

# Acknowledgements

## Troy D. Abel's Praxis for Environmental Justice Showcase

I am excited, honored, and humbled to be featured for the 2017 innovative teaching showcase on engaging social justice. My engagement with social justice and its environmental dimensions are far from my own doing. In fact, my scholarly voice on these topics have been shaped and transformed by collaborating professors, colleagues, students, and communities for nearly two decades. I first encountered the intersection of social justice and environmental issues as a doctoral student in the early nineties. My chosen field of environmental policy and all of its institutions were dominated by a vigorous debate over the unequal distribution of pollution hazards.

At the time, protests and research on toxic waste disparities for nonwhite and poor communities rattled environmental policy institutions in the United States (US). Labelled environmental racism, scholars and community activists were documenting the unfair treatment and meaningless involvement of people in the development, implementation, and enforcement of environmental policies because of their race, color, national origin, or income. The sometimes acrimonious debate attracted the interest of many of my peers in and out of our classes. Two of my professors would become important mentors for my EJ scholarship while at GMU.

First, Kingsley Haynes was the Dean of the GMU graduate school and he welcomed me and my peers to graduate studies at GMU in the fall 1992 convocation. He rhetorically asked what we thought was different about becoming a graduate student?

He described how the classes had larger numbers as prefixes. Three and four hundred classes corresponded to third and fourth year undergraduate courses. Now we would take five, six, seven, and even eight hundred numbered classes. We would read more each week for sure. We would have smaller classes, more freedom, but more responsibility too. Dean Haynes then described how we would best understand if we imagined the day of our graduation and the regalia we would wear.

Undergraduates would have the same black robes and square hats. Everyone would ceremoniously move the tassel from the right to the left. Some would have cords of gold and a special title. But the graduate students, Master's and Doctoral students, would have a scarf. Formally called a hood, its striped with the colors reflecting one field or another. But the real difference, Kingsley said, would be the words a graduate student would hear from him on that stage. "Welcome to the community of scholars."

Seven years later, the second Professor Tom Dietz gave me an antique book on county government. I had just successfully defended my dissertation and earned the right to wear the regalia of a Ph.D. My dissertation examined localities in the US who chose to inventory their Greenhouse Gas (GHGs) emissions and curtail them to a level consistent with an international treaty. Professor Dietz had remembered one of my hobbies I developed over six years of attending academic conferences. I sought out the used book stores in the cities hosting the swarm of academics. Inside the front cover of the 1933 book, Tom wrote this message. "Congratulations

on joining the conversation of scholarship as it evolves through history. With my wishes for great success in finding your voice in the discussion, 15 September 1998.”

These two professors helped me develop my scholarly voice and a research program engaging environmental justice that’s now going on 18 years. Kingsley and Tom mentored a group of doctoral students and me in the development and submission of a National Science Foundation (NSF) grant for a project titled “Social vulnerability analysis: spatial and hazard screening of toxic chemical releases” that addressed the following questions.

How does change in scale affect the analysis and outcomes of correlation between environmental hazard locations and socioeconomic variables? Are spatial clusters of environmental hazards and community socioeconomic variables evident in metropolitan areas? Can a hierarchy of metropolitan hazards be discerned across the metropolitan riskscape? Our proposal was funded and these questions have shaped my research program on Environmental Justice (EJ) and its political geography through eight of my 11 peer reviewed publications and two books. More importantly, those two professors helped me and my peers recognize the potential value of our voices in the scholarly conversation that just started.

Those GMU peers included Sanjay Marwah, Peter Arena, and Somik Lall and I’m indebted to them for their critical engagement and energy that helped shape my early engagement in EJ. I also am grateful to my other doctoral student peers like Henrietta Bullinger, Tyrus Smith, Annette Hanada, Ron Hira, Lee Higgins, and Buddy Kilpatrick. They provided a critical sounding board for many of my initial stabs at building an EJ research program. Jennifer Nowicki was one of the first students whose collaboration helped advance my social justice work in the St. Louis region.

Among my academic colleagues, Debra Salazar and Mark Stephan helped empower my scholarly EJ voice with both their collaborative approach to research and frank deliberation on papers, datasets, and methodological approaches. Both have been key authors on several EJ publications. I’m forever grateful for both their friendship and intellectual efforts on the challenges of environmental racism. Likewise, Western’s Kristen French and Vernon Johnson have been leading mentors in my own interrogations of white privilege and its overlooked prominence in environmentalism and the policies and institutions this modern social movement spurred. Both have challenged my thinking in critical ways and helped me share this perspective with my Western peers and environmentalists in the region.

I’ve also benefited from many students over the years who questioned or even challenged my thinking on EJ. In 2011, two WWU undergraduates collaborated with me and the environmental justice organization “The Forgotten People” based in Tuba City, AZ. Their mission is to improve the well-being of the Dine’ people who live on the Navajo Nation in Arizona. After a presentation I made at an EPA conference, representatives from the Forgotten People asked if I could help them create maps similar to the ones I had presented from my Seattle research. I shared this request in my environmental policy analysis course and undergraduates Jarrett Wheeler and Bob Sabie volunteered to collaborate and earn ENVS 498 credits. Their reports were titled *The Right for Environmental Self-Determination in Diné Country* and *Participatory mapping and environmental justice for the Navajo Nation* respectively. The second project also

involved the development of an [online mapping tool](#) that we submitted to the [EPA's Apps for the Environment Challenge](#). Sabie's work won national runner-up for the student competition.

This participatory action research and engagement with EJ challenges became a foundation and inspiration for nine more student EJ related collaborations including: (1) *Just sustainability in Seattle: nonprofits and civic environmentalism* (undergraduate Dan Kostek); (2) *Assessing EPA's EJ Small Grants Program* (undergraduate Megan Sarver); (3) *Cleaner air with green infrastructure: the case for South Park and Georgetown* (undergraduate Taylor Obata); (4) *Magnetic biomonitoring of polluted trees in South Seattle* (undergraduate Lauren Templeton); (5) *Community engaged research for efficacy and health in Seattle* (undergraduate Annemarie Davis); (6) *Problems, promises, and progress in EPA's EJ small grants program* (undergraduate Demaree Trull); (7) *Pollution biomonitoring curriculum for environmental justice* (undergraduate Jill Needham); (8) *Biomonitoring in Seattle: mapping spatial variation of PM concentrations in Industrial and high-traffic areas* (MS student Saba Asefa); and (9) *Airborne particles associated with metal accumulation and biomarker response in lichen* (MS student Gunnar Guddal). In sum, all of these students progressed with me from the classroom to their projects by hearing and reading about the voices of environmental injustice, hearing about my work on environmental disparities in class presentations, reading and contemplating my publications on Seattle's riskscape, and then transforming into a voice for environmental justice.

But, three of my former students stand head and shoulders above the rest: Stacy Clauson, Jonah White, and Patricia Robert. In my very first Western quarter, Patricia stopped by my office to talk environmental justice. She was pursuing an MA in Political Science and heard from her advisor Debra Salazar that I was researching EJ. We discussed her very original idea to develop a new scale of state EJ policy effort and I enthusiastically accepted an invitation to join Patricia's thesis committee. Less than a year later, Patricia was preparing her first scholarly conference paper for "The State of Environmental Justice in America 2007" conference at Howard University in Washington, D.C. Several years later, and thanks to Patricia's persistence and intellectual curiosity, we co-authored the *Review of Policy Research* publication with Debra Salazar titled "State of environmental justice: redistributive politics across the U.S." Patricia transformed from an excellent student to a valued peer as I continued to develop an EJ research program.

Second, Jonah White also arrived as a graduate student early in my Western career. He had an interest in how Seattle was being transformed by gentrification. It is a socioeconomic process observable at the neighborhood level and characterized by the displacement of existing poorer and nonwhite families by white, and wealthier residents. In 2009, I asked him to consider a collaboration exploring the relationship between gentrification and Seattle's urban riskscape. In our first published paper, we found that Seattle's industrial air toxic exposure risks were unevenly dispersed, gentrification was increasing the socioeconomic stratification of the city, and the inequities of both converged in the same South Seattle neighborhoods. That work prompted *Seattle PI* journalist Scott Sunde to ponder if the city was "[Creating Ghettos of Poverty and Pollution?](#)"

During his time at Western, Jonah transformed from a graduate student assisting in my scholarship on urban geography and environmental injustices to a research collaborator who led as much or more than he followed my directions. He is now a doctoral student in Geography at

Michigan State University and Jonah's continuing dedication and passion to examining the urban patterns of concentrated advantage and disadvantage will surely shape our thinking about environmental injustices. I'm proud to now call Jonah both a peer and friend and look forward to seeing his future research and publications.

Third, former graduate student Stacy Clauson was an invaluable collaborator on our efforts working with the Duwamish Community Action for Clean Air project from 2014 - 2016. This EPA funded Collaborative Problem-Solving for EJ grant supported a partnership between the Duwamish River Cleanup Coalition, the Puget Sound Clean Air Agency, the Washington chapter of the American Lung Association, King County Public Health, Huxley College of the Environment's Peninsulas Program (HCEPP) of Western Washington University (WWU), and the Georgetown and South Park Neighborhood Associations. The project achieved the following objectives: (1) compiled existing information on the sources of diesel and other air pollution in the Duwamish Valley, (2) identified and filled data gaps with new monitoring and mapping efforts, and (3) took actions to reduce (a) concentrations of air pollutants and (b) the frequency and severity of asthma among local residents.

Stacy distinguished herself in this project by designing a prototype air pollution web map and app to educate and empower residents; facilitating focus groups that reviewed the mapping prototype, and designing a second version of the online map that better informed Georgetown and South Park neighborhood residents. She also was a key contributor on two conference papers about our work and a 2015 publication in the journal of *Sustainability*. Titled, "Risky business: sustainability and industrial land use across Seattle's gentrifying riskscape," we explored the intersections of urban industrial and nonindustrial land use planning, gentrification, and environmental injustice. More importantly, Stacy was instrumental in helping transform my EJ research program from on doing research on communities to a community-engaged praxis with communities.

In conclusion, I'd like to also express my gratitude to my faculty and staff colleagues in the Department of Environmental Studies, my nominating peer Professor Gene Myers, my chair Professor Gigi Berardi, and my Peninsulas colleague Dr. Jenise Bauman. These individuals have been champions for my EJ work in a variety of ways and I'll be forever grateful for their support.