

# 2020 Smart Sensing Non-Classical Biology

Dr. Sofi Bin-Salamon | June 17, 2020 | Virtual

| Time                 | Topic  | Speaker  |
|----------------------|--|--|
| 0930-1000            | Login  |  |
| Introduction         |  |  |
| 1000-1005            | Welcome Remarks  | <b>Dr. Stefano Lami</b><br>Science Counselor<br>Embassy of Italy to the United States  |
| 1005-1010            | From interdisciplinarity to integration of knowledge: the AFOSR – CNR model                          | <b>Prof. Luigi Ambrosio</b><br>Director<br>Institute of Polymers, Composite and Biomaterials<br>National Research Council of Italy |
| 1010-1015            | Smart Sensing Non-classical Biology  | <b>Dr. Sofi Bin-Salamon</b><br>Program Manager<br>Air Force Office of Scientific Research  |
| Enabling Discoveries |  |  |
| 1015-1025            | Keynote: Beyond neurons: unexpected excitable behaviors in astrocytes                                | <b>Dr. Valentina Benfenati</b><br>Institute for Organic Synthesis and Photoreactivity<br>National Research Council of Italy        |
| 1025-1030            | Application in cutting edge technologies to study biomolecular interactions of nanomaterials         | <b>Dr. Saber Hussain</b><br>711th Human Performance Wing<br>Air Force Research Laboratory  |
| 1030-1035            | Plasmonic sensing: from coffee rings to quantum biology  | <b>Prof. Ishan Barman</b><br>Department of Mechanical Engineering<br>Johns Hopkins University                                      |
| 1035-1040            | Disordered nanomaterials: biophysical applications of a versatile, performing and scalable platform  | <b>Dr. Annalisa Convertino</b><br>Institute for Microelectronics and Microsystems<br>National Research Council of Italy            |
| 1040-1045            | Biophysical investigations on DNA-Engineered Perovskite Materials                                    | <b>Prof. Shashank Priya</b><br>Department of Materials Science and Engineering<br>Pennsylvania State University                    |
| 1045-1050            | Bio-hybrid organic semiconductor devices and their Photoresponses incorporating biological materials | <b>Prof. Thomas Brown</b><br>Department of Electronic Engineering<br>University of Rome, Tor Vergata                               |
| 1050-1055            | Astrocyte dynamics: uncovering active mechanical rhythms in brain tissue                             | <b>Dr. Kate O'Neill</b><br>Department of Physics<br>University of Maryland   |

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| 1055-1100                          | Aquaporin and water flux: a novel path for brain cell communication and dynamics  | <b>Prof. Paola Nicchia</b><br>Department of Bioscience,<br>Biotechnology and Biopharmaceutics<br>University of Bari                   |
| 1100-1105                          | Structure-function relationships and ion channel dynamics of brain astrocyte glial cells in the presence of gold-nanocluster (AuNCs) bio-nanophotonic probe | <b>Dr. Shashi Karna</b><br>Weapons Materials Research and Development<br>Army Research Laboratory                                     |
| 1105-1110                          | Organic Optobioelectronics:<br>Transducing Light into Biosignals  | <b>Prof. Tobias Cramer</b><br>Department of Physics and Astronomy<br>University of Bologna  |
| 1110-1125                          | <b>Panel Discussion</b>   |   |
| <b>Collaborative Opportunities</b> |   |   |
| 1125-1130                          | Collaborative international opportunities in a post-COVID-19 world  | <b>Dr. Larry Nagahara</b><br>Associate Dean of Research<br>Whiting School of Engineering<br>Johns Hopkins University                  |
| 1130-1135                          | Knowledge, education, collaborative inclusive growth: the experience of Astro Projects  | <b>Dr. Roberto Zamboni</b><br>Director<br>Institute for Organic Synthesis and Photoreactivity<br>National Research Council of Italy   |
| 1135-1140                          | Unraveling the mystery of the brain through international, interdisciplinary partnership  | <b>Prof. Wolfgang Losert</b><br>Associate Dean<br>College of Computer, Mathematical and Natural Sciences<br>University of Maryland    |
| 1140-1145                          | AFOSR International Initiatives   | <b>Dr. Misoon Mah</b><br>International Program Manager<br>Air Force Office of Scientific Research                                     |
| 1145-1150                          | The University of Bologna and the US: perspectives and opportunities for innovation in the Emilia-Romagna Region ecosystem                                  | <b>Prof. Beatrice Fraboni</b><br>Rector's Delegate for International Relations with North America and Europe<br>University of Bologna |
| 1150-1155                          | International Institute for Biosensing  | <b>Prof. Shashank Priya</b><br>Associate Vice President for Research<br>Pennsylvania State University                                 |
| 1155-1200                          | How to foster, grow and nurture innovation ecosystems: the GW Accelerate national and international experiences   | <b>Mr. Giulio Busulini</b><br>Senior Advisor for International Programs<br>George Washington University - OIE                         |
| 1200-1215                          | <b>Panel Discussion</b>   |   |
| 1215-1225                          | <b>Final Remarks</b>  |   |
| 1225                               | <b>MEETING CONCLUSION</b>   |   |