

Science Communication Opportunities

1.) Create a *Path to Science Careers* video using one of these options:

- If you are a scientist or working towards becoming a scientist, you can create *A Day in the Life of a Scientist* video. The idea is to guide students through your typical day at the lab. You can take this opportunity one step further by participating in a small (1-4 students) Q & A Zoom session, or in-class visit, at a Putnam County High school after a class of Juniors view your video.
- If you have a science degree and/or a science background but are not working as a scientist, you can share your *Science Career* video story. To help guide students in a realistic way, we want to produce a variety of videos highlighting many different career paths. As science advocates, we have a unique opportunity at Whitney Lab to showcase both *scientist* and *science-support* careers.

Video details and what to include:

- Your background and science path leading you to where you are today (insert as much appropriate personal information as you desire).
- Mistakes and lessons along the way (things you would do differently? What would you tell your younger self?).
- Research interests and current research questions
- Future goals
- *Path to Science Career* videos should be 8-12 minutes in length.
- Videos will be shared with local high school teachers, community partners, and our website via the Virtual Science Notebook.

Everyone has a different comfort level with sharing personal hardships & accomplishments, and a different comfort level in front of the camera. You can choose a video style/format that fits you as an individual.

2.) Create a *Science Education* video focused on connecting your research to one of the topics featured in Whitney's Virtual Science Notebook.

Video details and what to include:

- Target audience is 4th-12th grade, but topics can be introduced with the goal of increasing scientific literacy for the public.
- You can create your video with younger or older students in mind.
- Education Videos should be 3-5 minutes in length.
- Videos which contain a lot of scientific content should be broken up into individual shorter videos, building upon the main topic.
- Some topics and examples are outlined below. Videos in the Virtual Science Notebook will be organized under these main ideas for ease of navigation.
- The scientific topics were chosen to provide additional teacher resources as they relate to state standards. However, our educational goals and examples in the videos should be "Whitney-centric!"

Video Guidelines and Tips:

- We have people at Whitney able to help with content, production and editing as needed. If you would prefer to make your own, go for it! Note that all final products need to be approved by the education and media team. If you would like help getting started contact Brenda Cannaliato, brenda@whitney.ufl.edu for information.
- Create an outline and visualize how the content might fit into a video (a storyboard can help with this).
- Gather all images and pre-recorded video, graphs, illustrations, etc. you want to include.
- Walk through film location prior to filming to check lighting. Bright light is best, watch for shadows in the camera's field of view.
- Be aware of the general cleanliness of the area.
- Wear Whitney Laboratory apparel. Avoid colored stripes, excessive patterns, and non-Whitney logos.
- Be aware of background noise.
- Audio can be part of filming, or voice overs can be recorded later.
- For downloading purposes, it is easier to film in segments and then link together during editing.

Topic ideas:

The Virtual Science Notebook will be organized broadly by topics such as Biodiversity, DNA, Interdependence, etc. Any video you make will potentially fit into several broad categories for organization of the Notebook. Focus in on your specific topic, and the Education department will place the video in the most suitable broad categories.

If you need help with a topic, contact Brenda Cannaliato, brenda@whitney.ufl.edu for ideas, or choose from the requested high school topics listed below.

- Marine Ecosystems and Biodiversity: topics include habitat, ecological niches, succession, biodiversity, food chain/webs, inter-species relationships, symbiosis, and parasitism.
- Energetics: Primarily photosynthesis and chemosynthesis (hydrothermal vent systems); primary productivity within systems; some work with respiration (mostly in comparison with photosynthesis)
- Nutrient cycling in marine ecosystems: nutrient cycles including nitrogen, carbon, calcium, phosphorus, magnesium, sulfur; eutrophication
- Corals and coral reefs: physical science regarding reefs (conservation and ecological importance) as well as biology of the coral organisms themselves (this might be a good unit to tie in with if any of your research is with Cnidarians, etc.)
- Underwater geology: including plate tectonics, hydrothermal vent systems
- Coastal environments, including geology and biology of coast
- Human Impacts: Anything related to impacts on oceans, coastal systems, environmental management
- Ecosystem Services: pharmacological resources, etc.
- Metabolism, osmoregulation/osmoconformity, life cycles, anatomy/physiology of various organisms
- Scientific Theory Request: How did you come up with your question? What are the variables that worry you? How did you design your experiment? Did you have help? What kind? etc.

Goals of the Virtual Science Notebook:

- To become an easy to navigate "library" of sorts containing a collection of scientific informational videos made by Whitney students and staff.
- To promote scientific literacy for K-12 students, teachers, and the public
- To contribute to on-line resources which support Florida State Standard STEM requirements.
- To create Science communication opportunities for Whitney students and staff.
- Whitney's online science notebook can live on the web for a long time, allowing different people to contribute at different times. There is no deadline.

Resources:

- All UF students and employees have access to Linked In Learning.

<https://elearning.ufl.edu/supported-services/linkedin-learning/>

- UF journalism and film suggest the basic course titled *Video Foundations* by instructor, Anthony Artis.