**Explore STEM Careers in Action**

**Welcome**

* Resources from [KQED](http://www.kqed.org) and [QUEST](http://science.kqed.org/quest/)

**Using Multimedia in the Classroom**

* [Why Use Multimedia in Science Education](http://science.kqed.org/quest/files/downloads/2011/06/QUESTWhyMedia.pdf)
* [How to Use Media Effectively for Teaching and Learning](http://science.kqed.org/quest/files/downloads/2011/06/QUESTMediaTips.pdf)

**Using Multimedia to Explore Careers**

* [Redwoods and Climate Change](http://science.kqed.org/quest/video/redwoods-and-climate-change/)
	+ Pre-viewing Activity: With a buddy, brainstorm all of the kinds of scientists who study things related to climate change. We’re going to watch a story about a biologists who studies redwood trees to learn about how climate change is affecting them. What are some tools or equipment they might use?
	+ Viewing Activity: On a piece of paper, make two columns: What tools, materials and equipment are used by the scientists? AND What skills are needed? While watching video, jot down notes in each column. After the video, compare your list with a neighbor.
	+ Did anything surprise you? Why is this work important?
* [Millie Hughes-Fulford: Scientist in Space](http://science.kqed.org/quest/video/millie-hughes-fulford-scientist-in-space/) – Viewing activity: focus questions (assign 1-2 to each student)
	+ Millie Hughes-Fulford was the first woman to do what? *travel into space as a working scientist*
	+ What was her role on board? *to carry out experiments from scientists from around the world*
	+ What did she learn about t-cells*? they don’t send out the same signals and scientists get sick*
	+ Who does she work with? *other scientists, astronauts, NASA*
	+ What is important about her work? *aid astronauts that are going into space and people with immune problems*
	+ What was she interested in as a child? *science fiction television shows*
* [Exploring Corals of the Deep](http://science.kqed.org/quest/video/exploring-corals-of-the-deep/)
	+ Watch 1:51-2:17 without sound and think about the following questions:
		- What do you think this machine is for? Who uses it? To study what?
	+ Watch with sound from 1:46 - 3:52 to find answers to questions.
* [Why I Do Science: Danielle Reed](http://science.kqed.org/quest/video/why-i-do-science-danielle-reed/) or [Why I Do Science: Drew Endy](http://science.kqed.org/quest/video/why-i-do-science-drew-endy/)
	+ What did the scientist say that stood out or was memorable?
	+ What interested him/her in the particular field of study?
	+ What does he/she like about the job?
	+ What about this career interests you?
	+ What questions would you like to ask to learn more about this career?
* [Darfur Stoves Project](http://science.kqed.org/quest/video/darfur-stoves-project/) – Take notes about the following while watching: What tools, materials and equipment are used by the scientist? Where does he spend time and do research? Who else does he work and interact with? Did anything surprise you? Why is this work important? Who benefits?
* [Do Now - A Love of Science](http://education.kqed.org/edspace/2013/02/06/do-now-62-a-love-of-science/)
	+ students use Twitter or can comment in the comment box

**Student Media Projects**

* Project ideas
	+ narrated slideshow about career
	+ interview a scientist - make a video
	+ map locations where scientist has worked and what they studied at each site
* [Media-Making Toolkit](http://science.kqed.org/quest/education/media-making-toolkit/)
* [Online Training Modules](http://education.kqed.org/edspace/2013/02/06/pd-module-2-implementing-science-based-media-projects/#more-4635)

[**QUEST Website**](http://science.kqed.org/quest/)

* [QUEST Blog](http://science.kqed.org/quest/blog/) (or science news article)
	+ Student activity: List jobs that you can think of that relate to the issue or topic. What kinds of scientists may be involved in the research, study or topic?
* [Science Education Collections](http://science.kqed.org/quest/education/curriculum/)

[**PBS LearningMedia**](http://ca.pbslearningmedia.org/)

* [Careers in Environmental Health](http://www.teachersdomain.org/resource/envh10.health.envhcareers/)
* [Careers in Engineering Technologies](http://www.teachersdomain.org/asset/ate10_int_engcareers/)
* [Information Technology: Computer Systems Engineer](http://ca.pbslearningmedia.org/resource/ates12.sci.pttcomputer/information-technology-computer-systems-engineer/) (part of [Pathways to Technology](http://ca.pbslearningmedia.org/search/?q=pathways+to+technology) collection)

**Other Fantastic Science Career Resources**

* [School to Careers](http://www.careers.iptv.org/) (Iowa Public Television)
* [Engineering Your Future](http://www.futuresinengineering.org) (Think TV)
* [Pathways to Technology](http://www.pathwaystotechnology.org/fields/index.html) (WGBH Educational Foundation)

**Questions?** Contact scienceed@kqed.org