**NanoNeuro 2022**  
Thursday, July 21st, 2022

Sponsored by the Tianqiao and Chrissy Chen Institute  
Hosted by the NeuroTechnology Center at Columbia University and the Donostia International Physics Center  
Organized by Rafael Yuste and Aitzol Garcia-Etxarri

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<th>New York Time EDT (UTC -4)</th>
<th>Europe Time CEST (UTC +2)</th>
<th>Session 1: Nano Chair: Aitzol Garcia-Etxarri</th>
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| 8:00 - 8:05 AM            | 14:00 - 14:05            | Rafael Yuste (Columbia U) and Aitzol Garcia-Etxarri (DIPC)  
Introductory Remarks |
| 8:05 - 08:35 AM           | 14:05 - 14:35            | Guillaume Baffou (CNRS, Marseille)  
Quantitative Phase Imaging for Thermoplasmonics and Biomicroscopy |
| 8:35 - 9:05 AM            | 14:35 - 15:05            | Viola Vogel (ETH Zurich)  
Molecular Mechanobiology of Extracellular Matrix: Healthy Versus Inflammatory Cell Niches |
| 9:05 - 9:35 AM            | 15:05 - 15:35            | Sylvie Roke (EPFL)  
Water as a Contrast Agent for Membrane Potentials & Ion Fluxes in Neurons |
| 9:35 - 10:05 AM           | 15:35 - 16:05            | Valentin Nägerl (Bordeaux)  
Mind the Gap: New Approaches to Study the Extracellular Space of the Brain |
| 10:05 - 10:35 AM          | 16:05 - 16:35            | Panel Discussion  
Moderated by Rafael Yuste and Aitzol Garcia-Etxarri |
| 10:35 - 11:05 AM          | 16:35 - 17:05            | Break |

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| 11:05 AM - 11:35 PM       | 17:05 - 17:35            | Shimon Weiss (UCLA)  
Novel Nano-optical Tools for Electrophysiology and Bioelectricity Investigations |
| 11:35 -12:05 PM           | 17:35 - 18:05            | Ozgur Sahin (Columbia U)  
Electromechanical Tension in Cell Membranes |
| 12:05 - 12:35 PM          | 18:05 - 18:35            | Jerzy Szablowski (Rice U)  
Noninvasive Neuroengineering |
| 12:35 - 1:05 PM           | 18:35 - 19:05            | Dirk Trauner (NYU)  
Optical Control of Proteins Essential for Memory  
**Keynote:** Alice Ting (Stanford U)  
Molecular Recorders for Writing Transient Cellular Events into RNA |
| 1:05 - 1:45 PM            | 19:05 - 19:45            | Panel Discussion  
Moderated by Rafael Yuste and Aitzol Garcia-Etxarri |
| 1:45 - 2:15 PM            | 19:45 - 20:15            | Rafael Yuste and Aitzol Garcia-Etxarri  
Closing Comments |