

Mission: Our goal is to introduce ELMS 8<sup>th</sup> grade students to the basic science of renewable energy with a focus on Biofuels and Solar Power.

- Our guests include students engaged in the eCybermission program (21, Day2-8<sup>th</sup> grade science students), who are working on topics related to a micro-hydropower generator, solar panels, and reducing energy consumption/light pollution; 21, Day 1-8<sup>th</sup> grade science students; and their teachers.
- The “Expedition” for this semester is Progress, which encourages students to think: What is progress, what drives it, are there consequences to progress, and is progress the same for everyone?

Agenda – Wednesday, November 16th

8:50	Welcome	Daniel Collins, Graduate Assistant for ESF Outreach Dr. Chuck Spuches, Assistant to the President for Outreach
9:00	Introductions	Daniel Collins, Graduate Assistant for ESF Outreach
9:15	Biofuels <ul style="list-style-type: none"> <li>• What is a biofuel?</li> <li>• Waste Materials/Algae as Fuel</li> <li>• Harvesting Energy</li> </ul>	Dr. Marie-Odile Fortier, Assistant Professor, Forest and Natural Resources Management
10:00	Gateway Energy/Water Resources Tour <ul style="list-style-type: none"> <li>• Combined Heat and Power</li> <li>• Green Roof</li> </ul>	Daniel Collins, Graduate Assistant for ESF Outreach Fillipo LaRosa, Plant Utilities Engineer
10:30	Solar Power <ul style="list-style-type: none"> <li>• Conversion of light to usable energy</li> <li>• Efficiency</li> <li>• Cells vs. Array</li> <li>• Solar Eye (Rotating solar panel)</li> <li>• How is energy transferred to the consumer?</li> </ul>	Dr. Neal Abrams, Associate Professor, Chemistry
11:15	Renewable Energy and Progress <ul style="list-style-type: none"> <li>• What drives progress?</li> <li>• Is progress the same for everyone?</li> <li>• What are the consequences of progress?</li> </ul>	Dr. Tristan Brown, Assistant Professor, Forest and Natural Resources Management
11:45	Renewable Energy Game(s)	Daniel Collins, Graduate Assistant for ESF Outreach Jake O’Connell, Interim
12:15	Lunch and Discussion/eCybermission	Daniel Collins, Graduate Assistant for ESF Outreach eCybermission Graduate Student Team Advisors

1:00	Depart from Campus	
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**Important and Related eCybermission Dates**

- Final Registration Date: Wednesday, December 7, 2016
- Expeditionary Learning Middle School Exhibition Night: Thursday, December 15, 2016
- Final Mission Folder Submission Date: Wednesday, February 22, 2017