

KENT STATE UNIVERSITY CERTIFICATION OF CURRICULUM PROPOSAL

Preparation Date **1-Sep-16** Curriculum Bulletin _____

Effective Date **Spring 2017** Approved by EPC _____

Department **Division of Research and Sponsored Programs**
 College _____
 Proposal **Establish Institute**
 Proposal Name **Establishment of a Brain Health Research Institute**

Description of proposal:

This proposal seeks to establish the Brain Health Research Institute (BHRI), which will support and expand this existing multidisciplinary area of research strength at Kent State University. With approximately 40 faculty across multi-disciplines studying brain health, Kent State offers existing researchers, graduate programs and infrastructure to facilitate the emergence of the proposed institute. Brain health is one of the strongest areas of ongoing research at Kent State with brain health researchers having received 85 awards in the past five years, totaling more than \$8.8 million in funding.

Describe impact on other programs, policies or procedures (e.g., duplication issues; enrollment and staffing considerations; need, audience)

No duplication of existing programs is perceived. Other universities in the state and region have developed centers/institutes to recognize and extend the research expertise of their faculty, but those do not serve to compete with the proposed institute. Brain health is a highly fundable, broad area of research, which allows the to-be-hired director and additional faculty to direct and emphasize specific programs of research under this topic consistent with their own expertise.

Units consulted (other departments, programs or campuses affected by this proposal):

The Research Advisory Committee of Research and Sponsored Programs (RASP), consisting largely of deans and/or their designees and the chair of the University Research Council, proposed five possible research initiatives to focus strategic research investment. Kent State community feedback was sought and received. Brain health represents arguably the largest area of existing research strength at the university and spans departments/colleges/campuses.

REQUIRED ENDORSEMENTS

 Department Chair / School Director ____/____/____

 Campus Dean (for Regional Campuses proposals) ____/____/____

 College Dean (or designee) ____/____/____

 Dean of Graduate Studies (for graduate proposals) ____/____/____

 Senior Vice President for Academic Affairs and Provost (or designee) ____/____/____

Proposal to Establish an Academic Administrative Structure

Brain Health Research Institute

Description of proposal:

This proposal seeks to establish the Brain Health Research Institute (BHRI), which will support and expand this existing multidisciplinary area of research strength at Kent State University. We plan to hire a visionary director to catalyze and foster collaborations among our growing multi-department/college/campus Brain Health program. The Research Advisory Committee of Research and Sponsored Programs (RASP), consisting largely of deans and/or their designees and the chair of the University Research Council, proposed five possible research initiatives to focus strategic research investment. KSU community feedback was sought and received. Brain Health represents arguably the largest area of existing research strength at KSU and spans departments/colleges/campuses. The Director of the BHRI will possess an exemplary track record of research in areas relevant to Brain Health with a desire to engage broadly with others in the field and build relationships within and beyond Kent State. The Director will maintain his/her established extramurally funded research program, while leading, fostering and engaging in collaborative research and building productive relationships relative to the mission of KSU with internal and external partners. The Director will also hold the faculty rank of Associate Professor or Professor with tenure in the appropriate academic unit.

1. The quality of the faculty, students, and programs:

With ~ 40 faculty across multi-disciplines studying Brain Health, Kent State offers existing researchers, graduate programs, and infrastructure to facilitate the emergence of the BHRI. Brain Health is one of the strongest areas of ongoing research at Kent State with researchers in Brain Health having received 85 awards in the last five years totaling over \$8.8 million in funding. Notable recent grants include a \$3.5 million award (only ~ \$1 million has been expended, thus \$2.5 million is not included in the \$8.8 million above) to Drs. Fresco and Hughes in Psychological Sciences to study “Mindfulness-Based Stress Reduction for High Blood Pressure: A Two-Site RCT” and a \$444,000 award to Gemma Casadesus-Smith in Biological Sciences to study “Mechanisms of Metabolic Hormone Amylin Action on Alzheimer’s Disease Pathogenesis”. Moreover, seven Brain Health faculty have received Kent State’s Outstanding Research & Scholarship Award (Hughes, Delahanty, Gunstad, Riccio, Dunlosky, Rawson, Bracher). Finally, Brain Health faculty have been the recipients of numerous awards and honors including Dr. Katherine Rawson receiving the Presidential Early Career Award for Scientists and Engineers and the Outstanding Early Career Award from the Psychonomic Society, Dr. Hughes being named a Fellow of the American Association of Cardiovascular and Pulmonary Rehabilitation, and Dr. Barnbaum receiving the bronze IPPY Award in the Medicine, Health and Nutrition category for her book *The Ethics of Autism*. Last, the Fenwick report noted that Kent State was ranked in the top three of institutions nationally for quantity and quality of publishing in the area of trauma/post-traumatic stress and was ranked first for Memory and Learning (both

topics being pursued by Brain Health faculty). Thus, we consistently disseminate high-quality publications in this area.

With respect to students working with Brain Health faculty, there is an extensive list of graduate students publishing in high impact journals including first authored publications in Science, Health Psychology, Neuropsychology, Psychosomatic Medicine, Developmental Psychology, Memory and Cognition, and Physiology and Behavior. Further, recent graduates have been able to successfully compete for federal funding as interns and postdocs, with 4 K- awards, an F32, and a T32 awardee in the Neuropsychology program alone. Also our graduate students are often recipients of “best poster” and “best presentation” awards at national conferences, and are frequent recipients of travel awards and grant funds to support their dissertation research.

The Director of the BHRI will have the opportunity to recruit additional faculty to support the Institute and its shared vision and to extend collaborative opportunities for our faculty and students. Existing programs/areas of research strength that would benefit from the BHRI include, but are not limited to:

- Neuroscience
- Stress/traumatic brain injury
- Learning strategies (SOLE Center)
- Neurodegenerative disorders
- Cognition in youth and the elderly
- Substance abuse and addiction
- Healing Stanzas – WICK poetry center
- Exercise/wellness and cognition
- Mindfulness and integrative health

2. Centrality and coherence to the mission and strategic directions of the university and other academic units:

After extensive consultation with faculty, staff, students and community members, including two listening tours, President Warren announced her bold, new strategic roadmap for Kent State University. The establishment of the BHRI directly addresses Strategic Aim #2: A Nationally Distinctive Kent State. More specifically, it will aid in accomplishing Initiative 2.1: To build a culture of research and innovation. Dr. Warren has set a goal of doubling extramurally-funded research at KSU in the next five years. Strategic investment in research areas of strength will directly build and increase the culture of research at KSU. Hiring of a federally funded director and additional funded faculty will immediately increase KSU’s external funding. It is also anticipated that funding will increase further via collaborative grants submitted among current faculty and Institute personnel. Creation of the BHRI also fulfills a number of other goals as presented in the strategic roadmap: the hiring of additional tenure-track faculty and the identifying and supporting of prominent academic programs. Existing expertise in Brain Health is truly multidisciplinary, with individuals in virtually all colleges engaged in research that would be relevant to the BHRI.

3. Comparative advantage versus other structures:

According to the Policy Register:

1. An institute may be created to facilitate comprehensive research on a major problem or on a cluster of significant related topics or issues. The topics or issues that provide the focus for the institute shall involve two or more departments or schools and incorporate a university-wide perspective. Ordinarily, institutes are created because the organization, advantages, and support they provide are not feasible under existing department or school structures. Institutes shall be supported insofar as possible through extramural resources; and,
2. An institute shall facilitate and administer the performance of research and provide an organizational identity to selected research programs and participating faculty, staff and students. An institute shall supplement and complement the mission of the academic departments, schools and colleges.

Thus, the BHRI, with a primary focus of facilitating and expanding KSU's research prominence, is the ideal structure for organizing this cross-department/college/campus research area.

4. What makes the unit particularly appropriate for Kent State University:

As mentioned, there is a critical mass of faculty across the KSU campuses engaged in research that would fall under the topic of Brain Health. Oftentimes, these faculty are unaware of similar research being done at KSU by their colleagues in other departments/colleges. As KSU looks to strategically invest in research areas of strength in order to build a culture of research and a nationally distinctive KSU, Brain Health is arguably our largest area of research strength. Investment in individuals with active funding will directly impact our goal of doubling externally funded research.

5. Demand for the unit and for the graduates of the unit:

RASP's Research Advisory Committee proposed five possible research initiatives to focus strategic research investment. KSU community feedback was sought. We received well over 100 responses to the survey inquiring about Research Institutes. This was about triple the typical response rate for university-wide surveys. While there were concerns about how the Institutes would be organized and supported, there was strong support for the BHRI (as well as the other proposed Research Institutes). As the director and additional hires into the BHRI will have traditional academic homes in relevant departments, there will be no graduates from the Institute. However, graduate students of Brain Health faculty will benefit greatly from the BHRI and collaborative opportunities afforded by the BHRI. Current and recent graduate trainees are already accomplishing great things, including students in Anthropology receiving funding for their research from NSF and Sigma Chi, and students in Psychological Sciences receiving funding from the Mind and Life Institute to use imaging techniques to

better understand meditation. Our graduate students engaged in research on Brain Health also are extremely competitive for internships, post-docs, and faculty positions. For instance, Neuropsychology has a 100% placement rate for internships in Psychological Sciences. Recent graduates from Brain Health labs have gone onto postdocs at Duke University, Brown University Medical Center, Howard University, Syracuse University, and Ohio State University, and others have taken tenure-track positions at the University of Pittsburgh, the Mayo Clinic, Nova Southeastern University, West Virginia University, Walsh University, Adelphia University, and the University of Maine.

6. Duplication and interrelatedness of the unit's program(s) within the university, state, and region:

No duplication of existing programs is perceived. Other universities in the state and region have developed centers/institutes to recognize and extend the research expertise of their faculty, but those do not serve to compete with the proposed institute. Brain Health is a highly fundable, broad area of research, which allows the to-be-hired director and additional faculty to direct and emphasize specific programs of research under this topic consistent with their own expertise.

7. Efficiency and Effectiveness of the unit in leveraging existing resources and expanding new resources:

The BHRI reflects the most efficient approach to optimizing strategic investment into our research strengths. As mentioned, Brain Health researchers exist in all colleges although there is limited interaction/organization of these faculty despite their overlapping research interests. By centralizing the BHRI, these researchers will be able to optimize infrastructure support while interacting collaboratively with each other and the new faculty hired as a part of the BHRI. As we are focusing on hiring only currently funded individuals for the BHRI, grants will offset a portion of their salaries, while also bringing in indirect costs. Further, this will immediately increase our rates/amounts of external funding, bringing us closer to the goal of doubling extramurally-funded research. The anticipated growth in indirect cost recovery due to the recruitment of funded faculty and new program grants facilitated by the institute will provide funds to support a continuing administrative core for the BHRI. This core will support pilot studies, clerical and administrative support for grant preparation, seminar series and annual retreats for BHRI faculty.

8. Administrative reporting structure:

The Director of the BHRI will report to the Vice President for Research, who reports to the President of the University. The Director and other hires in the BHRI will also be members of the departments most in line with their research/training interests. Performance reviews will be done jointly with the appropriate academic unit chair and the VP for Research.

9. Space and capital budget needs:

The BHRI will be launched with strategic funds allocated by the President. At the end of this initial funding period, the BHRI will be evaluated for future funding. This approach is similar to the model suggested for all centers and institutes at KSU. It is anticipated that continuing support and space allocation will be provided by RASP and the academic units that are administrative homes to the Director and newly recruited BHRI faculty.

10. Evaluation procedures including academic assessment procedures:

The VP for Research will work with the Director of the BHRI to establish goals and performance metrics for evaluation. Input will be obtained from the Research Advisory Committee and the heads of the affected academic units. The VP for Research will convey results of evaluations to the President of the University. In addition, it is anticipated that the Director will establish both an internal and an external BHRI Advisory Committee to provide continuing input on the mission of the BHRI and to advise on goals and metrics.

11. A timetable for proposal implementation:

We have formed a search committee for the Director position (at this point the Director of an Initiative, until approval is granted for the establishment of the BHRI). The search committee is chaired by Jim Blank with the following members: Maria Zaragoza, Laura Leff, John Johnson, John Gunstad, Doug Delahanty, Jeff Hallam, Ernie Freeman, Angela Ridgel. The BHRI will be proposed to the Educational Policies Council in September, to Faculty Senate in November, and the Board of Trustees in December. Assuming approvals, the first semester of operation would be Spring of 2017.