



Dupont Summit 2016

Science, Technology, and Environmental Policy

December 2, Historic Whittemore House, Washington, DC

Panel

“Citizen Science, Sensing, and the Asthma Files Project”

Background: In Los Angeles and Southern California, asthma affects 12.7% of the population but this rate is higher in low-income and communities of color. Urban sprawl, inversion, and the international shipping industry contribute to past and present pollution rates. While past work has looked into the complexity of asthma in this research, there is a gap in the knowledge of this complexity in terms of politics and policy interactions.

Purpose: In partnership with the Asthma Files Six Cities Project, this study seeks to characterize interactions between scientific research and policymaking efforts to protect public health, to learn how science, Citizen Science, and Environmental Justice are interlaced with policy decisions, and to compare these interactions with other cities around the world.

Methodology: South Coast Air Quality Management District meeting minutes were analyzed from July 2015-July 201 for common and interesting underlying themes. When a theme was identified, the video of that portion was reviewed. In addition, eight semi-structured interviews were conducted with lobbyists, government employees, non-profits, and consultants. These interviews were transcribed and analyzed for key themes.

Results: Environmental Justice acts as a driving force on governmental agencies and Sacramento has become more accepting of this movement as evidenced by the increase in laws passed with an Environmental Justice and origin. Even with this, on a local level, low-income and communities of color still bear the burden of pollution while more affluent communities received more media attention, state funds, and institutional support to clean their air. In addition, while California passes ambitious environmental laws, the state rises to meet the benchmarks. In this way, California is a leader for the country on clean air and policy drives science and innovation which is opposite of what was previously thought.

Conclusions and Future Directions: Controlling asthma rates in Southern California is a complex and dynamic process. It will further be helped by sound innovation and implementation policies. In conjunction with Environmental Justice advocates, California will provide a promising model for other states to follow. In addition, it will be interesting to explore how the role Citizen Science will play with air quality collection in the upcoming years as this incorporates an Environmental Justice component.

Panelists

Jessie Levin, *Pomona College*

Lindsay Poirier, *Rensselaer Polytechnic Institute*

Christy Spackman, *Harvey Mudd College*