WEDNESDAY, OCTOBER 23

CHANCELLOR JOHN SHARP

The Texas A&M University System

Chancellor John Sharp '72 earned a bachelor's degree in political science from Texas A&M University, where he was a member of Squadron 6, the Corps staff of the Corps of Cadets, and the 1972 rugby team. He also was elected sophomore class president, student life chairman, Muster chairman, and student body president.

Upon graduation, Sharp was commissioned as a second lieutenant in the United States Army Reserve.

He later earned a master's in public administration from Texas State University. He is a distinguished alumnus from both universities.

Sharp served more than three decades as a state legislator, senator, railroad commissioner and comptroller before becoming a partner at Ryan & Company. He became Chancellor of The Texas A&M University System in 2011.

Sharp was married to Charlotte Sharp for 42 years before her passing in 2020. They have a daughter, Victoria; a son, Spencer; and two granddaughters, Simone and Freya.

Today Sharp is married to Diana Atchison Sharp, who has sons, Cas and Cullen; daughter Courtney Harvey; and grandchildren, Corr, Palmer, Annabel, Max and June.

REP. GREG BONNEN, M.D.

Chairman, House Committee on Appropriations, Texas House of Representatives

Representative Greg Bonnen (Friendswood) is Chair of the House Appropriations Committee and is currently serving his sixth term as State Representative for House District 24.

Prior to serving as Chair of the House Appropriations Committee, he served as Chair of the Appropriations Subcommittee on Higher and Public Education and as a member of the Insurance Committee. He has also previously served on the Energy Resources Committee; Appropriations Subcommittee on Health and Human Services; Appropriations Subcommittee on General Government, the Judiciary, and Criminal Justice; Joint Interim Committee on Coastal Barrier Systems; Texas Windstorm Insurance Association (TWIA) Funding Structure Oversight Board; Interim Committee on Border Security; and Interim Committee on Mental Health.

Representative Bonnen has been named a Courageous Conservative by the Texas Conservative Coalition, Guardian of Small Business by the National Federation of Independent Business, Texas Values Faith and Family Champion, and Pro-Life Hero.

Dr. Bonnen is a practicing neurosurgeon and serves as the Chairman of the Board of Houston Physicians' Hospital.

Dr. Bonnen grew up in Angleton and graduated cum laude from Texas A&M University with a Bachelor of Science degree in Biochemistry, and attended medical school at UTMB where he also did his neurosurgery residency and served for two years as an assistant professor of neurosurgery. During college, Representative Bonnen spent two summers working as a counselor at Texas Lion's Camp for handicapped children, which he credits with introducing him to both his profession as a doctor and his wife, Kim. He has continued to devote time to his church and different charitable organizations and has participated in numerous mission trips to Mexico, Panama, Haiti, Cuba, and the Philippines. Representative Bonnen and his wife Kim live in Friendswood and have two daughters, Lindsay and Janae.

MS. ADRIANA CRUZ

Executive Director, Texas Economic Development & Tourism, Office of Governor Greg Abbott

Adriana Cruz was appointed Executive Director of the Economic Development and Tourism (EDT) division within the Office of the Governor in December 2019. Cruz joined EDT with a robust background in economic development and business.

Throughout her tenure, in coordination with Governor Abbott, Cruz has made it a top priority to recruit semiconductor projects, touting the state's ranking as the best state to do business, with its tax incentives and a growing workforce. Cruz oversaw the recent formation of the Texas CHIPS Office, a division within the EDT, created to provide support to the TSIC and assist in the administration of the TSIF.

Previously, Adriana Cruz served as President of the Greater San Marcos Partnership, the regional economic development organization established in 2010 to encourage and nurture economic growth in San Marcos, and Hays and Caldwell Counties. Prior to that role, Cruz was the Vice President of Global Corporate Recruitment for the Austin Chamber of Commerce where she was project lead in high profile corporate relocations and expansions. Cruz holds a B.B.A. in Marketing from the University of Texas at Austin, has been married for 39 years to her husband Rik and has three grown children living in the Austin area.

DR. TODD YOUNKIN

CEO and President, Semiconductor Research Corporation Dr. Todd Younkin is the CEO and President of Semiconductor Research Corporation. Appointed by the Board in 2022, Younkin has transformed SRC into a vibrant powerhouse responsible for nearly \$100M annually in university-based research sponsored by 25 international companies and 2 U.S. government agencies. Todd's critical initial accomplishment as CEO was to oversee the development and publication of the 2030 Decadal Plan for Semiconductors, released in partnership with the Semiconductor Industry Association in 2021, which bolstered the case for the passage of the CHIPS and SCIENCE ACT of 2022 on August 9th, 2022.

The global SRC research agenda funds over 100 universities, supports over 3000 academic and industry researchers, and graduates around 1500 bachelor's, master's, and doctoral students annually. Todd's excited by the worldwide call for a renewed investment in semiconductor materials, hardware, and design, as well as the equally important calls for an emphasis on education and workforce development and our need for environmental sustainability.

Dr. Younkin serves on the Secretary of Commerce's Industrial Advisory Committee in support of CHIPS for America. He is currently on the Georgia Tech ECE Executive Advisory Board, the Joint School of Nanoscience and Nanoengineering (JSNN), and the State University of New York (SUNY) Research Council.

Prior to helming SRC, Dr. Younkin worked at Intel from 2001-2020, with research and development experience that spanned Intel's 0.18um to 5nm nodes and a variety of Intel business units. He completed his B.S. in Chemistry at the University of Florida and holds a Ph.D. in Chemistry from the California Institute of Technology.

Outside of work, Todd enjoys tennis, spending time with his family, and all things nerdy.

MR. SAMEER PENDHARKAR

Vice President, Technology Development & Senior Fellow, Texas Instruments

Sameer Pendharkar received his undergraduate degree in Electrical Engineering from the Indian Institute of Technology, Bombay (IIT-Bombay), and graduate degree in Electrical Engineering, from the University of Wisconsin-Madison in 1996 and a MBA degree from the University of Texas at Austin in 2008.

He joined TI in 1996 and is currently a TI Senior Fellow and Vice President of Technology Development. Sameer and his team are responsible for setting and executing the technology roadmap for all the TI businesses.

He is a member of the Texas Semiconductor Innovation Consortium Executive Committee as well as a member of the Executive Board of Directors for the Semiconductor Research Corporation (SRC) and currently serves as its Board Chairperson. Sameer is a senior IEEE member and has published more than 100 technical papers in leading academic journals and conferences and has been granted more than 300 U.S. patents.

DR. DAVID THOMPSON

Vice President, Process Engineering, Technology Research, Intel

David Thompson joined Intel as Vice President, Process Engineering, Technology Research on August 28, 2023.

He began his career at Praxair in 2002 where he worked on the development of chemistries supporting semiconductor materials inflections taking place in metallization and dielectrics. He then joined Applied Materials in 2010 where he most recently served as Vice President of Strategic Solutions. During his tenure at Applied Materials, he was responsible for developing new process chemistry, hardware, and the associated external supplier ecosystems to drive the timely commercialization of capital equipment products and services.

Thompson has 112 patents granted associated with semiconductor materials, process, hardware, and integration. He holds a Ph.D. in Chemistry and a B.Sc. in Engineering Chemistry, both granted from Queen's University in Kingston, Ontario, Canada.

DR. DAVID STAACK

Deputy Vice Chancellor for Research, The Texas A&M University System

David Staack, Ph.D. is Deputy Vice Chancellor for Research at The Texas A&M University System; a system of 11 universities and 8 state agencies with externally funded research expenditures of \$1.3 billion annually. In his administrative role Dr. Staack supports multi-university and multiagency research initiatives, intellectual property and commercialization, institutional infrastructure projects, research compliance and business practices and industry partnerships across the A&M System.

Prior to this role, Dr. Staack served as Associate Vice Chancellor for Research and Interim Director of the Texas A&M Semiconductor Institute. In that capacity, he led the establishment of the institute, including the planning of new facilities, research programs, and workforce development initiatives, all made possible by the appropriation of \$226 million to the institute through the Texas CHIPS Act. Previously, in other administrative roles, Dr. Staack served for five years as the College of Director Undergraduate Engineering of Laboratory Instruction, where he led the design and implementation of a new common laboratory and makerspace infrastructure, benefiting over 12,000 students in the Zachry Engineering Education Complex. He has also served on the Faculty Senate and as Chair of the Faculty Senate Research Committee.

Dr. Staack is also currently an Associate Professor of Mechanical Engineering at Texas A&M University. He teaches courses in fluid mechanics, thermodynamics, transfer. heat plasma engineering, and experimental design. Dr. Staack leads an active research program as the principal investigator at the Plasma Engineering and Non-Equilibrium Processing Research Laboratory, where his group investigates various plasma discharge and electron beam phenomena and their applications. His research spans diverse fields, including energy transition technologies, medical device and sensor development, hypersonic propulsion, and spacecraft environmental remediation, oil and gas reforming, carbon sequestration, biofuels, drilling semiconductor technologies, processing, advanced manufacturing, and high-speed optical, laser, and x-ray sources and diagnostics. His work includes both fundamental research and industry translation, with over 100 archival publications and more than 70 patent publications.

David Staack has been a faculty member at Texas A&M University since 2009. He joined Texas A&M after receiving his Ph.D. in Mechanical Engineering from Drexel University, working for four years at Princeton University's Department of Energy Princeton Plasma Physics Laboratory, and completing his M.S. and B.S. in Aerospace Engineering at the University of Virginia in 2000.

THURSDAY, OCTOBER 24

MS. SUSAN FEINDT

Vice President of Ecosystem Development, Natcast

Susan Feindt joined Natcast as its Senior Vice President of Ecosystem Development in April 2024. Natcast is a purpose-built, non-profit entity created to operate the National Semiconductor Technology Center (NSTC) consortium, established as a key component of the CHIPS and Science Act of the U.S. government. The NSTC is a public-private consortium convening industry, academic, and government organizations across the semiconductor ecosystem. Its mission is to serve as the focal point for semiconductor research and engineering, advancing and enabling disruptive innovation to provide U.S. leadership in the industries of the future.

Prior to Natcast, Feindt was an executive and senior technical fellow at Analog Devices where she led technology strategy and innovations, specializing in advanced process and device development. Feindt's career at ADI spanned thirty-six years where her leadership, mentorship, and technical innovations resulted in the commercialization of numerous technologies. She has served on multiple industry and academic advisory boards, including as vice-chair of the Department of Commerce CHIPS Industrial Advisory Committee (IAC).

Feindt earned her B.S. from M.I.T. At Natcast, Feindt will focus on defining membership strategy, prioritizing program offerings, and advocating for the semiconductor ecosystem's interests.

MR. WILLIAM C. "BILL" SPROULL, F.M., H.L.M

Semiconductor Economic Development Consultant Sproull has had a 40+ year career in professional economic development and public policy. He most recently served for 17 years as President and CEO of the Richardson Chamber of Commerce, Tech Titans, and the Richardson Economic Development Partnership. After retiring from the Chamber, he started a government relations consulting practice focused helping semiconductor and telecom on companies get federal and state grants.

Former Texas Governor Rick Perry appointed him for 6 years to the board of the Texas Emerging Technology Fund, a half-billion public investment fund, which he Chaired during 2010-2011. The Fund invested in over 120 early stage companies, funded numerous public-private research consortia, and recruited 52 world-class researchers and their teams to Texas universities to commercialize technology.

Texas Governor Greg Abbott appointed him in 2020 as Chair of the Governor's Broadband Development Council. The Council under his leadership recommended and the Legislature enacted a bill to create the State's first Broadband Office, first statewide broadband plan, and a grant fund.

Sproull was elected Chairman of IEDC in 2014. As Chair, he focused on engagement of and support for young and minority professionals in economic development. In 2023, IEDC conferred upon him their Lifetime Achievement Award.

He previously held senior economic development positions at the Dallas Regional Chamber, the McKinney Economic Development Corporation, and at the Economic Development Corporation of Kansas City, Missouri.

Sproull is a graduate of Baylor University with BA in Economics and Political Science.

PANEL: CATALYZING CHANGE: THE ROLE OF STARTUPS IN SHAPING THE SEMICONDUCTOR LANDSCAPE

MODERATOR: DR. SUKUMARAN NAIR

Vice Provost for Research and Chief Innovation Officer, Southern Methodist University

Dr. Suku Nair is the Vice Provost for Research and Chief Innovation Officer at SMU. He is a University Distinguished Professor at the Lyle School of Engineering where he was the Chair of Computer Science and Engineering Department from 2008 to 2016 and the founding director of the AT&T Center for Virtualization. He is the founder of the Cyber Security program at SMU, which currently enjoys the NSA/DHS Center of Excellence in Information Assurance Education and Cyber Defense designation.

Most recently he provided leadership for the SMU led Texoma Semiconductor Tech Hub as designated by the EDA (Economic Development Administration).

MS. SUSAN DAVENPORT

President and CEO, Brazos Valley Economic Development Corporation

Susan Davenport is the President and CEO of Brazos Valley Economic Corporation. The Brazos Development Corporation Valley Economic (BVEDC) is public-private economic а development corporation serving the citizens of Brazos County, Texas. Anchored by the Cities of Bryan and College Station and home to Texas A&M University, the Brazos Valley is a 21st century community that provides access to a highly-educated workforce, a low-cost business environment and a wonderful quality of life. It makes it one of the best places to launch, grow and locate your business.

For the past five years, Ms. Davenport has led the creation and execution of a regional, domestic, and international economic development strategy for the 12-county greater Houston region. This strategy has resulted in the relocation of three Fortune 500 company global headquarters as well as hundreds of other companies to the area. Her efforts have resulted in thousands of new jobs and opportunities for regional residents.

Prior to Houston, Ms. Davenport served as President & CEO of the Gainesville Area Chamber of Commerce in Florida. Earlier, Davenport spent 13 years as Senior Vice President of Global Tech Strategies at Opportunity Austin. During her tenure, Opportunity Austin is credited with the creation of 174,000 jobs and enhancing regional payrolls by \$8.7 billion.

Ms. Davenport has also worked to retain or expand more than 500 employers and secured almost \$100 million in grant funding for various companies through her work with Portfolio Austin, the Central Texas Regional Center for Innovation and Commercialization, the Greater Austin Technology Partnership, and Austin TechLive.

Ms. Davenport holds a Master of Public Affairs from the University of Texas at Austin and a Bachelor of Science in Nursing from the University of Texas Medical Branch. She is a graduate of the Economic Development Institute at the University of Oklahoma, and she is an active member of the International Economic Development Council.

DR. SIRISHA KUCHIMANCHI

Founder and CEO, Sahita Technologies

Dr. Sirisha Kuchimanchi is an entrepreneur, semiconductor tech executive, TEDx speaker, author, podcast host, board member and investor. She is the founder of Sahita Technologies, which specialize in consulting services that encompass semiconductors. advanced manufacturing, and workforce development. With over 20 years of experience at Texas Instruments and Applied Materials in engineering, manufacturing, quality, and technology development, she has made significant contributions to the industry by driving improvements for both internal and external customers. Sirisha has a Ph.D. from Carnegie Mellon University, is an IEEE Senior Member and sits on the SRC workforce advisory board. She cochaired her companies manufacturing women's ERG, which supported over 500 employees across 3 continents and 8 countries. Sirisha hosted the Podcast "Women, Career & Life", a top 30% of Spotify podcast with listeners in 50 countries across 6 continents.

MR. WILL MCCREADIE

Investor, General Catalyst

Will McCreadie is an investor on our Global Resilience team, where he works alongside Paul Kwan on companies modernizing our defense, industrial and energy sectors. He is based in San Francisco, and is involved with GC's investments in Helsing, Nominal, Cobot, Charm Industrial, Alsym Energy, Civic Roundtable, and First Street.

Prior to General Catalyst, Will worked at Lux Capital, where he supported investments from pre-seed to Series D, helped incubate two portfolio companies and worked as a climate EIR. He also helped Lux develop theses on carbonnegative materials, continuous biosensing, and ML security.

Will graduated from Georgetown University with a degree in Computer Science and Economics. He also spent time as a neuroeconomics researcher studying the neural aspects of decision making. Will grew up in a family that placed equal value on science, finance, and design, and brings all of these lenses to investing. He is fascinated by the interaction of rapid technical change and timeless human behavior. Will was once a competitive runner, and raced in Canadian cross country championships. Running is still his favorite way to unwind.

MR. CHRIS MANACK

CEO, Integral Semiconductor Technology

Mr. Manack is an esteemed entrepreneur currently leading initiatives at Integral Semi since 2023. In this role, he collaborates with startup companies in the Dallas-Fort Worth area to build factories and launch innovative services and technologies. His work extends to the academic institution arena, where he assists the University of Oklahoma among other institutions in securing grants for strategic projects. Additionally, Mr. Manack is deeply involved in commercial and residential real estate transactions through Manack Venture Capital LLC.

Prior to embarking on his thriving entrepreneurial endeavors, Mr. Manack served as the vice president at Texas Instruments Incorporated from 2021 to 2023, where his leadership was marked by strategic innovation and rapid project delivery. Before ascending to that appointment, he excelled as the director of the firm from 2017 to 2021, where he demonstrated his wide-ranging semiconductor expertise in technology. Additionally, Mr. Manack held the role of packaging technology manager at Texas Instruments Incorporated from 2012 to 2015, where he also prospered as a semiconductor engineer from 2005 to packaging 2012.

Mr. Manack's tenure at Apple from 2015 to 2017 as a packaging technologist proved pivotal to his advancement, as he was proud to collaborate on board and chip development that advanced the first Apple Watch to market, along with many semiconductor innovations that enabled Apple products. His professional prowess is further evidenced by his extensive patent portfolio, which includes innovations like the Integrated Power Package and Embedded Die Package, reflective of understanding of semiconductor а deep technology and a commitment to advancing the field.

Mr. Manack attributes his success thus far to relentless curiosity and drive, traits that enabled him to realize key academic accomplishments. He earned a Master of Science in micro-electronic mechanical systems from The University of Texas at Dallas in 2012 and a Bachelor of Science in mechanical engineering from The University of Oklahoma in 2007. He is also proud of the broad recognition his teams received via two Jack S. Kilby Awards within one decade, accolades that underscore Mr. Manack's ability to foster innovation among large groups of professionals.

Outside of his professional life, Mr. Manack is dedicated to his family, including four children, and he enjoys staying active by participating in wake-surfing, coaching sports and serving in the community. With future aspirations to ascend to executive leadership positions, Mr. Manack will apply his wealth of experience from prominent companies like Apple and Texas Instruments Incorporated toward achieving these goals.

MR. JOHN LAUER

CEO, Adom Industries, Inc.

With two exits now under his belt, John Lauer has proven that he can build large complex tech businesses. John's last tech company, Zipwhip, sold to Twilio for \$1 billion.

Prior to Zipwhip, John created Simplewire and led its growth to \$350M in annual revenue.

John was also the founder and creator of ChiliPeppr, the world's first open-source CNC machine operating system. ChiliPeppr gave the maker community the first freely available tool to operate CNC machines from a 3D control interface inside their web browser and provided an early inspiration for Adom, his current startup.

John was struck that over his 30-year career as an engineer, the process for physical hardware prototyping has seen almost zero innovation. His vision is to make hardware prototyping as fast as software. Adom puts hardware in the cloud, allowing engineers to iterate quickly and collaborate easily. The result is that, with Adom, hardware prototyping will become 50x faster.

DR. DANIEL BABICH

Investor, Aesculus Capital

Dan Babich is the founder of Aesculus Capital, a deep tech venture capital firm focused on the energy transition and semiconductors sectors. Dan spent fourteen years at Fortelus Capital Management in London and Hayman Capital Management in Dallas. Before finance, he earned a PhD in physics from Harvard and worked as the Gordon and Betty Moore Prize Postdoctoral Scholar at Caltech.

FIRESIDE CHAT

SEN. JOHN CORNYN

United States Senate

In 2020, Texans overwhelmingly re-elected Senator John Cornyn to represent them for a fourth term in the U.S. Senate.

Since he was first elected in 2002, Sen. Cornyn has earned a national reputation as an articulate and powerful voice for Texas values in Washington. Sen. Cornyn, a San Antonio native, strongly believes that we need more Texas solutions in Washington, which is why he consistently fights to bring the Lone Star State's commonsense solutions to the federal level.

He is committed to strengthening our national defense, securing our borders, repairing our broken immigration system, and fostering economic development by keeping taxes low, reducing federal spending, and fighting job-killing regulations from Washington bureaucrats. Sen. Cornyn is also a tireless advocate for Texas military personnel, veterans, and their families, and he has fought year after year to provide these brave Americans with greater support, care, and benefits.

Sen. Cornyn serves on the Senate Finance, Intelligence, and Judiciary Committees, where he helps craft legislation on behalf of more than 30 million Texans. From 2013 until 2018, Sen. Cornyn was chosen by his colleagues to serve as the Whip, the second-highest ranking position in the Senate Republican Conference.

Sen. Cornyn has served the people of Texas for nearly four decades, first as a district judge and later as a member of the Texas Supreme Court and Texas Attorney General.

He received his undergraduate degree from Trinity University, his law degree from St. Mary's School of Law, and his LLM from the University of Virginia Law School.

Sen. Cornyn married his wife Sandy in 1979, and they have two grown daughters.

REP. MICHAEL MCCAUL

Chairman, House Foreign Affairs Committee, United States House of Representatives

Congressman Michael T. McCaul is currently serving his tenth term representing Texas' 10th District in the United States Congress. The 10th Congressional District of Texas stretches from Lake Travis to the Brazos Valley and includes Austin, Bastrop, Brazos, Burleson, Colorado, Fayette, Grimes, Lee, Madison, Travis, Washington, Waller, and Williamson Counties.

Career and Leadership

Congressman McCaul previously served as the Chairman of the House Committee on Homeland Security, and at the beginning of the 118th Congress, he became the first Texan to chair the Foreign Affairs Committee, which considers legislation that impacts the diplomatic community.

Prior to Congress, Congressman McCaul served as Chief of Counter Terrorism and National Security in the U.S. Attorney's office, Western District of Texas, and led the Joint Terrorism Task Force charged with detecting, deterring, and preventing terrorist activity. McCaul also served as Texas Deputy Attorney General under current U.S. Senator John Cornyn, and he served as a federal prosecutor in the Department of Justice's Public Integrity Section in Washington, DC.

Personal Life

A fourth-generation Texan, Congressman McCaul earned a B.A. in Business and History from Trinity University and holds a J.D. from St. Mary's University School of Law. In 2009 Congressman McCaul was honored with St. Mary's Distinguished Graduate award. He is also a graduate of the Senior Executive Fellows Program of the School of Government, Harvard University. Congressman McCaul married his wife Linda in 1993. They are proud parents of five children: Caroline, Jewell, and the triplets, Lauren, Michael, and Avery. The McCauls call Austin, Texas, home.

DR. JOE ELABD

Vice Chancellor for Research, The Texas A&M University System

Dr. Joe Elabd is the Vice Chancellor for Research at The Texas A&M University System; a system of 11 universities and 8 state agencies with externally funded research expenditures of \$1.3 billion annually.

As the leader of the A&M System Office of Research, Dr. Elabd is responsible for providing research leadership and services to support all 19 system members and overseas numerous offices and initiatives, including Texas A&M Innovation, National Laboratories Office, Bush Combat Development Complex, Texas A&M Semiconductor Institute, Texas A&M Fort Worth, Research Security Office, Research Compliance Office, Research Administration Office, Research Development Office, and the Chancellor's Research Initiative.

Prior to these roles, Dr. Elabd has served in several administrative roles at Texas A&M University, including the Interim Vice Chancellor and Dean of Engineering, Interim Director of the Texas A&M Engineering Experiment Station, Associate Dean for Research of Engineering, and Associate Department Head of Chemical Engineering.

Dr. Elabd is also currently a Professor and the Axalta Coating Systems Chair II in the Artie McFerrin Department of Chemical Engineering at Texas A&M University. He is a Fellow of the American Physical Society and served as a Senior Fellow at the Instituto di Studi Avanzati, Università di Bologna and a Scholar in Residence at the Food & Drug Administration. He has received numerous research awards including the NSF CAREER Award, the ARO Young Investigator Award, and the DuPont Science an Engineering Award. His research focuses on electrochemical energy (batteries, capacitors, fuel cells) and materials and polymer science. Dr. Elabd has taught chemical engineering courses at all levels (freshmen, sophomore, junior, senior, and graduate).

Dr. Elabd received his Ph.D. and B.S. both in chemical engineering from Johns Hopkins University and University of Maryland, Baltimore County, respectively, and was a National Research Council Postdoctoral Fellow at the U.S. Army Research Laboratory.

DR. SAM PALERMO

Professor, Electrical Engineering, Texas A&M University Samuel Palermo (Senior Member, IEEE) received the B.S. and M.S. degrees in electrical engineering from Texas A&M University, College Station, TX, USA, in 1997 and 1999, respectively, and the Ph.D. degree in electrical engineering from Stanford University, Stanford, CA, USA, in 2007., From 1999 to 2000, he was with Texas Instruments, Dallas, TX, where he worked on the design of mixedsignal integrated circuits for high-speed serial data communication. From 2006 to 2008, he was with Intel Corporation, Hillsboro, OR, USA, where he worked on high-speed optical and electrical I/O architectures. In 2009, he joined the Electrical and Computer Engineering Department, Texas A&M University, College Station, TX, USA, where he is currently a Professor. His research interests include high-speed electrical and optical interconnect architectures, RF photonics, highperformance clocking circuits integrated sensor systems, and neuromorphic computing systems.

MR. RYAN GREUTER

Vice President, Fab Engineering Taylor Fab Startup, Samsung Austin Semiconductor

PANEL: INVESTING IN THE FUTURE: THE ROLE OF GOVERNMENT INVESTMENT IN THE SEMICONDUCTOR ECOSYSTEM

MODERATOR: DR. JOE ELABD

Vice Chancellor for Research, The Texas A&M University System

MS. LYNELLE MCKAY

Chief Portfolio Management Of ficer, CHIPS for America, U.S. Department of Commerce

Lynelle enters her new role as Chief Portfolio Management Officer after serving as a Senior Relationship Director in the CHIPS Program Office, where she has worked directly with CPO applicants and a variety of stakeholders in the semiconductor industry. Coming out of retirement to join the CHIPS Investment Office, Lynelle has over 20 years of experience working in the semiconductor industry, including senior leadership roles with both Freescale Technologies and Motorola. She has also held leadership positions working with the Girl Scouts of the USA, including supporting girls in STEM programs.

DR. BARRY JOHNSON

Division Director, Division of Translational Impacts, Directorate for Technology, Innovation and Partnerships, National Science Foundation

Barry Johnson joined the U.S. National Science Foundation Directorate for Technology, Innovation and Partnerships (NSF TIP) in June 2022 as the division director for Translational Impacts.

Johnson brings a wealth of experience in industry and startups and has a long history of building public and private partnerships. For example, in 2001, he co-founded the biometric security company Privaris Inc., where he served as chairman of the board of directors and, for nearly four years, president and CEO. In 2014, Apple Inc. acquired Privaris' patent portfolio. Johnson was also the founding president and executive director of the Commonwealth Center for Advanced Manufacturing, an applied research center and not-for-profit public-private partnership comprising industry, academia and government. He has consulted with more than a dozen companies and federal agencies.

Johnson also has significant government and academic experience. From March 2015 to January 2019, he served as the division director for the then-Division of Industrial Innovation and within Partnerships the NSF Engineering Directorate. During that time, he spent nearly a year as acting assistant director for Engineering, receiving the NSF Distinguished Service Award. He was instrumental in creating the NSF Non-Academic Research Internships for Graduate Students program, among other accomplishments.

Johnson is the L.A. Lacy Distinguished Professor of Engineering at the University of Virginia's Charles L. Brown Department of Electrical and Computer Engineering and has been the director of the computer engineering program. He served as an inaugural co-principal investigator for the Engineering Research Visioning Alliance, a national partnership that convenes, catalyzes and empowers the engineering community to identify future research directions.

Johnson earned his bachelor's, master's and doctoral degrees in electrical engineering from the University of Virginia. He has published more than 150 technical articles, written several books and is an inventor on more than 40 issued patents. Johnson is a Class of 2016 National Academy of Inventors fellow and is also a fellow of the Institute of Electrical and Electronics Engineers.

MS. MARYAM COPE

Vice President of Government Affairs, Natcast

DR. STEPHEN DAVIS

Program Director, CHIPS Office, Texas Office of the Governor

Stephen Davis serves as the Program Director for the Texas CHIPS Office. He works with the National Semiconductor Centers Texas Task Force and the Texas Semiconductor Innovation Consortium and its Executive Committee. Prior, he served as the Research and Economic Analysis Program Manager for the Texas Economic Development and Tourism Office within the Office of the Governor. He received a Ph.D. in Political Science and an MBA from Texas Tech University, as well as a master's degree in international affairs from the Bush School of Government at Texas A&M University.

PANEL: IS TEXAS A LEADER IN SEMICONDUCTOR SOLUTIONS? IF NOT, WHAT IS NEEDED?

MODERATOR: MR. JOHN SCHRECK

Chief Executive Officer, Texas Institute for Electronics John Schreck is the former senior vice president (retired) of DRAM Engineering at Micron Technology and in December 2022 became the CEO of the Texas Institute for Electronics (TIE). In his role as SVP of DRAM Engineering, Mr. Schreck was responsible for Micron's international team product engineering with of design and responsibilities including new technology development and high bandwidth memory (HBM) engineering. Mr. Schreck serves on the University of Texas at Austin's Chandra Department of Electrical and Computer Engineering External Advisory Board and the Cockrell School of Engineering Advisory Board. He is also a member of the Chandra Department of Electrical and Computer Engineering Academy of Distinguished Alumni. He holds a bachelor's in electrical and electronics engineering from UT Austin and a master's in electrical and electronics engineering from Rice University.

DR. TED MOISE

Director, North Texas Semiconductor Institute

Ted Moise earned a B.S. degree in Physics and Engineering from Trinity College and a Ph.D. degree in electrical engineering from Yale University where he was awarded the Harding Bliss Prize for excellence in Engineering and Applied Science. In 1997, Ted and his team at Texas Instruments started work on the development of scaled ferroelectric capacitors leading to the industry's first production of lowvoltage, high-density, embedded ferroelectric random-access memory. Since achieving FRAM production on the 130nm node in 2007, TI and its partners have designed and sold FRAM-based products with applications ranging from implantable medical devices to ultra-low-power micro-controllers and automotive data recorders. From 2007-2021. Ted led technology development teams focusing on non-volatile memory, high-performance analog CMOS, highperformance/low-noise BiCMOS, and sensor technology. After retiring from Texas Instruments in 2021, Ted joined the University of Texas at Dallas where he serves as the inaugural director of the North Texas Semiconductor Institute.

Ted has authored or co-authored over 90 papers, served as conference and session chair for several international technical conferences, presented numerous plenary lectures/tutorials, and holds 51 issued patents. Ted's work was honored with the 2012 Edith and Peter O'Donnell Innovation Award from The Academy of Medicine, Engineering & Science of Texas (TAMEST) and he was elected an IEEE fellow in 2019.

DR. GERARD COTÉ

Professor, Biomedical Engineering, Texas A&M University Gerard L. Coté is a Texas A&M Regents Professor, Director of the TEES Center for Remote Health Technologies and Systems, Director of the NSF funded PATHS-UP Engineering Research Center, and holder of the James J. Cain Professor I in Biomedical Engineering at Texas A&M University. Coté is an expert in biomedical sensing for diagnostic and monitoring applications. His focus is developing innovative hand-held and wearable point-of-care technologies and systems for a variety of chronic and infectious disease applications using optics, electronics. microfluidics, paper fluidics, nanoparticles, and assays. He has coauthored over 450 publications, proceedings, and abstracts. He is an entrepreneur, holds several U.S. patents, and has co-founded three medical device companies namely; BioTex, BasePair BioTechnologies, and Visualase (acquired by Medtronic in 2014). Coté is a Fellow of five organizations including; the National Academy of Inventors, IEEE, SPIE, BMES, and AIMBE. He is also the recipient of several awards including the IEEE Sensors Council Technical Achievement Award, Sigma Xi Walston Chubb Award for Innovation, University of Connecticut School of Engineering Academy of Engineers and Distinguished Distinguished Achievement Award for Graduate Mentoring, Distinguished Achievement Award for Research and Distinguished Achievement Award for Teaching all from the Texas A&M Association of Former Students.

MS. AMANDA RICKMAN

Principal Technical Fellow, Raytheon

Amanda is a Principal Engineering Fellow for Raytheon in McKinney, Texas. She serves as the Technology Area Lead for Microelectronics Packaging where she shapes and executes a development portfolio for Advanced 2D to 3DHI packaging technology. Amanda is also the Technical Director for the Advanced Products Center, a manufacturing facility focused on RF microelectronics products and integration. She has 23 years of experience at Raytheon with a broad range of expertise in RF packaging, ultrathin coatings, materials testing, and additive manufacturing. She received an MS in Materials Engineering from Auburn University.

MR. KELLY BAKER

Technical Fellow, NXP

Kelly is a technical Fellow and member of the Innovation Management team within NXP's CTO organization. In this role he helps advance corporate-wide innovation activities, including overall responsibility for NXP's university research engagements and leverage of US-based startup companies.

He joined Motorola Semiconductor (later spun out as Freescale, and acquired by NXP) in 1985 after completing BS/MS degrees in electrical engineering at UT-Austin and Stanford. His first assignment involved device and process development for 1.5um DRAM memories, and over a 39-year career he has contributed (through hands-on technical work and as a manager) to development of devices and IP for high speed SRAMs, low power logic, embedded nonvolatile memories and automotive microcontrollers. In recent years his focus was on technology strategy, roadmaps and helping drive innovation in technologies ranging down to 16nm and below.

Kelly is a Senior Member of IEEE, chaired the IEEE Nonvolatile Semiconductor Memory Workshop (now IMW) in 2004, and served on technical committees for IEDM, VLSI Symposium and IRPS. He is author or co-author of over 50 US patents and over 50 conference presentations and journal articles. In 2005 he and his co-inventors received Freescale's outstanding patent of the year award.

DR. DEEPAK KULKARNI

Senior Fellow, Advanced Micro Devices

Deepak Kulkarni is a Senior Fellow at AMD. His responsibilities include defining package architecture for AMD's data center CPU and GPU products. Deepak has successfully led several packaging technology initiatives such as 2.5 Elevated Fan-Out Bridge (EFB), as well as 3.5D packaging to enable AMD's data center product roadmap. He has also developed novel computational modeling and AI solutions to enable improvements in package design and manufacturing yield.

Over the last eighteen years, he has held several leadership positions in advanced packaging. Prior to joining AMD, Deepak was Senior Director of packaging yield at Intel Corporation. He holds twenty-five patents and over twenty publications osn 2.5D/3D architectures, and AI techniques applied to yield management. His contributions to the semiconductor industry have been recognized by an Intel Achievement Award (Intel), Next 5% award (AMD) and best paper award (ITHERM). Deepak holds a PhD from the University of Illinois Urbana-Champaign with a major in mechanical engineering and a minor in computational science.

PANEL: CULTIVATING EXPERTISE: TRAINING THE NEXT GENERATION OF SEMICONDUCTOR PROFESSIONALS

MODERATOR: DR. ALYSSA REINHART

Director of Workforce Development, Texas Institute for Electronics

Dr. Alyssa Reinhart is the Director of Workforce Development for the Texas Institute for Electronics (TIE), а UT Austin-supported consortium of leading semiconductor companies, defense electronics firms, national labs, and academic institutions. In this role, she leads efforts to reinvent and expand education pathways at all levels, ensuring the semiconductor industry has the skilled workforce it needs to thrive.

With over 15 years of experience in education and workforce development, Dr. Reinhart brings expertise in research, policy implementation, and data-driven strategy across local, state, and national levels. She has worked both domestically and abroad, focusing on building systems and capacity for educational agencies to implement transformative initiatives. Her work centers on career pathways that span high school, postsecondary education, and the workforce.

Dr. Reinhart previously served as Director for Strategy and Resources in the College, Career, and Military Preparation Division at the Texas Education Agency. In this role, she collaborated with the Texas Workforce Commission and the Higher Education Coordinating Board to align education and workforce pathways, helping students transition seamlessly from school to careers. She also managed several federal grants, including programs focused on STEM education and college and career advising.

In a previous role as an educational management consultant, Dr. Reinhart supported a large, urban school district in the creation of a career readiness strategic plan, leveraging labor market data, stakeholder engagement, and systems development analysis to guide and implementation. Most recently, as a Senior Advisor to the Strategic Data Project at Harvard University, she oversaw the development of open-source analytic tools and diagnostics to evaluate student success along career pathways, using longitudinal postsecondary academic and workforce data from multiple states to a create a common framework.

Dr. Reinhart holds a Ph.D. in Educational Psychology, an M.A. in Program Evaluation, and a B.A. in Mathematics, all from the University of Texas at Austin. Her blend of academic training and hands-on experience in strategic planning and workforce alignment makes her a key leader in workforce development, particularly within STEM and high-demand industries.

DR. GARRETT GROVES

Vice Chancellor for Strategic Initiatives, Austin Community College District

Garrett Groves is Vice Chancellor of Strategic Initiatives for the Austin Community College District. He joined ACC in February 2018 and leads the college's effort to identify emerging labor market needs, evaluate opportunities for industry collaboration, and build strategic partnerships with local community partners. Garrett has a particular emphasis on aligning workforce development the programs with rapidly expanding advanced manufacturing and semiconductor industries in Central Texas. He currently serves both the on Texas Semiconductor Innovation Council and the Austin Regional Manufacturers Association.

Before joining ACC, Garrett directed the Economic Opportunity Program at the Center for Public Policy Priorities. He also served as a scholar in residence at the Federal Reserve Bank of Dallas and as a Senior Policy Analyst at the National Governors Association in Washington D.C. He has a Ph.D from the University of Texas at Austin in Higher Education Leadership, a master's degree from the LBJ School of Public Affairs at the University of Texas at Austin, and a bachelor's degree from the University of Denver.

MS. HEATHER JUSTICE

Senior Director, Education Strategy Group

Heather Justice is a senior director at ESG, leading work on career readiness and aligning highquality K-12, postsecondary, and industry pathways. Prior to joining ESG, Heather served as the Division Director for College, Career and Military Preparation within the Texas Education Agency, where she oversaw the implementation of the Texas Regional Pathways Network, highquality Career and Technical Education programs, work-based learning, industry certifications of value, and College and Career Readiness School Models such as Early College High Schools, Pathways in Technology Early College High Schools, and Texas STEM Academies. Prior to joining the Texas Education Agency, Heather was the Executive Director of Career and Technical Education for the Tennessee Department of Education. In this role, she managed the comprehensive reform of Career and Technical

Education programs of study, instituted datasharing agreements to obtain industry certification data, overhauled the licensing of CTE educators, and established a statewide Heather Justice is a senior director at ESG, leading work on career readiness and aligning high-quality K-12, postsecondary, and industry pathways. Prior to joining ESG, Heather served as the Division Director for College, Career and Military Preparation within the Texas Education Agency, where she oversaw the implementation of the Texas Regional Pathways Network, high-quality Career and Technical Education programs, workbased learning, industry certifications of value, and College and Career Readiness School Models such as Early College High Schools, Pathways in Technology Early College High Schools, and Texas STEM Academies. Prior to joining the Texas Education Agency, Heather was the Executive Director of Career and Technical Education for the Tennessee Department of Education. In this role, she managed the comprehensive reform of Career and Technical Education programs of study, instituted data-sharing agreements to obtain industry certification data, overhauled the licensing of CTE educators, and established a statewide professional development model for CTE educators.

DR. CINDY LAWLEY

Assistant Vice Chancellor for Academic and Outreach Programs, Texas A&M Engineering Experiment Station Dr. Lawley is responsible for the PK-12 Engineering Education Outreach Program, the Engineering Academies Program, the Professional and Continuing Education Program, the System-wide Engineering Academic Program, TEES Regional Divisions, and the Conference and Events Division for Texas A&M Engineering. She has a Ph.D. in Higher Education Administration from Purdue University, a M.A. in Education from the University of Alabama, and a B.S. in Computer Information Systems from Mississippi University for Women. She has over 30 years of experience

in project management, with over 25 years in Higher Education.

Dr. Lawley does research in engineering education, PK-12, professional and continuing education, and workforce development. Over the last 30 years, Dr. Lawley has worked extensively with industry and academia in creating a talent pipeline, upskilling, and reskilling workers, as well providing pathways for underserved as populations to obtain degrees in engineering. Dr. Lawley was recently selected by the Texas A&M Board of Regents as a Regents Fellow, one of the highest honors bestowed on an individual within the Texas A&M University System.

Dr. Lawley is the PI on five (\$21 M total) workforce development projects with the Department of Defense to create a talent pipeline for the defense industry These project initiatives collaborate with regional stakeholders across Texas and the U.S. to understand their specific local workforce shortfalls and skills gaps. These projects engage stakeholders (industry, academia, and community) to identify and address the skills, tools, and techniques (including manufacturing and other competencies) needed to succeed in STEM fields and increase awareness of DoD manufacturing workforce needs.

Prior to this position, Dr. Lawley was the Executive Director of Academic and Strategic Initiatives at Texas A&M Engineering. Before moving to Texas A&M in August 2014, she spent 18 years at Purdue University College of Engineering working on alumni relations, industry collaborations, and marketing and communications. Dr. Lawley has taught academic courses in Engineering Student Success, Technical Communications for Engineers, Organizational Leadership, and Law and Ethics.

DR. STEVE PUTNA

Director, Texas A&M Semiconductor Institute

The Texas A&M University System announced the appointment of Dr. E. Steve Putna as the inaugural director of the Texas A&M Semiconductor Institute to begin July 1, 2024. This appointment marks a milestone in the System's commitment to advancing semiconductor research and development, workforce training and industry collaboration.

"Dr. Putna has the experience and ambition needed to lead the Texas A&M Semiconductor Institute," said John Sharp, chancellor of The Texas A&M University System. "What we are creating here will help bolster the semiconductor industry in the U.S. for the next century." Dr. Putna brings to Texas A&M more than 25 years of extensive experience in the semiconductor industry, particularly in manufacturing and supply chain management at Intel Corporation. His career encompasses a wide range of technical and financial responsibilities. He has experience leading large teams and driving innovative research projects from concept to implementation.

"Following a 25-year career in semiconductor R&D and supply chain at Intel Corporation and at Semiconductor Research Corporation, I'm thrilled to have the opportunity to serve as the inaugural director of the Texas A&M Semiconductor Institute," Dr. Putna said. "My vision for the Institute is one of boundless possibility leveraging positive reinforcement amongst Texas, the US government, and A&M's outstanding track record of research, development, innovation, and workforce development. Intense focus on maintaining and growing public-private partnerships as well as fostering consortia alliances will drive the Institute to a position of global prominence whilst simultaneously realizing the goal of strengthening our domestic semiconductor ecosystem."

Dr. Putna holds a Ph.D. in Chemical Engineering from the University of Pennsylvania and a B.S. in Chemical Engineering from the University of Texas at Austin.