5th **Annual International**
Neurodiversity *and the* **Built Environment Symposium**

Interdependence in Action

THURSDAY, MARCH 27 | 6 p.m.

Opening reception: The Landing

FRIDAY, MARCH 28 | 9 a.m.

Symposium: Hybrid format
In person: East Falls Campus, DEC Center, Rooms 215, 217, 219
Onsite and online: webinar details upon registration

The event is presented by the Synesthetic Research and Design Lab at the College of Architecture and the Built Environment, in collaboration with the Jefferson Heath Center for Autism and Neurodiversity, and in partnership with the University College Dublin Inclusive Design Research Centre of Ireland with SMARTlab teams. It is sponsored by Shrub Oak International School.

Jefferson.edu/NeurodiversitySymposium

Thomas Jefferson University

Marking the fifth year of the International Neurodiversity and the Built Environment series, our theme, “Interdependence in Action,” promotes collaboration, interaction, and mutual support while suggesting practical and actionable discussions that address all-inclusive ways of inhabiting and perceiving our environments. The discussions will build on the previous four years' symposia, SPRING 2024 Intentional Connections, FALL2022 PlaceMaking, FALL2021 Immersive Experiences, and FALL2020 Building Community and Rethinking the Built Environment, respectively.

These yearly events are transdisciplinary and aimed toward critical interactions addressing all-inclusive ways of inhabiting and perceiving our environments. They seek to stimulate international dialogue amongst neurodivergent individuals, communities and advocacy groups, architects, planners, designers, artists, medical field experts, technology companies, educational institutions, and everyone interested in the broader framework of access, safety, and celebration of the human spectrum.

SCHEDULE

9–9:30 a.m.

OPENING REMARKS

9–9:15 a.m

Synesthetic Research & Design Lab, SR&DL
Severino Alfonso & Loukia Tsafoulia, SR&DL Directors and Assistant Professors, College of Architecture and the Built Environment, Thomas Jefferson University

Center for Autism and Neurodiversity, CAN
Director, Thomas Jefferson University, Jefferson Health

Sabra Townsend, Director of Operations

PARTNER
SMARTlab
Lizbeth Goodman, Professor, Founder and Director of SMARTlab, Founder and Director of the Inclusive Design Research Center of Ireland @ UCD

SPONSOR
Shrub Oak International Schoo
Lauren Koffler, MSW, Head of Admissions, Communications & Client Relations

9:15–9:30 a.m.

Susan Aldridge
President, Thomas Jefferson University

Edmund deAzevedo Pribitkin
Chief Physician Executive I EVP I Jefferson Health President, Jefferson Medical Group, Professor, Dept. of Otolaryngology-Head & Neck Surgery, SKMC

Barbara Klinkhammer
Dean and Professor, College of Architecture and the Built Environment, Thomas Jefferson University, Director SMARTlab@Jefferson

9:30–10:45 a.m.

PANEL 1

Multiscalar & Co-Design Approaches

9:30–9:45 a.m.

The Ins & Outs: Multiscalar Designs with the Frankfort Community, Philadelphia

Severino Alfonso, Kimberly Douglas, Laila Hassan, Siretta Humphrey

9:45–10 a.m.

Flourishing-based Co-Design as a Mechanism for Impactful Design with/for Neurodiversity and therefore Design for All

Jenna Mikus

10:00 am - 10:15 am

Centering Co-Design for Inclusion in an Interdisciplinary Design Studio

Magda Mostafa, Sarah Rottenberg

10:15–10:45 a.m.
In Dialogue
Moderated discussion and audience Q&A

11 a.m–12:15 p.m.

PANEL 2

Support Frameworks

11–11:15 a.m.

The influence of environment and High Sensitivity: Navigating personal and professional worlds

Antonio Chacón, Clara de Castro

11:15–11:45 a.m.

Student-Centered AI: Revolutionizing Therapeutic Tools with a Focus on Individual Needs

Rinat Hitelman, Lauren Koffler

11:45 a.m.–12:15 p.m.
In Dialogue
Moderated discussion and audience Q&A

LUNCH BREAK – 12:15 – 1 p.m.
Lunch provided in room DEC 220

1–2:15 p.m.

PANEL 3

Building our Practice

1–1:15 p.m.

Lab Planning for Neuro-Inclusion

Aria Hill, Larissa Sattler, Ellie Thomas

1:15–1:30 p.m.

Designing Learning Environments for a Spectrum

Matthew Heckendorn

1.30–1:45 p.m.

Lessons Learned from Neurodivergent Scientists

Rachel Updegrove

1:45–2:15 p.m.
In Dialogue
Moderated discussion and audience Q&A

2:30–3:45 p.m.

Panel 4

Practical Applications of Cross-Disciplinary Work

2:30–3:15 p.m.

Take a seat – The doctor will see you soon

Elijah Jones, Rob Mellville, Wendy J. Ross, Lonnie Smith, Sabra Townsend, Gary Welfer

3:15–3:45 p.m.
In Dialogue
Moderated discussion and audience Q&A

Times shown are Eastern Standard Time.

INTRODUCTORY REMARKS

9 – 9:30 a.m., Eastern Time U.S.

ORGANIZERS

(Bios in the end of the schedule, pages 14-17)

SYNESTHETIC RESEARCH AND DESIGN LAB

Severino Alfonso, RA(EU) MSAAD, Dipl-Ing, *Director, Synesthetic Research & Design Laboratory, Assistant Professor, College of Architecture & the Built Environment (CABE), Thomas Jefferson University*

Loukia Tsafoulia, RA(EU) MSAAD, Dipl-Ing, *Director, Synesthetic Research & Design Laboratory, Assistant Professor, College of Architecture & the Built Environment (CABE), Thomas Jefferson University*

CENTER FOR AUTISM AND NEURODIVERSITY

Wendy Ross, MD, FAAP, *Inaugural Director, Jefferson Center for Autism and Neurodiversity*

Sabra Townsend, *Director of Operations, Jefferson Center for Autism and Neurodiversity*

PARTNER

UNIVERSITY COLLEGE DUBLIN INCLUSIVE DESIGN RESEARCH CENTRE OF IRELAND WITH SMARTLAB

Lizbeth Goodman, MA, MLitt, PhD, FRSA, *Professor, Founder and Director of SMARTlab, Founder and Director of the Inclusive Design Research Center of Ireland @ UCD*

SPONSOR

SHRUB OAK INTERNATIONAL SCHOOL

Lauren Koffler, MSW, *Head of Admissions, Communications & Client Relations, Shrub Oak International School*

INTRODUCTORY REMARKS BIOS

9 – 9:30 a.m., Eastern Time U.S

THOMAS JEFFERSON UNIVERSITY AND COLLEGE OF THE BUILT ENVIRONMENT LEADERSHIP

SUSAN ALDRIDGE, PhD

President, Thomas Jefferson University

Dr. Susan Aldridge has been widely recognized at home and abroad for her outstanding service to and numerous accomplishments in higher education and healthcare planning/policy as a seasoned educator, administrator, and strategist, with a distinguished career spanning more than four decades. She continued to use her vast experience and knowledge as a member of the Board of Trustees for Thomas Jefferson University and Jefferson Health.

Dr. Aldridge has held executive leadership positions in some of the nation's largest universities—Drexel University, University of Maryland Global Campus, Troy University's University College, and eCampus- served as a consultant to university presidents and foreign ministers of education, government officials, and business leaders, and spent ten years as Director of Services for the Aging in Denver, Colorado. As a Senior Fellow at the American Association of State Colleges and Universities, she authored the book Wired for Success. Dr. Aldridge was also Principal Investigator for several US Department of Health and Human Service (HHS) grants and a national HHS proposal reviewer. Dr. Aldridge was both the chair and co-chair for the US-China Forum on Distance Education and the co-chair of the Department of Defense Task Force on Distance Learning Standards. Dr. Aldridge also served on a global team for the UAE prime minister to rank projects for Global Impact Awards while performing accreditation reviews for the Saudi Arabia Ministry of Education.

Having received her Bachelor's Degree from Colorado Women's College, Dr. Aldridge completed her Master's and PhD in public administration at the University of Colorado. Her doctoral research, funded by the US Department of HHS, was on the impact of Medicare prospective reimbursement on patient care outcomes.

EDMUND DEAZEVEDO PRIBITKIN, MD, MBA,

Chief Physician Executive, EVP, Jefferson Health President, Jefferson Medical Group, Professor, Dept. of Otolaryngology-Head & Neck Surgery, SKMC

Dr. Pribitkin is an Executive Vice President at Jefferson Health, a $7.3 billion, A+/A3 bond rated academic-community health system consisting of 18 hospitals, 50+ outpatient locations, and a managed health care organization. He is the president of the Jefferson Medical Group, which is comprised of over 3500 employed physicians and advanced practice providers across 3 states. He is a core member of the senior executive team with leadership accountability for clinical integration, operations, strategic and programmatic development. In partnership with the regional hospital presidents, he helps direct the Jefferson Health operation, including enterprise-level strategy

INTRODUCTORY REMARKS BIOS

9 – 9:30 a.m., Eastern Time U.S

THOMAS JEFFERSON UNIVERSITY AND COLLEGE OF THE BUILT ENVIRONMENT LEADERSHIP

development, governance, P&L oversight, system optimization, and revenue growth. He is the executive owner of the 17-floor Honickman Center, a $760M Specialty Care Pavilion to open 4/2024 in center city Philadelphia. He has led enterprise central scheduling and direct patient scheduling initiatives with top decile performance, chaired the Continuous Documentation Improvement Steering Committee with HIMSS7 certification and helped lead three successful EPIC installations across 9 Hospitals with highest EPIC rating.

A Professor of Otolaryngology and respected facial plastic surgeon, Dr. Pribitkin received his medical degree from the Perelman Medical School at the University of Pennsylvania and his MBA from The Wharton School. A perennial Top Doc, he has authored over 100 publications with an H-index of 30. He has been a Co-Investigator on successful P50 grants exploring the etiology and prevalence of smell and taste dysfunction with the Monell Chemosensory Institute and has helped develop the first pediatric test for smell dysfunction with Monell and the Nemours Institute. He published the first dose-response study on Botox cosmetic and originated the Sonic Rhinoplasty technique. He serves on the Board of Trustees of Wilmington University in Delaware.

BARBARA KLINKHAMMER, RA (DEU), DIPL.-ING

Dean and Professor, Thomas Jefferson University,
College of Architecture and the Built Environment (CABE)
Director, SMARTlab at Jefferson

An accomplished scholar, design educator, and architect, **Barbara Klinkhammer**, RA (DEU) Dipl.-Ing., serves as Dean of the College of Architecture and the Built Environment at Thomas Jefferson University. Klinkhammer brings a deep understanding of the contemporary professional design world and a timely vision of the future of design education. An expert on color theory, she has numerous publications and grants to her name focusing on color in the built environment. She co-founded the Jefferson Institute for Smart and Healthy Cities and actively takes part in the discourse of contemporary architecture through practicing and participation in international design competitions. She has served in leadership and board positions of numerous professional and academic organizations including the ACSA, ARCC and SESAH, and served as the co-editor of ARRIS. Klinkhammer holds the German equivalent of the Bachelor's and Master's degrees in architecture from the RWTH-Aachen and is a registered architect in Germany.

PANEL 1.

MULTISCALAR & CO-DESIGN APPROACHES

9:30 – 10:45 a.m., Eastern Time U.S.

THE INS & OUTS: MULTISCALAR DESIGN WITH THE FRANKFORT COMMUNITY, PHILADELPHIA

The presentation explores the outcomes of a senior-level design studio course at Thomas Jefferson University's School of Architecture and the Built Environment. The studio, comprising Landscape Architecture and Interior Design department students, collaborated with the Frankfort Community in Philadelphia through the Word of Faith Church, the Frankford CDC, and other community members. Together, they identified and developed co-design opportunities across urban, architectural, and interior scales. A key focus of the studio was to incorporate the neurodivergence paradigm into the design process, ensuring that the built environment accommodates diverse cognitive and sensory needs. The presentation highlights the dual objectives of the studio: addressing community-specific design challenges and integrating neurodiverse perspectives. The results underscore the complexities and rewards of such an interdisciplinary and inclusive approach, revealing insights into the potential for design to foster more inclusive and supportive environments. Through this case study, the presentation aims to contribute to the broader discourse on neurodivergence in design, advocating for a more empathetic and responsive built environment.

SEVERINO ALFONSO, *Director, Synesthetic Research & Design Laboratory, Assistant Professor, College of Architecture & the Built Environment (CABE), Thomas Jefferson University*

Severino co-directs the Synesthetic Research and Design Lab, where he partners with self-advocacy communities and industry experts to build collective knowledge around all-inclusive ways of perceptually experiencing our spaces. His creative work has received competitive funding and has been exhibited in international design venues such as the ECC 2021 Venice Biennial, the Trajan Market Museum of the Imperial Fora in Rome, the Municipal Theater of Piraeus in Athens, Greece, and the IE Creativity Center in Segovia, Spain. He is currently an artist in residence at the S+T+ARTS ReSilence and VOICE European Horizon Programs. He holds an MSAAD from Columbia University in NYC and two MS from the ETSAMadrid. He is a PhD Candidate SMARTlab Practice-Based PhD at TJU researching the effects of interactive art and embodied therapeutic environments on autistic adolescents

KIMBERLY DOUGLAS, Director and Professor, Landscape Architecture Program, Lab for Urban and Social Innovation, Stantec Term Chair, Robert Wood Johnson Fellow Interdisciplinary Research Leaders

Professor Kim Douglas is the Director of the Landscape Architecture Program at Thomas Jefferson University and the Lab for Urban and Social Innovation. She focuses on equitable and sustainable design through hands-on projects. Awarded the Anton Germinshuizen Stantec Term Chair in 2016, she researches the effects of nature on communities, including the acclaimed Park in a Truck project. Kim is also working on a Pollinator Network in southwest Philadelphia and a Robert Wood Johnson fellowship grant on the mental health effects of green spaces on teens.

As a licensed landscape architect and founding principal of STUDIO GAEA, her notable projects include the Cynwyd Heritage Trail and Linwood Avenue Park Plan. She actively promotes landscape architecture through teaching, volunteering, and participating in organizations like the Community Design Collaborative and the ACE Mentor Program. Recently, she received the ASLA National Community Service Award for her pro bono work.

LAILA HASSAN, Landscape Architecture student, Thomas Jefferson University

Laila Hassan is a Senior Landscape Architecture student at Thomas Jefferson University. She is the Vice President of the ASLA Student Chapter and a DEI Board Representative at Jefferson. Currently investigating materials used in urban landscapes and how landscape material can be

sustainable. In addition, her years as a climbing instructor have made her eager to engage in playscape design and explore how they can be more accessible to everyone, including those in the neurodiverse community.[1]

SIRETTA HUMPHREY, Pastor of the Word of Faith Church, Frankford, Philadelphia

Siretta Humphrey is currently the Pastor of the Word of Faith Church. In addition to pastoring the church, she has spent over 20 years working with children and families in the School District of Philadelphia, DHS, and various summer programs. The church is proud to sponsor and partner with the State Representative, Frankford CDC, and Community Volunteers for Faith and Unity events throughout the year. These initiatives include a Community Garden, Back to School events, toy giveaways, and collaborations with the Archdiocese to provide breakfast and lunch during the summer. This past summer, the church also served families with neurodiversity needs and was introduced to Biophilia by Jefferson. The Word of Faith Church remains committed to making a difference in the community.

FLOURISHING-BASED CO-DESIGN AS A MECHANISM FOR IMPACTFUL DESIGN WITH/FOR NEURODIVERSITY AND THEREFORE DESIGN FOR ALL

Neurodiversity-focused built environment design has become a necessary (sometimes hot-button) topic of discussion over the past few years, as the number of individuals identifying as neurodivergent[1] (versus neurotypical), the recognized importance of differing perspectives to foster creativity, and the number of companies wishing to curate spaces to attract diverse populations continue to rise. Unfortunately, to date, many proposed approaches overlook designing for the more equitable neurodiversity terminology and instead favor a more neurodivergent versus neurotypical (us versus them) mentality that emphasizes difference over similarity. A new design paradigm, one that is underpinned by architectural science and healthy buildings protocols but augmented by applied wellbeing science scholarship and inclusive design interrogation, is needed to engage individuals to understand needs and to curate environments that support the wide range of human neurodiversity—combatting the tendency for overgeneralized standards and identifying the necessity for new paradigms that recognize, learn from, and uplift difference—to design effectively with and for all. One proposed approach, known as eudaimonic design, originates in flourishing design research and examines how best to design artefacts and praxes to realize optimal health and wellbeing in concert with Aristotle's concept of eudaimonia, when people are their best, most authentic selves. The aim of this talk is threefold: to outline neurodiversity and inclusive design history and taxonomy; examine eudaimonic design as a means of engaging neurodiverse communities to envision and precipitate flourishing (functional and flexible places and experiences) by design; and present positive and negative examples of design for neurodiversity in research and practice for context.

[1]Neurodivergence is a term coined by the neurodiversity movement to encompass people who do not identify as neurotypical. It includes those with autism spectrum disorder, ADHD, dyslexia, dyscalculia, etc. as well as those without a formal diagnosis. Essentially, it refers to the range of neurological differences by which people think, feel, and behave with the world, incorporating cognitive behavioral, and social elements.

The term neurodiversity by definition is inclusive, as it encompasses the full spectrum of brain differences, including both neurodivergent and neurotypical individuals. All humans are (neuro) diverse because we all are unique, with individual fingerprints, genetic makeup, and brain function and therefore varying preferences, personalities, and perspectives. All human needs and preferences can be addressed by design within the world and within our built environments in particular—spaces that have been designed for neurotypicals primarily to date.

JENNA MIKUS, PHD, Founder, Eudae Group; Honorary Fellow, University of Melbourne's Centre for Wellbeing Science; Visiting Fellow, QUT's Centre for Decent Work & Industry

Dr Jenna Mikus is the Founder and Managing Partner of the Eudae Group—a design consultancy based in the US, UK, and Australia. As an advocate for balancing industry acumen with academic rigor, Dr Mikus blends art with science, quantitative analysis with qualitative exploration, and creativity with pragmatism. She is recognized as an Honorary Fellow with the University of Melbourne's Centre for Wellbeing Science, a Visiting Fellow with QUT's Centre for Decent Work & Industry, a Senior Fellow with the Centre for Conscious Design, a Research Advisor for the International WELL Building Institute, and the Founder of the Harvard University-affiliated Human Flourishing Network's Flourishing by Design special interest group.

CENTERING CO-DESIGN FOR INCLUSION IN AN INTERDISCIPLINARY DESIGN STUDIO

In the Fall of 2024, the interdisciplinary design course Design for Accessibility, Equity and Inclusion focused on Designing for the Sensory Landscape: Between Prospect and Refuge. The course, co-taught by Sarah Rottenberg and Magda Mostafa, challenged students at the University of Pennsylvania to create sensory respite spaces in three locations across the Penn campus in collaboration with neurodivergent and autistic individuals.

Through this course, students explored co-design as a method to address systemic inequities and foster inclusion, learning to balance power dynamics and adapt design tools for diverse communication styles. This presentation will showcase the course's pedagogical approach and student outcomes, emphasizing how co-design fosters empathy, critical reflection, and user-centered innovation.

We will highlight the activities we engaged in with students, as well as students' experience with co-design: their challenges of managing conflicting feedback, overcoming biases, and relinquishing control to empower co-designers as equal contributors. And ultimately, how students were able to build trust, listen deeply, and embrace uncertainty to create authentic and impactful solutions that reflected the lived experiences of neurodivergent collaborators.

By navigating foundational literature, interdisciplinary collaboration and real-world challenges, students developed the tools and mindset to lead inclusive design practices informed by lived experiences of Neurodivergent individuals themselves. Attendees will gain insights into actionable co-design strategies and the transformative potential of incorporating equity and accessibility into design education.

MAGDA MOSTAFA, Founding Partner and Principal of Studio™, Professor of Design at the American University in Cairo

Magda Mostafa is Founding Partner and Principal of Studio™, a design consultancy based in Dubai specialising in Autism and Neuro-Inclusive Design, as well as Professor of Design at the American University in Cairo. She is the author of the ASPECTSS® Design Index, the world's first research-based design framework for autism. ASPECTSS® was awarded the UIA Triennial Research Award in 2014 and Mostafa is the only laureate to be presented this award twice, awarded again in 2023 for her Autism Friendly University Design Guide. Through her consulting ASPECTSS® has been used in architectures for autism and neurodiversity across 5 continents and her work has been presented globally and was most recently exhibited at the 2021 and 2023 Venice Architecture Biennales. She collaborates globally with leading architectural practices including JSA/MIXdesign, a inclusive design consultancy based in NY where she currently leads their Autism and Neuro-Inclusive Design Lab. Information about her work can be found at her website www.autism.archi and www.studio-tm.online.

SARAH ROTTENBERG, Executive Director, Integrated Product Design and Adjunct Associate Professor, Stuart Weitzman School of Design, University of Pennsylvania

Sarah Rottenberg is an Adjunct Assistant Professor at the University of Pennsylvania Stuart Weitzman School of Design and the Executive Director of the Integrated Product Design Program, a master's program that bridges design, business, and engineering. Sarah specializes in bringing people together to design products and experiences that are desirable, meaningful, feasible, and viable. She is adept at articulating design processes and methods, teaching Design Thinking and Design Process to students across the university and for Wharton Executive Education. Sarah is a cofounder of Lia Diagnostics, a company that has developed a flushable pregnancy test – a sustainable product that puts women in control of their own experience. Sarah began her career as a design strategist at Doblin, Inc. and was a Directing Associate at Jump Associates. She has an MA in Social Sciences from the University of Chicago and a BS from Georgetown University.

10:15– 10:45 a.m.: In Dialogue. Moderated discussion and audience Q&A

PANEL 2.

SUPPORT FRAMEWORKS

11 a.m.– 12:15 p.m., Eastern Time U.S.

THE INFLUENCE OF ENVIRONMENT AND HIGH SENSITIVITY: NAVIGATING PERSONAL AND PROFESSIONAL WORLDS.

The presentation serves as an introduction to the Highly Sensitive trait (origin and characteristics) and demonstrates how the environment influences Highly Sensitive People (HSP), either enhancing or hindering their well-being. It focuses on the strengths and challenges of this trait in daily life, offering an opportunity for self-awareness and empowering individuals to take responsibility for creating a more conscious and healthy life. It explores how spaces and environmental elements (at home, work, and in public places) can impact the emotional and physical responses of HSPs, using examples of cities and cultures as key factors in their personal and professional development.

ANTONIO CHACON
President of the Board of Trustees, Spanish High Sensitivity Foundation (Fundespas)

Antonio Pérez Chacón holds a PhD in Psychology (specializing in Human Resources) from the University of Seville. He has experience as an assistant professor in the Master's Degree in Occupational Risk Prevention at UNIR and in the Master's Degree in Integrated Systems, as he is an Auditor in Quality and Environment by the IRCA (The International Register of Certificated Auditors). He has been awarded the Gold Medal of the General Council of Industrial Relations and Labour Sciences, the Cross of Honour for Health and Safety at Work, and the Gold Medal of the Europa Forum for Professional Prestige. He is the Secretary General of the Association of Highly Sensitive Professionals and Psychologists of Spain and President of the Board of Trustees of the Spanish Foundation for High Sensitivity. He is a specialist in Sensory Processing Sensitivity in Organisations

CLARA DE CASTRO, *Expert in High Sensitivity and Emotional Intelligence. Registered Architect and Interior Designer*

Originally from Spain, Clara has lived and worked in London, Stockholm, New York, and Toronto. This cultural diversity has provided her with the opportunity to explore how the environment impacts our lives, both as an architect and interior designer, while also feeding her curious mind. With 15 years of experience in the field and having discovered her own Highly Sensitive trait 11 years ago, she transitioned into a new professional chapter to become an expert in Highly Sensitive People (HSP) and Emotional Intelligence. Her purpose is to help individuals transform their differences into strengths through one-on-one sessions, workshops, creative exhibitions, and a specialized newsletter that guides others on this journey. Her goal is to contribute to building a more human and inclusive world, where there is space for everyone.

STUDENT-CENTERED AI: REVOLUTIONIZING THERAPEUTIC TOOLS WITH A FOCUS ON INDIVIDUAL NEEDS

This presentation explores the transformative potential of student-centered AI design in therapeutic settings, focusing on how personalized, user-focused technology can significantly enhance support for neurodiverse individuals. Through a collaborative effort between Shrub Oak International School and Wide Therapy—recognized for its patented digital AI platform and unique treatment methodology—attendees will gain insights into the principles of student-centered design. A detailed case study will be presented, demonstrating how Wide Therapy's advanced AI tools, rooted in a distinctive and patented methodology, were specifically tailored to address a student's

therapeutic needs, leading to successful integration. This approach aligned with the student's preferences and significantly enhanced their potential, as evidenced by data-driven results. This session aims to inspire and equip educators and clinicians with innovative methods to implement AI solutions that truly address the unique requirements of neurodiverse students.

LAUREN KOFFLER, MSW,
Head of Admissions, Communications, and Client Relations at Shrub Oak International School

Lauren is Head of Admissions, Communications, & Client Relations at Shrub Oak International School, a therapeutic day and residential school for autistic children, adolescents, and young adults. Lauren has more than a decade of experience in education and, as part of Shrub Oak's leadership team, feels fortunate to collaborate with a group of like-minded professionals committed to a common goal: providing autistic students with an outstanding education in a warm, respectful, family-centric environment. Lauren received her undergraduate degree from the University of Wisconsin-Madison, her master's degree in social work from Fordham University, and is currently pursuing her PhD at SMARTlab – Thomas Jefferson University. She is passionate about exploring ways to support autistic individuals, particularly those with co-occurring mental health conditions.

RINAT HITELMAN, BCBA,
Co-Founder and Clinical Director, Wide Therapy

Rinat Hitelman is a Board-Certified Behavior Analyst (BCBA) and Clinical Director with years of experience in early intervention and autism therapy. She has devoted her career to improving the lives of children with developmental challenges, collaborating with families, educators, and care teams to develop personalized, evidence-based solutions. As Co-Founder and Clinical Director at Wide Therapy, Rinat leads the clinical strategy, ensuring the platform's therapeutic foundation is both scientifically rigorous and highly practical. Her expertise in behavior analysis and skill acquisition has been pivotal in shaping Wide Therapy's patented digital solution, which empowers children to develop independence and essential life skills. Rinat is passionate about creating scalable, accessible solutions that improve outcomes for children and reduce the burden on care providers. She is committed to advancing innovation in digital health and ensuring every child has the opportunity to reach their full potential.

11:45 a.m. – 12:15 p.m.: In Dialogue. Moderated discussion and audience Q&A

12:15 – 1 p.m: LUNCH BREAK
Lunch provided in room DEC220

PANEL 3.

BUILDING OUR PRACTICE

1–2:15 p.m., Eastern Time U.S.

LAB PLANNING FOR NEURO-INCLUSION

Foundational knowledge regarding the population's neurodiversities is well understood on a medical and psychological level. However, designers and those involved with creating the built environment have a long way to go to establish spaces where all humans, no matter their neurodiversity, can thrive. More specifically, lab environments have long been designed in a methodical and efficient way to best utilize and control space with little adjustment for individual preferences. In an effort to better understand the needs of our lab users, the Spatial Equity Research Group at PAYETTE has begun documenting lived experiences from lab users with the goal of designing for neuro-inclusive labs and research space.

Our survey, Lab Gap!, delves into the nuances of designing laboratory environments with some of the most stringent mechanical and safety considerations. Beyond the infrastructure, our goal is to explore questions around sensory experiences and potential conflicts with existing lab planning for neurodiverse individuals. This presentation will share initial findings from the survey, our process of designing an inclusive survey, how we've reached our target audience, and strategies to incorporate findings into our projects.

ARIA HILL
Architectural Designer

Aria Hill has maintained a passion for social justice throughout her architectural education as evidenced by her TEDxVirginia Tech talk "Changing the Face of Architecture." Today, her professional work in laboratory design continues to uphold the values consistent with striving for inclusive and equitable practices. Upon joining the Spatial Equity Research Group at PAYETTE, she has worked to elevate the education of architects and designers in spatial justice.

LARISSA SATTLER
Architect (AIA)

As a young designer, Larissa Sattler was passionate about studying how spatial equity could have negative and positive effects on individuals and the public. Her research pursuits began in St. Louis with thesis work and museum exhibitions on the racial and historical legacies of urban injustice - segregation by design. Upon joining PAYETTE she launched the Spatial Equity Research Group as a citizen-led initiative to promote the design of equitable spaces within the practice. The research group has acted as a catalyst and forum for promoting design and spatial justice.

ELLIE THOMAS
Architectural Designer

Ellie Thomas joined the research group at its pivot point to research neuro-inclusion and has championed initiatives related to the topic. Her past research efforts include how one's spatial perceptions change with dementia and cognitive decline as well as other neuroscience and architecture studies. Today, her growing expertise in healthcare design paired with passion for research on neuro-inclusive spaces has helped to excel not only the group's knowledge, but how PAYETTE strategically thinks about neuro-inclusive design within projects.

LESSONS LEARNED FROM NEURODIVERGENT SCIENTISTS

Existing research on neurodiversity and the built environment rarely discusses the neurodivergent person inhabiting non-office or non-healthcare spaces, such as laboratories. But neurodivergent people exist everywhere in the public spaces, as they are people, just like everyone else. And in the words of a neurodivergent scientist on reddit, "Based on my experience, the Venn Diagram of "is a scientist" and "is neurodivergent" is essentially a circle." Historically, laboratory environments have been designed for the science, not the humans that inhabit

laboratory spaces. The science often requires stringent criteria for the environment, leaving little room for varying needs for the comfort of the scientists. At HERA laboratory planners, our design work pushes to put the science, and (equally as important) the people first.

This presentation will discuss the iterative process of conducting qualitative research with neurodivergent scientists. It will conclude with some findings, showing the range of responses from neurodivergent scientists on their experience working in scientific laboratories.

RACHEL UPDEGROVE,
WELL AP, Assoc. AIA, HERA laboratory planners.

Rachel is an autistic woman, an Adjunct Faculty at Thomas Jefferson University, and a Lab Planner who funnels her passion for neurodiversity into discovering the needs, wants, and cultures of HERA laboratory planners' clients to help create the best laboratory environment tailored to them. As a neurodivergent woman, she has spoken and advocated for neurodivergent people on regional and global AEC stages, encouraging designers to think beyond stereotypes and consider the needs of people changing.

DESIGNING LEARNING ENVIRONMENTS FOR A SPECTRUM

There is no one size fits all set of educational design strategies or models to foster success for Neurodivergent Individuals. Over the past twenty years, Heckendorn Shiles Architects has had the honor of designing a broad portfolio of impactful environments to meet the needs of individuals with a wide range of differences. These designs have served preschoolers to primary education students to adults, with varied emphasis on educational to occupational to therapeutic needs. Through our portfolio, we have striven to understand the design requirements, challenges and opportunities for individuals with Down Syndrome, "bright students who learn differently", non-verbal individuals, children with cerebral palsy, and students requiring "a safe and caring learning environment through structured, multisensory instruction". Like neurodiversity itself, many of these projects "look and feel" much like "typical" spaces but include subtle design nods that respond to the individual needs of the individuals served. At its essence, the very word neurodiversity means variety, and the inherent beauty that comes with that variety. This talk will discuss subtle and overt design ideas utilized by Heckendorn Shiles Architects in a wide Spectrum of spaces, each with their own unique mission, population, regulatory requirements, and design strategies.

MATTHEW HECKENDORN, AIA, LEED AP, NCARB,
President of Heckendorn Shiles

Matthew Heckendorn's professional experience encompasses educational, corporate/workplace, healthcare/therapeutic, residential, athletic/recreational, banking, food service, transportation, and retail design, as well as campus master planning and adaptive reuse. Professional lectures include Forum for Architecture, Design on the Delaware, Greenbuild, Pennsylvania Brownfields Conference, Urban Land Institute, and the University of Pennsylvania's Wharton School. Matt has served as an Adjunct Professor at Drexel University, a member of the Haverford Township Planning Commission, and the current Property Committee Clerk for Stratford Friends School's Board of Trustees. Matt's interest in design for Neurodivergent Individuals spans twenty years of professional practice and eighteen years of parenthood.

1:45 – 2:15 p.m.: Moderated discussion and audience Q&A.

PANEL 4.

PRACTICAL APPLICATIONS OF CROSS DISCIPLINARY WORK

2:30 – 3:45 p.m., Eastern Time U.S.

TAKE A SEAT – THE DOCTOR WILL SEE YOU SOON

The patient visit starts before the doctor sees you. It begins when you enter the building. Jefferson Health sought to improve the entire medical visit for all patients by working holistically and innovatively using multidisciplinary collaborations with key neurodivergent stakeholders to provide input and develop pathways that make the medical home a home for all. This session will explore the Honickman story with a special focus on art and furniture in the building. Physicians, industrial designers, graduate students, furniture manufacturers, artists, neurodivergent participants, and caregivers all participated in creating a more comfortable place to receive healthcare. With a variety of perspectives, from concept to prototype, through production to installation, the team will discuss the challenges and achievements of creating the sensory seating along with additional novel features available in the Honickman Center.

ELIJAH JONES
Clerk typist, Philadelphia Corporation for the Aging Protective Services

A recent graduate of the Kanbar College of Design, Engineering & Commerce (DEC), School of Design and Engineering at Thomas Jefferson University with a BS in Industrial Design, Elijah Jones combines creativity and compassion in his professional and community roles. Elijah also serves as the Creative Media and Communications Director/Administrator for his church. With a passion for meaningful design, participated in numerous design projects including the student design team for the sensory seating. Elijah is proud to be one of the original student designers of a chair tailored to the needs of neurodiverse patients, reflecting his dedication to innovation and inclusivity in every aspect of his work.

ROB MELLVILLE
Visiting Assistant Professor, Kanbar College of Design, Engineering & Commerce (DEC), Thomas Jefferson University

Rob is originally from the UK where he obtained a degree in Furniture design from Ravensbourne college of Design and Communication in 1994. After graduation Rob won a national competition for the design of a chair that used an innovative construction and was developed over two years working with the faculty and facilities of the Royal college of Art. The success of the project prompted Rob to found 'BYPRODUCT' a design-led fabrication and marketing company which developed an entire line of contract furniture using paper honeycomb technology. Working internationally the company carried out many projects with Architects and Interior designers. Rob's work was exhibited and sold at Sotheby's and won an Architectural Review award for product excellence. In 2007, Rob moved to the United States where he has taught Furniture design in several universities. In 2024, Rob was awarded a MS degree in Sustainable Design from Thomas Jefferson University.

WENDY J. ROSS, MD, FAAP
Inaugural Director, Jefferson Health Center for Autism and Neurodiversity, and Clinical Associate Professor, Behavioral Health

Wendy graduated from Mt Sinai School of Medicine and completed Pediatrics residency at Yale and Developmental Pediatrics fellowship at Harvard. She started the first autism air travel program, upon which legislation was based and for which she was named a top 10 CNN Hero. She has worked with sporting venues, museums, and healthcare enterprises to make them places of belonging for the neurodivergent population. She developed interdisciplinary courses at Thomas Jefferson University combining design and health with community engagement and speaks internationally on the topic.

LONNIE SMITH
Owner, Autisarian

Lonnie Smith, US Air Force veteran, author, and filmmaker, founded Autisarian, a platform uniting autistic entrepreneurs, artists, and creators to foster financial success and inclusion. Dedicated to empowering the autistic community, Lonnie's creative works include the feature film Downgraded Citizen, introducing the first autistic superhero, and the Superhero Ribbons bedtime stories, which inspire hope and resilience. As the father of renowned sculptor Kambel Smith, Lonnie celebrates the intersection of autism and creativity. Through storytelling and advocacy, he strives to raise awareness of neurodiversity and showcase the boundless potential within the autistic community.

SABRA TOWNSEND
Director of Operations, Jefferson Health Center for Autism and Neurodiversity

Sabra's position is multi-faceted in the field of autism services: directing Center operations, clinical and strategic development, training, and grants management. Prior to Jefferson, she worked in public health, focusing on community service to children with special needs. She directed an AmeriCorps national service program, managed medical and nursing students who performed basic health assessments, and provided training to both parents and professionals on topics including special education and everyday strategies for improved life outcomes. Her neurodivergent son informs her work on a daily basis. Sabra earned her BS in Industrial Engineering from Lehigh University with a concentration in Operations Management and is enrolled in the TJU/UCD SMARTlab PhD program through the College of Architecture and the Built Environment, Thomas Jefferson University.

GARY WELFER,
Program Manager – Specials, MillerKnoll - North America

Gary has been in the office furniture industry for 29 years and has a strong knowledge base of product and well-rounded experience from the dealership, customer and manufacturer perspective. He has held several different positions within MillerKnoll ranging from Technical Sales Consultant, Applications Specialist, Competitive Analyst, Product Manager and Bid Desk Manager to his current position as Program Manager within Specials. With his broad range of experience, background and skills, Gary understands the evolving work environment and the complexities that challenge our customers. To help solve for these needs he leverages his vast knowledge of MillerKnoll's portfolio of products, customization capabilities, and working together driving positive change for the good of humankind. Gary holds a BS degree in Interior Design from LaRoche College, Pittsburgh, PA and a Master's in Management with a concentration in Marketing from Aquinas College, Grand Rapids MI.

3:15 – 3:45 p.m.: In Dialogue. Moderated discussion and audience Q&A

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Synesthetic Research & Design Lab (SR&DL) at the College of Architecture & the Built Environment, Thomas Jefferson University

The Synesthetic Research and Design Lab, (SR&DL), directed by Severino Alfonso and Loukia Tsafoulia within the College of Architecture & Built Environment, is a "design as research" collaborative platform that develops practical and theoretical methodologies that critically frame the interactions between humans, objects, and environments. In meshing scientific expertise with artistic praxis, immersive technology, industry, and the lived experience of the community, the work developed at the SR&DL explore interaction and immersion as a valuable creative praxis in softening established disciplinary borders.

The SR&DL develops research-driven interactive and experiential installations and experimental prototypes as a way to transgress the art, health, and design fields' boundaries. The lab investigates design systems that provide a layered understanding of embodied spaces — affective and performative — through the experimental meshing of the physical and digital realms. They offer a resource for the future of elastic and inclusive environments as they address accessibility through interaction with technology and sensory reciprocity.

The SR&DLab collaborates with the Jefferson Health Center for Autism and Neurodiversity, the Occupational Therapy Department at Thomas Jefferson University, and the University College Dublin Inclusive Design Research Centre of Ireland in partnership with SMARTlab teams in Dublin and Cahersiveen, Ireland, and Niagara Falls, Canada. It also partners with self-advocacy communities and industry experts to build collective knowledge that addresses all-inclusive ways of perceptually experiencing our spaces. Through symposia, publications, and applied research, these collaborations stimulate cross-disciplinary and community dialogue aiming to catalyze comfort, celebration, and joy within our current environments.

For more information visit: *www.jefferson.edu/academics/colleges-schools-institutes/architecture-and-the-built-environment/synesthetic-research-and-design-lab* and *www.synestheticdesignlab.com*

Severino Alfonso and **Loukia Tsafoulia**, are registered architects, educators, and researchers whose creative work examines the interplay of information, materiality, human cognition, and the senses. They are assistant professors at the College of Architecture and the Built Environment, Thomas Jefferson University where they co-direct the *Synesthetic Research and Design Lab*. Before joining TJU, they taught at Barnard + Columbia Architecture, Pratt Institute, Parsons School of Design, New York Institute of Technology, the Spitzer School of Architecture at The City College of New York, and the New York City College of Technology.

Their work has been exhibited in international art and design venues such as the Trajan's Market Museum of the Imperial Fora in Rome, Italy (2022), the 2021 European Cultural Center, Venice Architecture Biennale in Venice, Italy, the Municipal Theater of Piraeus in Athens, Greece (2021-2022), the IE Creativity Center in Segovia (2023), the London 3D print show, and the ICFF in New York. They have been awarded numerous funding for the development and exhibition of their work. Loukia and Severino are currently artists in residence at the S+T+ARTS Resilence European Horizon Program.

Severino holds a Post-Professional MS in Advanced Architectural Design from the Graduate School of Planning and Preservation, Columbia University in NYC and two MS in Urban Design and Advanced Architecture respectively from the School of Architecture in Madrid (ETSAM). He is a PhD Candidate SMARTlab Practice-Based PhD at Jefferson researching the effects of interactive art and embodied therapeutic environments on autistic adolescents.. He has worked with international architectural studios such as Carme Pinos, Angel Fernandez Alba, and Federico Soriano in Spain, Lomar Arkitekter in Sweden, and Per-forma Studio, KDF Architecture, and Natalie Jeremijenko in the United States.

Loukia received her diploma in Architecture Engineering from the National Polytechnic School of Athens where she is a Ph.D. candidate. She also holds a Post-Professional MS in Advanced Architectural Design from the Graduate School of Planning and Preservation, Columbia University. Loukia is the editor and author of the books *Transient Spaces* and *KatOikia, Housing Explorations at the Intersection of Pedagogy and Practice*.

PRESENTED BY

Center for Autism and Neurodiversity (CAN) at Thomas Jefferson University and Jefferson Health

The Center for Autism and Neurodiversity–Jefferson Health drives a collaborative effort among those affected by autism, clinicians, and community partners to create pathways for meaningful interaction and participation throughout the lifespan. The Center takes a novel approach by taking those from differing professional and personal experiences and incubating programmatic conceptual shifts to move the needle from the concept of a 'cure' to creating opportunities for those who think and interact differently and examining the impact both on those individuals and the world at large throughout the lifespan. Jeff CAN is working on design in many formats including the built environment, fashion, immersive art, and furniture. Their first line of sensory waiting room furniture is being manufactured by Miller Knoll. The Center is excited to engage with the *Synesthetic Research and Design Lab* in exploring the physical environment and its impact on the population of those affected by autism. This collaboration serves as a catalyst that will open new pathways in how we design spaces. Its goal is to spark enthusiasm, ongoing dialogue, and exploration in how we all view the world and our roles within it, emphasizing the value of the integration of multiple perspectives in maximizing possibility for everyone. The Center continuously strives to learn from multidisciplinary and stakeholder perspectives, pilot new programs, and measure outcomes, in an effort to create optimal endeavors and strategies that can be widely disseminated to enhance opportunity.

Wendy J. Ross, MD, is a developmental and behavioral pediatrician and the inaugural director of Jefferson's Center for Autism and Neurodiversity, which merges her love of clinical medicine with her community inclusion programs. Dr. Ross created the first Autism Airport Inclusion Program with mock flights, upon which Senator Lautenberg based legislation. She additionally has pioneered programs at museums, sporting events, and other settings. In 2014, Dr. Ross was recognized internationally as a top 10 CNN hero. She attended the Humanities and Medicine program at Mt Sinai School of Medicine in New York, where she graduated in the AOA honor society. She completed a pediatrics residency at Yale and a fellowship in Developmental Pediatrics at Harvard.

Sabra Townsend is the Director of Operations for The Center for Autism and Neurodiversity. Her position is multi-faceted in the field of autism services: directing Center operations, clinical and strategic development, training, and grants management. Before Jefferson, she worked in public health, focusing on community service to children with special needs. Most recently, focusing on individuals with intellectual and developmental disabilities, she directed an AmeriCorps national service program, managed medical and nursing students who performed basic health assessments and provided training to both parents and professionals on topics including special education and everyday strategies for improved life outcomes. Her work experience includes human factors engineering and technical aviation publications at the Federal Aviation Administration as well as community coordinating at the Philadelphia Dept. of Public Health and The Children's Hospital of Philadelphia. Sabra served as group leader on the statewide PA Autism Task Force and works with the city, state, and private organizations to improve services for people with special health care needs. Recent publications topics include Engaging University Partners in HealthMeet® - assessments for people with intellectual and developmental disabilities. Honored with the Small Miracles award by the Center for Autism in 2012. Sabra earned her BS in Industrial Engineering from Lehigh University with a concentration in Operations Management.

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***The Inclusive Design Research Centre*, University College Dublin and *SMARTlab* teams at University College Dublin (UCD), Skelligs (Ireland) and Niagara (Canada)**

SMARTlab was founded by Professor Lizbeth Goodman in 1992, with a vision to create an education system that values diversity, values women, values children, values wisdom and learns from the world's most diverse people, including the elders and other knowledge-keepers. SMARTlab specializes in developing ground-up technology solutions for people of all levels of cognitive and physical ability, from mainstream learners of all ages to 'special' and 'gifted' learners and lifelong learners in the developed and developing worlds. The aim is to transform lives through providing unlimited access to education and tools for creative expression.

SMARTlab is an academic collective created to ignite change. For three decades, SMARTlab has run an award- winning practice-based PhD programme and delivered high-impact research, development and innovation programmes and projects. SMARTlab aims to bring together the brightest minds across disciplines and to provide them with the tools they need to contribute to solving real-world problems and building sustainable solutions. We provide world-class research and incubation space and offer a brain trust for academic staff, practice- based PhD students, Postdoctoral Researchers, transdisciplinary teams spanning the Arts, Engineering, Humanities, Social and Natural Sciences, Connected Public Health and Business Innovation domains, alongside private and public sector partners.

Lizbeth Goodman is the Chair of Creative Technology Innovation and Full Professor of Inclusive Design for Education at University College Dublin, where she directs the Inclusive Design Research Centre of Ireland at UCD, in partnership with SMARTlab clg and the Academy4theFuture. She is Chair of EDI for SMME and is an Athena Swan programme representative for Engineering & Architecture. Lizbeth founded the SMARTlab in its first iteration in 1992 and has developed the award-winning practice-based PhD Programme through the institute, along with the associated MAGIC Multimedia and Games Innovation Centre and Gamelab, which Lizbeth designed with industry collaborators as a prime knowledge transfer space in the London docklands prior to moving the lab to Dublin in 2010-11.

Prior to joining UCD, Lizbeth was Director of Research for Futurelab Education, working with David Puttnam and the team to establish innovative platforms for the future of education in a context of global change. In 2018 she launched the Academy4theFuture at Davos, and in 2019 she and the team returned to Davos to present the SMARTlab WEF Women awards, delivered to the UNDP summit in October 2020. In 2019 she was named Woman of the Decade by WEF Women. In 2008 she was named Best Woman in Academia and the Public Sphere; and Best Woman in Technology by the Blackberry Rim international awards panel. She was nominated to Chair the Royal Irish Academy's Social Sciences Committee in 2012. She is the author/editor of 14 books and many peer- reviewed papers, has supervised 55 PhDs to successful completion, and is a prolific broadcast presenter on TV, Radio and Online. She is PI and co-PI of several major funded research projects, and an evaluator and judge of numerous research council and EC evaluation panels.

She is known as an expert in Digital Inclusion, including learning models for communities at risk. She is an award- winning advocate of community-based ethical learning and teaching models using interactive tools and games to inspire and engage learners of all ages. She specializes in working with people who do not have physical voices (whether due to disability, injury, illiteracy, or other social/political factors), enabling the use of new creative technologies for expression vocally, in writing, and with movement and music.

SPONSORED BY

Shrub Oak International School

Shrub Oak International School is a therapeutic day and residential school serving autistic children, adolescents, and young adults with complex co-occurring conditions. Located on 127 gated acres less than one hour from New York City, we offer strength-based and passion-based learning supported by a highly individualized, transdisciplinary approach. Specialty areas include complex students with behaviors; NVLD; intellectual disability; dual diagnoses of autism and co-occurring conditions including visual and hearing impairments; medically fragile students; and elopement.

In 2024, Shrub Oak will be offering a new program, the Pines at Shrub Oak, for autistic students in need of significant psychiatric support before transitioning to a less restrictive environment. Students at the Pines will receive psychiatric services in addition to academic and life skills instruction in a safe, supportive environment with a 2:1 student-to-staff ratio.

For more information regarding Shrub Oak International School or the Pines at Shrub Oak, visit www.shruboak.org.


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