CEO, and Founder, Naviter Bioanalytics, LLC

Dr. Very is currently serving as the Director of the M.S. Degree Program in Biotechnology for Duquesne University. Additionally, he is President, CEO, and Founder of **Naviter Bioanalytics, LLC**, a global science and technology development firm specializing in technological due diligence, bioanalytical method development, performance qualification, and regulatory approval of diagnostics, pharmaceuticals, and medical devices.

With over thirty years of diagnostic and pharmaceutical assay development and performance qualification experience in such diverse clinical areas as oncology, infectious disease, and metabolic disease, Dr. Very is a frequently invited speaker at national and international scientific symposia discussing topics ranging from advances in personalized medicine in oncology, the clinical utility of serum biomarkers in the diagnosis and management of disease, and the future of the *in vitro* diagnostic industry.

He received his Bachelor of Science degree in Biology from the University of Notre Dame, a Master of Science degree in Biology from the University of Texas at San Antonio, and a Doctorate in Microbiology/Immunology from Boston University.



GROWING A BIOMEDICAL COMPANY IN PITTSBURGH:
CHALLENGES AND SOLUTIONS
—The Institutional perspective

PANESLIST - DR. MATTHIAS KLEINZ 11: 20 am - 12: 15 pm

Dr. Matthias Kleinz, DVM, PhD

Executive Vice President
Head of Translational Sciences Investments UPMC Enterprises

Matthias Kleinz, DVM, PhD, is Executive Vice President, Translational Sciences at UPMC Enterprises. Matthias joined UPMC Enterprises in July 2017 to help UPMC invest and commercialize innovative translational science by defining the true potential of new life science technologies, exploring optimal business models and strategies, and helping to form companies with a clear path to success.

Matthias was the CEO of UPMC Enterprises portfolio company Novasenta from 2018 to 2021 and sits on the board of UPMC Enterprises portfolio companies Generian, Cerevance and Novasenta. He is also a member of the executive committee for the UPMC Genome Center. Prior to UPMC Enterprises, Matthias spent nine years in management doctorate in clinical veterinary medicine.

BIOENGINEERING PANEL



BIOENGINEERING

The Bioengineering Session at the 2023
Pittsburgh Biotechnology Summit will focus
on biomedical innovation-related research
and associated biomedical technology
translation-related activities in Pittsburgh

MODERATED BY DR. SANJEEV G. SHROFF

1: 15 pm - 3: 00 pm

Dr. Sanjeev G. Shroff, PhD

Interim Dean, Swanson School of Engineering, Distinguished Professor of and McGinnis Chair in Bioengineering, Professor of Medicine, University of Pittsburgh

Dr. Shroff's research is in the cardiovascular arena, with the following focus areas:

- (1) Relationships between left ventricular mechano-energetic function and underlying cellular processes, with a special emphasis on contractile and regulatory proteins and post-translational regulation of cardiac contraction (e.g., via phosphorylation or acetylation).
- (2) The role of pulsatile arterial load (vascular stiffness in particular) in cardiovascular function. One of the hypotheses being investigated is that aberrant vascular stiffness changes are involved in the genesis of certain cardiovascular pathologies (e.g., preeclampsia, isolated systolic hypertension in elderly).
- (3) Cardiovascular actions of relaxin and its therapeutic potential in the context of three pathologies:
- (i) relaxin-induced maternal vascular remodeling and associated functional benefits in preeclampsia,
- (ii) relaxin-induced left atrial remodeling and suppression of atrial fibrillation, and
- (iii) relaxin-induced left ventricular remodeling and associated functional benefits in the setting of diastolic dysfunction.
- (4) The role of regional contraction dyssynchrony in global ventricular mechanics and energetics.
- (5) Development of novel, physiology-based cardiovascular monitoring technologies.

Dr. Shroff's research efforts have been supported by numerous grants from NIH, AHA, NSF, and industry sources. He was the recipient of the Established Investigator Award from the AHA (1986-1991) and was elected as a Fellow of the American Physiological Society, Fellow of the American Institute for Medical and Biological Engineering, Fellow of Biomedical Engineering Society, and Fellow of International Academy of Medical and Biological Engineering. Dr. Shroff has been serving as the Principal Investigator on the Coulter Translational Research Partnership II Program since 2013.

This program has supported 39 biomedical technology development projects and successfully translated 17 biomedical technologies out of academia so far (formation of new companies or license or option to existing companies).



BIOENGINEERING

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PANELIST - DR. CHANDAN K. SEN

1: 15 pm - 3: 00 pm

Dr. Chandan K. Sen, PhD

University Endowed Professor and Director, McGowan Institute for Regenerative Medicine, Associate Vice Chancellor – Life Sciences Innovation and Commercialization, Chief Scientific Officer – Wound Care, University of Pittsburgh Medical Center, University of Pittsburgh

As a postdoc at the University of California-Berkeley and as a junior faculty at the Lawrence Berkeley National Lab in the Bay area, Chandan K Sen had the privilege of close interactions with Prof. Bruce Ames at Berkeley – of the Ames' test fame. Prof. Ames was actively involved in entrepreneurship and mentoring. Chandan's journey in the wound healing research arena began with the visit of Prof. Thomas Hunt of UCSF to his lab in Berkley. Prof. Hunt explained problems in chronic wounds and hoped that Chandan's prior work on oxygen and reactive oxygen species signaling could offer critical insights.

Chandan's first NIH grant was as a project leader of a UCSF based Trauma Center P50 grant. During the peer review of that P50 proposal, Prof. Greg Semenza – who went on to win the 2019 Nobel Prize on hypoxia – served as Chandan's site visiting grant examiner. Chandan and Prof. Semenza later edited volumes of the classical series Methods in Enzymology on Hypoxia. In 2000, Chandan joined the Department of Surgery at the Ohio State University as an Assistant Professor to develop a translational program on wound healing. Later, together with his clinical surgical colleague Gayle Gordillo – who is now at UPMC – Chandan founded the Comprehensive Wound Center at Ohio State. Next, as the first Associate Dean of Translational Research, Chandan worked with his colleague, Rebecca Jackson (Associate Dean of Clinical Research) and alarge team to secure the NIH Clinical and Translational Science Award grant and renew it.

Chandan credits philanthropic gifts for his productivity in innovation and entrepreneurship. Of these, a \$1.5M gift by the Wexner family of Columbus helped him seed the TNT technology for tissue reprogramming. In 2018, Chandan and a team of 36 researchers moved to Indiana to lead the Indiana Center for Regenerative Medicine and Engineering. He was appointed as Associate VP of Research to spearhead the military research portfolio. His engineering team was based in Purdue's Weldon School of Bioengineering. Chandan and his team moved to the University of Pittsburgh in 2023. In 2022, he was elected Fellow of the National Academy of Inventors. In addition, he and his team received numerous recognitions including the Edison Award for his technologies. Chandan's team is well funded by the NIH and DoD. In addition, he has a significant industry funding portfolio. Chandan has published over 350 scientific publications with an H-index of 111.



BIOENGINEERING

The Bioengineering Session at the 2023 Pittsburgh Biotechnology Summit will focus on biomedical innovation-related research and associated biomedical technology translation-related activities in Pittsburgh

PANELIST - DR. JOHN A. VIATOR

1: 15 pm - 3: 00 pm

Dr. John A. Viator, PhD

Professor and Chair, Department of Biomedical Engineering, Duquesne University; Founder, Acousys Biodevices Inc; Co-Founder, J3RM, LLC

John A. Viator is Professor and Chair of the Department of Biomedical Engineering at Duquesne University. He founded the Biomedical Engineering Program at Duquesne in 2013, the first engineering unit at the university. His research focuses on biomedical optics, with specific expertise in photoacoustics. He has applied these methods to various fields of medicine, including dermatology, oncology, surgery, ophthalmology, and radiology. He pioneered the use of photoacoustic flow cytometry for detection, enumeration, and capture of circulating tumor cells for early detection of cancer and for managing therapy.

He founded Acousys Biodevices Inc, a startup company that licensed associated patents and is commercializing the technology for melanoma care. More recently, he has used photoacoustic flow cytometry for early identification of bacterial infection of body fluids and for rapid determination of antibiotic resistance. He is a co-founder of J3RM, LLC, which is commercializing the technology, currently focusing on identification of infections as a laboratory developed test.

He received his bachelor's degree in physics from the University of Washington, a master's degree in mathematics from the University of Oregon, and his PhD in electrical engineering from Oregon Health & Science University. He has held positions at the University of California, Irvine, Oregon Health & Science University, the University of Missouri, and at Duquesne University. He retired as a Lieutenant Commander In the US Naval Reserve in 2007, having had tours on active and reserve duty.



BIOENGINEERING

The Bioengineering Session at the 2023 Pittsburgh Biotechnology Summit will focus on biomedical innovation-related research and associated biomedical technology translation-related activities in Pittsburgh

PANELIST - DR. ADAM W. FEINBERG

1: 15 pm - 3: 00 pm

Dr. Adam W. Feinberg, PhD

Professor, Departments of Biomedical Engineering and Materials Science & Engineering, Carnegie Mellon University; Co-Founder, FluidForm Inc

Dr. Feinberg is the principal investigator of the Regenerative Biomaterials and Therapeutics Group and a Professor at Carnegie Mellon University in the departments of Biomedical Engineering and Materials Science & Engineering. He is also a Co-Founder and CTO of FluidForm Inc, a start-up company commercializing FRESH 3D bioprinting technology.

He earned his BS in Materials Science & Engineering from Cornell University in 1999 with Co-op experience at Abiomed, Inc., working on total artificial hearts. He then earned his PhD in Biomedical Engineering from the University of Florida, focused on engineering cell-material interactions to prevent and enhance adhesion. This was followed by postdoctoral training at Harvard University, developing new biomaterials and stem cell-based cardiac tissue engineering strategies. Dr. Feinberg has co-authored over 50 peer-reviewed publications, holds over 20 US patents and patent applications and has received multiple honors including the NSF CAREER Award, the NIH Director's New Innovator Award, and Fellow of the American Institute for Medical and Biological Engineering.

A primary research focus is engineering extracellular matrix (ECM) protein scaffolds using advanced biomanufacturing and 3D bioprinting approaches for multiple applications including cancer models, regenerative scaffolds, skeletal muscle and cardiac muscle tissue engineering. At FluidForm Inc, he is driving the commercialization of the FRESH 3D bioprinting platform for a wide range of applications in the pharma, medical device, and regenerative medicine industries.



BIOENGINEERING

The Bioengineering Session at the 2023 Pittsburgh Biotechnology Summit will focus on biomedical innovation-related research and associated biomedical technology translation-related activities in Pittsburgh

PANELIST - DR. EVAN FACHER

1: 15 pm - 3: 00 pm

Dr. Evan Facher, PhD, MBA

Vice Chancellor, Innovation and Entrepreneurship and Associate Dean, Commercial Translation, Pitt School of Medicine, University of Pittsburgh

Evan Facher is Vice Chancellor for Innovation and Entrepreneurship at the University of Pittsburgh and Associate Dean for Commercial Translation at its Medical School. In these roles, Evan promotes the commercial and societal potential of faculty and student discoveries as well as works with regional businesses to enhance the regional innovation ecosystem.

During Evan's tenure, he has overseen commercialization efforts resulting in more than 1,700 invention disclosures, 500 issued US patents, 700 deals, and 125 startups. Prior to his time at Pitt, Evan was President& CEO of SironRX Therapeutics, worked in Bayer Healthcare's medical device division as General Manager of its Pittsburgh Interventional business and was Senior Manager Business Development at Athersys, Inc. Over his career,

Evan has been involved with corporate fundraising of nearly \$100 million from venture, strategic partner, and grant sources as well as aleader in company and product acquisitions totaling over \$600 million of investments. Evan holds a PhD in Human Genetics from the University of Pittsburgh, an MBA from Case Western Reserve University, and a B.S. in Biology from the University of Miami, FL.



BIOENGINEERING

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PANELIST - MARIA GERAGHTY, MS

1: 15 pm - 3: 00 pm

Maria Geraghty, MS
Program Manager, AlphaLab Heath, Pittsburgh

Maria is the Program Manager for AlphaLab Health (ALH) - a program of Innovation Works in collaboration with Allegheny Health Network. In this role, Maria is responsible for recruiting and operations and works closely with the startups, partners, and mentors participating in the program. Prior to ALH, she was a Graduate Research Assistant in the uBiointerface Lab at the University of Pittsburgh where she focused on developing electrochemical methods for eradicating antibiotic-resistant fungi.

Maria also served as an undergraduate teaching assistant for the Hk Maker Lab - a summer engineering design program for NYC high school students - and selected projects to be incubated at the Harlem Biospace. Maria holds a BS degree in Biomedical Engineering from Columbia University and an MS degree in Bioengineering from the University of Pittsburgh.



Bill Flanagan
TV, Producer

MODERATED BY BILL FLANAGAN

3: 15 pm - 4: 45 pm

Bill Flanagan, an experienced broadcast journalist, has told the story of the transformation of the economy across the ten county Pittsburgh region for more than 40-years, originally for KDKA-TV. He serves as host and producer of "Our Region's Business," a weekly business public affairs program now in its 20th year on WPXI-TV in Pittsburgh, PA, WPXI.com/ORB, the Pittsburgh Cable News Channel (PCNC), and YouTube.

The program is produced in partnership with the Allegheny Conference on Community Development, which Bill serves as a Special Advisor after 21-years as Chief Corporate Relations Officer, focused on institutional advancement. The non-profit civic leadership organization has been bringing together public and private sector partners for more than 75 years to improve the economy and quality of place across the Pittsburgh region.

In 2009, Bill was president of *The Pittsburgh G-20 Partnership*, the public-private partnership that welcomed the world to Pittsburgh for the G-20 Summit.

From 2004-2008 Bill served as the Executive Director of *Pittsburgh 250*, the 14-county commemoration of the 250th anniversary of the naming of Pittsburgh.

Bill is a member of the boards of The Advanced Leadership Institute, the Pittsburgh Economic Club, the Pittsburgh Technical College Foundation, La Promesa Foundation, Rivers of Steel, and WQED, and is a past member of the boards of Leadership Pittsburgh, Inc. and Life's Work, the Penn State Greater Allegheny Advisory Board, and the National Academies of Science and Engineering Ambassador Advisory Committee.

Bill and his wife, Ann Devlin Flanagan, are the parents of two children, Will and the late Mara Catherine.



PANELIST - DR. NEIL CAMPBELL

3: 15 pm - 4: 45 pm

Dr. Neil Campbell, B.Sc., M.A., M.B.A., D.B.A.

Executive Chairman, Mosaigen Corporation President & CEO, Blue Water Biotech, Inc. (NASDAQ)

A distinguished global authority on science and technology commercialization, Dr. Neil Campbell serves as the Executive Chairman of Mosaigen Corporation and President, CEO and Director of Blue Water Biotech, Inc., a NASDAQ company focusing on personalized medicine in oncology. Concurrently, he holds an academic appointment at Duquesne University's School of Science and Engineering, where he focuses on biotechnology education, community development, and research.

Over his three-decade career, Dr. Campbell has pioneered advancements across multiple sectors—including life sciences, health tech, nanotechnology, AI, and high-performance computing. He has a track record of commercializing over 300 innovative products and services, showcasing his versatile expertise.

In the financial arena, Dr. Campbell has lent his acumen as a venture capital partner, operating partner, and industry advisor in both venture capital and private equity along with private investment organizations. He continues to serve on various advisory boards and committees, driving industry, academic, and governmental partnerships.

Formerly, Dr. Campbell was the driving force behind multiple startups and publicly traded established companies. He founded and led as CEO, Celios, RespaRx, Helomics, and served as the CEO of EntreMed Pharmaceuticals (NASDAQ). Additionally, he held executive roles at industry giants like Life Technologies, IGEN International (now Roche), Celera Genomics, and Abbott Laboratories.

Academically, Dr. Campbell has held appointments with Johns Hopkins University, Hong Kong University of Science and Tech, University of Liverpool, and more. A U.S. Air Force veteran, Dr. Campbell earned his B.Sc. from Norwich University and holds advanced degrees in Management Sciences (M.A.) and International Business (M.B.A.) from Webster University. He received his Doctorate in Science and Technology (D.B.A.) from the University of Liverpool, UK.



PANELIST - CRAIG MARKOVITZ

3: 15 pm - 4: 45 pm

Craig MarkovitzDistinguished Service Professor of Entrepreneurship

Craig S. Markovitz is an Entrepreneur in Residence in the Swartz Center for Entrepreneurship and a Distinguished Service Professor of Entrepreneurship in the Tepper School of Business at Carnegie Mellon University (CMU). He was also the inaugural Prosser Mellon Fellow at the RK Mellon Foundation.

Markovitz is the founding CEO of Blue Belt Technologies, Inc., a spinoff from the Robotics Institute at CMU. He was a key member of the deal team that led to an acquisition by Smith and Nephew, plc in January 2016 for \$275,000,000. Markovitz is also founding CEO of Spotlight Medical, Inc., a spinoff from CMU and The University of Pittsburgh. He managed this company to a successful exit as well.

He was the recipient of the 2019 Junior Achievement of Western PA Spirit of Enterprise Award for Entrepreneurial Achievement, the 2016 Carnegie Science Center Entrepreneur and the 2016 Pittsburgh Venture Capital Association Outstanding Entrepreneur Awards.



PANELIST - CHRISTIAN MANDERS

3: 15 pm - 4: 45 pm

Christian MandersCEO- Promethean Lifesciences, Inc

Christian Manders is the Chief Operating Officer of Promethean LifeSciences, Inc., a Pittsburgh-based biomedical company specializing in the development of reconstructive surgery products. He is also the Chief Executive Officer of the early stage drug development company, Undaunted Bio, Inc.

Mr. Manders grew up in Hershey, PA and attended Yale University, where he majored in history with a minor in nepotism. Upon graduation, he moved to Pittsburgh to join his family with the hopes of commercializing his father, Ernest K. Manders', intellectual property. Promethean LifeSciences is the result.

At Promethean, Mr. Manders is responsible for overseeing the daily operations of the company. He has successfully gained FDA clearance for their products, GammaGraft and Repriza, human skin allograft products for the treatment of wounds and reconstructive procedures. Promethean is currently marketing GammaGraft and Repriza in the US.

Mr. Manders and his father spun out a Holding Company, Core of Discovery, that has the goal of spinning out a company a year for the next 5 years. The first spin-out, Undaunted Bio, is working on a repurposed drug for trigeminal neuralgia. There are a number of companies waiting in the wings to be formed.

Mr. Manders has a strong interest in tissue engineering, tissue banking, and the general process of invention. He has a unique perspective on the commercialization of medical products and the hurdles that can impede the process. He was honored as one of the Pittsburgh Business Times' Power 100 Business Leaders (2019), served on the Board of Governors of the American Association of Tissue Banks (AATB), served on the Board of Directors for Life Sciences Pennsylvania (LSPA), took part in the American Council on Germany's (ACG) Young Leaders Program, founded and organizes the Pittsburgh BioBreakfasts (www.biobreakfast.com), and is active in the life sciences and political communities in Pittsburgh.



PANELIST - KATHRYN ROMANO

3: 15 pm - 4: 45 pm

Kathryn Romano Chief Accounting Officer Krystal Biotech, Inc.

Kathryn Romano has been the Chief Accounting Officer of Krystal Biotech since February 2020. As a member of the executive management team, Kathryn has played a key role in enabling Krystal's growth and development through her responsibilities as the head of finance and human resources. Since joining Krystal, Kathryn has contributed to several follow-on public equity offerings, including an at-the-market equity offering program and a private placement, that collectively have netted the company over \$600 million. She has over 20 years of experience in various management roles across multiple industries, including extensive experience focused on building public company finance departments and related system implementations.

Prior to joining Krystal, Kathryn most recently held the position of Corporate Controller at CNX Resources Corporation. Prior to joining CNX, Kathryn was the Corporate Controller of Rice Energy until the company was acquired by EQT. Prior to joining Rice Energy, Kathryn worked in a variety of accounting and auditing roles at Black Box Corporation and Deloitte. Kathryn is a Certified Public Accountant and holds a Bachelor of Science in Accounting from Penn State University.



PANELIST - SREEKAR GADDE

3: 15 pm - 4: 45 pm

Sreekar Gadde
Executive Director - Bluetree Angel's

Sreekar Gadde, the Executive Director for BlueTree Allied Angels, leverages his background in engineering, law, and business to identify and analyze early-stage companies for potential investment opportunities. In addition, he assists management teams of early- and mid-stage companies in developing an IP strategy that complements the company's business strategy.

Sree's work experience spans various fields including Artificial Intelligence (Edge Case Research, Aspinity, TalkMeUp, and Ariel Precision Medicine), medicine (Lindy BioSciences and CytoAgents), data analytics (BlastPoint), and consumer goods (Aeronics, Anglr, and Crafty Counter). Independent of industry, Sree works with companies to identify what differentiates them from their competition and determine what forms of IP provide them the best strategic value to protect that differentiation. Prior to joining BlueTree, Sree worked as an IP litigator and an IP prosecutor at two top law firms,

Ropes and Gray and Sterne Kessler, as well as Assistance Chief IP Counsel for Dynamics, Inc. In addition, he was a validation engineer and team lead for Intel's microprocessor design business unit.

Sree holds an MBA from Carnegie Mellon University's Tepper School of Business, a JD from The George Washington University Law School, a Master's and Bachelor's in Electrical and Computer Engineering from CMU, as well as a Bachelor's in Cognitive Science.

CONCLUSION



CONCLUSION

BY - DR. PARUL NISHA

4: 45 pm - 5: 00 pm

Dr. Parul Nisha, PhDSenior Director of Clinical Development at Cook MyoSite

Dr. Nisha is the Senior Director of Clinical Development at Cook MyoSite, an industry leader in regenerative medicine pioneering autologous muscle derived cell therapy, that traces its origins back to research done at University of Pittsburgh. She has over two decades of life sciences research experience spanning both industry and academia. Her research journey has taken her from cancer epigenetics and immunology bench research to clinical and regulatory affairs of pharma and medtech product development- supporting her passion and enthusiasm for research and innovation in healthcare.

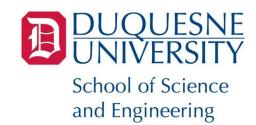
Dr. Nisha received her PhD from CMU and did post-doctoral research at NIH and Children's Hospital, UPMC. She also worked for Philips Respironics and advised several biotech start-ups while helping build the business at a Pittsburgh-based boutique consulting firm Clinical Research Strategies. She is very involved in the Pittsburgh life sciences ecosystem and promotes STEM careers and education to life sciences graduates as well as middle and high school students.

Purposeful giving has always been a way of life for Dr. Nisha through her leadership with organizing events and panels, mentoring, volunteering, judging pitch competitions and science fairs among others.

Parul is an old time Pittsburgher, having moved to the city from India as a graduate student, and has lived here for close to 20 yrs. She is very invested in Pittsburgh and its growth, is an Indian classical music enthusiast, and lives in Wexford with her husband and two boys.

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