## 2016 Western New York Science, Technology, Engineering, and Mathematics (STEM) Forum

Wednesday Evenings – 7:30-9:30 PM in Room 222 Natural Sciences Complex, UB North Campus

SCHEDULER: Dr. Javid Rzayev (jrzayev@buffalo.edu/645-4314) SECRETARY: Barbara Raff (raff@buffalo.edu/645-6805)

ORGANIZING COMMITTEE: Dr. Liesl Folks (UB), Dr. Andrew Whittaker (UB), Sandi George (Frontier), Dr. Jeffrey Arnold (Daemen), Dr. Marcus Bursik (UB), Dr. Steve Free (UB), Dr. Michael DeMarco (Buffalo State College), Tom Bird (Williamsville); Jim Hensel (Tonawanda)

September 14 PROF. TRACY GREGG, Dept. of Geology, University at Buffalo

"Deep, Dark and Dank: Exploring Submarine Volcanoes with the Alvin Submersible"

September 21 <u>4:15 PM VISIT</u> to TAYLOR DEVICES, 90 Taylor Drive, North Tonawanda (enter N.T. for GPS)

Tour guides: DOUG TAYLOR, CEO; ALAN KLEMBCZYK, VP of Sales and Engineering - tour of the Assembly and Test facilities, and of the Machining facilities nearby, where they design and manufacture custom shock absorbers, dampers, and shock isolation systems for commercial and aerospace/defense markets.

September 28 <u>4:00 PM VISIT</u> to BUFFALO MANUFACTURING WORKS; Meet @ UB CBLS (Bruce Holm Commons), 701 Ellicott St., Buffalo

Tour guide: SUSAN WITT, Learning Lab Manager - tour of Buffalo Manufacturing Works research labs where they help companies innovate and advance manufacturing technology in advanced automation, additive manufacturing, and metrology and inspection. The tour will also include a stop in the Additive Manufacturing Learning Lab where area students learn STEM concepts through 3D printing and additive manufacturing technologies.

October 5 <u>4:00 PM VISIT</u> to BUFFALO SCIENCE MUSEUM, 1020 Humboldt Pkwy., Buffalo

Tour guide: BRIAN ENRIGHT, Learning Director - join us for our Educators Open House and discover how much we have changed. Our new science studios have been designed to align with the NYS Core STEM curriculum, and incorporate hands-on, interactive exhibits that make the students the scientists. Through our new engagement model, the Museum and Tifft Nature Preserve offer student and teacher programs that support classroom education and contribute to the Society of Natural Sciences' larger vision to inspire and motivate lifelong learners and create lasting memories.

October 19 PROF. LAUREN SASSOUBRE, Dept. of Civil, Structural and Environmental Engineering, Univ. at Buffalo "Using Culture-Based and Molecular Methods to Investigate Bacterial Pollution in Lake Erie"

October 26 TENTATIVE: 4:00 PM VISIT to Integer Holdings Corporation (former Greatbatch Inc.)

November 2 PROF. LARA HUTSON, Dept. of Biology, University at Buffalo "How Neurons Find Their Way to 'Wire' Our Nervous System"

November 9 PROF. IMAN BORAZJANI, Dept. of Mechanical and Aerospace Engineering, University at Buffalo "Simulation-Based Engineering: Bio-fluids Applications"

November 16 PROF. TIMOTHY COOK, Dept. of Chemistry, University at Buffalo "The Role of Molecular Self-Assembly in Renewable Energy"

November 30 PROF. DEBRA DUBOIS, Dept. of Biological Sciences, University at Buffalo "Differences in How Drugs Affect Males and Females"