

Teacher Information Sheet:

Meet a Science Filmmaker: Yat-Long Sam Poon



This is a teacher's sheet for the three readings on Yat-Long Sam Poon. It contains extra context for the readings and information that can be shared with students. We recommend also using the the grade 3-5 reading for background information.

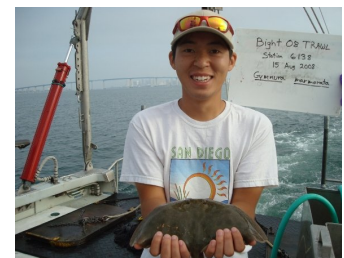
Additional Information:

last updated October 2021

- Poon has multiple job titles such as: Filmmaker, Sound Designer, & Photographer.
- Poon has skills in multiple aspects of filmmaking including videography, editing, and sound engineering.
- He works as a Media Producer for StarTalk which stars Neil deGrasse Tyson. His core work in this position is editing footage for the show and delivering the final product.
- He started working for StarTalk in 2012. From 2012-2015 he was an Audio Engineer.
- Poon teaches at the college level; his current or past courses are on the topics of biology, conservation, and filmmaking.
- Poon is an active volunteer in his community, including for Science Delivered!
- Poon has previously worked as a marine biologist doing environmental consulting.
- You can find some of Poon's videos on his YouTube channel but many are geared to older audiences. The Science Delivered Kickstarter video and video titled "What are we doing to the intertidal" are science-related and age-appropriate. Many of Sam's personal video projects are related to community and culture. Students may enjoy "CoTA - Journey to America," and "Greek Fest - What's Good, Fresno?" Additionally, "Pop and Plumage" is interesting but features taxidermy. Watch and see if some or all of it is appropriate for your students. Be sure to look at each video description to learn more about the work!

Education and Career Path:

- Poon majored in ecology in college.
- He has a masters degree in environmental conservation.
- He is mostly self-taught in filmmaking.



Poon during his time as a marine biologist & environmental conservation consultant.

Teacher Information Sheet:

Yat-Long Sam Poon & Science Standards

Below we outline the ways Poon's work can be connected to K-5 science and STEM standards or teachings.

Links to K-5 standards:

- Poon's filmmaking and photography can be linked to:
 - **1st grade light** - *NGSS 1-PS4-2, 1-PS4-3*. We created a bonus reading that explicitly discusses how understanding light and shadows is critical to creating films and photos. This fits in well with first graders' study of shadows and how light interacts with different objects.
 - **4th grade light** - *NGSS 4-PS4-2*. The bonus reading described above can be linked to this standard. Students should understand that virtually ALL objects reflect light (not just mirrors). Creating good lighting for film and photography requires a deep understanding of the differences in how light reflects off various objects.
- His work as a **Sound Designer** or **Audio Engineer** in filmmaking (and podcasts) relates to **1st grade sound** (*NGSS 1-PS4-1*) or the various **4th grade** *NGSS* standards that include aspects of sound (*4-PS3-2, 4-PS4-1, 4-PS4-3*).
- Poon uses a wide array of **technology** in his work. He needs to know what lighting and audio equipment to use for different shoots. He needs to understand how to set up and use the equipment. Poon also uses sophisticated software technology programs to edit videos.
- Poon's filmmaking can be linked to the *NGSS* SEP: **Obtaining, evaluating, and communicating information** (all grades). Poon uses his background in science and filmmaking skills to help communicate scientific information to the broader public. He must understand how to communicate both visuals and audio in an engaging, compelling, and accessible way.
- Poon's teaching and training in marine biology and conservation also relates to standards involving ecology, animals, and conservation/human solutions.