

# NetSci High Workshop & Conference 2014

**July 17-25, 2014**  
**Boston University**

Accommodations: Check-in after 2PM at The Tree House at MassArt, 578 Huntington Avenue, Boston. Phone: 617-879-5105

Dining Facilities: All meals are at Boston University's Warren Towers, 700 Commonwealth Avenue. You will need to wear your "NetSci High 2014" badges to get in through security. At the check-in to the dining hall, simply say you are "prepaid" through the workshop (and again wear your badges). On weekdays, breakfast begins at 7 am, lunch at 11:30 am, and dinner at 5 pm. On weekends, brunch begins at 10:30 am and dinner at 5 pm.

Workshop Location: Boston University Science Center at 590 Commonwealth Avenue

Workshop Rooms:

- SCI 113 - auditorium on first floor
- SCI 352 - conference room on third floor
- SCI 128/130 - computer labs on first floor
- SCI Lounge - main lounge on first floor
- PRB 595, 353, 365 - rooms in physics research building

Workshop Organizers:

- Paul Trunfio, Boston University - Cell/text: 617-833-3370
- Steve Uzzo, New York Hall of Science - Cell/text: (631) 645-3508
- Hiroki Sayama, Binghamton University - Cell/text: (607) 743-3915
- Catherine Cramer, New York Hall of Science - Cell/text: (508) 274-1354
- Lori Sheetz, West Point - Cell/text: (303) 906-7403
- Gene Stanley, Boston University

Program Website: [www.bu.edu/networks/](http://www.bu.edu/networks/)

WiFi Access at BU:

Guest ID: **162846**  
Name: **netscihigh**

## **Thursday July 17 - Student Workshop Day 1**

\*\* Get "Charlie Ticket" passes activated for 1 week at Kenmore (\$19)

**7:00 am – Breakfast (700 Commonwealth Avenue, Warren Towers, BU)**

**9:00 am – SCI 352 – 590 Commonwealth Avenue**

- Welcome & Overview

**9:30 am – SCI 352**

- "Informal Chat" #1 with Sandy Pentland, MIT

**10:30 am – Science Center Lounge**

- Get to Know You Activity

**11:30 am – Lunch (700 Commonwealth Avenue, Warren Towers, BU)**

**1:00 pm – SCI Courtyard**

- Activity: Columbian Hypnosis

**1:30 pm – SCI 130**

- Gephi: Visual Representation of Networks

**2:30 pm – SCI 130**

- Graphr: Hands-on Network Visualization Tool

**3:15 pm – SCI 130**

- Install NetLogo & Network Interactives

**4:00 pm – SCI 352**

- Wrap Up

- Introduce "Talk Show"

**5:00 pm – Dinner (700 Commonwealth Avenue, Warren Towers, BU)**

## **Friday July 18 - Student Workshop Day 2**

**7:00 am – Breakfast (700 Commonwealth Avenue, Warren Towers, BU)**

**9:00 am – SCI 113**

- “Talk Show #1”

**9:30 am – SCI 113**

- An Overview of Network Science
- “Rookie’s Guide to Networks”
- Spread of Information on a Network
- Naming Networks

**11:30 am – Lunch (700 Commonwealth Avenue, Warren Towers, BU)**

**1:00 pm – SCI 113**

- “Talk Show #2”

**1:30 pm – SCI 113**

- “Imaginary Board of Directors Activity” (Brooke Foucalt-Wells)

**2:45 pm – SCI 113**

- Data Visualization Tour

**3:45 pm – SCI 113**

- Group Network Exploration Challenge Assignment

**4:00 pm – SCI 113**

- Tips for Making Presentations
- Wrap Up

**5:00 pm – Dinner (700 Commonwealth Avenue, Warren Towers, BU)**

## **Saturday July 19 - Student Workshop Day 3**

### **8.45 am – SCI 113**

- “Talk Show #3”

### **9:00 am – SCI 128 & 130**

- Python and NetworkX Installation
- Getting Started in Programming
- Network Analysis, Visualization and Simulation in Python Programming Language
- NetworkX Programming Basics
- Reading, Writing and Plotting Network Data

### **10:30 am – Brunch (700 Commonwealth Avenue, Warren Towers, BU)**

### **12:00 pm – SCI 128 & 130**

- Degree Distributions
- Characteristic Path Lengths
- Connectivity
- Clustering Coefficient
- Centrality
- Community Detection
- Coreness
- Dynamic Simulation of Networks

### **2:00 pm – SCI 113**

- “Talk Show #4”

### **2:15 pm – SCI 113**

- Design & Networks Workshop (Isabel Meirelles, Northeastern University)

### **5:00 pm – Dinner (700 Commonwealth Avenue, Warren Towers, BU)**

## **Sunday July 20 - Student Workshop Day 4**

**10:30 am – Brunch (700 Commonwealth Avenue, Warren Towers, BU)**

**5:00 pm – Dinner (700 Commonwealth Avenue, Warren Towers, BU)**

## **Monday July 21 - Student Workshop Day 5**

**7:00 am – Breakfast (700 Commonwealth Avenue, Warren Towers, BU)**

**9:00 am – SCI 352**

- “Talk Show #5”

**9:20 am – SCI 352**

- Group Network Exploration Challenge Presentations

**11:30 am – Lunch (700 Commonwealth Avenue, Warren Towers, BU)**

**1:00 pm – SCI 113**

- “Talk Show #6”

**1:20 pm – SCI 113**

- Informal Chat #2: Erzsébet Ravasz Regan (Beth Israel Deaconess Medical Center)

**2:30 pm – SCI 128 & 130**

- Parallel Workshop 1: Getting Started with Processing

- Parallel Workshop 2: Friendship Paradox

**3:30 pm – SCI 128 & 130**

- Swap Workshops

**5:00 pm – Dinner (700 Commonwealth Avenue, Warren Towers, BU)**

## **Tuesday July 22 - Student Workshop Day 6**

**7:00 am – Breakfast (700 Commonwealth Avenue, Warren Towers, BU)**

**9:00 am – SCI 113**

- “Talk Show #7”

**9:20 am – SCI 128 & 130**

- Parallel Workshop 1: How Google Works
- Parallel Workshop 2: Networks and Diseases

**10:20 am – SCI 128 & 130**

- Swap Workshops

**11:30 am – Lunch (700 Commonwealth Avenue, Warren Towers, BU)**

**1:00 pm – SCI 113**

- “Talk Show #8”

**1:20 pm – SCI 113**

- Informal Chat #3: Brian Keegan (Northeastern University)

**2:30 pm – SCI 113**

- Chalk Talk
- Network Science Core Concepts in Small Groups

**5:00 pm – Dinner (700 Commonwealth Avenue, Warren Towers, BU)**

## **Wednesday July 23 - Student Workshop Day 7**

**7:00 am – Breakfast (700 Commonwealth Avenue, Warren Towers, BU)**

**9:00 am – SCI 352**

- “Talk Show #9”

**9:15 am – SCI 352**

- Introduction to Project Brainstorming  
- Organizing Ourselves for the Year

**10:00 am – SCI 352**

- Collaborative project for Y2 and Y3 students

**11:30 am – Lunch (700 Commonwealth Avenue, Warren Towers, BU)**

**3:00 pm – SCI 113**

- Presentations of collaborative projects

**5:00 pm – Dinner (700 Commonwealth Avenue, Warren Towers, BU)**

## **Thursday July 24 - Student Workshop Day 8 (Research Conference)**

**7:00 am – Breakfast (700 Commonwealth Avenue, Warren Towers, BU)**

**9:00 am – Room TBD**

- Welcome
- NetSci High 2013/14 Retrospective

**9:20 am – Room TBD**

- “Beethoven to Eminem” - Robin Wilkins, University of North Carolina, Greensboro

**10:00 am – Room TBD**

- Student Presentations

**11:30 am – Lunch (700 Commonwealth Avenue, Warren Towers, BU)**

**1:00 pm – Room TBD**

- “Coupled Networks” – Gene Stanley, Boston University

**2:00 pm – Room TBD**

- Presentation of Certificates
- Words of Wisdom Discussion

**3:00 pm – Room TBD**

- Online Survey
- Focus Group with Russ Faux

**4:15 pm – SCI Courtyard**

- Group Pictures

**5:00 pm – Dinner (700 Commonwealth Avenue, Warren Towers, BU)**