

Unless otherwise noted, all activities take place at NewSchool of Architecture & Design

NEUROSCIENCE FOR ARCHITECTURE, URBANISM & DESIGN

This year's edition of the Summer Intersession program offers an intensive week-long "short course" in neuroscience as it relates to the design of the built environment—and beyond. As with past Summer Intersessions, it has been designed especially for an audience consisting of architecture and design firm executives, urban designers, environmental experts, health professionals, design faculty, upper-level graduate and post-doctoral students and others engaged in architectural, urban and design practice and scholarship.

The 2019 program theme "Neuroscience for Architecture, Urbanism and Design" explores the following perspectives:

- **Neuroscience for Architecture: the State of the Art.** Collaborative practices between architects and neuroscientists will be highlighted, addressing the question, "How can design professionals and scientists work together effectively?
- Emerging Topics in Neuroscience for Architecture (and Beyond). Sessions on New Media and Aesthetic Experience will explore the roles technology and how neuro-aesthetics can play in the evidence-based design of the built environment.
- **Neuroscience for Healthy Urbanism**. Experts in urban design and public health will discuss opportunities and challenges in applying neuroscientific research to cities and neighborhoods.
- **Neuroscience for Design**. What is Human-Centered Design? How can concepts and practices of neuroscience for architecture inform the world of design? Presenters will speak about issues relating to the design of products, interiors and media.

SCHEDULE

Monday, August 12 - Embodiment and Aesthetics

The opening day of the 2019 program begins with a discussion about the emergence of Neuroscience for Architecture as an academic and professional pursuit. The morning's featured speakers, Harry Mallgrave and Thomas Albright, will address the two-part theme of Embodiment and Aesthetics from their perspectives in architecture and science, respectively. The first part of the afternoon focuses on applications of neuroscientific research in design practice. Then Roundtable Workshop led by Jeff Watson will create lively discussions circling back to the morning theme, followed by a reception.

8:00 am	Sign-in; photos for IDs; breakfast
8:45	Welcoming Remarks by President of NewSchool, Marvin Malecha
9:00	Introduction by Dr Kristine Mun & History of ANFA by Kurt Hunker
9:30	In Search of Paradise Harry Francis Mallgrave
10:30	Neuroscience of Beauty Tom Albright
11:30	Dialogues / Mallgrave, Albright [moderated by Kurt Hunker]
12:00 pm	Lunch Talk: Introductions
2:00	Neuroscience for Architectural Practice Alison Whitelaw
3:00	Light and Circadian Rhythm Satchin Panda + Fred Marks
4:00	Introduce Workshop: "Thing of the Future" Jeff Watson
4:15	ROUNDTABLE WORKSHOP
5:15	Workshop Presentation
5:30	Reception
6:30	Day 1 ends; dinner on one's own



SCHEDULE

Tuesday, August 13 - Human Centered Design

Day two centers on the topic of Human Centered Design. A topic we can all define and apply albeit each a little bit differently. It is a process, a result and perhaps a mind-set. Steve jobs said that "The broader ones understanding of the human experience, the better design we will have." And William Bates, the President of the AIA recently wrote, "At its best architecture is a lasting physical manifestation of our highest ideals and most cherished values". How can we as designers of the built environment and the creators of the things in the built environment understand how to better serve the needs of the people who are the ultimate reasons for our work?

8:00 am	breakfast
9:00	User experience Design and, well, everything Don Norman
10:00	Baukultur, Corbusier, and Buildings that have Brains Michael Arbib
11:00	Dialogues // Norman, Arbib [moderated by Mike Stepner]
11:30	ROUNDTABLE WORKSHOP
12:30 pm	Lunch
2:30	Designing for Active Healthy Cities at the Macro and Micro Levels Jim Sallis
3:15	Eco- and Neuro- Logical based Design for a post Anthropocentric era Ilaria Mazzoleni
4:00	PANEL DISCUSSION: Norman, Arbib, Sallis, Mazzoleni, Pacenti [moderated by Mike Stepner]
5:30	Workshop Presentation
6:00	Day 2 ends; dinner on one's own

Wednesday, August 14 - Technologies and Tools

Day three of the program begins with a discussion about the tools and technologies that help us to measure the effects of the built environment on human physical and mental states. We will investigate the potential of evidence-based design using new tools for data collection, measurement, and mapping. The morning's speakers will discuss the application of these technologies in the design process, covering topics as diverse as spatial relationships between real and virtual environments and the rethinking of architectural standards from a neurological perspective. The lunch session "Workstations (dis)Play" will allow participants to view digital displays of work in the Gallery and to interact with presenters. The afternoon lectures expand the discussion about responsive architecture and design with neuroscience-based material programming and ideas around trans-disciplinary processes, artificial intelligence, and responsive, dynamic environments. Lectures will be followed by a panel discussion and we will close the night with dinner on the rooftop of the IDEA building.

8:00 am	breakfast
9:00	Measuring Neurophysiological Responses to the Built Environment Eduardo Macagno
9:45	Exploring the Spatial Relationships Between Real and Virtual Environments Dr. Clemenson
10:30	Rethinking Architectural Standards from a Neurological Perspective Bogosian + Mun
11:15	PANEL DISCUSSION: Macagno, Bogosian, Clemenson, Mun [moderated by Tatiana Berger]
12:00 pm	Workstations (dis)Play Lunch Chat in the Gallery
2:00	Responsive Architecture through Neuroscience-Based Material Programing Dr. Elie Chaer
3:00	Mapping Trans-Disciplinary Processes Dr. Myles Sciotto
3:30	Emotive Matter: Neuroscience In Design Behnaz Farahi
4:00	Lecture Title TBD Guvenc Ozel
4:30	PANEL DISCUSSION: Chaer, Sciotto, Farahi, Ozel [moderated by Tatiana Berger]
5:30	Open Discussion Session
6:00	Day 3 ends; dinner with group at the rooftop of IDEA



SCHEDULE

Thursday, August 15 - Sense and Perception

Day four explores Sense and Perception from three perspectives: 1) Space: How we sense and perceive Space through a spectral dimensions from physics to phenomenology to poetics, 2) Beauty: How we sense and activate Beauty by neuro-aesthetics of the mind, and 3) Interactivity: How we can sense and create spatio-social interactive systems incorporated from the domain of neuroscience where the aim for Homeostatic balance between bodies and enviornments are explored. These three perspectives provide stimulating ways to apply concepts adopted and adapted from neuroscience to form new understanding of our world in a newly mediated world. We conclude with a final panel discussion and the awarding of Certificates to our participants.

8:00 am	breakfast
9:00	Kinds of space Sergei Gepshtein
10:00	Enacting Civilization: Neuroaesthetics and the Thermodynamics of Beauty Marcos Novak
11:00	Home(ostasis):Neuroscience, Interactivity and the Potential of Neuromorphic Design Neil Leach
12:00 pm	Lunch
2:00	ROUNDTABLE WORKSHOP
3:00	Workshop Presentation
3:30	OPEN PANEL DISCUSSION: Malecha, Gepshtein, Novak, Norman [moderated by Kristine Mun]
5:00	Open Reflections, final comments, awarding of certificates
	Social hour with libations and hors d'oeuvres
6:00	Program Ends

Friday, August 16 - SALK Institute Tour (optional)

This week ends with an optional Tour to the masterpiece of Louis Kahn, the Salk Institute for Biological Studies. Bus will pick up the group in the front of the NewSchool building and will return everyone to NewSchool by noon.

8:15 am	Bus departs NewSchool of Architecture & Design to Salk Institute
11:30 am	Bus departs Salk Institute to NewSchool of Architecture & Design

NOTES