



High School Student Research Experience Itinerary

Monday, July 13th

9:00 am: Meet Dr. Melvin at the front entrance of AMIC (*see map on pg. 3*)

9:00 – 9:30 am: AMIC tour and safety training w/Dr. Melvin

9:30 – 10:00 am: Overview of microfluidics and microphysiological systems w/Dr. Melvin

10:00 – 11:00 am: Observe single cell trapping experiment w/Gabrielle and Avery

11:00 am – 12:00 pm: Introduction of research project w/Dr. Melvin

12:00 – 1:00 pm: Lunch (can bring lunch, go to Core Dining hall, or go out with family)

1:00 – 2:00 pm: Observe microfluidic co-culture experiment w/Riley

2:00 – 2:30 pm: Training on PDMS mixing/pouring w/Dr. Melvin & Riley

2:30 – 3:30 pm: Observe algae chemotaxis experiment w/Abbey Grace and Julia

3:30 – 4:00 pm: Practice microfluidic device punching w/Dr. Melvin & Riley

4:00 – 5:00 pm: Work on research project using DM1 microscope w/Dr. Melvin

5:00 pm: Parents pick up students at AMIC front entrance

Tuesday, July 14th

9 am: Meet Dr. Melvin at the front entrance of AMIC

9:00 – 9:30 am: Effective oral presentation training w/Dr. Melvin

9:30 – 10:00 am: DMI8 fluorescence microscope training w/Anna

10:00 – 11:30 am: Research project experiment using DM8 fluorescence microscope w/Dr. Melvin

11:30 am – 12:00 pm: Observe data analysis and processing for amoeba deformation project w/Kaylee

12:00 – 1:00 pm: Lunch w/research group (pizza)

1:00 – 1:30 pm: Image analysis training w/Anna

1:30 – 2:00 pm: Analyze project data w/Dr. Melvin

2:00 – 3:00 pm: Microfluidic device fabrication w/Dr. Melvin, Riley, and Anna

3:00 – 4:00 pm: Research group meeting (Hannah, Alli, and Julia research presentations)

4:00 – 5:00 pm: Observe droplet microfluidic experiment w/Anna

5:00 pm: Parents pick up students at AMIC front entrance

Wednesday, July 15th

9 am: Meet Dr. Melvin at the front entrance of AMIC

9:00 – 10:00 am: Hydrogel synthesis w/Alli and Jasmeen

10:00 – 11:30 am: Research project experiment using DM8 fluorescence microscope w/Dr. Melvin

11:30 am – 12:00 pm: Image analysis and data processing

12:00 – 1:00 pm: Lunch (attend Dr. Melvin's lunch and learn with EUREKA! program at Core Dining Hall)

1:00 – 2:30 pm: Introduction to 3D printing w/Riley

2:30 – 4:00 pm: Prepare final research presentation

4:00 – 4:30 pm: Research project presentation to group

4:30 – 5:00 pm: Wrap-up w/Dr. Melvin

5:00 pm: Parents pick up students at AMIC front entrance