## DETAILED PROGRAM

**Sunday, 30 July 2017**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:00 am – noon</td>
<td>Registration Open – Omni Ballroom Pre-Function Area</td>
<td>Omni Ballroom Pre-Function Area</td>
</tr>
<tr>
<td>5:00 pm – 8:00 pm</td>
<td>Working Group Meetings – Omni College Room B</td>
<td>Omni College Room B</td>
</tr>
<tr>
<td>9:00 am – 4:30 pm</td>
<td>Training Meeting (for trainers only) – Omni College Room B</td>
<td>Omni College Room B</td>
</tr>
<tr>
<td>5:00 pm – 6:00 pm</td>
<td>Opening Networking Event – Omni Grand Ballroom</td>
<td>Omni Grand Ballroom</td>
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On Sunday, 30 July, registration will open at 8:00 am outside the Omni Hotel Ballroom and will remain open until noon. Registration will re-open on Sunday at 5:00 pm and will remain open until 8:00 pm. Monday through Thursday registration will move to the SCSU campus. Registration will be located in the Adanti Student Center (ASC) outside the Ballroom (3rd floor ASC) and will open prior to the opening session each day and will remain open until the conclusion of the last session each day.

**Tech Support** –
Technology Support will be available each day during conference hours to assist with technology needs, work on website profiles, and sessions requiring technology.

**Informal Meetings and Networking** –
Participants will be encouraged to use available space for meetings around emerging questions and issues. Informal conversations and networking is often the most valuable part of any conference. Please visit the registration desk if you have a need for meeting space for this purpose. A/V cannot be guaranteed.

**Breakfast** will be provided each morning (Monday-Thursday) **from 6:30 am to 7:30 am** at the Omni Hotel in the **Omni Grand Ballroom**.
<table>
<thead>
<tr>
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<tbody>
<tr>
<td>6:30 am – 7:30 am</td>
<td>Students and Community Members Set Up Posters for Presentations - Omni Grand Ballroom</td>
</tr>
<tr>
<td>7:30 am – 8:15 am</td>
<td>Travel to Southern Connecticut State University (SCSU) campus - Omni Lobby</td>
</tr>
</tbody>
</table>
| 8:30 am – 9:15 am | Welcome and Opening of the Meeting – ASC Ballroom  
**Presenters:** Scott Graves, GLOBE Partner and host; Tony Murphy, Director, GIO; Lin Chambers, NASA and NSF; John McLaughlin, NOAA; Alice Alpert, DOS; Toni Harp, Mayor of New Haven; Bruce Kalk, SCSU Interim Dean of Arts and Sciences; Joe Bertolino, SCSU President; Robert Prezant, SCSU Provost; Patrick Heidkamp, EGMS Department Chair  
Welcome to the 21st GLOBE Annual Meeting and 5th Student Research Exhibition from local GLOBE Partners and hosts, GIO Director, NASA Program Manager, NSF Program Manager and NOAA Education. |
| 9:15 am – 10:15 am | The Past Year in Data Information Systems – ASC Ballroom  
**Presenters:** David Overoye, Cornell Lewis  
Many changes and enhancements have occurred in the last year to the Data Information Systems (DIS) and the program’s apps (GLOBE Data Entry, and GLOBE Observer). These will be outlined in this session. |
| 10:15 am – 10:30 am | Break – ASC Fireplace Lounge |
| 10:30 am – 11:30 am | Field Experience Description for Protocol Training – ASC Ballroom  
**Presenters:** Scott Graves, with SCSU Field Interns  
GLOBE Partner Scott Graves will give an overview of the three locations where the protocol training will occur; the SCSU campus; Cove River; and the Hammonasset Beach. There will also be information on travel, site capacity, and safety. |
| 10:30 am – 11:30 am | Student Collaboration Opportunities and Research Alignment – ASC Theater  
**Presenter:** Audra Edwards |
| 11:30 am – 12:30 pm | Lunch – Food Court Plaza Level |
| 11:30 am – 5:00 pm | Register for the Field Experience Protocol Training – Ballroom Prefunction Area |
12:30 pm – 1:15 pm  **Keynote Address – ASC Ballroom**  
*Presenter: Alexander J. Felson, Associate Professor, Yale University, School of Forestry and Environmental Studies and School of Architecture, Director of Urban Ecology & Design Lab.*  
*Title: Urban Design and Landscape Architecture for Coastal Resilience*

1:15 pm – 2:15 pm  **Report from GLOBE Working Groups – ASC Ballroom**  
*Moderator: Tony Murphy*  
*Presenters: Jessica Taylor, Nektaria Adaktilou, Mullica Jaroensutasinee, Elżbieta Wołoszyńska-Wiśniewska*  
Chairs of each of the four Working Groups (Education, Evaluation, Science, Technology) report out on their work over the past year.

1:15 pm – 4:00 pm  **Student Field Preparations, Field Site Introductions and Field Protocols; Outer Island Preview - ASC Theater**  
*Presenters: Scott Graves, SCSU assistants, trainers (Peggy Foletta, Audra Edwards, Peter Falcon, Julie Malmberg).*  
Equipment testing at Beaver Pond on campus.

2:30 pm – 5:00 pm  **Concurrent Sessions (open to all)**

**Country Coordinators Meeting – ASC Room 301**  
*Moderator: Lyn Wigbels*  
Country Coordinators discuss opportunities, challenges and barriers to implementing GLOBE in their countries.

**US Partners Meeting – ASC Ballroom**  
*Moderator: Jennifer Bourgeault*  
US Partners discuss opportunities, challenges and barriers to implementing GLOBE in their areas.

3:30 pm – 4:00 pm  **Break – Fireplace Lounge**

4:00 pm – 5:00 pm  **Concurrent Sessions Continue**

4:00 pm – 4:45 pm  **Students and Teachers Return to the Omni**

5:00 pm – 5:45 pm  **Students Set Up Posters and Prepare for Poster Presentations – Omni Ballroom**

5:00 pm  **Adults return to the Omni**

5:45 pm – 6:30 pm  **Photos and Interviews with Students Prior to Poster Session – Omni Ballroom**
6:30 pm – 8:30 pm  

**5th Student Research and GLOBE Community Poster Exhibition – Omni Grand Ballroom**

Learn about GLOBE student research and how community members are implementing GLOBE. Posters will remain in place for the duration of the meeting. *Light refreshments will be served during this session.*

8:00 pm  

**Registration Closed**
Tuesday, 1 August 2017

7:30 am – 8:15am
Travel to Southern Connecticut State University (SCSU) Campus – Omni Hotel Lobby Bus will depart promptly at 7:30 am

8:30 am – 9:30 am
Announcements & Panel Discussion – ASC Ballroom
Moderator: Scott Graves
Mark Paine Assistant to the Commissioner of Public Works, West Haven; James Tait, SCSU Werth Center for Coastal Marine Studies
Title: Academic and Citizen Science collaborations with local municipalities - beaches and marshes.

8:30 am – 4:00 pm
Students Research Experience
Students travel from campus to Outer Island at 8:30 am

<table>
<thead>
<tr>
<th>Protocol Areas</th>
<th>Trainers</th>
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</thead>
<tbody>
<tr>
<td>Atmosphere (WeatherBug stations, clouds/contrails)</td>
<td>Peter Falcon, Juliet Hulse</td>
</tr>
<tr>
<td>Hydrology (temperature, dissolved oxygen, pH, salinity, conductivity, transparency)</td>
<td>Alice Alpert, Peggy Foletta, Julie Malmberg, Outer Island Interns</td>
</tr>
<tr>
<td>Intertidal Transects, crab populations, Seine netting, bird observations, upland vegetation</td>
<td>Ginny Baltay, Jim Lockhart</td>
</tr>
<tr>
<td>Photography, Videography, Social Media</td>
<td>Jan Heiderer, Autumn Burdick, Audra Edwards</td>
</tr>
<tr>
<td>Assistant</td>
<td>Allyson Edwards (GLOBE Alumna)</td>
</tr>
</tbody>
</table>

Research Topics: Outer Island and coastal environments, sustainability, resilience and future challenges (including sea level rise and hurricanes).

Students Return to SCSU Campus at 4:00 pm

Concurrent Protocol Training Sessions (requires pre-registration)
Register for the Field Experience Protocol Training – Ballroom Prefunction Area from 11:30 am to 5:00 pm on Monday.
### Option A (50 participants)

**Location:** Hammonasset Beach (40 minutes from campus)

<table>
<thead>
<tr>
<th>Protocol Areas</th>
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<tbody>
<tr>
<td>Hydrosphere/Atmosphere (temp, DO, pH, conductivity,</td>
<td>Andrea Ventoso, Jonathan Craig (L)</td>
</tr>
<tr>
<td>salinity, transparency, clouds/contrails) (Site #1)</td>
<td>SCSU: Sarah Gifford (float) (L)</td>
</tr>
<tr>
<td>Hydrosphere/Atmosphere (temp, DO, pH, conductivity,</td>
<td>Mohammed Benbouida, John McLaughlin</td>
</tr>
<tr>
<td>salinity, transparency, clouds/contrails) (Site #2)</td>
<td></td>
</tr>
<tr>
<td>Intertidal Transect (Site #1)</td>
<td>SCSU: Sharon Brostrom</td>
</tr>
<tr>
<td>Intertidal Transect (Site #2)</td>
<td>SCSU: Kimberly Dupuis</td>
</tr>
<tr>
<td>App Pro</td>
<td>Travis Andersen</td>
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(L) = Lead

### Option B (50 participants)

**Location:** Cove River (20 minutes from campus)

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<tr>
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<tbody>
<tr>
<td>Atmosphere and Soil (temp, clouds/contrails, soil</td>
<td>Tina Cartwright, Lawrence Kambiwoa, Diana</td>
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<tr>
<td>characterization)</td>
<td>Garasic (L), Marta Kingsland</td>
</tr>
<tr>
<td>Biosphere (MUC, canopy cover, tree height) (Sites #1)</td>
<td>Henry Saunders, Jennifer Bourgeault</td>
</tr>
<tr>
<td></td>
<td>SCSU: Darryl Nicholson (&amp; Soils) (L)</td>
</tr>
<tr>
<td>Biosphere (MUC, canopy cover, tree height) (Sites #2)</td>
<td>Claudia Caro, Matthijs Begheyn</td>
</tr>
<tr>
<td></td>
<td>SCSU: Peter Broadbridge (&amp; Soils)</td>
</tr>
<tr>
<td>Hydrosphere (temp, DO, pH, conductivity, salinity,</td>
<td>Kevin O’Connor</td>
</tr>
<tr>
<td>transparency) (Site #1)</td>
<td>SCSU: Danny Martins</td>
</tr>
<tr>
<td>Hydrosphere (temp, DO, pH, conductivity, salinity,</td>
<td>Henry Ortiz</td>
</tr>
<tr>
<td>transparency) (Site #2)</td>
<td>SCSU: Kevin Dickson</td>
</tr>
<tr>
<td>App Pro</td>
<td>David Overoye</td>
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(L) = Lead
9:30 am – 12:30 pm  **Option C (65 participants)**  
*Location:* On SCSU Campus – meet in Science Building Quad.

<table>
<thead>
<tr>
<th>Protocol Areas/Sites</th>
<th>Trainers</th>
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<tbody>
<tr>
<td>Atmosphere (Clouds/Contrails + App)</td>
<td>Nadhirah Alharthy, Rafat Jambi</td>
</tr>
</tbody>
</table>
| Mosquitos (Site #1) | Russanne Low  
SCSU: Jennifer Cline |
| Mosquitos (Site #2) | Maria Lorraine De Ruiz-Alma  
SCSU: Matt Connors |
| Soil/SMAP | Krisanadej Jaroensutasinee, Brian Campbell (L), Narendra Das |
| Hydrosphere (temp, DO, pH, conductivity, transparency) (Site #1) | Ylliass Lawani, Elzbieta Woloszynka-Wisniewska  
SCSU: Scott Thibault (L) (Atmos/Soils/Hydro) |
| Hydrosphere (temp, DO, pH, conductivity, transparency) (Site #2) | Mullica Jaroensutasinee,  
SCSU: Amanda Arce |
| App Pro | Cornell Lewis |

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12:30 pm – 1:30 pm  **Lunch (Groups B and C on campus; Group A in the field) - Food Court Plaza Level**

1:30 pm – 4:00 pm  **Students Complete Their Fieldwork at Outer Island - Research Topics:** Outer Island and coastal environments sustainability, resilience and future challenges (like sea level rise and hurricanes)

1:45 pm – 3:00 pm  **Concurrent Sessions**

**Campus Tour: New Academic Science Laboratory & WERTH Center** – proceed to New Science Building, meet in the foyer near the Rock Garden. Tour the SCSU campus and learn about some of the new science facilities built and how they are used in student learning and experiences. First come-first served (25 max limit).
GLOBE and Citizen Science Discussion – ASC Room 301
Moderator: Tony Murphy
Presenters: Kristen Weaver, Becca Hatheaway, Lisa Gardiner
GLOBE released the GLOBE Observer (GO) app last year, which now has two measurements (clouds and mosquitoes) that citizen scientists can enter into the database. This session discusses the future direction of GO and other citizen science opportunities that are possible with UCAR Center for Science Education, a GLOBE Partner.

Balloon/Kite Aerial Photography & Drones and How they Enhance our Understanding of Science and the Environment (with demonstration) – ASC Ballroom
Panel Discussion
Moderator: Scott Graves
Presenters: David Bydlowski, Vern Williams, Darryl Nicholson, Scott Thibault, Peter Broadbridge
This session examines how Partners are using balloons, kites and drones to enhance our understanding of science and the environment, provide mid-altitude aerial perspectives on landscapes and habitats and environmental issues with emerging relevance to ground-based GLOBE observations and protocols.

Creative Models for Implementing GLOBE (at the country level) – ASC Room 201
Moderator: Lyn Wigbels
Presenters: Nadhira Alharthy, Oman; Marta Kingsland, Argentina; Krisanadej Jaroensutasinee, Thailand; Charles Mwangi, Kenya; Elżbieta Wołoszyńska-Wiśniewska, Poland
Come learn what strategies some Country Coordinators are using to implement GLOBE within their countries. Different models will be shown in the session.

GLOBE Professional Development and Training – ASC Room 308
Presenter: Jessica Taylor
A number of years ago GLOBE created a process for Trainer and Master Trainer Certification. The Education Working Group has been asked to review and revise the current Trainer Certification process and requirements. This session presents some of the recommendations and seeks community input on the proposed changes.

3:00 pm – 3:15 pm
Break – Fireplace Lounge (Group A returns to campus and joins Concurrent Sessions)
Concurrent Sessions –
Website Administration for US and International Partners - ASC Ballroom
Presenters: David Overoye, Cornell Lewis
Are you a GLOBE Partner, US or International? Do you need some pointers on how to work through the GLOBE website? Then this session is for you! Come learn about the capabilities that you have as a partner and how to easily navigate the capabilities, such as setting up, administering and closing workshops, pushing news and events up to your regional office, etc.

GLOBE Weather NGSS-Based Instructional Unit for Middle School – ASC Room 201
Moderator: John Ristvey
Presenters: Lisa Gardiner, Becca Hatheway, Renee Minaya, Lindsey Mohan, Bill Meyers
GLOBE is developing a Next-Generation Science Standards (NGSS) based instructional unit for middle school teachers that promotes student understanding of weather phenomena. Throughout the unit, students will work with weather data, analyze data, and use related GLOBE atmosphere protocols and activities. This session will provide participants with an overview of the unit and the opportunity to contribute input before the unit is pilot tested this fall.

Coastal Measurements Discussion – ASC Room 305
Presenters: Scott Graves, John McLaughlin
Come discuss how GLOBE protocols can be used to monitor coastal environments more broadly; new tools and established techniques; how to contribute to local/regional stakeholders; expand student investigations of this important and dynamic interface between land, sea and sky; with considerations of possible future opportunities.

Regional GLOBE Learning Expeditions – ASC Room 301
Moderator: Amalia Aubone, Latin America and Caribbean
Presenters: Mark Brettenny, Africa; Desh Bandhu, Asia and Pacific; Dana Votapkova, Europe and Eurasia; Salma Alzubi, Near East and North Africa
GLOBE Learning Expeditions have become a stand-out feature of the program, with regional events occurring more frequently. Come learn how different countries and regions have developed and organized these regional GLEs.

Implementing GLOBE in Your Classroom (International) – ASC Room 306
Moderator: Anna Heyne-Mudrich
Presenters: Kanokrat Singui, Thailand; Michel Pedurand, France; Sonja Drzensla, Germany; Nasser Mohammed Almanari, Oman
Ever wonder how GLOBE is implemented in schools internationally. This session will help you understand how various schools around the world are implementing the program.
Educator Toolkit: Data and Resources for Student Research and Investigations – ASC Room 308
Moderator: Theresa Schwerin
Presenters: Cassie Soeffing, Tina Harte, Brian Campbell
Bring your laptop or tablet for this session on data and resources for framing student-centered investigations around phenomena. The workshop will focus on a new educator toolkit (released June 2017) that includes: quick start guide to data sources; lessons, activities and resources by grade band; and key features of NASA online resources and how to use them to investigate phenomena (e.g., MY NASA DATA, NASA Earth Observations (NEO, NASA Worldview, GLOBE El Niño data, and Change Matters).

4:00 pm – 5:00 pm  Students return to SCSU Campus from Outer Island

4:45 pm  Adults Return to the Omni Hotel (Free Evening)

5:00 pm – 5:30 pm  Student Outer Island Informal Debriefing and Brainstorming - ASC Fireplace Lounge
Facilitators: Audra Edwards, Peggy Foletta, Julie Malmberg

5:45 pm – 8:00 pm  Student Pizza and Movie Night – ACS Theater
Facilitators: Scott Graves, Roller Angel, Allyson Edwards, Mitch Klett
During pizza dinner - Dr. Erin Heidkamp of SCSU International Studies will introduce college study abroad opportunities at SCSU.

8:15 pm  Students Return to Hotel
Wednesday, 2 August 2017

7:30 am – 8:15 am  Travel to Southern Connecticut State University (SCSU) campus – Omni Lobby

8:30 am – 9:30 am  Announcements and Keynote Address – ASC Ballroom

Presenter: Dalia Kirschbaum, NASA Goddard Space Flight Center (via Skype)
Title: Measuring Rainfall from Space in Our Backyards: How Satellites Can Be Used to Understand Disasters, Disease and More

Concurrent Protocol Training Sessions (requires pre-registration)
Register for the Field Experience Protocol Training – SCSU Ballroom Prefunction Area from 11:30 am to 5:00 pm on Monday.

9:30 am – 3:00 pm  Option A (50 participants)
Location: Hammonasset Beach (40 minutes from campus)

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<td>Tina Cartwright (L), Maria Lorraine De Ruiz-Alma  SCSU: Sarah Gifford (floating) (Co-L), Diana Garasic</td>
</tr>
<tr>
<td>Hydrosphere/Atmosphere (temp, DO, pH, conductivity/salinity; transparency, clouds/contrails) (Site #2)</td>
<td>Danielle De Staerke, Henry Saunders</td>
</tr>
<tr>
<td>Intertidal Transect (Site #1)</td>
<td>SCSU: Kimberly Dupuis, Ginny Baltay (Co-L)</td>
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<td>App Pro</td>
<td>David Overoye</td>
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9:30 am – 12:30 pm  Option B (50 participants)
Location: Cove River (20 minutes from campus)

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<td>Andrea Ventoso (L), Lawrence Kambiwoa, Marta Kingsland</td>
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### Protocol Area/Sites

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<tr>
<td>Atmosphere (Clouds/Contrails + App)</td>
<td>Nadhir Alharthy, Rafat Jambi</td>
</tr>
<tr>
<td>Mosquitos (Site #1)</td>
<td>Mullica Jaroensutasee, SCSU: Jennifer Cline</td>
</tr>
<tr>
<td>Mosquitos (Site #2)</td>
<td>Claudia Caro, SCSU: Matt Connors</td>
</tr>
<tr>
<td>Soil/SMAP</td>
<td>Matthijs Begheyn (L), Krisanadej Jaroensutasee, Narendra Das (demo)</td>
</tr>
<tr>
<td>Hydrosphere (temp, DO, pH, conductivity, transparency) (Site #1)</td>
<td>Mohammed Benbouida, Ylliass-Lawani, SCSU: Scott Thibault (L) (Atmos/Soils/Hydro)</td>
</tr>
<tr>
<td>Hydrosphere (temp, DO, pH, conductivity, transparency) (Site #2)</td>
<td>Tony Murphy, SCSU: Amanda Arce</td>
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<tr>
<td>App Pro</td>
<td>Cornell Lewis</td>
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### Student Learning Experience: Data Analysis

Meet in ASC Theater and Proceed to Engleman Hall, B Wing, Room 221
Facilitators: Audra Edwards, Peggy Foletta, Peter Falcon, David Overoye, Roller Angel, Julie Malmberg
12:30 pm – 1:30 pm  
**Lunch** – Students – Rock Garden  
Adults – Food Court Plaza Level

1:30 pm – 3:30 pm  
**Student Research Experience Peer Review** – Engleman Hall B Wing, Room 221  
Facilitators: Audra Edwards, Peggy Foletta, Peter Falcon, Julie Malmberg  
Student Groups share and practice presentations.

1:45 pm – 3:00 pm  
**Concurrent Sessions**

**Campus Tour: New Academic Science Building and WERTH Center** – Proceed to the New Science Building - meet in foyer near the Rock Garden.  
Tour the SCSU campus and learn about some of the new science facilities built and how they are used in student learning and experiences. First come-first served (25 max limit).

**GLOBE Weather NGSS-Based Instructional Unit for Middle School** – ASC Room 201  
Moderator: John Ristvey  
Presenters: Lisa Gardiner, Becca Hatheway, Renee Minaya, Lindsey Mohan, Bill Meyers  
GLOBE is developing a Next-Generation Science Standards (NGSS) based instructional unit for middle school teachers that promotes student understanding of weather phenomena. Throughout the unit, students will work with weather data, analyze data, and use related GLOBE atmosphere protocols and activities. This session will provide participants with an overview of the unit and the opportunity to contribute input before the unit is pilot tested this fall.

**SMAP Soil Moisture Measurements and New Instrumentation** - ASC Room 306  
Presenter: Narendra Das  
Have you taken soil moisture measurements using the SMAP protocol? Are you still interested in these measurements and want to learn about the development of a new instrument from Narendra Das and Erika Podest that could make taking these measurements easier? Then come listen to Narendra talk about and show their new instrument.

**Implementing GLOBE in a University** – ASC Room 308  
Moderator: Kevin Czajkowski, University of Toledo  
Presenters: Karl Schneider, University of Cologne; Scott Graves, Southern Connecticut State University; Kevin O’Connor, Mount Royal University  
Are you a GLOBE Partner at a university? Haven’t yet integrated GLOBE into your courses, or want more ideas? This session is for you. Come and learn about various implementation models at the university level in different countries.
**GLOBE Observer Mosquito Habitat Mapper: Partnerships, Programs and Potential -- ASC Ballroom**  
*Moderator: Theresa Schwerin*  
*Presenters: Russanne Low, Avery Waite, Jean Robert Batana Pires Ferreira*  
Learn about the international initiatives connected to GLOBE Observer Mosquito Habitat Mapper (GO-MHM). Team members share exciting new developments: GLOBE’s partnership with the IGES-led, USAID-funded Mosquito Challenge Community Campaign (MCCC), reports from MCCC workshops held in Brazil and Peru, and the recent announcement of the UN’s commitment to develop a proof-of-concept international citizen science mosquito database that would potentially include GLOBE data. All these initiatives are part of a larger effort to reduce the risk of mosquito borne disease worldwide, including USAID’s Combating Zika and Future Threats Grand Challenge. We will share educational resources created for use to support the GO-MHM use in informal and formal educational settings, and provide guidance how to best design a GO-MHM workshop for your community.

3:00 pm – 3:15 pm  **Break – Fireplace Lounge**

3:15 pm – 5:15 pm  **Consecutive Sessions – ASC Ballroom**

**Data Entry and Visualization from GLOBE Field Work**  
*Presenters: David Overoye, Cornell Lewis*  
During this session, participants will enter and visualize the data that they have collected during the fieldwork.

**Website Clinic**  
*Presenters: David Overoye, Cornell Lewis, Travis Andersen, Roller Angel*  
Having issues with your GLOBE account or understanding aspects of the website? This is a hands-on clinic for you to resolve your issues.

3:30 pm – 3:45 pm  **Student Break – Fireplace Lounge**

3:45 pm – 5:15 pm  **Student Tour of Science Building/Werth Center and Presentation on Drones in Research and Reporting – Meet at the Rock Garden and Proceed to SCI 210 (new Science Building)**  
*Facilitator: Scott Graves, Vern Williams, Scott Thibault, Darryl Nicholson, Peter Broadbridge.* Drone aerial group photo in rock garden.

5:30 pm – 6:30 pm  **Travel to Omni (or Peabody Museum) (Adults and Students)**
7:00 pm – 9:00 pm

**Night at the Yale Peabody Museum**
The Peabody Museum is part of Yale University. The Museum’s collections are a major component of the research and teaching activities of the Peabody and Yale. The curators and staff are engaged in contributing new knowledge based on the Museum’s research materials and making this knowledge available to the general public and to specialized audiences. The Yale Peabody Museum fills many important roles on the Yale campus, particularly as it has expanded its role in the community and the region, thereby offering a “front door” to the University for the general public. Heavy hors d’oeuvres will be served.

9:30 pm

**Return to the Omni Hotel**

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**The 21st GLOBE Annual Meeting on Social Media**

Follow along and share with us by using: #GLOBE21

- Twitter: @GLOBEProgram
- Facebook: @TheGLOBEProgram
- Instagram: @globeprogram
Thursday 3 August 2017

7:30 am – 8:15 am  Travel to Southern Connecticut State University (SCSU) campus – Omni Lobby

8:30 am – 10:30 am  GLOBE Strategic Plan: World Café – ASC Ballroom
    *Moderators: Tony Murphy, John Ristvey*
    The GLOBE Program’s current strategic plan ends in 2017. In April, a group of community members gathered to develop goals and strategies for the next five years. In this session, you will have an opportunity to review the draft plan (goals, strategies, and activities) and have a conversation to discuss the community’s contributions to the plan for the next five years.

8:30 am – 10:30 am  Student Campus Cache – *Meet in Rock Garden*
    *Facilitators: SCSU Student Interns*
    Theme is sustainability features of a college campus. Thinking about our human impacts.

10:00 am – 10:30 am  Break – Fireplace Lounge

10:30 am – 12:00 pm  Student Final Preparation for Presentations – *Meet in ASC Theater and proceed to Engleman Hall B Wing, Room 221*
    *Facilitators: Audra Edwards, Peggy Foletta, Peter Falcon*
    GLOBE Visualization Tutorial Presenters: David Overoye, Roller Angel

10:30 am – 12:00 pm  Concurrent Sessions

    **Elementary GLOBE – ASC Room 201**
    *Moderator: Becca Hatheway*
    *Presenters: Becca Hatheway, Tina Harte, Lisa Gardiner*
    Learn about the latest updates to the Elementary GLOBE resources, including new ebooks and a revised Teacher Implementation Guide. Try out a variety of storytelling strategies and engage in an activity that features cross curricular connections.

    **GLOBE Alignment with NASA Resources – ASC Room 301**
    *Moderator: Travis Andersen*
    *Presenters: David Bydlowski; Kevin Czajkowski, Elena Sparrow*
    NASA funded a number of GLOBE partners recently to integrate GLOBE and its activities with other NASA resources. Three partners are currently involved in this work. Come and hear how the three projects (Mission EARTH; AREN (AEROKATS and ROVER Education Network); Arctic and Earth SIGNs (STEM Integration of GLOBE and NASA assets) are progressing and their plans for the next year.
Present and Future Collaborations – ASC Room 306
Moderator: Lyn Wigbels
Presenters: Mark Brettenny, GLOBE Africa (TAHMO); Kristin Wegner, GIO (3D-Printed Automatic Weather Stations); Kim Martinez, NWF (EcoSchools); Dana Votapkova, Europe and Eurasia (EcoSchools); Lyn Wigbels, GIO (Peace Corps, UNEP)
GLOBE, over the last number of years has reached out to various organizations to renew and create collaborations. In this session, presenters will outline these collaborations and what they mean for GLOBE and the community.

Implementing GLOBE in a Classroom (U.S.) – ASC Room 305
Moderator: Todd Toth
Presenter: Kevin Dickson, Connecticut; Bill Meyers, Colorado; Marcy Burns, Ohio
Teachers will present examples of how they have implemented GLOBE in their classrooms. Come learn about how teachers integrate GLOBE into their everyday teaching and learning. Discussion is also welcomed.

Inclusion in the GLOBE Community-STEM Equity – ASC Room 308
Panel Discussion Moderator: Jennifer Bourgeault
Presenters: John Ristvey, Julie Malmberg, David Padgett, Henry Ortiz
US Partners have been working on the issue of STEM equity and inclusion for a number of years. Come learn about the National Science Foundation grant GIO received to organize three STEM equity bootcamps, SciGirls, GLOBE community-focused work, GLOBE with English language learners (ELL) and a guidance document for working with students with disabilities. Attendees will have a chance to share your local efforts and then let's discuss how GLOBE can further this work even more.

Technology Share-a-Thon - GLOBE Apps – Data Entry, Observer (Clouds), Mosquitos, Phenology – ASC Ballroom
Presenter: Matthijs Begheyn, Krisanadej Jaroensutasinee,
This session is organized by the GLOBE Technology Working Group. Next to presentations by the organizers, participants are invited to briefly share information about apps and other technologies that could be of interest to the GLOBE community. After the brief introductions, participants can learn more about the apps or technologies via roundtable discussions. If you would like to share an app or technology, plan to arrive to the session about 10 minutes early.

12:00 pm – 12:45 pm  Lunch
12:45 pm – 1:45 pm  
**Plenary Session – ASC Ballroom**

Panel Discussion: The Importance of Ongoing Environmental Monitoring; the Value of Citizen Science and GLOBE; How Local GLOBE Students can Connect their Data Collection to the Needs of Local Stakeholder/Municipality  
*Moderator: Scott Graves*

*Panelists: David Kozak, Mark Paine, James Tait, Rebecca French*

Panel questions/discussion points to include – the importance of ongoing environmental monitoring; expanding collaborations on citizen science, academia and local state agency stakeholders; and future planning for coastal resilience – SLAMM modeling and more. Examples of West Haven City, WH High School, SCSU ENV classes, SCSU MAR classes, East Haven City.

1:45 pm – 3:45 pm  
**Student Learning Experience Round Robin - ASC Ballroom**

*Moderators:  Peggy Foletta, Audra Edwards*

Theme is Coastal Resilience and Sustainability - Lessons Learned at Outer Island.

3:45 pm – 4:00 pm  
**Break – Fireplace Lounge**

4:00 pm – 5:00 pm  
**Highlights from the Past Year and Looking Ahead to 2018 – ASC Ballroom**

*Presenters:  Lin Chambers, David Overoye, Tony Murphy*

This session outlines some of the highlights from the past year and plans for the year ahead for the program.

5:00 pm – 5:30 pm  
**Travel to the Omni**

7:00 pm – 9:00 pm  
**Group Photo and Closing Networking Event – Omni Grand Ballroom**

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