

CitSci2019: Key Environmental Justice Takeaways, Issues, Recommendations, and Next Steps

**National Institute of Environmental Sciences
(NIEHS) Webinar - Presentation**

March 27, 2019

CitSci2019 Conference

Theme: “*Growing Our Family Tree*”

March 13-17, 2019

Raleigh Convention Center

Raleigh, North Carolina

Sponsor: National Citizen Science Association and Partners

CitSci2019 Conference:
Environmental Justice (EJ) Planning Committee Members

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CitSci2019 – Key EJ Takeaways: Content

- A. Planning
- B. Presentations
- C. Citizen Sciences Association (CSA) Issues
- D. Research Issues
- E. Methodology / Technology Issues
- F. Next Steps: Recommendations to National Citizen Science Association (CSA)
- G. Thank You: Acknowledgements

Weblink: CitSci2019 EJ Dinner Panel Bios:

<https://www.citizenscience.org/2019/02/28/citsci2019s-environmental-justice-panel/>

YouTube: CitSci2019 EJ Dinner Panel: https://youtu.be/5FL2bCifB_A

CitSci2019 – Key EJ Takeaways: **PLANNING**

1. National Citizen Science Association (CSA) Board Invites Racial, Gender, and Geographic Diversity.
2. National Science Foundation (NSF) Funds Environmental Justice Scholarships (50-plus) & one year individual CSA membership with voting rights.



CitSci2019 – Key EJ Takeaways: PRESENTATIONS

NSF EJ Awardees as “presenters” rather than just attendees:

1. WERA Exploring EJ Fieldtrip/Site Tour in Mebane, NC
2. Posters/flash-talks, symposia, & workshops
3. EJ Dinner/Panel for all 800 attendees



CitSci2019 – Key EJ Takeaways: **CSA Culture ISSUES**

- A. The **“citizen science” social label does not encompass the “environmental justice” identity under federal civil rights, environmental, and public health laws and statues.**
- B. Not enough recognition or inclusion of community-driven, community-based applied and action-oriented science in fields of public health and environmental justice.
 - EJ grassroots research started in Warren County, NC 40 years ago, with protests and repeated arrests.**
- C. Not enough recognition or inclusion of long-term community-university partnerships and the use of community-based participatory research (CBPR) as a form of citizen science.
- D. The **National Citizen Science Association’s (CSA) leadership and universities do not currently represent racial/ethnic diversity of the U.S.A.**
 - 1. Wealth of citizen science work being performed in communities of color.
 - 2. Wealth of citizen science work being performed in partnerships with institutions that have a large number of students of color.

CitSci2019 – Key EJ Takeaways: Research ISSUES

1. Address the “**Guinea Pig Syndrome**” (per WERA PowerPoint) to curtail “**helicopter studies**” without planned solutions.
2. **Lack of trust** in impacted communities because of scientific racism
3. **Lack of trust** in impacted communities because of scientific colonialism
4. **Lack of trust** in impacted communities because of focus on dissemination that only leads to publication and not action
5. **Lack of trust** because of hero academics
6. **Lack of trust** because funding agencies do not really focus on action, impact, capacity-building and “**inpowerment**”
 - a) Inequities in funding between the scientific experts and real-life on-the ground community experts
 - b) IDC (*I don't care*) issues
7. **Concerns about research ethics** including scientific exploitation and pimping people's pain
8. **Scientists are not transparent about their values** and recognize the value of science is just not about knowledge production

CitSci2019 – Key EJ Takeaways: Methodology/Technology ISSUES

1. **Grassroots affordable and friendly new research monitoring technology: air, water, soil and “human exposures”:**
 - a) Need more technologies that can capture the exposure story of communities impacted by environmental injustice
 - b) More focus on the public health exposome
 - c) More technologies that can capture cumulative impacts
 - d) Current EPA monitoring framework is inadequate
 - e) Regulatory agencies are permitting poison instead of prescribing public health
2. **Lack of research that addresses human and the “*Three Bs: bees, birds, and butterflies*” in the same environments:**
 - a) The Three Bs frequently get more attention and protection than “*EJ Human*” people of color from some scientific disciplines
 - b) Lack of focus on environmental justice and public health in academic-driven, top-down citizen science research

CitSci2019 – Key EJ Takeaways: [NEXT STEPS](#)

Recommendations to the National Citizen Science Association's Board

1. Organize CSA Environmental Justice Workgroup
2. Integrate environmental justice into Diversity, Equity, and Inclusion Workgroup
3. Integrate environmental justice framework and principles into other workgroups and CSA programming
4. Increase diversity of CSA Board
5. Increase the number of environmental justice practitioners on CSA's Board

CitSci2019 – Key EJ Takeaways: [NEXT STEPS](#)

Recommendations to the National Citizen Science Association’s Board

1. Seek CSA Mission Statement’s inclusion of **WERA’s Community Owned and Management Research (COMR) Principles**:
 - a) Funding equity
 - b) Management parity
 - c) Science for compliance
 - d) Legal tools for compliance and enforcement of existing civil rights and public health statutes
2. **CSA Board and EJ Workgroup review and address new federal policy recommendations**, proposed by presidential candidates and U.S. Congressional Representatives, that are designed to reduced health disparities for people of color and the environment at large:
 - a) “***Environmental Justice Bill***” led by Senator Cory Booker’s (D-NJ) and
 - b) “***Green New Deal***” led by Senator Bernie Sanders (D-VT), Representative Alexandria Ocasio-Cortez (D-NY), and Representative Edward Markey (D-MA)

CitSci2019 – Key EJ Takeaways: **NEXT STEPS**

Recommendations to the National Citizen Science Association's Board

1. **Address EJ issues in people color communities and indigenous areas that move from “*Crisis to Chronic*” due to political barriers, hurricane/fire/flood disasters, and funding short-falls.**
2. Develop an Environmental Justice Declaration of Rights.
3. Create an online directory of EJ awardees to document stories, best practices, lessons learned.
4. Develop a stronger emphasis on STEM training to provide more access to citizen science resources (e.g., Sci-Starter) to communities of color including youth of color.
5. The **term “citizen science” is not inclusive**, and does not include over 40-million non-citizens. Think about adopting a new term such as community science or the people's science.
6. Foundations and government agencies must be more accountable to communities impacted by environmental justice to make sure there is equity in funding; CSA can play a role in this effort.
7. Develop **new funding mechanisms** for this work include using crowdfunding approaches.
8. **Engage institutions that train students of color including Historically Black Colleges and Universities (HBCUs), Hispanic Serving Institutions (HSIs), Tribal Colleges, etc.**

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- North Carolina State University
- IQAir Foundation
- West End Revitalization Association (WERA)
- University of Maryland-College Park (CEEJH)
- North Carolina Environmental Justice Network (NCEJN)
- National Institute of Environmental Health Sciences (NIEHS)
- Weblink and YouTube viewers

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 - ❖ Caren Cooper, North Carolina State University, Raleigh, NC
 - ❖ Sacoby Wilson, University of Maryland-College Park, MD & NCEJN
- CSA/NSF/EJ Dinner Panel – Racial and Geographic Diversity
- CSA/NSF/EJ Travel Scholarship Awardees (50+) Racially Diverse