

The Northeastern University  
**Young Scholars Program**

<https://stem.northeastern.edu/>

Final Presentation Schedule 2019  
 West Village H, Room 110

August 1, 2019

	Schedule
8:30-8:45	<p><b>Welcome and Opening Remarks</b>  <i>Claire Duggan, Director for Programs for The Center for STEM Education</i>  <i>Emily Chernich and Salima Amiji, Young Scholars Program Coordinators</i></p>
8:50-9:00	<p><b><i>Manipulating Mitochondrial Networks for Treating Multidrug-Resistant Triple Negative Breast Cancer</i></b>            Lauren Murphy, Arlington High School            Edward Pham, Wellesley High School  <i>Mansoor Amiji, Distinguished Professor, Pharmaceutical Sciences</i></p>
9:05-9:15	<p><b><i>Can the Properties of Hydrogels be Optimized to Mimic Blood Vessels?</i></b>            Avi Mahal, Shrewsbury High School            Anna Pavlova, Winchester High School  <i>Eno Ebong, Assistant Professor, Chemical Engineering</i></p>
9:20-9:30	<p><b><i>Generating and Manipulating 3D Avatars from Imaging Technology</i></b>            Sophia Franklin, Newton North High School            Caleb Lee, Brookline High School  <i>Sarah Ostadabbas, Assistant Professor, Electrical and Computer Engineering</i></p>
9:35-9:45	<p><b><i>Thermally Bonded Microfluidics for Healthcare</i></b>            Samson Cantor, Newton South High School            Tina Tailor, Billerica Memorial High School  <i>Abigail Koppes, Assistant Professor, Chemical Engineering</i></p>
9:50-10:00	<p><b><i>Robot Hand for Grasping Tightly Packed Objects</i></b>            James 'Tully' Lines, Urban Science Academy            Zachary Tam, Lincoln-Sudbury Regional High School  <i>Robert Platt, Assistant Professor, Computer Science</i></p>
10:05-10:15	<p><b><i>EEG Seizure Classification Using Power Analysis</i></b>            Rohan Abichandani, Commonwealth School            Hannah Nguyen, Braintree High School  <i>Aatmesh Shrivastava, Assistant Professor, Electrical and Computer Engineering</i></p>
10:20-10:30	<p><b><i>GPCRs, Contractility and Calcium Signaling in the C. elegans Spermatheca</i></b>            Omar Noamany, Al Noor Academy            Jenny Zeng, North Quincy High School  <i>Erin Cram, Professor, Biology</i></p>
10:30-10:45	<p><b>Intermission</b></p>

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10:45-10:55	<p><b><i>Digitally-Controlled Analog Filter Prototype for Wireless Communication Applications</i></b>          David Abrahamyan, Watertown High School          Jay 'Joaquín' Park, Newton South High School          Marvin Onabajo, Associate Professor, Electrical and Computer Engineering</p>
11:00-11:10	<p><b><i>Natural Language Processing for Understanding Novel Text Summarization and Media Bias</i></b>          Emily Lo, Wellesley High School          Alyssa Shelburne, Westwood High School          Lu Wang, Assistant Professor, Computer Sciences</p>
11:15-11:25	<p><b><i>Rapid Transformation of Origami Devices</i></b>          Gabriela Paz-Soldan, Algonquin Regional High School          Luke Schlatter, Brookline High School          Samuel Felton, Assistant Professor, Mechanical and Industrial Engineering</p>
11:30-11:40	<p><b><i>Application of Radar Techniques for Human Body Imaging at Security Checkpoints</i></b>          Hannah Huang, Shrewsbury High School          Cole Young, Medfield High School          Jose Martinez, Assistant Professor, Mechanical and Industrial Engineering</p>
11:45-11:55	<p><b><i>Detecting Motion of a Structure Using Video Cameras</i></b>          Cameron Pentland, Milton High School          Hao Sun, Assistant Professor, Civil and Environmental Engineering</p>
12:00-12:10	<p><b><i>Final Remarks</i></b>          Emily Chernich and Salima Amiji</p>
12:15-1:00	<p><b><i>POSTER SESSION in West Village G</i></b>  <i>Students will be accompanying posters and showcasing their research. Light refreshments will be provided.</i></p>