The 7th CiNet Conference: New horizons in brain mapping

February 1 - 3, 2022 (Online Conference)

Program (subject to change):

Time zone: Japan Standard Time (UTC + 9h)

Day 1: February 1

| 9:00 | Opening: | Toshio ' | Yanagida. | Center | Director. | CiNet |
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9:05 Event outline: Hiromasa Takemura, Conference Chair

Session 1: Sensation and Perception

Chair: Yuki Murai (Osaka University/University of California, Berkeley)

- 9:10 Shinji Nishimoto, Osaka University/NICT, CiNet

 "Mapping sensory, cross-modal, and cognitive representations in the human brain"
- 9:50 Jonathan Winawer, New York University
 "Integrating functional MRI and electrocorticography in the study of the human visual system"
- 10:30 David Leopold, National Institutes of Health
 "Single-unit fMRI mapping: new perspectives on brain organization"
- 11:10 Poster Flash Session
- 11:22 Poster & Interactive Session (Zoom breakout room)
- 12:20 Break

Session 2: Microstructure

Chair: Masaki Fukunaga (National Institute for Physiological Sciences)

- 16:00 Chantal Tax, Univ. Medical Center, Utrecht/CUBRIC

 "Increasing the acquisition space and dimensionality in microstructural MRI:

 promises and pitfalls"
- 16:40 Yaniv Assaf, Tel Aviv University "Evolution of the Connectome"
- 17:20 Nikolaus Weiskopf, Max Planck Institute for Human Cognitive and Brain Sciences

"Characterizing Brain Microstructure Using Magnetic Resonance Imaging: Towards In-Vivo Histology"

18:00 end of Day 1

Day 2: February 2

Session 3: Structural Connectivity

Chair: Taihei Ninomiya (National Institute for Physiological Sciences)

| 9:00 | Hiromasa Takemura NICT, CiNet/ National Institute for Physiological |
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| | Sciences |
| | "Neuroimaging approach for understanding visual streams" |
| 9:40 | Sarah Helibroner, University of Minnesota |
| | "How and why should we build a wiring diagram of the brain?" |
| 10:20 | Farran Briggs, University of Rochester |
| | "Corticogeniculate circuits in the visual system" |
| 11:00 | Poster Flash Session |
| 11:12 | Poster & Interactive Session (Zoom breakout room) |
| 12:10 | Break |

Session 4: Receptor and Neurotransmission

Chair: Maiko Uesaki (NICT, CiNet)

Nicola Palomero-Gallagher, Jülich Research Centre
"Receptor expression in the human and macaque monkey brain: different but
comparable"
Holly Bridge, University of Oxford
"Investigating the neurochemistry of human binocular vision"
Takafumi Minamimoto, National Institutes for Quantum Science and
Technology

"Visualizing and manipulating primate brain circuits with DREADDs" 18:00 end of Day 2

Day 3: February 3

Session 5: Evolution and Development

Chair: Tomoyo Morita (NICT, CiNet)

- 9:00 Nina Patzke, Health and Medical University Potsdam

 "Physical constraints on the mammalian brain evolution: viewed from marine mammals"
- 9:40 Catherine Lebel, University of Calgary

| | "Mapping brain development in childhood using magnetic resonance imaging" |
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| 10:20 | Marcello Rosa, Monash University |
| | "Marmosets in visual neuroscience: why?" |
| 11:00 | Poster Flash Session |
| 11:10 | Poster & Interactive Session (Zoom breakout room) |
| 12:10 | Break |
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| Session | 6: Stimulation and Intervention |
| Chair: | Hiromasa Takemura (NICT, CiNet/National Institute for Physiological Sciences) |
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| 16:00 | Satomi Chiken, National Institute for Physiological Sciences |
| | "Mapping of the macaque brain using optogenetics and fMRI" |
| 16:40 | Wim Vanduffel, KU Leuven |
| | "Reversible pathway selective inactivation in the macaques: behavioral and |
| | brain-wide functional effects" |
| 17:20 | Tadashi Isa, Kyoto University |
| | "Dynamics of global brain networks for recovery from spinal cord injury" |
| 18:00 | Closing: Junichi Nabekura, Director General, National Institute for |
| | Physiological Sciences |
| 18:10 | Virtual Reception (Remo) |
| 20:00 | end of Conference |