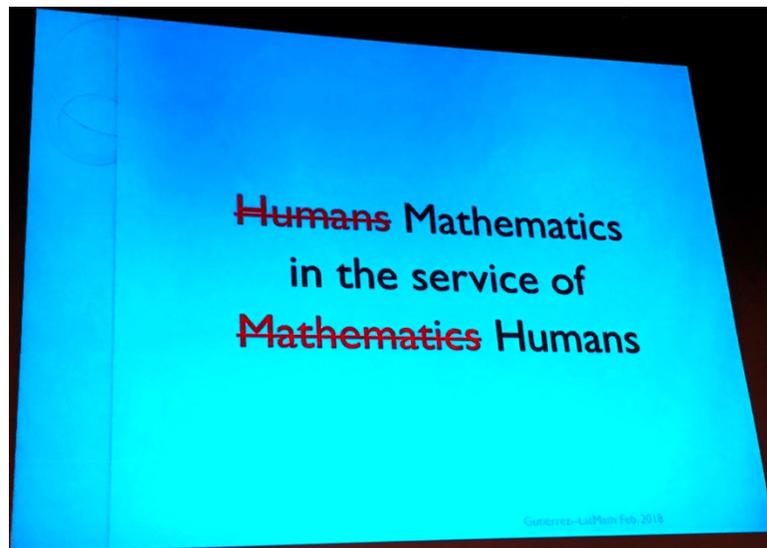


## Mathematical Biology at LatMath 2018 at IPAM

By Dr Carrie Diaz Eaton, SMB Education Subgroup Chair

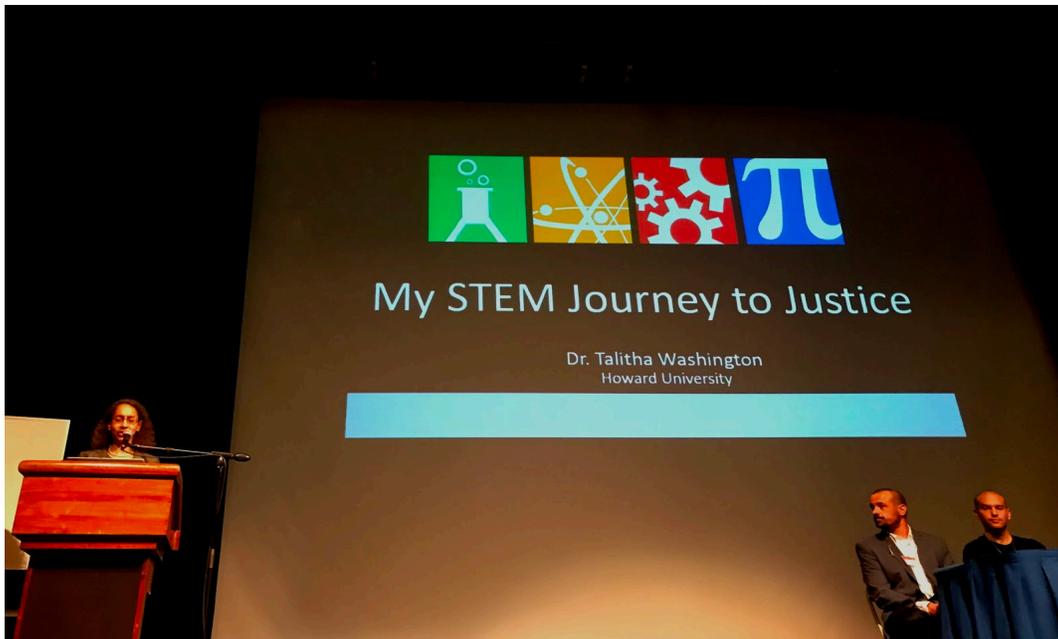
Photo credits to Vanessa Rivera-Quiñones

This conference had a very strong mathematical biology presence, and we attribute that to a few reasons in no particular order. The first is Dr. Mariel Vazquez, who was on the organizing committee. Many know of her mathematical biology work in topology and DNA and as the winner of the 2016 Blackwell Tapia Prize. She helped select plenary speakers and recruited Selenne Bañuelos, Alicia Prieto Langarica, and me to co-organize a session in Mathematical Biology. The second reason is that mathematical biology seems to be a particularly diverse branch of mathematics, in part because biology is a particularly diverse branch of STEM and because of a strong leadership legacy from researchers such as Carlos Castillo-Chavez and Ray Mejia.



Slide from From Rochelle Gutiérrez's talk

Inspiring mathematical biology plenary speakers included Edgar Lobaton of North Carolina State University who spoke on “From Cyborg-Insect to Human Motion: Topological Data Analysis Applied to Time Series” and Rochelle Gutiérrez from University of Illinois at Urbana-Champaign, who discussed “Rehumanizing Mathematics: A Vision for the Future.” During Dr. Gutiérrez’s talk, I discovered that while known for her work in an inclusive mathematics education, she started her studies as a systems biologist!

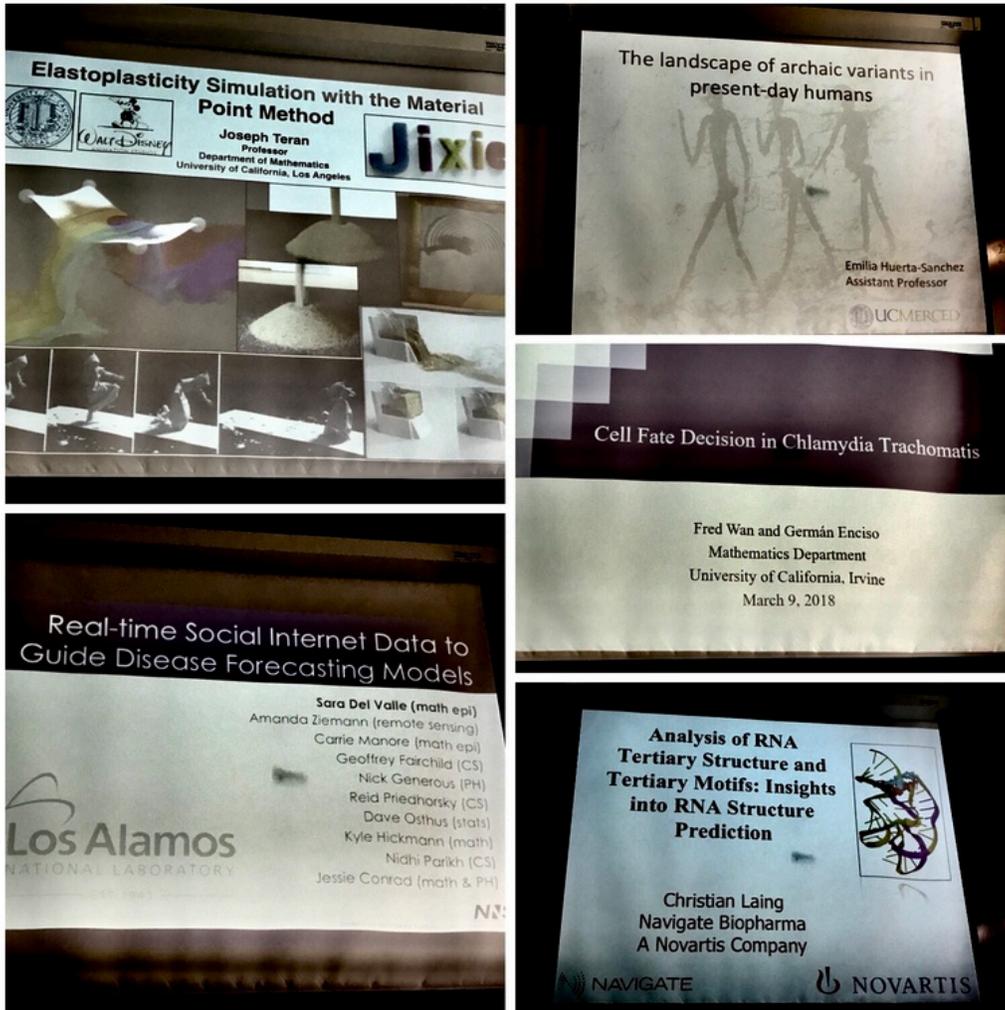


Slide from Talitha Washington's talk

Plenary panel speakers included mathematical biologists Carlos Castillo Chavez and Talitha Washington alongside Dagan Karp. The videos of these plenary talks are available on the website under the schedule:

<http://www.ipam.ucla.edu/programs/special-events-and-conferences/latinx-in-the-mathematical-sciences-conference-2018/>

The mathematical biology session speakers were Sara Del Valle (Los Alamos National Laboratory), German Enciso Ruiz (UC Irvine), Emilia Huerta-Sanchez (UC Merced/Brown), and Christian Laing (Navigate BioPharma), and Joseph Teran (UCLA).



As an organizer of various minisymposia and colloquia, one of the most striking features was how amazing all of the talks were, but how different the color of the speaker was than most mathematical biology meetings I attend in the US. I came out of this meeting with a roster list of strong speakers to invite when the next opportunity arises, both within and outside of mathematical biology. I encourage others to do the same. If you have students watch research talks from MBI or Youtube, add these to your line-up! If you are organizing a session, invite one of these speakers, or look at the speakers highlighted on [lathisms.org](http://lathisms.org), [mathematicallygiftedandblack.com](http://mathematicallygiftedandblack.com), and <http://www.biomat.org>.

Resources like <http://www.edexcelencia.org>, focus on why these actions matter for Latinx student success. Vanessa Rivera-Quiñones is a graduate student University of Illinois at Urbana-Champaign studying disease modeling. She wrote a blog for QUBES on what this conference meant to her (available at <https://qubeshub.org/news/blog/2018/03>). The talks she heard, the people she met, the experience helped give her a sense of belonging and a renewed sense of confidence. To keep great talent in mathematics, we need to show that all mathematicians are valued in our community.