Research Profile

Julia Rodriguez: Studying Science through the Lens of History

Professor Julia Rodriguez doesn’t come up with scientific theories or observe cells through a microscope. She has, however, spent her life studying science. A contradiction in terms? Not at all.

Rodriguez is less interested in the validity of scientific claims themselves than in the question of how scientific ideas about race and gender intersect in society, specifically in Latin America.

Rodriguez’s passion for this nexus is evident in virtually every task she undertakes, from using her prestigious National Science Foundation (NSF) CAREER Award to create HOSLAC (History of Science in Latin America and the Caribbean), a digital archive of primary sources, web links, and references for students and professors, to writing award-winning papers such as “A Complex Fabric: Intersecting Histories of Race, Gender, and Science in Latin America,” for which she won the 2012 Best Article Prize by the New England Council on Latin American Studies.

As Rodriguez puts it, the underlying passion of all her work is to “make people realize that these things are much more connected than they think.”

When Rodriguez applied for the NSF CAREER Award in 2006, she knew her proposal would have to both exhibit strong research and show how that research could be integrated effectively in the classroom. Rodriguez consulted with her husband, Charles Forcey, who worked for many years in humanities digital publishing. “He said to me, ‘Why don’t you do a website? A database of some sort? What would make a contribution to your field?’ I immediately thought of primary sources and digitizing primary sources that could be used in teaching.”

And thus was planted the seed for HOSLAC. The award-winning archive covers 30 topics in the history of science in Latin America and the Caribbean, from Healers & Indigenous Medicine (2000 BCE+), to Latin American Nobel Prize Winners (1947-1995)—and everything in between.

HOSLAC is navigable by clicking on thumbnail photos of the over 200 primary resources themselves, or by exploring the primary sources as arranged by topic. Each primary source provides an image, historical information interpreting that image, and detailed references. It provides information that will intrigue newcomers as well as satisfy those looking for more detail.

This multipurpose usefulness is exactly what Rodriguez had in mind.

Aware of the specificity of her field, she says, “How many people teach a class on the history of science in Latin America? Not many. But a lot of people teach Latin American History. A lot of people teach U.S. History and European History, which have some overlap in topics such as exploration, navigation, slavery, etc. So I thought, there’s a really broad
audience I could reach. You’re teaching early modern European history? Well, here’s a unit on the discovery and exploration of America that you can just plug right into your class.”

Rodriguez jokes that she doesn’t make any money from HOSLAC, a nonprofit, open source site. But, there is one self-serving part of the enterprise: “To share with people my excitement about new insights from the scholarship on the history of science in Latin America.”

Some people are not even aware that scientific research is done in the region, Rodriguez says. How do you make sure people know that scientific breakthroughs such as fingerprinting and high altitude physiology were developed in Latin America? Make it free. Make it navigable. Provide the connection.

Not one to rest on her laurels, and always looking for new lenses through which to study the history of science, Rodriguez is working on a new book exploring the history of anthropology as a field. The book maps the contours of a complex, transatlantic dialogue among turn-of-the-century natural and social scientists from both Europe and the Americas in their pursuit of truths about Latin American races and civilizations.

She notes, “Late 19th-century science thought it had something new to say about human “nature.” In my classes, I look at that from a lot of different angles, interpretations, and settings. The history of anthropology is similar, but I’m looking specifically at the social scientists who took on the “science of man,” anthropology. These anthropologists themselves often came from biology, medicine and forensics backgrounds in that foundational period of their discipline, starting around 1860.”

No matter which class Rodriguez is teaching -- Citizenship and Inequality, the History of Childhood, or the History of Science, Medicine, and Technology in Latin America (her “dream class” in Fall 2013) -- the common denominator in her research remains the biological theories of human difference and behavior.

With her latest project, Rodriguez notes, “I’m just coming at the same questions using different sources: What is the social meaning of science? How are scientific ideas interpreted in other spheres? How do they make their way into our cultural practice and political policy?”

Begin your exploration of the HOSLAC archive at: http://www.hoslac.org/.

As an example of the rich and varied resources, click on the primary source Syphilis and Guaiacum (1500 A.D.) and up pops an image of a 16th century engraving that the viewer can zoom in and out of.

Next to the image (shown at left) is a lengthy discussion of how syphilis spread during this time period, and the commonly held belief that guaiacum wood was a cure for the disease, along with references to support this information.


Story by Lucy Hitz. 1/3/13