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

Intentional Connections

THURSDAY, APRIL, 18 | 6 p.m.

Opening reception: LARK restaurant

FRIDAY, APRIL 19 | 9 a.m. to 4 p.m.

Symposium: Hybrid format
In person: East Falls Campus, DEC Center, Room 211–212
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 the University College Dublin Inclusive Design Research Centre of Ireland with SMARTlab teams, and it is sponsored by Shrub Oak International School.

Jefferson.edu/NeurodiversitySymposium

Thomas Jefferson University

JEFFERSON 200

Building on the previous three years' symposia, FALL2020 *Building Community and Rethinking the Built Environment*, FALL2021 *Immersive Experiences*, and FALL2022 *PlaceMaking*, respectively, this year's symposium focuses on ***Intentional Connections*** and ways we *are all in together* to expand the scope of the dialogue with a focus on *Arts and Science cross-pollination*, *Design Collaboration, Education as a Catalyst* and *Participatory Research*.

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.

INTRODUCTION/OPENING REMARKS

9–9:20 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
Wendy Ross, Inaugural Director, Thomas Jefferson University, Jefferson Health

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

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

Caitlin Sweetapple, EdD, Director of Research

SMARTlab
Lizbeth Goodman, Founder/Director, SMARTlab, Founder/Director, the Inclusive Design Research Centre of Ireland @ UCD

9:20–9:25 a.m.

Susan Aldridge

Interim President
Thomas Jefferson University

9:25–9:30 a.m.

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

Via Arts

ARTS | SCIENCE

9:30–9:45 a.m.

Antonio Camurri

Art-inspired Interactive Systems: the DanzArTe Emotional Wellbeing Technology Project

9:45–10:15 a.m.

Raegan Davis, Rosemary Frasso, Lyn Godley, Nate Godshall, Elijah Jones, Wendy Ross

Immersive Art for Wellbeing: A Deep Dive into Calm at Ravenhill Chapel

10:15–10:45 a.m.

In Dialogue

Moderated discussion and audience Q&A

11 a.m.–12:15 p.m.

PANEL 2

Reaching Out

DESIGN | COLLABORATION

11–11:15 a.m.

Phuong Lan Nguyen

Learning from Experiences of Autistic Adults: The Role of the Built Environment in Independent Living

11:30–11:45 a.m.

Jennifer Carpenter, Linda Friedlaender, Eron Friedlaender, Stuart Neilson, Denise Resnik, Irina Verona, Chris Walsh

Advancing Meaningful Inclusion through Design: Cross-Disciplinary Collaboration

11:45–12:15 p.m.

In Dialogue

Moderated discussion and audience Q&A

LUNCH BREAK – 12:15 – 1 p.m.

1–2:15 p.m.

PANEL 3

Shifting Cultures

EDUCATION | PARTICIPATION

1–1:15 p.m.

Stephen Shore

Listening to autistic voices: What shifting the paradigm to participatory research reveals about prioritizing good mental health for autistic individuals

1.15–1:30 p.m.

Laura Sibbald

Spark Authenticity: Student-Led Opportunities for Meaningful Engagement in Higher Education

1.30–1:45 p.m.

Camille Proctor

Cultivating Intentional Connections: Education as a Catalyst in Culturally Diverse Neurodivergent Spaces

1:45–2:15 p.m.

In Dialogue

Moderated discussion and audience Q&A

2:30–4 p.m.

WORKSHOP

Neuroinclusive Practices @ the Design Process

Shannon McLain, Magda Mostafa, Elena Sabinson, Rachel Updegrove

Methods of Neuro-inclusive Co-creation

Times shown are Eastern Standard Time.

INTRODUCTORY REMARKS

9 – 9:30 a.m., Eastern Time U.S.

EVENT ORGANIZERS, PARTNERS & SPONSORS

(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*

SHRUB OAK INTERNATIONAL SCHOOL

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

Caitlin Sweetapple, EdD, *Director of Research, Shrub Oak International School*

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*

INTRODUCTORY REMARKS BIOS

9 – 9:30 a.m., Eastern Time U.S.

SUSAN ALDRIDGE, PhD

Interim 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.

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.

VIA ARTS ARTS | SCIENCE

9:30 – 10:45 a.m., Eastern Time U.S.

ART-INSPIRED INTERACTIVE SYSTEMS: THE DANZARTE EMOTIONAL WELLBEING TECHNOLOGY PROJECT.

Art and science are often viewed as distant domains only loosely connected. In recent years we are now witnessing more interaction between the two. This has led to an increased awareness of how art and science are indeed two different but strongly coupled aspects of human creativity, both driving innovation as art influences science and technology and as science and technology, in turn, inspire art. Recognizing this mutually beneficial relationship, the Casa Paganini research center cultivates the intersection of scientific and technological research in human-centered computing where art and humanistic culture are a fundamental source of inspiration in a trans-disciplinary approach. In this presentation, I discuss concrete examples on how our collaboration with artists informed our work on the automated analysis of nonverbal expressive and social behavior and interactive sonification, including presentation of some of the scientific and technological results from the EU projects H2020 FET PROACTIVE EnTimeMent and EU Horizon Europe STARTS ICT Resilience and the DanzArTe-Emotional Wellbeing Technology project.

Casapaganini.unige.it, youtube.com/infomusLab, https://digitalhumanities.dibris.unige.it/ACW-track-international/

ANTONIO CAMURRI, PHD, *Casa Paganini Research Centre and DIBRIS, University of Genoa, Italy*

Antonio Camurri, holds a PhD in Computer Engineering and is a full professor at the University of Genoa (Polytechnic School), where he teaches Human Computer Interaction (MS Computer Engineering; MS Digital Humanities). He is the scientific director of Casa Paganini Research Centre. His research combines human-computer interaction and affective computing with artistic and humanistic research: non-verbal multimodal interactive systems; automated analysis and interactive sonification of non-verbal full-body expressive gesture, emotion, and social signals in performing arts, active experience of cultural content, cultural welfare, therapy, and rehabilitation. Coordinator of 6 EU ICT and FET projects, Principal Investigator in over 20 EU projects and industry contracts. Member of the editorial boards of the Journal of New Music Research and of Plos One journal, of the ESF College of Expert Reviewers, member of the board of directors of Museo Palazzo Reale of Genoa, co-director of the Joint Research Laboratory ARIEL (Augmented Rehabilitation Lab) with Gaslini Children Hospital. Scientific collaborations in artistic projects include music theatre projects of Luciano Berio (Scala di Milano 1996; Salzburg Festival 1999) and dance projects of Virgilio Sieni in 2017. Coordinator for the University of Genoa of 2004, 2005, and 2006 New York University Summer Program on Music, Dance, and New Technology.

IMMERSIVE ART FOR WELLBEING: A DEEP DIVE INTO CALM AT RAVENHILL CHAPEL.

Exposure to art impacts human health and can, in the healthcare setting, improve the patient experience, lead to shortened hospital stays, improve recovery time, and reduce the need for pain management. However, most of this research focuses on static art. Godley et al. (2023) found that art that includes dynamic light can also lower stress. To further explore the potential impact of exposure to art using DL, students in the TJU class 'Lighting as Public Experience' created a fully immersive experience housed in Jefferson's Ravenhill Chapel, designed to create a calming experience for fellow students and others, including a group of neurodiverse patients.

In collaboration with the Student Health Program, Counseling Center, and faculty advisors, students were invited to participate in the experience. Online pre- and post-

surveys were used to collect feedback on student perspectives on the experience. Jefferson researchers from JCPH/SKMC, Center for Behavioral Medicine, and Center for Autism and Neurodiversity, along with graduate assistants, have completed preliminary data analysis, and the findings are positive, e.g., post-experience respondents reported feeling reductions in stress and increased feelings of relaxation.

This presentation will describe the DL experience and data collection approaches deployed to evaluate the impact of those exposed.

RAEGAN DAVIS, MS, *Statistician, Jefferson College of Population Health*

Raegan Davis is a biostatistician based in the Office of Research at Jefferson's College of Population Health. Prior to working at Jefferson, she completed her master's at Temple University, where her research combined critical theory and quantitative methodology to explore the intersections of economics, inequality, and policy outcomes from vaccine access to democratization.

ROSEMARY FRASSO, PHD, SM, CPH,
Professor Population Health, Jefferson College of Population Health, Director, Public Health, and Director, Mixed Methods Research, Asano-Gonnella Center for Research in Medical Education and Health Care, SKMC

Rosemary Frasso is a health equity researcher and public health educator. Frasso earned a Ph.D. from the University of Pennsylvania and master's degrees from the Harvard School of Public Health. Her current research focuses on integrating qualitative and quantitative methods in projects designed to improve the health and well-being of vulnerable populations. Frasso embraces traditional and creative data collection approaches, including, arts-informed research, photo-elicitation, and photo-voice. Frasso works on several cross-disciplinary projects with educators, artists, and economists who are committed to using qualitative methods to support and enhance community collaborations and to amplify the voices of vulnerable populations.

Lyn Godley, MFA, *Faculty at Thomas Jefferson University, Industrial Design Program, Director of Jefferson Center of Immersive Arts for Health.*

Lyn Godley is a Professor of Industrial Design at Thomas Jefferson University, where she is developing curricula in Lighting Design with a focus on Light as Experience. She is also the Director of the Jefferson Center of Immersive Arts for Health, which investigates the impact of new media art on health. In addition, Godley is a multi-media artist with work in numerous museums and private collections. Since 2000, her studio work has focused on exploring the relationship between art and technology – linked to her research on how integrating dynamic light in artwork can create a deeper engagement with the user.

Nate Godshall, *third-year undergraduate student at Thomas Jefferson University, Industrial Design Program.*

Nate Godshall a third-year Industrial Design student at Thomas Jefferson University, is passionate about multimedia production. He recently collaborated in the production of an immersive art experience focused on well-being through digital projection mapping. Nate's expertise in sound design and music production played a role in enhancing the project's impact.

Elijah Jones, *fourth-year undergraduate student at Thomas Jefferson University, Industrial Design Program.*

Elijah Jones is a senior at Thomas Jefferson University, pursuing a Bachelor of Science degree in Industrial Design. Alongside a concentration in furniture design, Elijah has developed a keen interest in lighting design. Recently, he collaborated with a team of students and Professor Lyn Godley to create an immersive lighting experience using projection mapping. Elijah's innovative approach and passion for design showcase his dedication to pushing creative boundaries in the field of Industrial Design.

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

Wendy Ross is a developmental pediatrician and the inaugural director of Jefferson Health's Center for Autism and Neurodiversity. In her clinical practice, she sees children and understands their development, integrating their medical, educational, and therapeutic plans. In her program, she supports individuals with intellectual and developmental disabilities throughout their lifespan in an effort to improve the quality of their community belonging, with a focus on their accessible healthcare.

10:15 am - 10:45 am: *In Dialogue.*
Moderated discussion and audience Q&A

PANEL 2.

REACHING OUT DESIGN | COLLABORATION

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

LEARNING FROM EXPERIENCES OF AUTISTIC ADULTS: THE ROLE OF THE BUILT ENVIRONMENT IN INDEPENDENT LIVING.

Many autistic adults encounter challenges when pursuing independent living compared to their peers. With limited residential options available, parents express concern about the future living conditions of their adult children. In this presentation, I will elaborate on our research project, which delved into the experiences of autistic adults to understand how the built environment impacts their independent living. While most existing architectural research on autism focuses on the physical environment, our emphasis is on the real-life experiences of individuals. Employing a qualitative, participatory approach, we investigate how various spatial aspects influence the independent living experiences of autistic adults. Our findings highlight that independent living involves customizing various aspects, including both material and social factors within the built environment. These interconnected factors collaborate to either support or hinder independent living. Our research reveals that the built environment influences autistic residents at different levels, and its design can either facilitate or hinder independent living in various ways. Different types of spaces necessitate distinct design strategies. Lastly, we demonstrate practical methods to include autistic individuals in research.

PHUONG LAN NGUYEN, PhD
Research associate, KU Leuven, Department of Architecture, Research[x]Design, Belgium.

Phuong Lan Nguyen, postdoctoral researcher at KU Leuven, Research[x]Design, draws motivation from her architectural background and personal experience as a mother to an autistic son for her research. She explores the built environment's impact on autistic individuals' independent living and work experiences.

ADVANCING MEANINGFUL INCLUSION THROUGH DESIGN: CROSS-DISCIPLINARY COLLABORATION

There is tremendous potential to advance the ways in which our built environment may be modified to support more successful and rewarding access and use by more autistic people in more locations. Successful interdisciplinary teams representing public health, community developers, architecture, engineering, educators, and autistic communities demonstrate the potential of a collaborative approach to meaningful inclusion in our cities. Work across disciplines relies on a common working language across professions and with the disabled as well as novel tools to measure the impact of interventions. Fundamental to this effort is an imperative to describe group methods through which autistic people report their needs, a means for designers to workshop ideas with end-users of builds, facility in mapping the accessible environment, and explorations of the cognitive dissonance between disabled and abled people in the same spaces. Our presentation will highlight exemplary initiatives of academic-community collaboration around supporting autistic inclusion, a visual language of autistic experience within community settings, and creative partnerships around auditing environments and designing for autistic inclusion.

JENNIFER CARPENTER, RA, AIA, LEED AP
Principal, Verona Carpenter Architects

Together with partner Irina Verona, **Jennifer** leads a firm dedicated to physical and social sustainability, lecturing widely on the subject of designing for neuroinclusion. She recently co-presented Design Stories, at the Opening Plenary of the conference, "Restorative City: Designing New York City with Health at the Center." Recent awards include first prize for the Learning Spaces Competition at the

University of Louisiana Lafayette and Interior Design Magazine NYCxDesign 2020 Winner in the Health + Wellness category for the Williamsburg Bathhouse. She currently teaches a course on disability, architecture, and play at Columbia's Graduate School of Architecture.

LINDA FRIEDLAENDER, Head of Education, Yale Center for British Art.

Linda has been Head of Education at the Yale Center for British Art since 1996 and previously held similar positions at the Wadsworth Atheneum Museum of Art and the Mount Holyoke College Art Museum, also serving on its Advisory Board for many years. "Enhancing Observational Skills," a program co-created with a Yale Medical School colleague, led to collaborations with the Wharton Business School and the Yale Schools of Medicine and of Nursing. It has been adopted by over 200 other medical schools worldwide. Linda is currently involved locally and nationally in making public arenas, such as museums, welcoming, safe spaces for neurodivergent populations.

ERON FRIEDLAENDER, MD, MPH, *Professor of Clinical Pediatrics, University of Pennsylvania Perelman School of Medicine, Attending Physician, Children's Hospital of Philadelphia.*

Eron has deep expertise in the assessment and care of autistic youth in hospital settings and how autistic individuals are vulnerable within healthcare systems. She teaches models for community inclusion and exemplary care practices for autistic individuals. She is a founding member of MIXdesign and has partnerships with several other architectural firms centered in inclusive design. Dr. Friedlaender is also a member of the First Place Global Leadership institute, a national cross disciplinary autism translational research.

STUART NEILSON, PhD, writer and image-maker, Cork.

Stuart lectures and writes about the autism spectrum as a health statistician and from his personal perspective of an autism diagnosis in 2009, at the age of 45. He was a founder member of the team that developed the innovative Diploma in Autism Studies at University College Cork, Ireland. He has a degree in computer science and a doctorate in mathematical modeling of inherent susceptibility to fatal disease. His images explore autistic portrayals and reactions to sensory stimulus and motion, particularly in public spaces, and complement his written work.

DENISE RESNIK, president/CEO, First Place *AZ, and Global Leadership Institute; co-founder, Southwest Autism Research & Resource Center (SARRC); founder/CEO, DRA Collective.*

Denise is a community and residential developer fueling a new wave of housing and community options for people with autism and intellectual and/or developmental disabilities. Inspired by her adult son with autism, she has led the collaborative tri-sector efforts resulting in Greater Phoenix being known as "the most autism friendly city in the world." (PBS NewsHour) Local properties, programs, and supportive policies advanced through First Place and SARRC inform her work across the U.S. and around the globe. She gave up heels a decade ago in favor of sneakers allowing her to move swiftly, tap into her entrepreneurial DNA, and achieve better outcomes through innovative approaches. Her value for collaboration and reciprocal learning is evidenced by her leadership and support of several local and national organizations.

IRINA VERONA, RA, AIA, Principal, Verona Carpenter Architects

Together with partner Jennifer Carpenter, **Irina** leads a firm that designs for humanity and resilience. Current projects include *Sensory Schools: Reimagining Learning Spaces for Neurodiversity*, a 2023 NYSCA + Architectural League grant; *The Inclusive Classroom: A Spatial History*, winner of the 2021 inaugural Barnard Adjunct Faculty Research Grant; and *The Neurodiverse City*, winner of the 2021 Design Trust for Public Space "Restorative City" RFP with WIP Collaborative. Irina teaches architecture at Barnard College and Columbia GSAPP. She is a founding editor of *Praxis: a Journal of Writing and Building*.

CHRIS WALSH, *Brown University undergraduate student*

Chris is an autistic Brown University undergraduate and the author of *Unmasked*, a column in the Brown School of Public Health's magazine that explores autism openness and public health. In 2022, Chris put his passion for disability-inclusive design to work as an intern at MIXdesign, a globally recognized inclusive architectural design consultancy. He enjoys biking, swimming, planespotting, traveling, and spending time with friends in his free time.

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

12:15 – 1 p.m: LUNCH BREAK.

PANEL 3.

SHIFTING CULTURES EDUCATION | PARTICIPATION

1–2:15 p.m., Eastern Time U.S.

LISTENING TO AUTISTIC VOICES: WHAT SHIFTING THE PARADIGM TO PARTICIPATORY RESEARCH REVEALS ABOUT PRIORITIZING GOOD MENTAL HEALTH FOR AUTISTIC INDIVIDUALS

Autistic adults have multiple, chronic, and potentially preventable healthcare needs as compared to same-aged adults without ASD. Much of what is known about the health and healthcare needs of autistic adults has emerged from health services research without knowing the specific priorities of autistic people for addressing barriers to care (e.g. Croen et al., 2015; Zerbo et al., 2018; Schott et al., 2020). Approximately 2% of U.S. research funding in autism is spent in addressing adult outcomes (IACC, n.d.). As a result, the paradigm of inquiry was shifted to participatory research where autistic people were authentically engaged in all aspects of research to determine healthcare priorities for autistic individuals. Results of this study as well as strategies used for engendering authentic engagement of autistic individuals in research shall be discussed.

Stephen Shore, *Clinical Associate Professor of Special Education.*

Diagnosed with "Atypical Development and strong autistic tendencies" and "too sick" for outpatient treatment Dr. Shore was recommended for institutionalization. Nonspeaking until 4, and with much support from his parents, teachers, wife, and others, Stephen is now a full-time professor at Adelphi University and adjunct at NYU Steinhardt School of Culture, Education, and Human Development, focusing on aligning best practices in supporting autistic people to lead fulfilling and productive lives. In addition to working with children and talking about life on the autism spectrum, Stephen is an internationally renowned educator, consultant, and author on lifespan issues pertinent to education, relationships, employment, and self-advocacy. His most recent book *College for Students with Disabilities* combines personal stories and research for promoting success in higher education. A current board member of Autism Speaks, the Organization for Autism Research (OAR), the American Occupational Therapy Foundation (AOTF), president emeritus of the Association for Autism and Neurodiversity, and advisory board member of the Autism Society, Dr. Shore also serves on the boards of numerous other autism-related organizations. Dr. Stephen Shore combines personal, practical, and academic experiences to promote fulfilling and productive lives for autistic and otherwise neurodivergent individuals as the rule rather than the exception.

SPARK AUTHENTICITY: STUDENT-LED OPPORTUNITIES FOR MEANINGFUL ENGAGEMENT IN HIGHER EDUCATION

In considering neurodivergent learners, higher education institutions have a responsibility to broaden expectations and opportunities for campus engagement. Common areas on campus that are frequently used as gathering spaces may not represent affirming spaces for all students, resulting in lower turnout of neurodivergent learners. This can result in a poorer connection to the campus, and a lack of opportunities to broaden their own identity through dynamic participation. Empowering neurodivergent students to advocate for neuro inclusive considerations in event planning promotes self-awareness, advocacy, and ownership in the campus community. This presentation will explore the development of neurodivergent student leadership opportunities and the impact on student participation and satisfaction on campus.

Laura K. Sibbald, M.A., CCC-SLP, ASDCS, CYMHS, *Executive Director, Neurodiversity Initiatives at Chestnut Hill College, Advisory Board Member, Shrub Oak International School.*

Laura is passionate about neurodiversity advocacy and empowerment, with over twelve years of experience supporting and advocating for students with learning differences and their families. She is a nationally certified speech-language pathologist, a published author, and an invited speaker on the topics of trauma-informed best practices, supporting self-advocacy and self-determination, and developing neurodiversity-affirming interventions. Laura is an active member of the College Autism Network, the Neurodiversity Employment Network, and the Pennsylvania Speech-Language Hearing Association DEIA Committee.

CULTIVATING INTENTIONAL CONNECTIONS: EDUCATION AS A CATALYST IN CULTURALLY DIVERSE NEURODIVERGENT SPACES

This presentation explores the pivotal cultural shift necessary in neurodivergent spaces, spotlighting education as a potent catalyst for this change. In this session, Camille will delve into the multifaceted landscape of neurodiversity within culturally diverse communities. Addressing the urgent need for intentional connections, she'll navigate the intersectionality of culture, neurodivergence, and education. Drawing from her extensive experience, Camille will spotlight strategies to bridge cultural divides and foster inclusive environments. Leveraging education as a transformative tool, she'll advocate for tailored approaches that honor diverse cultural perspectives while nurturing neurodivergent individuals. Attendees will gain insights into actionable steps to cultivate cultural competence within neurodiverse communities, fostering empathy, understanding, and collaboration. Through engaging discourse and practical takeaways, this session aims to inspire a collective commitment to building inclusive spaces where every neurodivergent individual thrives.

Camille Proctor, *Executive Director, The Color of Autism Foundation*

Camille is a visionary advocate and thought leader in neurodiversity. With a background in psychology and a commitment to fostering inclusive spaces, Camille focuses on empowering marginalized voices within the autism community, advocating for cultural competence, and addressing disparities in autism diagnosis and support.

1.45–2:15 p.m.: In Dialogue. Moderated discussion and audience Q&A

WORKSHOP

NEUROINCLUSIVE PRACTICES @ THE DESIGN PROCESS

2:30 – 4 p.m., Eastern Time U.S.

METHODS OF NEURO-INCLUSIVE CO-CREATION

The traditional design process and methodologies prioritize neurotypical thinking, excluding neurodivergent people from collaborating with designers. This session's goal is to build upon Shannon McLain and Rachel Updegrove's neuro-inclusive co-creation-based design framework and now focus on inclusive methodologies of engagement at each design phase. This session's three micro-presentations and workshop aim to make design processes' methods neuro-inclusive by rethinking traditional practices and preconceived notions. These new or modified methods intend to be multi-modal and adaptable to meet different needs. The first presentation illustrates how neuro-inclusive methodologies informed the design of healthcare and educational spaces; the second discusses how to construct design studio education and culture to be neuro-inclusive through variation and choice in communication strategies; and the third narrates the aforementioned design framework that will guide the workshop. Using the learned strategies from the presentations, virtual and in-person attendees will ideate in groups how to modify, deconstruct, or re-design traditional design methods to be more neuro-inclusive.

Shannon McLain, *Architectural Designer/ Adjunct Professor, Stanev Potts Architects/ Jefferson University, East Falls*

Shannon's areas of research include "Re-humanizing Design: Empathetic Places for Wellbeing" as well as exploring digital and analog visualization techniques to document human narratives of place. Shannon, in collaboration with Rachel Updegrove, has created "Our Neurodivergent Narratives: Visual Storytelling Through A Prototypical Design Framework", which combines her work of visualizing narratives and design for well-being through a neuro-inclusive focus. They presented this research at the UIA World Congress of Architects. Shannon is also a community lead for Open Inclusion, a global inclusive research agency, that positively addresses disability through authentic insights, participatory design, and inclusive innovation.

Magda Mostafa, PhD, *Autism Design Consultant, Progressive Architects*

Magda Mostafa is an architect, scholar, and educator focusing on autism and inclusive design, currently leading autism design at Progressive Architects and teaching as Associate Professor of Design at the American University in Cairo. She is the author of the Autism ASPECTSS design guidelines, the world's first research-based design framework for autism worldwide. ASPECTSS has been presented globally and was awarded the UIA International Research Award in 2014 and was the subject of her well-received TedxTalk in 2015. Through various consultancies, ASPECTSS has been used across 5 continents. Information about her work can be found at www.autism.archi. She recently developed the world's first Autism Friendly University Design guide at Dublin City University, The published guide can be found at: https://issuu.com/magdamostafa/docs/the_autism_friendly_design_guide. Her work was also exhibited at the 2021 Venice Architectural Biennale. A digital version of that work is at https://www.autism.archi/aspectss-venice-architecture-biennale.

Elena Sabinson, *Assistant Professor in the Program of Environmental Design at the University of Colorado Boulder*

Elena Sabinson is an Assistant Professor in Environmental Design at the University of Colorado Boulder. Elena is a design researcher whose work spans the intersections of design, psychology, and

emerging technologies. Their doctoral research in Human Behavior & Design was completed in the Architectural Robotics Lab at Cornell University, where Elena developed bio-informed, soft robotic surfaces embedded in the environment to support emotional well-being. As a late-diagnosed Autistic and ADHD researcher, Elena is passionate about neurodiversity and design and conducts research that strives to help all people flourish in the environment across the full spectrum of human experiences.

Rachel Updegrove, *WELL AP, Assoc. AIA, Adjunct Faculty, Thomas Jefferson University, Laboratory Planner, HERA laboratory planners, Autistic Self-Advocate*

Rachel Updegrove is a Jefferson alum, an adjunct faculty member for Jefferson's CABE freshman design studio course, a laboratory planner at HERA laboratory planners, and an autistic woman. Her neurodiversity journey began her freshman year of college with an OCD diagnosis, and then an ADHD and Autism diagnosis a few months after graduating college. Rachel shares her neurodivergent journey, so no one feels alone, as she often feels like an "other" to autistic stereotypes.She believes that good *neuro*-inclusive design allows individuals of all sensory profiles to be able to coexist within the same space.

PRESENTED BY

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.synesthetic-designlab.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) where he is currently a Ph.D. candidate. 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*.

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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.

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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.

Lauren Koffler, MSW, *Head of Admissions, Communications & Client Relations*

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.

Caitlin Sweetapple, EdD, *Director of Research*

Dr. Sweetapple is Director of Research at Shrub Oak International School where she serves as head of the Center for Autism Research at Shrub Oak. The Center was created under her leadership to explore, analyze, and call attention to a wide range of salient topics pertaining to quality education of autistic students. Dr. Sweetapple received her undergraduate degree from Manhattan College, her master's degree from Katholieke Universiteit Leuven in Belgium, where she had extensive training from some of the top leaders in the field of special education and adapted physical education, and her doctorate degree from Molloy University majoring in Educational Leadership in Diverse Learning Communities. Her dissertation focused on celebrating neurodiversity and combatting oppressive normativity in special education classrooms.


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