

College of Veterinary Medicine at Tuskegee University

Department of Graduate Public Health



STRATEGIC PLAN 2019-2025

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COLLEGE OF VETERINARY MEDICINE Department of Graduate Public Health

December 19, 2018,

This Strategic Plan comes at the completion of one academic year as a new department in the College of Veterinary Medicine and the Graduate Public Health Program (GPHP) having its application for accreditation accepted by the Council on Education for Public Health (CEPH). As a field, public health evolving towards a more integrative and collaborative approach to addressing the issues that impact human health, animal health and the environment globally. Many pressing threats to health security are prevalent in the United States and are exacerbated in rural America such as: long-standing and recently emerging infectious diseases, environmental injustices, rapid increases in non-communicable diseases, antibiotic resistance to bacterial infections, and more. Underlying these threats is an equally broad set of root causes: globalization, urbanization, environmental degradation, and persistent social inequities. With an ever-shrinking financial commitment to public health research by the federal government, states and local health departments must priorities limited resources which many times leaves rural and low density communities with inadequate sanitation, water quality, and surveillance gaps.

At the Tuskegee University College of Veterinary Medicine (TUCVM), more than 73 years of leadership have built a towering legacy. The TUCVM is the only college among 30 schools/colleges of veterinary medicine in the US, located at a historically black college and university (HBCU). In keeping with the mission of Tuskegee University, the TUCVM has educated nearly 70% of all U.S. African American veterinarians (American Veterinary Medical Association, 2008). Focused on its commitment to address the issues of disparity and inequity, the TUCVM has joined the movement for change in public health training. The Department of Graduate Public (DGPH) within the TUCVM, which evolved from the TUCVM Institute of Public Health, offers a master's degree in Public Health (MPH). Within the College of Veterinary Medicine, there are two professional programs, the Doctor of Veterinary Medicine (DVM) program, and the Graduate Public Health program (GPHP). Other degrees offered in the College are the PhD in Interdisciplinary Pathobiology (IDP), the PhD in Integrative Biosciences (IBS), which is joint awarded with two other colleges in the University, and the Master of Science in Veterinary Sciences. The combination of these programs makes TUCVM an ideal entity to develop a one health program. The One Health concept is the integrative effort of multiple disciplines working locally, nationally, and globally to attain optimal health for people, animals, and the environment (AVMA, 2018).

We thank the members of the Strategic Planning Steering Committee; the faculty, staff, and students of the School; and the many external partners who contributed to this Strategic Plan. As we

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move from planning to implementation, we look forward to building an even stronger institution, and to advancing our vision of preparing public health professionals to prevent illness and injury while improving the health of communities both rural and urban from neighborhoods and villages to cities and even countries.

Strategic Planning Steering Committee Members

Dr. Ruby Perry, Dean College of Veterinary Medicine

Dr. Bailus Walker, Chair External Advisory Committee

Attorney Crystal James, Head Dept. Graduate Public Health

Dr. Deloris Alexander, Director Integrative Biological Sciences Program

Dr. Lucenia Dunn, External Advisory Board Member

Dr. Rueben Warren, Director National Center for Bioethics in Research and Health Care

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Crystal M. James, JD, MPH

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Head, Department Graduate Public Health

Director, Graduate Public Health Program

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The Foundation

The vision of the Graduate Public Health Program (GPHP), College of Veterinary Medicine and Tuskegee University, is to address health inequities and protect, promote and sustain the public's health



Building upon the legacy of Tuskegee University, the mission of the GPHP is to prepare the next generation of diverse leadership through research, innovation, advocacy and community engagement.

As Dr. Frederick Patterson third President (1935-1955) of Tuskegee Institute (now Tuskegee University), Founder of the United Negro College Fund (1944), recipient of the Presidential Medal of Freedom (1987) from President Ronald Regan and the founder of Tuskegee University College of Veterinary Medicine (TUCVM) stated:

"Change agents are critical links to enable a community to grow, be healthy and make a positive contribution to America. Their road is often rocky, but they are sustained by their training and commitment to make the world a better place in which to live." (Source: Speech, 1944 New York)



DGPH Core Values:

Ethical Leadership- leading with actions focused on beneficence, non-maleficence, respect for others, and justice for communities

Integrity- trustworthiness and incorruptibility to a degree that one is incapable of being false to a trust, responsibility, or pledge

Excellence- outstanding feature or quality

Diversity of gender, ethnicity, & culture- the condition of being comprised of different elements

Tell our stories-people of color, black belt communities, and cultural context of behaviors of African Americans have been historically described by persons outside of these social and geographical constructs. We intend to tell our own stories, define our communities and describe our cultural context as people of color living, working, and surviving in the rural south.

L-RISE GOALS

Our program goals are focused on leadership, research, innovative teaching, service learning and ethics (L-RISE) which reflect the belief of Dr. Patterson. Methods for collection and review of the data for continuous quality improvement of these goals and the program have been developed and implemented. The program's L-RISE goals with defined evaluated measures are listed below.

Goal #1: Excellence in Leadership - Train, educate and equip public health graduates for leadership roles through effective management, policy analysis, health planning and competence in community education and engagement.

Objective 1.1: Expand presence in State, National, and Global Professional Organizations Strategies to reach objective

- Increase the number of faculty attending the American Public Health Association and holding leadership positions
- Increase the number of faculty attending meetings in their discipline and holding leadership positions

Goal #2: Excellence in Research - Utilizing collaborative partnerships to foster Community Based Participatory Research (CBPR) strategies for improving community/population health and wellbeing.

Objectives 2.1: Increase Research Productivity

Strategies to reach objective

- Increase the number of federally funded research projects within the Department
- Increase the number of state funded research projects within the Department
- Increase number of federal and state applications for research dollars
- Increase research that impact the global community

Objective 2.2: Expand capacity building and research collaborations with African nations

• Increase the number of MOU's with foreign entities to increase capacity of students and develop applied learning opportunities

Goal #3: Excellence in Innovative Teaching - Nurture critical thinking and innovative teaching strategies to excel on the highest academic platforms.

Strategies to reach objective

Objective 3.1: Increase enrollment

Increase student enrollment by 20% each academic year

Objective 3.2: Increase faculty

- Hire one new faculty each year for five years
- Recruit and retain faculty interested in delivering content utilizing innovative, integrative, and inclusive strategies for didactic and service-learning mediums
- Sharing human resources- by collaborating to recruit faculty that can serve the needs of more than one department
- o Increase the number of faculty that are in other departments and contributing the PH capacity

Goal #4: Excellence in Service Learning - Establish strong community partnerships for an effective/efficient delivery of a timely evidenced based service learning, with respect, integrity and inclusion of community stake holders.

Objective 4.1: Translating Research into Public Health Practice

Strategies to reach objective

• Increase the number of partnerships with scientist on campus and at other universities to develop intervention strategies to translate scientific research findings to the communities that can benefit most from these discoveries

Objective 4.2: Strengthen outreach programs within Black Belt Communities

- Create Multidisciplinary Center for Community Outreach-
 - Understanding the problems of the populations in and around the black belt counties
- o Development of resources to provide technical assistance to communities
- o Conduct surveillance on issues pertinent to BB counties

Goal #5: Excellence in Public Health Ethics - Train and prepare public health graduates in the essential aspects of public health ethics, for the workforce and for community advancement.

Objective 5.1 Integrate ethics topics in all courses

Strategies to reach objective

- Increase the number courses of with public health ethics as salient issues integrated throughout the course.
- Increase opportunities for students to demonstrate responsible, ethical use of social media and

other digital platforms to disseminate public health messages

The Planning Process

We initiated strategic planning in Summer 2016 through a process that included extensive participation and input from across the University, the College, and from community partners. The work was guided by a Steering Committee of faculty, staff, students, and community representatives charged with creatively considering the GPHP strategic position and opportunities with elevating the GPHP from a program within the Department of Pathobiology to its own separate Department. The Dean of the CVM, Dr. Ruby Peny, included the recommendation in her visioning process for the College and officially created the Department of Graduate Public Health (DGPH) in May 2017. This strategic move positioned the DGPH to further enhance the GPHP by prioritizing collaborations among colleagues in other Colleges and schools that would not have a natural fit with the Department of Pathobiology such as the School of Nursing and Allied Health and the Robert R. Taylor School of Architecture and Construction Science, The Faculty Steering Committee reviewed existing data and gathered input from Students, community partners, staff, and faculty while participating in a multi-week planning process facilitated by Dr. Banks from the College of Education.

Once the first draft of the Strategic Plan was written and approved by the Steering Committee, its members sought review and comment through discussions at faculty meetings, hosted forums, input through electronic communication, and numerous informal discussions with faculty, staff, students, and external stakeholders. The Steering Committee then revised the Plan, doing its best to consider and accommodate the rich feedback received.

Directions Set by the Plan

This Strategic Plan envisions the Department we want to be at the end of the six-year implementation schedule while setting the stage for the next 10, 20, or even 50 years. The Plan is grounded in and supported by the relationships and resources that have been developed by the College over the past seventy plus years in the United States and abroad. The Plan commits us to sustaining excellence through strengthening our core functions. Areas of long-standing excellence include risk assessment and epidemiological research methodology, laboratory sciences, translational science, and rigorous education. We have applied these assets successfully to human health issues, food safety, environmental and occupational health, genomics, health policy and advocacy, HIV/AIDS, and public health practice.

The Plan is also grounded in an awareness of current difficulties: an uncertain financial climate, faculty time that is stretched to the limit, rising tuition that poses a burden on students, newly imposed limits on foreign students working in federal agencies, and limited recruitment resources. Elements of the Plan address each of these challenges.

We are intentional in creating a plan that is grounded in reality and yet doggedly future-oriented. It reflects the interests of the Department in its larger context, including its place within the College of Veterinary Medicine, the University, Macon County, the region, the State of Alabama, the nation, and the world. It identifies six emerging public health challenges, based on broad support from across the College community, that offer extraordinary opportunities to build on our strengths, innovate and collaborate, advance science, provide state-of-the-art training, and extend our impact on public health. The Plan creates a platform from which we can shape our future, develop new resources, train scientists and public health leaders equipped to serve the needs of rural communities.

ENHANCING OUR CORE

Innovative Teaching

- Case based learning
- Collaborative training
- Ethics Integration

Translation of Research to **Practice**

Thesis and Practicum experiences driven by Community needs Collaboration across Colleges Partnerships with other countries

Equitable Partnerships

Community based participatory research strategies

- One Health Concept
- Community driven integrative learning



Innovative Teaching Methods

As the faculty reflected on how to incorporate the CEPH competencies and GPHP specific competencies into the courses offered by the department, there was discussion as to how we may better tie quantitative and qualitative analysis skill building and scientific writing skills across the curriculum. The faculty concluded that the integration of case-studies that may be used in more than one course to build and develop skills as well as assist in acquainting the students to the appropriate ways these skills will be utilized in practice. Students are encouraged to work with major professors (professors that will mentor them through their thesis and/or experiential learning experiences).

Strategies to reach objective

Objective 3.1: Increase enrollment

• Increase student enrollment by 20% each academic year

The GPHP, reduced recruitment efforts over the past three years to focus on revising the curriculum and rebranding the program to focus more or rural health and integrative strategies. Efforts will not we refocused on recruiting students that are interested in working in rural communities and providing ethical leadership to marginalized communities.

Objective 3.2: Increase faculty

- Hire one new faculty each year for five years
 - Recruit and retain faculty interested in delivering content utilizing innovative, integrative, and inclusive strategies for didactic and service-learning mediums
 - Sharing human resources- by collaborating to recruit faculty that can serve the needs of more than one department
 - Increase the number of faculty that are in other departments and contributing the PH capacity

Excellence in Innovative Teaching - Nurture critical thinking and innovative teaching strategies to provide for the highest academic performance.			
Measure 1: Courses will include	Program Director will review all course syllabi at	Program	
critical thinking and case based	the beginning of each semester for inclusion of	Coordinator	
problem-solving skills.	competencies designated for primary inclusion in	Program Director	
	said course. A database of syllabi, student		

	evaluations and database of student culminating experiences will be kept by the Program Coordinator.	
Measure 2: Courses will include demonstrable scientific writing skills.	Program Director will review all course syllabi at the beginning of each semester for inclusion of competencies designated for primary inclusion in said course. A database of syllabi, student evaluations and database of student culminating experiences will be kept by the Program Coordinator.	Program Coordinator Program Director
Measure 3: Faculty members will receive aggregate data from courses to evaluate teaching effectiveness and innovation.	The Director of Course Analytics will prepare a formative and summative report of data collected for competencies in each course. These reports will be reviewed by individual faculty course coordinators for redelivery as indicated, by the faculty core for assessment of course appropriateness, and the Program Director for program curriculum improvement.	Director of Course Analytics Program Director Faculty Course Coordinator
Measure 4: Faculty members will engage in faculty development courses annually to promote and support innovative and evidenced-based teaching strategies to continuously improve the rigor and relevance of courses offered to students.	A log of faculty development courses taken by faculty members onsite and at other institutions will be maintained by the Program Coordinator. The Program Director will provide at least one onsite teaching strategy course annually.	Program Coordinator Program Director
Measure 5: Faculty members will make scholarly presentations at local, state, regional, national and/or international conferences to include lecture series of other institutions of higher learning annually.	A log of faculty presentations will be maintained by the Program Coordinator. The Chair of the Department of Graduate Public Health Program will use this information as a part of each faculty member's annual evaluation.	Program Coordinator Head, Graduate Public Health Department
Measure 6: Faculty members will submit at least one article for publication in peer review journals annually	A log of faculty publications submitted and accepted for publication will be maintained by the Program Coordinator. The Chair of the Department of Graduate Public Health Program will use this information as a part of each faculty member's annual evaluation.	Program Coordinator Head, Graduate Public Health Department

TRANSLATIONAL RESEARCH

Objective 4.1: Translating Research into Public Health Practice

Strategies to reach objective

• Increase the number of partnerships with scientist on campus and at other universities to develop intervention strategies to translate scientific research findings to the communities that can benefit most from these discoveries

Objective 4.2: Strengthen outreach programs within Black Belt Communities

- Create Multidisciplinary Center for Community Outreach-
- o Understanding the problems of the populations in and around the black belt counties
- o Development of resources to provide technical assistance to communities
- o Conduct surveillance on issues pertinent to BB counties

Thesis Translated to Intervention Strategies

The GPHP requires students selecting the thesis option to not only thoroughly investigate and defend a novel research question but also translate and deliver findings in a community setting wherein the learnings are immediately available to the communities that may benefit from the research findings. Students presented at the Community Health forum sponsored by Tuskegee University Libraries, Delta Sigma Theta Sorority, Inc. Tuskegee Alumnae Chapter, and the Tuskegee University Cooperative Extension Program entitled "Communities United: Building Healthy Lives Health Forum and Fair April 28, 2018. The issues presented during the health forum by faculty and students are as follows:

- Reframing National Security: Health Security in Rural Alabama (Crystal M. James, JD, MPH)
- Policy Analysis: Landfill Permitting Process and the Ashurst Bar/Smith Community (Nathalia Beras Ramirez, MD, MPH)
- The Effect of State Laws on Breast Feeding Practices (Candy De La Cruz, MD, MPH)

EQUITABLE PARTNERSHIPS

Partnerships with Community Organizations

To operationalize the vision, mission and goals listed above the DGPH has leveraged several community partnerships to collaborate towards decreasing health disparities and plans to develop more. Listed below is a brief description of a few collaborative partners.

Gift of Life Foundation (GOL) was founded in 1988 to reduce Montgomery County's high infant mortality rate. Today, GOL is building stronger communities through home visiting, mobile family coaching and other support programs that improve the health and wellbeing of the 554 at-risk families we serve. Our motto is: Healthy Mothers, Healthy Babies, Healthy Communities. Our programs address the maternal-child health needs of pregnant women, parenting mothers and/or fathers and caregivers of infants and children through the age of two (2). Our goals are to reduce infant mortality, preterm birth and low birth weight; equip mothers to have a healthy pregnancy and birth outcome; promote early childhood development; provide effective parenting skills; and help mothers and/or fathers become more self-sufficient. Our goals are accomplished through our community outreach programs: Nurse Family Partnership, Parents as Teachers, Mobile Family Coaching, Group Coaching and Fathers in Action.

Mission: To improve the health and well-being of at-risk mothers and babies to build stronger communities.

Vision: To foster an environment in Montgomery where:

- All pregnant women are able to receive prenatal care beginning in their first trimester.
- Healthcare and social services for mothers and babies are connected to each other in an efficient safety net.
- Every infant is fully screened and vaccinated.
- The teen pregnancy rate is well below Alabama's overall rate.
- The community is proud to stand up for at-risk mothers, children, and families.

Tuskegee Area Health Education Center, Inc. (TAHEC) serves individuals and families throughout a 19-county area of the Black Belt region of Central Alabama. In partnership with the Macon County Diabetes Coalition, of which TAHEC's Executive Director is lead, TAHEC provides health screenings and education to a highly rural, underserved populations. For purposes of this proposal, TAHEC will extend services in Macon, Bulloch and Montgomery Counties, AL to provide screening, education and health care management for Type 2 Diabetes, Hypertension, Obesity and Smoking cessation activities.

Tuskegee Macon County Community Foundation, Inc. (TMCCF) was founded in October 2002 and reorganized in June 2012 with the new mission of enhancing the quality of life in disadvantaged communities in rural and urban areas through the reduction of health disparities and advancing

health equity. It is a 501 (c)(3) public charity and is one of the few community foundations serving a predominately rural area.

Currently, a particular focus is on health equity in a rural area region. It sees as its major goals to develop appropriate partnerships that address critical issues and challenges in disadvantage communities and build and sustain philanthropic capital. Consistent with its mission, TMCCF plays an integral role in marshalling resources, both people and financial, to address a community's needs such as the reduction of health disparities.

As a community foundation, TMCCF leverages its expertise and relationships with local, state, and national stakeholders to convene and engage key decision makers in dialogue and action-oriented planning focused on capacity-building, impacts, and outcomes. TMCCF also engages in outreach to diverse stakeholders to collaborate on the development of a strategic agenda for community and economic development particularly in rural and urban poor communities. To meet the goal of cost-effective health and human service delivery in Tuskegee Macon County, TMCCF, Inc. engaged Westat, Inc. and A2D, Inc. as critical partners in meeting the healthcare challenges of the Tuskegee Macon County region that evolved into the Telehealth EcoSystem™ model. In April 2017, TMCCF organized the first Health Roundtable that resulted in health organizations convening on a regular basis to become more acquainted with programs and leadership to better serve Macon County.

INTERGRATIVE LEARNING EXPERIENCES

Integrative Learning Experiences are sought out and cultivated by faculty and staff of the DGPH to assist in translating the mission and vision of the program to public health practice. Each student is required, as delineated in the DGPH student handbook¹ to complete an experiential learning experience as well as a practicum or thesis. These integrative learning experiences are not possible without community partnerships with governmental and non-governmental community organizations that provide mentorship and hands on experience for our developing professionals. A preceptor/trainee manual has been developed and is shared with each potential community mentor, to ensure that the experiences our students receive have the necessary rigor and engagement to meet the expectations of the program.²

¹ Appendix G: DGPH Student handbook updated August 2018

² Appendix H: DGPH Mentoring Plan

ADDRESSING EMERGING CHALLENGES





HEALTH POLICY & LAW

Public policy is headline news in the United States as a historic government shut down and its impact on public processes dominate the news cycles. Utilizing these daily hot topics and other formally published public policy case studies not only provide stimulating conversation and engagement in the classroom it also demonstrates in a real-world context the interconnectedness and multifactorial processes necessary to consider when making public policy decisions.

Now that many professional program accreditation standards are moving to competency-based criteria, it is imperative to develop assessment measures, tools and resources to evaluate their utility in the didactic and experiential learning phases. The Council on Education for Public health (CEPH) has approved twenty (20) competencies that all accredited schools and programs must demonstrate along with at least five (5) program specific competencies that must be assessed for each student upon which a degree is conferred. Of the twenty CEPH competencies, at least seven (7) specifically require the demonstration of the ability to apply skills and advocate in a public health settings that lend themselves well to case study based instruction.



Members of the 116th Congress being sworn into office January 13, 2019.

ANTIBIOTIC RESISTANCE & INFECTIOUS DISEASES

Advances in genomics will increasingly help guide public health practice. Understanding genetic differences in disease susceptibility holds great promise in prevention research, as a full understanding of the etiology of multifactorial diseases will be essential in identifying effective prevention strategies to reduce the burden of diseases. Virtually every component of public health will be substantially impacted by changes in science and technology that relate directly to genomics. Genomic profiles may also determine how individuals respond to environmental exposures and so affect public health responses. At the population level, similarly vast arrays of detailed medical records related to herd health allow the detection of subtle patterns to aid the formulation of mechanisms for the prevention and treatment of diseases that have previously been impossible with limited data. The enormous challenges to managing and interpreting these data are matched by equally enormous potential benefits for public health. There is a particularly pressing need for the development of new statistical methodologies. Research and training are needed to address problems of design and interpretation of studies of genomic and environmental exposure data.

The College of Veterinary Medicine's newly instituted Center of Excellence in Food Animal Health and Food Safety in collaboration with other units within the University and the United States Department of Agriculture funded extension programs will provide new data types to be considered in assessing the social, cultural, and nutritional impacts on genomic profiles. Moreover, faculty members in the College of Arts & Sciences are leaders in developing and applying basic scientific discoveries in prostate and breast cancers that will lead to targeted medical interventions. Existing strengths also include faculty within the College of Agriculture, Environment, and Nutritional Sciences' (CAENS) with novel discoveries in the use of sweet potato leaves in intervention strategies for prostate cancer.

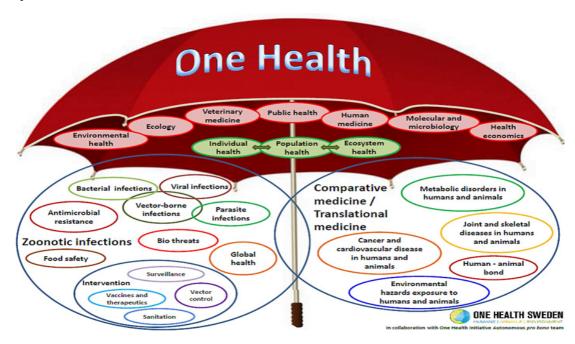






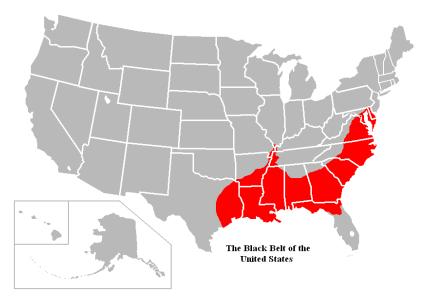
SOCIAL DETERMINANTS OF HEALTH

The One Health concept recognizes that the health of people is connected to the health of animals and the environment. The goal of One Health is to encourage the collaborative efforts of multiple disciplines-working locally, nationally, and globally-to achieve the best health for people, animals, and our environment. The One Health concept approach is important because 6 out of every 10 infectious diseases in humans are spread from animals. (CDC, 2018) The One Health concept incorporates co-equal, all-inclusive collaborations between all scientific-health and environmentally related disciplines. It is a concept that the health of all species is related (including human) and by incorporating all disciplines in a One Health concept one can more adequately meet the needs of all populations. In order to serve both the animal and human population in the best possible way health workers from all disciplines must be trained from a One Health concept perspective. Tuskegee University's College of Veterinary Medicine is in a unique strategic position to operate and train its students using a One Health concept umbrella (see Figure 1 below).



Moreover, this concept provides the unique opportunity to build inter-professional teams of faculty members working with students to address the real problems of the communities the institution serves. TUCVM incorporates the only Historically Black College and University (HBCU) College of Veterinary Medicine in the US and the only Graduate Public Health program in an HBCU in Alabama.

Health is influenced by the circumstances in which people are born, grow up, live, and work, as well as the systems put in place to deal with illness. The social determinants of health are a major contributor to health inequities and the differences in health status seen among and between black belt counties in the United States. The Deep South has been described by many disciplines based upon the context of the conversation. Cultural, geographical, and political contexts have been the leading factors that have traditionally defined the regions of the Unites of States of America (US).³ Health inequities constitute a clear indicator of the failure of a society's policies across many domains, including education, housing, justice, and security.



Research and education about the social determinants of health are occurring at the University invarious Colleges and Schools, including the College of Veterinary Medicine, College of Arts & Sciences, College of Agriculture, Environment, and Nutrition as well as the National Center for Bioethics in Research & Healthcare. There are methodological challenges to building the evidence base, requiring statistical and epidemiologic expertise. The emphasis is on creating synergies around current work and developing new ideas that will advance the field of social determinants. Within Tuskegee University there are opportunities to partner with the schools, colleges, and centers.

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