# SENSE.nano Symposium
**Environment, Water, and Agriculture**  
June 5, 2018  
Broad Institute

## Agenda

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>8:00AM</td>
<td>Registration</td>
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<tr>
<td>8:30AM</td>
<td>Brian Anthony Introduction</td>
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<td>8:35AM</td>
<td>Vladimir Bulović WELCOME</td>
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<tr>
<td>8:50AM</td>
<td>Marcus Remmers KEYNOTE</td>
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### SESSION 1: ENVIRONMENT  
Environmental Solutions Initiative (ESI)

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<tr>
<td>9:30AM</td>
<td>John Fernández Introduction to Sensing: Environment</td>
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<td>9:35AM</td>
<td>Bradley Olsen Nanostructuring Proteins for Improved Biosensors</td>
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<td>9:50AM</td>
<td>Jeremiah A. Johnson Organic Contrast Agents for Magnetic Resonance Imaging</td>
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<td>10:05AM</td>
<td>Michael Triantafyllou Biomimetic Sensors For Aquatic Environments</td>
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<td>10:20AM</td>
<td>Q&amp;A Panel with ESI Speakers</td>
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<td>10:35AM</td>
<td>NETWORKING BREAK</td>
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### SESSION 2: WATER, FOOD, AND AGRICULTURE  
Abdul Latif Jameel World Water and Food Security Lab (J-WAFS)

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<tr>
<td>10:50AM</td>
<td>John Lienhard Introduction to Sensing: Water, Food, and Agriculture</td>
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<tr>
<td>10:55AM</td>
<td>Timothy Swager Dynamic Droplets</td>
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<td>11:10AM</td>
<td>Zijay Tang Engineering Living Functional Materials for Environmental Applications</td>
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<tr>
<td>11:25AM</td>
<td>Rohit Karnik Preservation and Transport of ‘Dry’ Water Samples for Centralized Analysis and Management of Water Quality</td>
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<td>11:40AM</td>
<td>Q&amp;A Panel with J-WAFS Speakers</td>
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SESSION 3: STARTUP PRESENTATIONS
11:55AM  Brian Anthony  
**Introduction to Startup Presentations**
11:57AM  Rachael Z. Miller  
Rozalia Project for a Clean Ocean
12:00PM  Marcus Dahllöf  
**Introduction to the MIT Startup Exchange**
12:03PM  **STEX presentation**  
Merry Smith, C2Sense  
Sampriti Bhattacharyya, Hydroswarm  
Roger Nassar, RAN Biotechnologies  
Anshuman Das and Julia Somerdin, Labby  
Amit Gandhi, Sensen
12:15PM  **LUNCH BREAK, NETWORKING, AND STARTUP DEMOS**

SESSION 4: CHEMISTRY, AGRICULTURE, AND INSTRUMENTATION
1:15PM  Brian Anthony  
**Introduction to Sensing: Chemistry, Instrumentation, and Agriculture**
1:20PM  Craig Marvin  
**KEYNOTE**
2:00PM  Marin Soljacic  
* Nanophotonics Enabled Free-Electron THz to X-ray Sources *
2:15PM  Deepak Vasisht  
* FarmBeats: AI & IoT for Data-Driven Agriculture *
2:30PM  Gabriela Schlau-Cohen  
* Why don’t plants get sunburn? *
2:45PM  **Q&A with Session 4 Speakers**
3:00PM  **NETWORKING BREAK**

SESSION 5: PANEL DISCUSSION
3:15PM  **Agriculture of the Future / Society Impact & Implications**  
Heather Goldstone, Moderator  
John Fernández  
Paul Sellew  
Michael Strano  
Guest panelist
SESSION 6: SENSING APPLICATIONS AND ADVANCEMENTS

4:45PM One-minute Poster Pitches
5:15PM 2017 SENSE.nano Seed Grant Winners
        Brian Anthony
        Introduction
5:16PM JJ Hu
        Digital Fourier Transform Spectroscopy
5:23PM Michael Strano
        for The MIT Campus and the World
5:30PM Poster Session (refreshments served)
6:15PM Brian Anthony
        Closing Comments