## Hands-On, Minds-On Instructional Practices

## **Green Plants, Red Glow**

Photosynthesis can be challenging to teach and uninteresting for students to learn, but this shouldn't be the case. In this hands-on, minds-on activity, students extract chlorophyll and then observe the abundant red fluorescence upon illumination. The same red light emitted from sunlit plants is captured by satellites to measure global photosynthesis. This simple and low-cost activity allows for the observation of a red glow (fluorescence) from chlorophyll and provides a novel and terrific anchor for teaching photosynthesis in a biological, agricultural and global ecology context, thereby inspiring all students to better appreciate the fascinating world of plants. Kits for this activity are available through the Center for Inquiry-Based Learning.

## **Presentation Target:**

Middle School

## Presenter(s):

- 1. Kathy Uyen Nguyen, Ph.D. Candidate, Department of Chemistry, North Carolina State University
- 2. Jason Painter, Director, The Science House
- 3. Rachael Polmanteer, Director of Resource Development, Center for Inquiry-Based Learning