**Recommendations from the Executive Committee Charged with Proposing Priority Actions Related to the Strategic Priority of Enhancing Health (v3; 1-21-17)**

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The Enhancing Health Executive Committee greatly appreciates the extensive suggestions and thoughtful ideas presented by the Enhancing Health Steering Committee (Appendix A), many of which appear in our proposals below. In our deliberations, we emphasized four overarching goals.

**Goal 1: Enhance the Health of the Penn State Community: Students, Faculty, and Staff**

The first goal is to enhance the health of Penn State’s students, faculty, and staff through a combination of programs, policies, and research initiatives. Actions related to this goal will help define Penn State as an institution that is fundamentally committed to improving health. A Penn State education should be transformational, and one of the ways to accomplish that is to create conditions such that students are in better health upon graduation than they were when they entered Penn State. Likewise, being known as a workplace that values health will enhance Penn State’s recruitment and retention efforts.

**Short-Range Actions**

* **Launch College of Nursing’s new Penn State Employee Health and Wellness Center in January 2017; add opportunities for student-engagement, program evaluation and quality improvement; explore similar opportunities on some of the larger campuses.**
* **Capitalize on Penn State’s newly available health care claims dataset to inform University health insurance choices and health/wellness offerings by holding a workshop to make researchers aware of the data and supporting some policy-driven research.**

**Middle to Long-Range Actions**

* **Transform our campus environments by making Penn State smoke-free.**
* **Launch University-wide health campaign that addresses tobacco, alcohol, and other substance use; smart use of antibiotics; HPV vaccinations; healthy life styles (physical activity, diet, mindfulness, sleep); build in opportunities for student-engagement, research, program evaluation and dissemination of evidence-based best practices.**
* **Continue to invest in enhanced mental health services for Penn State students; provide training for faculty and staff so that they are ready to respond appropriately and refer students to mental health services.**

**Goal 2: Enhance Education and Student Engagement in the Area of Vulnerable**

**Populations and Health Equity**

*The second goal* is to enhance undergraduate and graduate students’ health-related knowledge through coursework and student engagement opportunities related to vulnerable populations and health equity. This focus targets population diversity and therefore fits well with Penn State’s “All In” initiative and related programs. The scope is deliberately broad, encompassing such issues as infant mortality, rural health, obesity, addiction, child maltreatment, infectious disease, access to health care services, and cancer and many other diseases, and can be examined through many disciplinary lenses, including physiology, demography, behavioral interventions, and health policy. Finally, many of our campuses are located in regions where health problems are pronounced and there are opportunities for internships, applied research experiences, service learning, and campus partnerships with health care providers.

**Short- to Medium-Range Action**

* **Create a Scholar-in-Residence Program to bring visiting faculty to Penn State to share their knowledge and stimulate research in the area of vulnerable populations and health equity; these programs should include visits to multiple campuses, including the World Campus; talks by and interviews with Scholars should be videoed for integration into courses.**

**Medium to Long-Range Actions**

* **Encourage the diffusion of interdisciplinary knowledge about vulnerable populations and health equity at all levels and locations through course enhancements, new interdisciplinary courses and programs (e.g., certificates, minors), including General Education courses.**
* **Create an innovative, interdisciplinary, undergraduate summer program that combines coursework and mentored research focused on vulnerable populations and health equity; program could include on-campus opportunities as well as opportunities for students to conduct mentored research elsewhere in the US or overseas; seek funding for student stipends in the new campaign and ensure that a diverse cadre of students participate.**

**Goal 3: Build a Research Infrastructure that Supports Excellence in Biomedical and Health Research**

The third goal is to build the research infrastructure essential for excellence in biomedical and health science. Although we have made very good progress bridging locations and linking the medical campus, University Park, and other PSU campuses, more attention to these linkages is critically important. In addition, if we are to successfully ramp up the contribution of health-related research to the University’s research portfolio, the University needs to invest in research space, including renovating existing space and adding new space.

**Short- to Medium-Range Actions:**

* **Appoint a team of faculty and designated staff tasked with expanding bridges between Hershey, UP, and other campus locations to promote PSU biomedical and health research capacity. This effort should build on the activities of the Clinical and Translational Science Institute (CTSI) to: (1) expand offerings and reach of biomedical research workshops and retreats for faculty from across the University to interact with and learn from each other, including some designed specifically to help junior faculty compete for early career training grants; (2) identify and support short-term residential solutions at UP and Hershey so that collaborators from other campuses can easily stay overnight; and (3) expand strategic communications assistance to the biomedical and health community for broad dissemination of PSU research and education activities, including opportunities for students to participate in science writing and videography.**

**Medium- to Long-Range Actions**

* **Create a new University-wide entity, the Institutes for Biomedical Sciences (IBS), that will transform important College of Medicine institutes into true University-wide enterprises (i.e., Cancer Institute, Clinical and Translational Sciences Institute, Neuroscience Institute, Institute for Personalized Medicine) and provide resources to incubate new strategic priorities centered on enhancing health (e.g., Applied Biological Research Lab, Center for Regenerative Medicine, Center for Social Determinants of Health/Center for Health Equity, Center for Lifelong Health and Fitness).**
* **Build a new IBS Building in proximity to the Millennium Sciences Building. This co-location will create a hub of health-related research activity conducive to interdisciplinary collaboration. The IBS building will include space for Hershey faculty based at UP as well as UP faculty engaged in the relevant research.**
* **Create a task force to work with the OVPR and the Office of Physical Plant to assess needs for wet laboratory space, including renovations and new construction.**
* **Work with the College of Medicine to plan a new building in State College to house the regional medical campus and relevant research space that does not require wet labs. The building’s foci would be multidisciplinary research related to health and health care and inter-professional education.**

**Goal 4: Invest in Biomedical and Health Research Excellence by Focusing on Cancer**

The fourth goal is to zero in on cancer and to make a series of investments in new faculty and other needed additions to move the needle in this important health arena. We chose cancer for several reasons. (1) We embrace the goal of achieving National Cancer Institute (NCI) designation for the Penn State Cancer Institute; doing so will require a concerted effort across the entire University to bring Penn State’s uniquely interdisciplinary culture to bear on the phenomena of cancer. (2) Cancer is a complex set of diseases whose study encompasses the broad, interdisciplinary range of subject matter of interest to Penn State’s biomedical and health community, from molecular and cell biology to population health, and from prevention to treatment. (3) Cancer resonates with our community of students, faculty, staff, alumni, and donors because of our long tradition of THON and because it is ubiquitous in people’s lives. (4) The 21st Century Cures Act, recently signed into law, will increase funding for cancer research. (5) Finally, the strategic planning window is relatively short; we would be wise to target our research-related investments in one, albeit multifaceted, direction. The Penn State Cancer Institute will be an important shaper of this set of initiatives; it is also likely that the unique Penn State “flavor” that emerges will shape future directions of the Cancer Institute.

**Short-Term Goals**

* **Hold a University-Wide summit for researchers whose work bears upon cancer prevention, treatment and/or cure to identify collective strengths and critical gaps in expertise; define our unique PSU “flavor” and use that information to inform plan for faculty co-hires (below). Consider inviting external experts to the summit to assess the scope of activity and provide advice as to where we can be most innovative and impactful.**
* **Mount a multi-year, cancer-focused seed grant initiative that encourages interdisciplinary collaboration and targets those projects most likely to lead to externally funded grants; monitor and assess return on investment.**
* **Form a University-Wide task force to explore creation of an interdisciplinary Penn State longitudinal study focused on cancer. This study could take a variety of forms including a prospective study of individuals who share certain risk factors for developing cancer or a study that follows cancer survivors with an eye to the conditions that give rise to recurrence. Ideally, its breadth would encompass “cells to society,” and it could function as a vehicle for bringing diverse parts of our scientific community together. The study should be developed in consultation with community partners so that it addresses local questions and concerns in conjunction with the scientific agenda. This collaborative effort would give our faculty valuable experience in interdisciplinary, biomedical and health research, while creating a centerpiece that would help a variety of entities (e.g., Cancer Institute, CTSI, Population Research Institute) compete for future external funding.**
* **Write a campaign case statement that showcases University-wide strengths in cancer-related research; work with deans, chancellors, and institute directors to inspire donors to endow faculty positions and create program endowments.**

**Medium to Long-Range Goals**

* **Make an ambitious investment in 30-50 new, co-funded faculty across the University whose research informs prevention, treatment and cure of cancer including in such areas as evolutionary medicine and risk assessment; regenerative and genetic medicine; metabolism; microbiome; social determinants; vulnerable populations and health equity; behavioral interventions (e.g., physical activity, diet, stress); health care access and delivery; environmental health; and big data.**
* **Invest resources in a cadre of co-funded post-docs and data-science professionals to stimulate cancer-relevant research collaborations.**
* **Create a network of existing or nascent centers focused on personalized/precision health to interact around cancer-related foci. These centers include, but are not limited to: The Institute for Personalized Health (CoM); Program for Person-Centered Care in the Center for Geriatric Nursing Excellence (Nursing); Center for Evolutionary Risk Analysis and Mitigation (Huck); Center for Microbiome Research (Huck); Center for Medical Genomics (Huck); Center for Molecular Toxicology (Huck & IEE); Methodology Center (HHD); Quantitative Developmental Systems Core (HHD & SSRI); Center for Healthy Aging (HHD); Center for Health Care and Policy Research (HHD); Center for Health Organization Transformation (CoE); and the (nascent) Center on Personalized Health Interventions (HHD). Provide network funds for an initial planning conference, joint colloquium series, summer workshops, and seed grants with goal of growing collaborative research and related training grants to support pre- and post-doctoral trainees in the area of personalized/precision health strategies to prevent, treat, and cure cancers.**