**PART 1, Monday, April 5: Introduction, Case Studies** (J. Urban-Rich)
10 – 10:30             Introduction to Microplastics
10:30 – 11             Hands on Demonstration
11 – 12:00             Sampling Methods and Ecotoxicology
**PART 2, Tuesday, May 11: Microplastics & Marine Shellfish** (J.E. Ward & S. Shumway)

**Microplastics: What are they? Why should we care?**

The first part of this short course will introduce you to microplastics and different ways that they are categorized. Microplastics are plastic particles <5mm, some of which are created this size for their function (known as primary microplastics) while others are formed from the breakdown of larger plastic items or textiles (known as secondary microplastics). However they are formed, they are in all environments and we want to know their concentration. Yet collecting microplastics and separating them from other particles can be difficult and all the methods have limitations. We will discuss different methods that are used to collect microplastics from the environment and discuss their strengths and weaknesses.

Everyone participating in the course should receive a kit in the mail that we will use during the course to practice density separation. The kits will contain the basic supplies that you will need to conduct a density separation in front of your computer/camera along with two bags of sand. One bag will be a standard and one bag will contain sand collected from 1 of 3 beaches in the Boston Region. Prior to the course, you will need to make a saturated salt solution so open your kit when it arrives. While we are all remote, we will still be working together and getting our hands wet. Working as a group we will determine which beach has more microplastic pollution. We will then discuss the potential ecological and toxicological issues with microplastics. It should be a lot of fun and you will come away with experience in how density separation works, what environmental microplastics look like and knowledge about the current state of microplastic sampling and potential impacts of microplastics.