

# Science Policy Fellows program trains ‘high-impact researchers’



**In its third year, GPS’s Science Policy Fellows program continues bridging disciplines at UC San Diego, delivers new research and even prototype tools**

By Sarah Pfladderer | GPS News



Streamlining the treatment of babies born with brain injuries, understanding the public health ramifications of heat waves and digging into health effects of biomass burning were a few of the highpoints hit by the UC San Diego School of Global Policy and Strategy’s (GPS) 2016-17 Science Policy Fellows.

Since its launch in 2014, the [Science Policy Fellows program](#) has motivated graduate students from UC San Diego’s STEM-related doctoral programs to incorporate a policy twist into their current scientific research. The program pairs

Ph.D. candidates from across the university with a GPS faculty member who guides them out of their technical comfort zones to explore the policy relevance and implications of their dissertation research.

“This program allowed me to gain a different perspective of what it means to be a high-impact researcher,” attested fellow Osinachi Ajoku, a 2019 Ph.D. candidate at Scripps Institution of Oceanography.

With mentorship from Assistant Professor [Jennifer Burney](#), Ajoku observed the impacts of biomass burning — for instance, from cooking practices and fires — on Africa’s climate and inhabitants.

“This fellowship allowed me to look at human climate interactions for the first time in my current thesis,” he said. “If this research pans out to be significant, then it will become important for climate policy in Africa in the future.”

Other 2016-17 fellows have already produced palpable results from their projects.

Devesh Vashihtha, a 2017 M.D. candidate at the School of Medicine, is penning a commentary with his faculty mentor, Associate Professor [Gordon McCord](#), on how family physicians are capable educators on the ways in which climate change affects public health in the U.S. It is a topic spun out of Vashihtha’s Science Policy Fellows project, which explored the relationship between heat wave visits to outpatient clinics and emergency rooms.

Collaborating with Vashitha on the project proved stimulating for McCord, too.

“Conversations with Devesh were useful for both of us,” McCord said. “They increased his exposure to policy analysis but also taught me much about health systems in San Diego.”

Echoing McCord, Vashitha said he concluded his fellowship with a more critical eye toward the policy implications of this research and the confidence to produce research that translates into policy.



For Mridu Sinha, a 2017 Ph.D. candidate in bioengineering at Jacobs School of Engineering, the program provided her an opportunity to work “in the field” on health-related projects.

Mentored by Professor [Roger Bohn](#), Sinha’s project kept close to her dissertation research that dives into factors affecting outcomes in infants with hypoxic ischemic encephalopathy (HIE), with a particular focus on an HIE treatment that cools infants in the first few hours of life, called therapeutic hypothermia

As part of her fellowship, she created a prototype “Cool Tool.” Essentially, it is online, evidence-based guidelines for nurses and other medical professionals to streamline the identification process of infants born with HIE as candidates for the expensive cooling treatments.

“Discussions with my mentor helped me appreciate the role of careful design and real-world challenges in creating something that is useful in the field,” Sinha said. “In addition, I better understood ways to bring about changes to policy and also understand the rationale behind current policies in my field.”

Reflecting on this third year of the Science Policy Fellows program, Burney, as the faculty lead of the program, noted that she is most moved by the student-faculty collaborations and the publishable projects produced from them.

“The biggest and best questions are often interdisciplinary,” Burney said. “There are a lot of UC San Diego students with deep knowledge at the frontier of STEM fields. When you pair them with faculty mentors who have policy knowledge in those domains, very interesting results ensue.”