SUMMER LEA KUHN

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PROFILE

As a current District Assistant Director, I assist in providing visionary oversight and strong leadership for the West Virginia University (WVU) Health Sciences Center (HSC) for Health Sciences and Technology Academy (HSTA) as it supports the HSC mission. This partnership focuses on but is not limited to fostering academic achievement, supporting enrollment and retention with a focus on increasing diversity, enhancing health literacy and healthy lifestyles among participants, and/or promoting Community Based Participatory Research (CBPR).

My position promotes efficiency in processes and cooperation among administrative functions within and among the administrative units as well as with the community leaders in the HSTA partnership. Along with the other HSTA and community leadership, I supervise four Program Specialists in Raleigh, Mercer, Mingo, Logan, and McDowell counties. This also includes 19 HSTA teachers and over 200 HSTA students.

In addition, my duties involve communicating and translating the principles of (CBPR) to HSTA teachers and students, along with educating HSTA-related families and communities about their health. I facilitate relationships with the academic scientists, who are engaged in community relevant research, and HSTA students. We transform difficult research ideas into high school research projects that students control and carry out. This has led to profound scientific studies where HSTA students are influencing healthy change among their community and families.

My field work also includes visits to local HSTA clubs supporting teachers and students in their development of science research ideas and projects, proper ethics training and practice, and translation of CBPR. I am a high school HSTA alumnus and serve just as a single example of the cyclic results HSTA has produced over the years. I am presently serving my third term as Director of HSTA Summer Institute. I assist in overseeing HSTA summer camps around the state and serve as Director of HSTA's Senior Camp.

My research interests include connecting HSTA alumni with current active HSTA students in hopes of continuing to bridge the minority and underrepresented population gap in the academic world as well as ensuing West Virginia (WV) is a bright and healthy community to live in. One of my current research projects is looking at college persistence and successes among HSTA students who have completed the HSTA program. I'm looking at alumni data to see if there is a relationship between the number of risk factors (minority background, financially disadvantaged family, and/or first-generation college student) and college persistence/successes. I will present this research at the North Central Sociological Association (NCSA) regional conference in March 2020.

In addition to looking at HSTA alumni, I am lead author on a manuscript looking at the impact of HSTA as an after-school program and how it influences health behaviors and outcomes among rural WV community members. During this study, our research team observed that HSTA students and community members in the intervention group statistically decreased total cholesterol. We also found that just being in the study, HSTA students and community members improved LDL cholesterol, A1C, and blood pressure. HSTA students and the program are real vectors of change and their potential will only develop from here. I hope to provide more evidence of HSTA's impact on health in WV communities in future studies. This manuscript will be submitted to *Obesity*.

September 2009 -June 2011

Oak Hill/Mount Hope High School HSTA Teacher, Oak Hill WV

- Academic role model for the Oak Hill and Mount Hope High School HSTA Clubs
- Provided students with hands on science activities exploring a range of topics
- Assisted in formulating community-based research studies
- Provided career-based guest speakers in STEM and Health Sciences
- Prepared students for college by searching for majors, careers, scholarships, and colleges to attend

August 2010 -

Analabs, Inc. Environmental Lab Analyst, Beckley, WV

June 2011

- Performed total suspended solid and total dissolved solid tests
- Provided support to other sections in the lab
- Lead and assisted in the planning of a local elementary science club

July 2011-

HSTA Community Research Associate/District Assistant Director, Shady Spring, WV

Present

- Develop, communicate and translate principles of CBPR between community, students, teachers, and faculty
- Shape and evaluate the HSTA curriculum
- Develop and plan in-service training for HSTA staff and teachers
- Mentor students on their citizen science research ideas and projects, proper ethics training and practice, and translation of CBPR to their local communities resulting in publishing/sharing on the power of research through students engaging with scientists and researchers
- Engage with academic researchers to prepare community-based research that HSTA students carry out in the community (i.e. research design, grant writing, IRB, data collection, data analysis, dissemination of results to the community as well as oral presentations and manuscripts)
- Create an online application system for HSTA using REDCap
- Create a tracking system for HSTA's program (i.e. teachers reports, student progress, alumni information, community governing information, etc.)
- Serve as the Director of HSTA Summer Institute (2018-Present)
 - Chair the HSTA Summer Advisory Board
 - Arrange the Summer Institute Budget for all HSTA summer camps
 - Manage all summer camp student applications
 - Counsel Campus Directors in planning and implementing summer camp curriculum including all HSTA camps as well as Health Careers Opportunity Program (HCOP) Summer Programs HAPPEN and GUIDE
 - Continue to cultivate relationships with Campus Directors at Marshall University, WVU
 Institute of Technology, Glenville State College, WV State University, and WVU Potomac
 State College
- Serve as the Director for HSTA Senior Camp held at WVU Main Campus (2018-Present)
 - Supervise the recruitment and hiring of summer camp mentors at WVU
 - Work with WVU Faculty to implement college classes
 - Assist student workers in planning and implementing Senior Camp activities
- Supervision of Program Specialists and HSTA teachers in Raleigh, Mercer, Mingo, Logan, and McDowell counties
 - Assisting community leaders with hiring Program Specialist and covering if a Program Specialist is absent
 - o Building and maintaining community relationships
 - Supporting HSTA teachers with program curriculum and annual student communitybased research projects

EDUCATION

West Virginia University, Morgantown, WV, Masters/Ph.D. Sociology, expected 2024 West Virginia University, Morgantown, WV, Master of Public Health, 2012 West Virginia University, Morgantown, WV, BS Biology, Psychology minor, 2009

KEY SKILLS AND CHARACTERISTICS

- Critical thinking
- Handling pressure
- Proficient technology skills
- Cloud Computing in OneDrive, DropBox, GoogleDrive
- Leadership
- Problem solving
- Team development and involvement
- Community relations expertise
- Grassroots organization
- Community resource development
- WVU KC IRB Knowledge
- Maintaining and building community partnerships
- Strong oral and written communication skills
- Administrative skills
- Mentor

- Microsoft Office Suite
- Adaptability
- School community relations
- Coaching academic faculty on community research engagement
- Assisting faculty with grant writing and IRB
- Project management skills
- Deep knowledge of statistical methods
- Database management skills
- Data collection and management software in REDCap and Qualtrics
- Data software STATA, JMP, SAS
- Organization of statewide events
- Curriculum development for students and teachers
- Educator

PROFESSIONAL COMMITTEES

- American Public Health Association (APHA) Section Councilor serving as the Website Chair (2016-2019) and Section Governing Council Representative 2019-2020.
- APHA abstract reviewer (2016, 2017, 2019, 2020).
- First 2 Network Committee (Member of the Faculty-Student Engagement Working Group: Linking college students to university faculty for mentorship and research opportunities. Member of the College Readiness Working Group helping prepare school aged students for college).

AWARDS

- WVU Chancellor's Award for Outstanding Team (HSTA) 2013
- WVU HSC Vice President's Award for Outstanding Achievement in Professional/Non-Teaching 2018

PUBLISHED MANUSCRIPTS

- Siciliano PL, BL Hornbeck, S Hanks, S Kuhn, AJ Zbehlik, AL Chester. (2018). Taking a Look at the Health Science and Technology Academy (HSTA). Journal of STEM Outreach, 1(1).
- Chester A, S Hanks, S Kuhn, F Jones, T White, Harris M, BL Hornbeck, S McKendall, M McMillion, C Morton, M Slusser, RK Saunders. (2018). Social Media Based STEM Enrichment Curriculum Positively Impacts Rural Adolescents Health Measures. Journal of STEM Outreach, 1(2).
- Hanks S, A Chester, C Morton-McSwain, S Kuhn, M McMillion, S Paulsen, U Para, S Groark, Y Cannon, BA Branch. (2012) Obesity Management Organized by Adolescents in Rural Appalachia. Obesity Interventions in Underserved U.S. Populations: Evidence and Directions (V Brennan, S Kumanyike, R Zambrana, eds). John Hopkins University Press.

PENDING MANUSCRIPTS

Ozga, J, N Felicione, S Ferguson, S Kuhn, M Blank, G Dino. Dual Use of Cigarettes and Smokeless Tobacco: Product Use and Nicotine Exposure. Accepted in Tobacco Control, waiting publication.

MANUSCRIPTS UNDER REVIEW

Wiener, C, K Bailey, A Adcock, S Young, S Kuhn and C Morton. Peer-Assisted Learning: Impact On Oral Health with Near-Peer Didactic Oral Education to Middle School Children Provided by High School Students. In Review: Dental Oral Bio and Craniofacial Research.

MANUSCRIPTS IN PROGRESS

Kuhn, S, RK Saunders, A Chester, M Harris, C Morton, M McMillion, and S Freeland. Effects of Social Media-Based Lifestyle Intervention for At-Risk Adolescent Peers and their Families. In Progress.

Misra, R, S Farjo, M Adelman, R McGinnis, A Chester, C Morton, S Freeland, M McMillion, S Kuhn. Community Outreach to improve diabetes screenings in rural and undersevered WV Counties. Poster presentation at the Rural Health Conference, Huntington WV, 2019.

Chester, A, S Freeland, M McMillion, S Kuhn, C Morton, L Cossman. HSTA Citizen Science: Adolescents Addressing Childhood Obesity through Early Childcare Facilities. Poster presentation at the Annual Science Education Partnership Awards (SEPA) Conference, Washington DC, 2019.

Ozga, J, N Felicione, S Ferguson, S Kuhn, M Blank. Dual Use of Cigarettes and Smokeless Tobacco: Product Use and Nicotine Exposure. Poster presentation at the Society for Research On Nicotine and Tobacco (SRNT), Baltimore MD, 2018.

Chester, A, S Hanks, M McMillion, S Kuhn, C Morton. Teaching to Learn: WV-HSTA Students Take CBPR to Their Communities. Poster presentation at the Annual SEPA Conference, Washington DC, 2016.

Kuhn, S, M McMillion, C Morton, A Chester, M Harris. West Virginia School of Osteopathic Medicine (WVSOM) & the Health Sciences and Technology Academy (HSTA) have partnered to train rising 11th and 12th grade students as Adolescent Health Advocates in a program that parallels WVSOM's Community Health Education Resource Persons (CHERPS). Roundtable presentation at the American Public Health Association (APHA), Denver CO, 2016.

Kuhn, S, M McMillion, S Freeland, C Morton, A Chester, T Haggerty. High school students' partner with medical school students to identify barriers to flu vaccinations among their peers. Poster Presentation at the APHA, Denver CO, 2016.

Zbehlik, A, R Pepin, R Akinnini, S Hanks, M McMillion, S Kuhn, C Morton, A Chester, S Bartels. HSTA Students (High School Students): Devan Bentley, Makayla Cole, Ashely Fleck, Nathaniel Flohr, Sean Fuller, Caitlin Fulp, Madeline Gates, Mandy Glaspell, Laura Gerwig, Jasmine Hammer, Drew Hardesty, Jada Harris, Je'Nye Hearn, Alexis Hines, Garrett Hunt, Elizabeth Jarrell, Brandi Isaacs, Megan Moyer, Richie Nelson, Nate Parrish, Morgan Pethel, Rachel Pennington, Steve Ramey, Colton Richards, Terron Robinson, Emily Smith, Devon Spencer, Alissa Stables, Tiana Turner, Taylor Wells, Haley White, Chase Wilson, Robert Wilson, Seth Wolfe. Knee Pain, Exercise, and Weight Loss in Community-dwelling Adults in Rural States with Divergent Health Outcomes. Poster Presentation at the APHA, Denver CO, 2016.

Chester, A, C Morton, M McMillion, S Hanks, S Kuhn. Community/Campus Partnership: Rural Pipeline for STEM Professionals. Oral presentation at the Science and Mathematics Teaching Imperative (SMTI) National Conference, New Orleans LA, 2015.

Kuhn, S, A Chester, S Hanks, C Morton, M McMillion. Scientist partnering with HSTA students to conduct CBPR. Poster presentation at the Rural Health Conference, Roanoke WV, 2015.

Straley, J, A Bolwerk and S Kuhn. Working Group: Partnerships in Rural Communities Form Viable and Meaningful Partnerships. Oral presentation at the International Teacher-Scientist Partnership Conference (ITSP), San Francisco CA, 2015.

Hanks, S, A Chester, S Kuhn. West Virginia Clinical Translational Science Institute Links Scientists and Teachers. Oral presentation at the International Teacher-Scientist Partnership Conference (ITSP), San Francisco CA, 2015.

Hanks, S, C Morton, S Kuhn, M McMillion, F Jones, T White, M Harris, A Chester. Social Media Intervention for Adolescents to Improve Healthy Lifestyles. Poster presentation at the APHA, Chicago IL, 2015.

Morton, C, S Kuhn, A Chester, S Hanks, M McMillion. Teen Initiated Sexual Education. Oral presentation at the APHA, Chicago, IL, 2015.

Kuhn, S. D Reed Jr., S England-Lord, D Harley, R Coleman, M McMillion, A Chester, S Hanks, C Morton-McSwain. A statewide initiative sponsored by the West Virginia Legislature to pilot a WVU Extension Service cyber bullying prevention program with HSTA WV students. Poster presentation at the APHA, Chicago IL, 2015.

Turner, J, S Kuhn, C Morton-McSwain, and J McGraw. Conflicting values associated with renewable versus non-renewable resource extraction in Appalachia. Oral presentation at the Ecological Society of America, Baltimore MD, 2015.

Branch, RA, S Tomasic, G Rose, B Lease, M Fierle, M Burgess, N Bunt, A Chester, S Hanks, S Kuhn. Community-Based Participatory Research (CBPR) By Youth: A Boomerang Model of Learning For STEM Teachers. Poster presentation at the Translational Science Annual Meeting, Washington DC, 2014.

Branch, RA, S Tomasic, G Rose, B Bunt, C Morton-McSwain, S Kuhn, S Hanks, A Chester. Wellness, Salutogenesis; A Novel Approach to Public Health in Disadvantaged Rural and Urban Communities. Poster presentation at National Conference on Engaging Patients, Families and Communities in all Phases of Translational Research to Improve Health, Bethesda MD, 2014.

Chester, A, S Hanks, S Kuhn, C Morton McSwain, RA Branch. Knowledge Broker Driven Community Based Participatory Research: An Avenue for Improving Health Outcomes in Rural Areas. Poster presentation at the All Together Better Health Conference, Pittsburg PA, 2014.

PROFESSIONAL CONFERENCE PRESENTATIONS CONTINUED

Chester, A, S Hanks, S Kuhn, M McMillion, C Morton-McSwain. Community Based Participatory Research Opportunities Through HSTA. Oral presentation at the West Virginia Transitional Clinical Institute, Morgantown WV, 2013.

Morton-McSwain, C, S Hanks, S Kuhn, A Chester, S Hanks, M McMillion. Lost in Translation: The Role of Community Research Associates in Community Based Participatory Research in Rural WV. Roundtable presentation at APHA, Boston, MA, 2013.

Kuhn, S, A Chester, S Hanks, C Morton-McSwain, M McMillion. Adolescents as health advocates and researchers: A CBPR model for underserved populations in rural Appalachia. Poster presentation at the APHA, San Francisco CA, 2012.

Sara Hanks, S Kuhn, A Chester, S Hanks, C Morton-McSwain, M McMillion. Determinants of Disease in Rural Appalachia: An Adolescent CBPR Project. Roundtable presentation APHA at the San Francisco CA, 2012.