

Environmental exposures across urban and rural communities in the Deep South

Feb 27-28th, 2019

Grant writing retreat

4-H Retreat Center, Columbiana, AL

Meeting Minutes

Attendees: Keisha Brown, Anabel Carter, Lauren Deanes, Mary Evans, Julia Gohlke, Michael Hansen, Ethel Johnson, Willie Lampley, Claudiu Lungu, Aundretta Montgomery, Molly Richardson, Sheryl Threadgill, Sheila Tyson, Suwei Wang, Steve Wood, Connor Wu, Ben Zaitchik

The meeting began with introductions and a fun get to know you exercise led by Ethel. Brief summaries of the NIH-funded project and other related projects were followed by discussions of goals moving forward (personal and collective), potential funding sources to address goals, and breakout groups to develop plans for application submissions.

Summary on outcomes and progress: An overview of the NIH funded project and accomplishments by Aim is provided ppt slide set (found in Files on Basecamp—'Grant writing retreat NIH project accomp.pdf'). Overall, aims are being completed in a timely manner, with some adjustments. For example, based on area-level VOC monitoring, personal VOC exposure monitoring was determined

Sheila and Keisha provided priority outcomes from the Birmingham. Overall, participants at workshops and monitor study enjoyed the project. Those in the monitor study liked receiving their results during the turn-in session. Sheila mentioned that some participants donated their incentive back to the Memorial Park Recreation Center. Sheila also mentioned the project helped to justify new swimming pool at Memorial Park and also projects with HUD to get air conditioning into housing. Keisha attended the environmental justice town hall, part of the Climate Reality Project and National Poor People's Campaign lead by Former VP Al Gore and Rev. Dr. William Barber, respectively, in Hayneville on Feb 22nd. Keisha felt that several of the ideas promoted were in line with ENACT. She mentioned there was a training in Atlanta through the Climate Reality Project that she would like to attend.

Ongoing environmental concerns in Birmingham were also discussed, including the recent announcement of a JCHB, DOJ, and EPA settlement with Drummond (owner of ABC Coke Facility in Tarrant) regarding Clean Air Act violations found in 2011. Inaccurate benzene emission estimates were discovered in 2011 by EPA and JCDH inspectors. According to the news article, the county's portion of the civil penalty will go toward public health benefits for communities near the ABC Coke facility. It was mentioned that it would be useful to follow-up with Mark Wilson on how this settlement money will be utilized. Although Matt Lacke couldn't attend, Julia mentioned she spoke with him prior to the retreat to get his ideas for our next steps and also to ask him about this settlement, considering that we had been sampling for BTEX in 2016 and 2017 in North Birmingham as part of this project. He said he had not known about the violations or the settlement until the news coverage and didn't have any specific

ideas for upcoming projects, although he did mention the JCDH will be one of the first places to implement new EPA air quality monitoring focused on ozone precursors.

Additional sources of pollution, including a facility that is burning car parts and ACIPCO were mentioned. Keisha mentioned another health fair in North Birmingham would be welcome, specifically focusing on high blood pressure, stress, mental health, COPD, autoimmune diseases, diabetes, and cancer. She mentioned that more emphasis needs to be on getting the word out prior to having the health fair to increase attendance---building up through distribution of flyers in churches and word of mouth.

Ethel reported participants in Wilcox Cty really enjoyed the project, particularly monitor study participants enjoying the pedometer and going outside. Many participants appreciated the incentive for this program. Sheryl mentioned results from workshop participants still overwhelmingly mentioned proper sewage as an issue, even though this has been a recognized issue since at least 1996, when Kellogg had funded projects on this issue in the area. She mentioned Claudia Poole (UAB Pediatrics) has a CDC funded project addressing the lack of sewage and safe drinking water. Ethel mentioned the desire to have a health food store in the area with fresh fruits and vegetables.

Molly and Suwei reported on their progress in analyzing the results from the monitor study and 2017 focus groups. Molly has submitted for publication the results of the sub-study including participants from the monitor study with Type II diabetes showing a small, but significant, reduction in morning glucose level with the additional 30 minutes spent outdoors, although no change in steps or temperature experienced was detected. She also presented these results recently at The Obesity Society annual meeting. She is currently working on analysis of focus group transcripts with Mary and a UAB student, Katie White. Suwei has submitted for publication an analysis of the Birmingham Public Works employees examining the temperatures they experienced during work hours and comparing it to recommended work-rest cycles given a specific work load and temperature/humidity/wind speed/solar radiation estimate. She found the using the nearest weather station data may slightly underestimate the number of hours in the most protective work-rest cycle when compared to using the temperature measured on individual workers.

Ben presented on findings from the temp/humidity monitoring sites within neighborhoods in Alabama, emphasizing the effect of tree coverage on nighttime temperature as well as difference they have found between results in Alabama vs. Baltimore Maryland in terms of matching ibutton data with temperatures measured at nearby weather stations.

Claudio updated the group on occupational VOC monitoring and how costly personal monitoring can be, justifying why we did not pursue this part of the original grant. He also mentioned programs through the NIOSH funded ERC—for example occupational health and safety training for teenagers, particularly related to summer jobs. He is also very interested in looking at utility and street pavement workers in terms of heat exposure and possible prevention strategies, like wearing cooling vests.

Mary updated on CSCH activities, specifically focusing on the newly funded project addressing blight in Birmingham. This project involves 8 neighborhoods (4 pairs), where randomly chosen neighborhoods will receive no intervention (control), a parenting skills (coping, communication) training intervention, a blight reduction intervention (such as a small park or community garden), or both the parenting skills and blight reduction. The city and the county have been asked to be involved. It might be useful to place neighborhood ibuttons in these neighborhoods this summer to establish a baseline.

Michael presented a GASP's emphasis on education, collaboration, and advocacy as well as a new video on a GASP initiative to develop real-time air quality monitoring capabilities throughout Birmingham. Steve mentioned Univ. of Alabama grants awarded to address sewage issues.

Willie mentioned the ProHealth Extension projects that focus on 14 counties over 3 years and focused on physical activity, nutrition, behavior, environment, and policy. He gave examples of project outcomes in Livingston and Gainsville including raised bed gardens, drip irrigation, fruit trees and free harvesting that can be checked out. He also mentioned a sand walking trail surrounding a playground, so parents can walk while children play. In addition, a fitness center in Gainsville, that has a code to get in to alleviate the need for staffing and a sliding scale membership.

Discussion on personal and collective goals: Julia mentioned her continued interest in urban/rural comparisons of environment/health relationships. Sheryl and Aundretta mentioned advocacy training is important to them and their work with Amy Badham. They also mentioned David Mathews Center for Civic Life. Sheila mentioned aiding senior citizens to get out and socialize and also to improve policy around Section 8 housing (both air conditioning and weatherization requirements). Steve mentioned water issues and Ethel mentioned some residents concern of the papermill smells and a possible coal mine below the Westgate community.

Identifying funding sources: To summarize discussion on the previous day as it pertains to grant writing, a list was developed of health issues, environmental issues, needed resources at community or individual level, policy change/advocacy topics, and ongoing projects that may be useful for identifying collaborators (Basecamp file 'grant writing retreat list of topics.pdf'). Molly presented the USEPA call for Environmental Justice projects. Michael mentioned GASP was working on a proposal for that call centered on North Birmingham and he also presented a Kresge Foundation call on climate change and health equity. Ben mentioned NSF Smart and Connected Communities and Coupled Human and Natural Systems programs and a Sloan Foundation call for instrumentation. Sheryl mentioned International Paper would be appropriate for projects in Wilcox County and Mary and Sheila mentioned Community Foundation would be appropriate for projects in Birmingham. Julia mentioned a renewal proposal to NIH of our current project. It was decided to have two breakout sessions to discuss these grant possibilities in further detail and bring back to the larger group. The first breakout was on the Kresge Foundation call and NIH renewal. The second breakout was International Paper, Community Foundation, and Sloan Foundation.

Review of components of successful proposals: Mary presented an overview of components of an NIH research plan and review criteria for NIH proposals. The slides are available on Basecamp ('components of a successful proposal.pdf')

NIH renewal breakout: Expanding the urban/rural comparison of time spent outdoors and temperature exposure and diabetes management to include two additional sites in Virginia. Working with extension family and consumer sciences programs designed for diabetes management. Willie suggested reaching out to Dr. Jennifer Wells at Auburn. Willie suggested looking at the DEEP, Power to Prevent, and Body and Soul curriculums. Extension would be a good way to go since Virginia Tech is land-grant university and extension will provide consistency across the two states. Church health ministry programs were also discussed. Sheila suggested meal preparation and Chef Sherrod at Lawson State as well as line dancing programs the get parents, grandparents, and kids involved and spending time together. Some barriers may include identifying certified instructors, booking a large enough facility and liability concerns,

preventing drop outs esp. if some participants feel like the program too fast paced or hard (e.g. older adults comparing themselves to teenagers). Ethel mentioned having a better pedometer, like a fitbit, would be a great incentive. Connor mentioned Xiaomi is another brand that is cheaper. A cluster randomized design was discussed. Ethel thought it would be possible to identify specific communities for different interventions (e.g. Pine Apple, Pine Hill, Camden, Coy). Some health outcomes that may be useful to measure are height/weight, blood pressure, heart rate, A1c, steps, sleep quality. Environmental exposures would be consistent with current grant (temperature, humidity, VOCs, possibly add ozone, PM). For the outdoor enhance program, bird watching or bird identification was brought up as a possibility. Sheila mentioned a kids science education program on bird identification in Eastlake.

The next deadline would be July 5th. Julia will prepare a draft 1 page specific aims and circulate to get the process started. She will also reach out to the NIH program manager to see if it fits within the construct of a renewal application.

Kresge Foundation Climate Change and Health Equity breakout: GASP will take the lead on this application with details found on 'Kreske Foundation Grant Ideas' and 'Kreske RFP' files on Basecamp. The Letter of Intent is due Mar 19th for a 12-14 month planning period grant to be potentially followed by a full 3 year grant. An initial idea will build from GASP's initiative to deploy real-time air pollution sensors in Birmingham. Potential outcomes were discussed: 1) Establishment of network of sensors, 2) Measurement of heat and PM, 3) Education and advocacy in kids and adult residents (citizen science at all levels), 4) Increasing trust in the community since approach would use citizen science with collaboration with universities and trusted community organizations.

International Paper: Sheryl will lead this effort since she has experience with successfully getting grants through their foundation. No deadline was found on website, but Sheryl said grants are typically around \$5000 and the grant is for 1 year. She will follow up with her contact at IP. Ideas for the application centered around improvements to the Resource Center including building a community garden in collaboration with extension in the back with a sand walking trail around the garden. It would need to be fenced and locked. It would have to be approved by the county commission and they would need to agree on upkeep of the land. A playground shade was also mentioned. A stove and meal preparation demonstration supplies would also be very useful for extension programs to be conducted at the resource center. Bioelectric impedance scales, treadmills, and stationary bikes could also be purchased and housed at the Resource Center for a fitness center. Metrics on how many people would be served would need to be part of the proposal as well as mission statement and summary of WCACHIL.

Community Foundation: The deadline is Aug 15th. It can be used to expand greenspace. It is for \$5000-\$75,000 and you need to have a matching sources. Sheila identified several possibilities. The greenspace on the West End near Cotton Ave. was mentioned as an area to transform into usable greenspace and social event space and connect to other nearby walking path areas. Mary and Sheila will lead up the effort to develop an application. Additional details can be found on Basecamp in the file 'Community Foundation of Greater Birmingham'. Other ideas to investigate are a health clinic in North Birmingham.

Sloan Foundation: This grant was examined by determined not a good fit, since needs an Asst. or Assoc. Professor in Alabama to lead up the effort.

Wrap up and action items: Our last workshops under the current NIH funding will be this Fall. Ethel mentioned climate change as a focus for this workshop. Additional action items from the grant application discussion are summarized below.

1. Michael will draft a summary for the Kresge Foundation submission and reach out to others as needed. LOI due Mar 19th.
2. Sheryl will reach out to her International Paper contact to determine deadline for submission.
3. Julia will develop an aims page and discuss with NIH program officer (target Apr. 1). Renewal submission date July 5th.
4. Sheila and Mary will draft the Community Foundation proposal idea and include others as needed. Due Aug. 15th.
5. Julia will work with Keisha to draft a letter to Mark Wilson regarding settlement.