

APPROVED BY SENATE
09/19/2016



Proposal to the Senate Committee on Educational Policy for the Creation of a New Unit of Research or Public Service (includes Centers and Institutes)

TITLE OF PROPOSED UNIT: Interdisciplinary Health Sciences Institute (IHSI)

CONTACT INFORMATION:

Contact person(s) that are to be included in any discussions that may lead to changes in the proposal prior to submission to the full Senate.

Neal J. Cohen, PhD

Professor, Department of Psychology, Neuroscience Program, and Beckman Institute
Director, Interdisciplinary Health Sciences Initiative (IHSI)
Director, Center for Nutrition, Learning, and Memory (CNLM)
EMAIL: njc@illinois.edu
PHONE: 217-244-4339

John Erdman, Jr., PhD

Emeritus Professor, Department of Food Science and Human Nutrition
Deputy Director, Interdisciplinary Health Sciences Initiative (IHSI)
EMAIL: jwerdman@illinois.edu
PHONE: 217-333-2527

Ruth Sosnoff, PhD

Assistant Director, Interdisciplinary Health Sciences Initiative (IHSI)
EMAIL: rsosnoff@illinois.edu
PHONE: 217-300-3223

PROPOSED STATUS:

Indication whether this proposal is for creation of a Phase 1 or Phase 2 unit. Also, a description of the basis for the choice of Phase 1 or Phase 2 status and, if Phase 2, why it should not first demonstrate its value through Phase 1 status.

This proposal is for the creation of a Phase 2 unit.

Formalizing the Interdisciplinary Health Sciences Initiative (IHSI) into an Institute is identified as a key component of the Campus Strategic Plan (*Goal III, subsection bii: Develop the Interdisciplinary Health Science Institute*). Our activities as an Initiative have established IHSI as a research unit situated at the campus-level, spanning across multiple colleges and schools, and involving faculty and staff from a range of academic disciplines, with the potential for housing smaller or temporarily approved centers. This makes us like the already existing Campus Interdisciplinary Research Institutes, under the Office of the Vice Chancellor for Research (OVCR). We are therefore formally requesting via this application to be renamed Interdisciplinary Health Sciences Institute (IHSI), while retaining all present and ongoing responsibilities and activities. IHSI currently has a recurring budget consisting of the long-standing budget commitment of the Division of Biomedical Sciences (DBS), which IHSI subsumed, together with additional funding previously provided by the Provost's office to fund ongoing critical research activities. Other funding will come from fees arising from research services provided by IHSI to campus researchers on a fee-for-service basis.

DESCRIPTION OF THE CHARTER:

- *Begin the proposal with an explanation of the nature of the opportunity – e.g. stating the external situation or problem which requires or has encouraged the creation of a unit as the solution. Detail the charter or mission of the proposed unit.*

Historical background

At present, the Interdisciplinary Health Sciences Initiative (IHSI) actively coalesces and enhances Illinois' far-reaching excellence in health science and technology to facilitate innovative research and training, growth of the Illinois funding portfolio, and the improvement of the health of our campus and community. This role for IHSI came out of a strategic planning process launched by Chancellor Robert Easter in the spring semester of 2010 to support the continued growth of UIUC's health research and education portfolio. The planning process engaged fifty-three faculty members in six teams, split into two stages. The first stage of this effort examined the Urbana campus' strengths, areas of opportunity, and infrastructure gaps and identified Illinois' opportunities and five Grand Health Challenges (outlined below) particularly well-suited to Illinois' strengths and unique alignments. The focus of stage two was to determine the infrastructure and programs required to concentrate campus efforts on health as a key priority. Both stages were guided by the Health Vision Team, a cross-campus team of leaders in health research and education.

The Health Vision Team recognized that the topic of health cuts across all colleges of the campus. The strength of the Illinois program in health research is rooted in its core disciplinary

strengths and the interdisciplinary nature of its research programs. These elements must be maintained and strengthened for Illinois to achieve national recognition as a leader in providing innovative advances in health. However, pursuit of health research and education as a major thrust for Illinois requires the development of infrastructure that is cognizant of the special obligations and conditions associated with human health (human subjects research requirements, National Institutes of Health (NIH), and the Health Insurance Portability and Accountability Act (HIPAA)). It was determined that the most effective way to achieve this outcome would be through the development of a central resource for faculty, students, and administrators that not only provides guidance and support but also maintains Illinois' focus on health science as a priority. Therefore, the Health Vision Team recommended the establishment of the Division of Biomedical Sciences (DBS). Subsequently, following a mandate in the campus 2013-2016 strategic plan, the programs and services created by DBS were absorbed into IHSI to fulfill the expanded aim to support programs across the entire health portfolio at UIUC, i.e., both human (clinical) and animal (pre-clinical model) health-related research, not limited to biomedical activities.

Compelling Purpose

Improving health and healthcare delivery are imperatives for our society and these will be major foci of research and policy development in the coming decades. It is essential that the University of Illinois at Urbana-Champaign (UIUC) target its considerable research, education, and outreach efforts to these areas, both to fulfill our mission to the people of Illinois and to ensure the continued intellectual vibrancy of UIUC. This is the same compelling purpose that led to the initiation of the Carle Illinois College of Medicine (CI COM). IHSI's role is to build the research infrastructure and portfolio that will support all of the health science research campus-wide, for all colleges, not just the CI COM, and for all of our clinical partners, and not just Carle Foundation (e.g., Mayo Clinic, University of Illinois at Chicago, Order of Saint Francis, and Massachusetts General Hospital, among others).

The University of Illinois can already be proud of high-profile health-related research on the Urbana campus, primarily focused on basic biological mechanisms in both humans and animals, which has garnered significant federal funding. Educational efforts in these areas have been recognized by numerous cross-disciplinary federally funded training grants. Dual degree programs combining clinical degrees (MD or DVM) with PhD or MPH programs have infused clinical knowledge into over 30 graduate programs and are recognized nationally for their breadth of research opportunities. The University of Illinois is home to many leading health science investigators including, on the Urbana campus, Howard Hughes Medical Institute (HHMI), MacArthur, NIH Pioneer, Innovator and Exceptional Unconventional Research Enabling Knowledge Acceleration (EUREKA) award recipients, as well as members of the National Academy of Sciences who currently benefit and will continue to benefit from the integration that IHSI provides to health sciences research.

During the past decade, the State of Illinois and the University have also made significant capital investments at Urbana in nanotechnology, genomics, computer sciences, supercomputing, and the chemical and life sciences. These investments help to capitalize on our strengths in engineering, computation, animal models, and the social aspects of health in a concerted effort to expand our portfolio of health-related research. Finally, UIUC has made a major commitment with the Carle Health System to create the new CI COM. The IHSI is designed to enhance and

facilitate existing highly-regarded programs, while encouraging the development of new interdisciplinary health science programs that capture the synergies between established efforts in order to best confront emerging health issues in a coordinated way.

Mission

To harness and enhance campus-wide expertise and infrastructure towards establishing the University of Illinois at Urbana-Champaign as a leading provider of innovative health research solutions, and as an internationally recognized and funded leader in health sciences research and technology. We will do this by addressing individual, family, community, and national health issues through team-based interdisciplinary research, education, and outreach, and by supporting and supplementing the Carle Illinois College of Medicine.

Vision

To coalesce and enhance Illinois' far-reaching excellence in health science and technology, to facilitate innovative research and training, grow our funding portfolio, and improve the health of our campus and community.

IHSI and Campus

IHSI is explicitly identified as a key component of the Campus Strategic Plan (*Goal III, subsection bii: Develop the Interdisciplinary Health Science Institute*). IHSI has created, and will continue to create, infrastructure that catalyzes interdisciplinary research, education, and outreach around topics or themes that are central to addressing the grand health challenges facing our nation. By doing so, IHSI enables our campus to better support researchers on our campus as well as our collaborators off campus, leading to more external funding and centers of excellence with deeper and broader research impact that extends across all colleges and campus wide. IHSI will achieve these goals by developing and implementing a series of research, education, outreach, and partnership initiatives, designed to facilitate and coordinate an interdisciplinary, team-based culture in the health sciences at Illinois.

The University of Illinois' distinctive opportunity for striving towards addressing the Grand Health Challenges facing the world lies in our unique ability to view the world through a variety of interdisciplinary prisms. Illinois' long tradition of building teams of researchers and students with complementary but different backgrounds and perspectives is not only consistent with the multi-level complexity of health, it creates a fertile breeding ground for innovation and new discovery. Many of the greatest breakthroughs occur when scholars from different disciplines share ideas, merge methodologies, and evolve new paradigms. It is precisely this kind of approach that is implemented at IHSI in order to make progress toward solving the grand health challenges, in addition to playing a supporting role for the Carle Illinois College of Medicine (CI COM), as the campus-wide research arm of this new enterprise.

Focusing the Initiative – Five Grand Health Challenges

As part of the Illinois Health Science Initiative deliberative process, interdisciplinary discussion teams from across campus identified five Grand Health Challenges at the University of Illinois at Urbana-Champaign that can be mobilized to address the aforementioned challenges, in collaboration with our clinical partners. Although this list is by no means all-inclusive, these topics serve as examples of some of the Grand Challenges that have motivated how IHSI has

organized its operations and allocated its resources to best support and strive towards solutions to these Grand Challenges.

Grand Health Challenge 1: Creating health systems linking basic disease mechanisms with individualized care.

There is a continued need to increase our understanding of how individual and environmental factors interact with basic biological mechanisms to exacerbate or ameliorate the rate of progression of key diseases and conditions, and applying them to care on an individualized basis.

Grand Challenge 2: Discovering, developing and deploying health enabling technologies to individuals and community health providers.

The development and deployment of new health enabling technologies, with our clinical partners, has the potential to bring transformational change to the nature of health sciences research and the delivery of health care.

Grand Challenge 3: Eliminating technical, financial, social, and legal barriers for sustainable health.

There are many barriers that prevent individuals from achieving sustainable health and well-being. Overcoming these barriers requires a comprehensive, interdisciplinary, and coordinated approach to recognizing and managing the determinants of health.

Grand Challenge 4: Creating knowledge systems for collecting and exploiting data to promote life-long health.

Advances in information technologies (sensor systems, networks, storage) make it possible to collect and utilize health information in new ways that enable the creation of a healthcare system that exploits and manages comprehensive data that can be applied to ensuring health and well-being for all.

Grand Challenge 5: Maximizing health, reducing chronic disease, and addressing disability throughout the lifespan.

Teams of researchers and scholars from a broad array of disciplines who are actively collaborating with community partners develop new, innovative, and sustainable solutions for the prevention, management, and treatment of chronic disease and disability.

- *Discuss the unit's alignment with the strategic direction(s) of the campus/college/school/department to which it will report.*

National direction:

IHSI has thus far focused its research efforts in three areas, Precision Medicine, Clinical and Translational Neuroscience, and Cancer, that align directly with the three biggest research initiatives announced by the current Federal Administration: The White House's Precision Medicine Initiative; NIH's BRAIN Initiative, and the National Cancer Moonshot 2020, placing Illinois at the forefront of health sciences research. All three of these are also excellent fits with the Grand Challenges described above.

Campus direction:

IHSI was designed to, and continues to, serve the UIUC campus by aligning Unit activities with various elements of the Campus Strategic Plan.

First, IHSI is identified as a key component of the Campus Strategic Plan in Goal III:

Goal III: Make a significant and visible societal impact

Subsection b: Create structures to better coordinate major research and outreach efforts around the societal challenges defined through the Visioning Future Excellence initiative.

ii. Develop the Interdisciplinary Health Science Institute.

Further, IHSI aligns with the following other goals within the Campus Strategic Plan:

Goal I: Foster Scholarship, Discovery and Innovation

c) Develop stronger infrastructure to support scholarship and innovation

Fulfilled by:

- Championing and supporting new interdisciplinary training programs.
- Raising awareness of key expertise gaps or emerging opportunities to facilitate the ability of campus to hire strategically.
- Supporting research scholarships at the high school, undergraduate, graduate and postdoctoral levels.
- Supporting summer research fellowships of Illinois students with our clinical partners.
- Hiring Research Development Specialists that are tasked to develop specific research themes and connect campus researchers to each other and to our clinical partners, therefore encouraging innovative research and discoveries.
- Participating as a member of the governance committee for Illinois Research Connections.
- Hosting lecture series to inform the campus community about current topics in research, which thereby stimulate broad campus discussions about potential funding opportunities.
- Administering the annual NIH Grant Writing Series, which is an intensive grant writing workshop to support and inform faculty on the NIH grant application process and writing.

Goal II: Provide Transformative Learning Experiences

a) Re-envision and reshape the Illinois student experience

Fulfilled by:

- Supporting the Computational Genomics Course offered through the Mayo Alliance, which introduces clinicians and researchers to fundamental computational genomic analysis tools.
- Developing and co-sponsoring scholarships to enhance the student experience.

Goal III: Make a Significant and Visible Societal Impact

d) Educate the broader public, leveraging the research and innovation of the university

Fulfilled by:

- Seeking, enabling and supporting clinical partner collaboration and community research participation.
- Planning community events in specific research program areas to further educate the broader public.

Goal IV: Steward Current Resources and Generate Additional Resources for Strategic Investment

a) Develop a systematic effort to continually steward the resources of the university

Fulfilled by:

- Identifying, enabling, and sustaining major infrastructure and service to advance campus health research.
- Bringing together and coordinating existing centers, units and initiatives.
- Providing services to promote campus health research and translation.
- Enhancing collaboration in specific health topics through symposia, networking, and web tools.
- Sponsoring and organizing a variety of meetings on campus with the goal of informing faculty about resources available, which will help support and catalyze health sciences research at the university and increase the chances of growing the research funding portfolio on campus.
- Facilitating extensive needs assessments and planning for various campus-wide resources, which employs the shared-services model by using resources synergistically to improve processes and research efficiency to the campus as a whole thereby enabling innovative research and increasing the chances of growing the UIUC research funding portfolio.
- Making significant contributions to the Carle Illinois College of Medicine (CI COM) planning, including, but not limited to, the writing and negotiation of the critical affiliation agreements, service on CI COM committees, including the Joint Liaison Committee, CI COM Dean Search Committee, Strategic Affiliation Committee (SAC), and Research Innovation Committee (RIC).

Goal IV: Steward Current Resources and Generate Additional Resources for Strategic Investment

g) Foster an integrated approach to institutional advancement efforts

Fulfilled by:

- Providing support for the Office of the Vice Chancellor for Institutional Advancement (OVCIA) during Foundation Weekend and at other times when potential donors—with a specific interest in health sciences work—are on campus. Further, the Director meets with potential donors, both private and corporate, regularly to support advancement efforts related to the CI COM.

Office of the Vice Chancellor for Research (OVCR) direction:

The OVCR provides leadership and oversight for research at Illinois. The OVCR also works to promote coordination, lead change, and ensure modern and compliant processes and professional services. IHSI is the Unit within OVCR that supports, coordinates, and provides advice to the VCR for health sciences research.

- *What is the proposed time period for existence of the unit?*

The IHSI proposes to be in existence for the length of time that this campus engages in health science and technology research, in order to facilitate, catalyze, and support these activities.

- *What is the relationship to the new College of Medicine?*

At present, IHSI is creating the research infrastructure for the development of the CI COM, as well as growing and managing UIUC's research relationship with Carle Foundation. IHSI's standing role is to build the research infrastructure and portfolio that will support all of the health science research campus-wide, for all colleges, not just the CI COM, and for all of our clinical partners, not just Carle Foundation (e.g., Mayo Clinic, University of Illinois at Chicago, Order of Saint Francis, and Massachusetts General Hospital, among others).

- *Describe the unit's proposed Research and/or Public Service activities as they relate to the charter or mission*

The IHSI facilitates: 1) coordination of campus expertise around specific health-related topics; 2) development and management of partnerships with strategic external clinical sites, corporations, and health-focused organizations; and 3) support of services to facilitate the pursuit of clinical and translational research.

The following is a robust list of activities and events that the IHSI has led or guided since its inception. Each Program Area has a steering committee that is composed of campus faculty experts in that particular research area. These steering committees provide guidance and recommendations for program focus, scholarships awarded, and allocation of resources.

1. Coordination of Program Areas centered around campus expertise in specific health-related topics:

- Cancer Program Area
 - Support and planning for the Cancer Community at Illinois

- Annual Cancer Community at Illinois Conference, since 2013
- Employment of a Research Development Specialist (RDS) with cancer expertise.
- Cancer Community Workshops and working group meetings that have covered a broad range of cancer topics: Tumor microenvironment, nutrition, physical activity, survivorship, big data, physical science oncology center, cancer detection, diagnosis, and treatment technologies
- Publication of *PATHWAYS*, a print newsletter, published twice a year since 2014 and a weekly digest email to the cancer community listserv
- Initiation and coordination of the C*STAR (Cancer Scholars for Translational and Applied Research Graduate) Program
- Initiation and coordination of the Cancer Scholars program for undergraduate students created to provide a unique and interdisciplinary student learning experience in cancer research
- Initiation and coordination of the researchHStart program for high school students interested in hands-on cancer research experience
- Initiation and coordination of Carle Foundation Hospital-Beckman Institute Fellow Program for Ph.D. or M.D./Ph.D. recipients interested in conducting oncology-related research
- Initiation and support of our partnership with Carle Cancer Center (more detail below)
- Support for ongoing collaborations with UIC Cancer Center, including a T-grant submission and planning meetings
- Clinical and Translational Neuroscience (CTN) Program Area
 - Support and planning for CTN
 - Embedded CTN Director at Carle
 - Neuroscience Institute
 - Employment of a Research Development Specialist (RDS) with neuroimaging expertise
 - Ongoing support for Illinois/Carle collaborative clinical projects at Carle, along with grant submission support
 - Development of the CTN community at Illinois including, but not limited to, joint sponsoring seminars, grand rounds, and joint undergraduate and graduate student special projects
 - Initiation and support of our partnership with Carle Cancer Center and Carle Sports Medicine and Rehabilitation
- Precision Medicine Program Area
 - Support and planning for Precision Medicine (PM).
 - Employment of a Research Development Specialist (RDS) with PM expertise
 - Development of the PM community at Illinois including, but not limited to sponsoring seminars, workshops, seed grant funding, and supporting student special projects

- Co-organizer of the annual Individualizing Medicine Conference held at Mayo Clinic in Rochester, MN, since 2012
- Implementation of big data software and data platform at Illinois, jointly supported by Illinois and Mayo

2. Development/Management of Clinical Partnerships:

- Mayo Clinic
 - Financial and administrative support for the Mayo Clinic & Illinois Alliance, since 2010
 - Initiation and support for the research collaboration of Illinois and Mayo: over 50 active research studies
 - Facilitation of over 75 faculty/physician connections between the institutions
 - Support of a Postdoctoral Research Associate (50% FTE) position, since 2012 to further the partnership and research priorities
 - Biomarker Workshop: Technologies for Identification, Detection, and Clinical Translation, 2014
 - Pharmacogenomics Workshop, 2013
 - Seed grant program with over 25 projects funded to date, 2010-present
 - Co-organized the Individualizing Medicine Conference held in Rochester, MN, since 2012
 - Annual one-week Computational Genomics Course, Summer 2013-present
 - Regular e-newsletter
 - Publication of *Interactions* newsletter, published twice a year since 2015
 - Implementation of KBase software and data platform at Illinois; jointly supported by Illinois and Mayo
 - Support and assistance of the Big Data project collaboration with Mayo and NCSA
- Carle
 - Initiation and support for the research collaboration of UIUC and Carle: over 56 research studies have been implemented to date
 - Facilitation of over 180 faculty/physician connections between the institutions
 - Support for, and imbedded staff in, the Biomedical Research Center at Carle, since 2011
 - Multiple research area Meet and Greets to provide an opportunity for Carle and UIUC researchers to meet and discuss their work and future collaborations
 - Support for annual Carle Cancer Survivor Retreat, since 2015
 - Embedding of Clinical and Translational Neuroscience Director at the Carle Neuroscience Institute, since 2015
 - Carle Illinois Health Innovations Lecture Series, since 2016
 - Carle Illinois Collaborative Research Seed Program, since 2016 (awards determined by the Research Innovation Committee, comprised of UIUC faculty)

and Carle physicians, and chaired by the IHSI Director, as specified in the Carle-Illinois Research Affiliation Agreement

- Embedding of Heart and Vascular Director at the Carle Heart & Vascular Institute, since 2016
- Support and infrastructure for Carle and UIUC collaborations in the following research areas: Heart and Vascular, Metabolic & Digestive Health, Clinical and Translational Neuroscience, and Cancer

3. Support of services to facilitate pursuit of clinical and translational research:

- NIH Grant Writing Workshop, 2011-present
- Biomedical Research Center at Carle, 2010-present
- NSF Grant Writing Workshop, 2014
- NIH Leadership Series Seminars, Spring 2015
- NIH Grant Writing Series, Fall 2015
- Landscape Seminar Series, 2011-2014
- Illinois Biostatistical Core support for all faculty at UIUC, 2016-present

In addition to these, the IHSI is also examining and analyzing the possibility of establishing and/or supporting other investments in health science that will facilitate and support more clinical research.

4. Success to date in facilitating externally sponsored funding for UIUC researchers:

- BRAIN Initiative: Integrated Multimodal Analysis of Cell and Circuit-Specific Processes in Hippocampal Function, NIH, 09/18/2015- 06/30/2018 -- \$ 2,044,206
- Spectroscopic imaging analyses of polyolefin polymers, Chevron Phillips Chemical Company LP, 07/01/2015-7/01/2017 -- \$ 292,000
- (PQC4) Towards in vivo, 3D cytotyping by stimulated Raman spectroscopic imaging, NIH, 09/16/2014–08/31/2016 -- \$ 373,914
- Discrete frequency infrared spectroscopic imaging for breast histopathology, NIH, 07/15/2014–6/30/2018 -- \$ 1,712,706
- 3D Prostate Histochemometry to Predict Disease Recurrence, NIH, 04/01/2016 - 03/31/2020 -- \$ 1,956,443
- Tissue microenvironment (TiMe) training program – NIH, 05/15/2016-4/14/2021— pending funding decisions
- Biomimetic hydrogel niches to study the malignant phenotype of glioblastoma multiforme, NCI, 2016 -- \$358,102
- Meso-plex mirna and protein profiling for cancer diagnostics using chip-integrate, NCI, 2015 -- \$319,852
- Multiplexed platform to probe interactions at the model cell membrane interface, NIGMS, 2015 -- \$298,822
- (PQC4) Towards in vivo; 3D cytotyping by stimulated Raman spectroscopic imaging-BA, NCI, 2015 -- \$168,561
- Intraoperative label-free optical molecular imaging of breast tumor margins, NCI, 2015 -- \$490,333

- Transcriptional regulation of H. Pylori-mediated gastric inflammation and cancer, NCI, 2015 -- \$150,000
- Quantitative imaging and modeling of regulation by bacterial small RNA, NIGMS, 2015 -- \$251,935
- Biomimetic scaffold anisotropy and biomolecule conjugation to direct tendon, NIAMS, 2015 -- \$70,490
- Gradient biomaterials to investigate niche regulation of hematopoiesis, NIDDK, 2015 -- \$335,585
- Engineering high-affinity t cell receptors against cancer antigens, NCI, 2015 -- \$46,613
- Botanical estrogens: mechanisms; dose and target tissues, NCCIH, 2015 -- \$218,717
- Small molecule activators of procaspases as anti-cancer agents, NCI, 2015 -- \$451,299
- A novel strategy to overcome resistance in temozolomide-refractory glioblastomas, NCI, 2015 -- \$179,619
- Deconstructing the cues in the mesenchymal stem cell microenvironment that promot, NHLBI, 2015 -- \$177,360
- 27-hydroxycholesterol as a link between obesity and breast cancer pathogenesis, NCI, 2015 -- \$244,752
- Novel methods to assess the effects of chemicals on child development, NIEHS, 2015 -- \$276,159
- Novel methods to assess the effects of chemicals on child development, NIEHS, 2015 -- \$726,773
- Predicting transcriptional and epigenetic networks in cancer from sequencing data, NCI, 2015 -- \$328,974
- (PQC4) Towards in vivo; 3D cytotyping by stimulated Raman spectroscopic imaging-BA, NCI, 2014 -- \$205,353
- Discrete frequency infrared spectroscopic imaging for breast histopathology, NIBIB, 2014 -- \$482,453
- Intraoperative label-free optical molecular imaging of breast tumor margins, NCI, 2014 -- \$483,605
- Transcriptional regulation of h. Pylori-mediated gastric inflammation and cancer, NCI, 2014 -- \$145,500
- Engineering high-affinity t cell receptors against cancer antigens, NCI, 2014 -- \$44,510
- Botanical estrogens: Mechanisms; dose and target tissues, NCCAM, 2014 -- \$1,415,653
- Deconstructing the cues in the mesenchymal stem cell microenvironment that promot, NHLBI, 2014 -- \$220,241
- Engineering T cell receptors for adoptive cell therapies, NCI, 2014 -- \$320,517
- Computational methods for next-generation comparative genomics, NHGRI, 2014 - - \$321,558
- 27-Hydroxycholesterol as a link between obesity and breast cancer pathogenesis, NCI, 2014 -- \$241,148
- Ultrasound-induced tissue damage assessment, NIBIB, 2014 -- \$602,988

- Novel methods to assess the effects of chemicals on child development, NIEHS, 2014 -- \$737,012
- Targeting C-MYC and MDR1 in cancer through small molecule inhibitors of IMP-1, NCI, 2014 -- \$160,150
- Next-generation quantum dots for molecular and cellular imaging of cancer, NCI, 2014 -- \$231,206
- Predicting transcriptional and epigenetic networks in cancer from sequencing data, NCI, 2014 -- \$333,516

JUSTIFICATION:

- *How does the formation of this unit fulfill needs not already met by colleges, schools, departments or other entities on campus? How will the unit help position the campus/college/school/department in a current or emerging field of inquiry?*

This proposal is to formalize the already existing IHSI as an institute.

The IHSI provides the critical hub for empowering and catalyzing the integration of health science and technology-related research campus-wide. IHSI will be a virtual institute that coordinates existing resources on, and across, campus, and at our clinical partner sites, to synergistically strengthen the overall research grant portfolio and enhance the funding potential of UIUC.

This is accomplished by the following:

- IHSI provides an integrated nexus for research services and partnerships that open new opportunities and lower barriers for researchers pursuing clinical and translational endeavors
- IHSI builds partnerships with community providers to bring new approaches and technologies to rural and underserved areas
- IHSI expands opportunities for interdisciplinary health education
- IHSI launches communication strategies to promote health research and education programs at Illinois
- IHSI supports and organizes faculty research around health challenges
- IHSI assists with team-building and project coordination
- IHSI manages and grows efforts in securing health-related grant funding

Three areas for which IHSI has successfully brought together health sciences and technology across units on campus are: 1) cancer, 2) clinical and translational neuroscience, and 3) precision medicine. Further, the IHSI advisory committee have identified three emerging themes: 1) heart and vascular health, 2) metabolic & digestive health, 3) health equity. These program areas and themes are supported by the IHSI administrative core, which provides shared administrative support to the program areas to catalyze research on campus and with our clinical partners.

IHSI has succeeded in linking UIUC researchers with clinicians, and, more generally, linking the campus to clinical partners. IHSI synergizes health sciences research, both on campus (e.g. increasing the efficiency of the overall research process) and with our partners (e.g., fusing health science research with technological advances to foster medical breakthroughs that help the entire population), which is directly aligned with the OVCR mission, our campus strategic plan, and National priorities. Consequently, the three main research areas of IHSI (i.e., Precision Medicine, Neuroscience, and Cancer) align directly with the three biggest research initiatives announced by the current Federal Administration: The White House's Precision Medicine Initiative; NIH's BRAIN Initiative, and the National Cancer Moonshot 2020.

PROPOSED STRUCTURE:

- *Describe the direct reporting line(s) of the proposed unit. How will the unit be situated in the organization's hierarchy?*

The IHSI, as an institute, will continue to report to the OVCR. The current IHSI Director, Neal Cohen, a professor in Department of Psychology, is responsible for the IHSI's overall mission, activities, and budget. Dr. Cohen was hired as the founding IHSI director in 2014 as the result of a campus-wide search and with the input of campus Deans, Directors, and leadership. The IHSI Director reports directly to the Vice Chancellor for Research on these and related matters in their monthly meeting. In addition, there is an IHSI Advisory Committee, currently comprised of 14 faculty members from units across campus, that serves as the primary advisory committee to the Director (outlined below in "Outcomes Section") and appointed by the VCR.

- *Describe the proposed organizational structure and how the structure will permit the unit to meet its stated objectives. Describe the staffing needs of the center/institute and plans for the leadership of the unit. List all faculty (current or proposed) and their associated titles.*

Institute Administrative Core: Will provide guidance and leadership to Institute programs, communicate UIUC expertise, develop programs to support faculty, department, and college health science priorities, and provide shared resources and knowledge to IHSI program areas.

Personnel

Director is responsible for guiding the campus' strategy and propelling UIUC as a leader in research and education in Health Sciences. This position is currently held by Neal Cohen.

Deputy Director is responsible for the development and execution of IHSI's strategic plans as well as providing leadership and direction for staff, setting an effective agenda and ensuring performance goals are met and set. This position is currently held by John Erdman, Jr.

Assistant Director is an academic professional responsible for overall management of the IHSI staff and resources, communication with internal and external stakeholders, and development of strategic partnerships to facilitate translational and clinical research. This position is currently held by Ruth Sosnoff.

Communications Director is responsible for overall communications and design that is critical to Institute efforts, including marketing and promotional support for research communities, as well as faculty and student training programs, conferences and workshops, fundraising, grant-writing, and website creation and maintenance. This position is currently held by Susan Johnson.

Communications Coordinator provides communications and design support for work in line with the Director of Communications' vision and goals. This position is currently held by Ashley Lawrence.

Program Coordinator provides program coordination in multiple areas during the evolution of IHSI and will represent IHSI and related programs to internal and external stakeholders, including Carle, Christie Clinic, and Mayo Clinic, as well as NIH and other federal agencies. This position is the human resources coordinator and liaison between IHSI and the OVCR, as

well as the support for budget related activities such as tracking of expenditures and commitments, account reconciliation, etc. This position is currently held by Leta Summers.

Office Support Associate provides secretarial assistance to facilitate IHSI activities and support a variety of related office functions in meeting the daily operational needs of the office and staff. This position is currently vacant.

Additional *Office Support* (e.g, academic hourlyies, and interns) may be required for general office duties and will support efforts of professional staff and research communities. This position is currently held by Destiny Woods.

Clinical and Translational Research Support: Assists faculty efforts to build synergistic research and educational programs around areas of existing strength or emerging opportunities. Activities include analysis of internal strengths/weaknesses, alignment with complementary external partners, identification of funding opportunities and development of research teams, research coordination and management, educational programs, and grant applications. This program area will also develop the partnership, expertise, and staffing needed to transform the campus clinical and translation research environment. This area is critical for the long-term success of the health research enterprise. The Institute must lower local and regional barriers to translational research to help secure pilot data for new projects that enable pursuit of federal and other external funds for translational research projects.

Personnel

Associate Director for Research Initiatives is an academic professional responsible for exploring and negotiating specialized research initiatives. This position also initiates and leads the development of partnerships with strategic clinical sites, identifies unmet needs for translational clinical research access/infrastructure, and determines most appropriate partner institutions based on alignment of interests, expertise, and cultures in collaboration with UIUC researchers. This position functions as the primary point for the development of contracts, MOUs and relevant partnership agreements in collaboration with relevant legal, compliance, and leadership offices on campus. This position is currently held by Emily Wee.

Research Development Specialists (RDS) collaborate with faculty members on campus in catalyzing new research programs and opportunities; identify common and complementary research interests among multidisciplinary faculty and assemble teams to strategically address research and funding opportunities, which may include providing elements of research planning and coordinating the preparation of funding agency proposal submissions; and analyze, align, and strategically match organizational strengths with short-term emphases and long-term directions of funding agencies.

Cancer RDS- this position is currently held by Margaret Browne Huntt

Clinical and Translational Neuroscience RDS- this position is currently held by Gillian Cooke

Precision Medicine RDS- this position is currently held by Margret Miller

Director of the Biomedical Research Center (BRC) is an academic professional who oversees research operations at the Biomedical Research Center at Carle. The duties include ensuring that

research projects are performed in compliance with all federal and state regulations, helping BRC investigators navigate the complex dual (Carle and Illinois) compliance environment, facilitating interaction between researchers at the BRC and physician collaborators, assisting with tissue acquisition and preparation for UI studies, and running the flow cytometer housed within the BRC. This position is currently held by Tor Jensen.

Director of Neuroscience Clinical Partnerships is an academic professional who identifies specific studies and investigators seeking to develop research partnerships, while developing a proposal outlining priority activities, staffing, facilities, and financial resources necessary to realize collaborative goals for research in neuroscience. This position also evaluates and proposes corresponding infrastructure at the University of Illinois, while fostering lines of communication and partnership between the Medical Director of the Carle Neuroscience Institute and the IHSI Director. This position is currently held by Tracey Wszalek.

Translational/Clinical Research support embedded within Carle clinical units is necessary to recruit research subjects, build research subject databases, and facilitate research collaboration. The initial focus will be on providing clinical research support for Cancer-based projects and Neurology research. Three *Clinical Coordinators* will be embedded within these priority clinical units in Carle to focus on University research projects and build the research tools needed to advance translational research. The cancer specific position is currently held by Janet Iverson, and the other two positions are vacant and will be filled soon.

Administrative Assistant oversees the Biomedical Research Center (BRC) office and supports the BRC staff, including the aforementioned Directors. This position facilitates IHSI and Carle collaborative activities, supports a variety of related office functions in meeting the daily operational needs of the office and staff, and provides daily office management. This position is currently held by Cathy Tingley.

ACADEMIC IMPLICATIONS:

- *Will tenure-stream faculty hold appointments in the unit? If so, describe the structure of the appointments.*

Tenure-faculty are part of IHSI, either with administrative appointments and not academic appointments, (i.e., director and deputy director), or as 0%-time faculty affiliates.

- *Describe any plans for the unit to offer courses or contribute to academic programs.*

IHSI does not create degree programs, nor does it offer courses, but it contributes to undergraduate and graduate educational programs in the following ways:

- Provide clinical and translational research opportunities
- Provide several fellowships and scholarships in collaboration with the Mayo Clinic and Carle Foundation
- Provide internship opportunities at the Mayo Clinic

- *Describe the potential impact this unit may have on other units' use of campus resources (e.g., budget allocations by the Library for acquiring new materials to support the unit, increased demand on CITES' open computer labs, etc.). If applicable, include supporting letters associated with use of these campus resources.*

The resources utilized by IHSI serve to help other campus units and their faculty to thrive. The mission of IHSI (“*to harness and enhance campus-wide expertise and infrastructure towards establishing the University of Illinois as a leading provider of innovative health solutions...*”) establishes that IHSI’s impact will be synergistic and will accelerate the progress of research in various departments, colleges, and units on campus. The researchers with whom IHSI works or supports remain in their home units, and all external funding associated with IHSI efforts is expected to likewise run through the researchers’ home units. IHSI’s work, therefore, has a powerful and positive influence on fellow campus institutes, various laboratories and centers, and the academic departments and colleges. This work furthers health sciences-related research and increases the efficiencies of the research process, as well as the research opportunities as a whole and with our clinical partner institutions. IHSI is growing health sciences research opportunities, and bringing resources and providing resources to units, campus-wide.

BUDGET AND FUNDING STRATEGY:

- *Detail an initial budget. Please distinguish between initial, startup, or one-time expenses and ongoing or operating expenses.*
- *Outline campus and other financial commitments for unit startup. If proposing permanent status, describe anticipated ongoing campus financial commitments and other sources of funding.*

IHSI currently has a budget under the OVCR consisting of the long-standing budget commitment of the Division of Biomedical Sciences (DBS), which IHSI subsumed in 2014, and additional funding provided by the Provost’s office. Below we provide expenditures for FY15 and FY16, and projected expenditures for FY17.

		Year of Operation		
		FY15	FY16	FY17-projected
Personnel				
Faculty Count	by # of FTE	1	2	2
Staff Count		11	12	16
	Personnel Services in \$	\$659,000	\$931,983	\$999,256
	Other Personnel Costs in \$	\$0	\$0	\$0
	Supplies, Services, Equipment in \$	\$125,599	\$265,687	\$383,000
	*Facilities in \$	\$79,481	\$81,487	\$99,990
	Total	\$930,121	\$1,279,157	\$1,482,246

*Biomedical Research Center (BRC) rent at Carle Foundation

The allocation is budgeted by the IHSI Director, and approved by the VCR during the annual budgeting process, with ongoing monthly discussions between the IHSI Director and the VCR about priorities, needs, and expenditures throughout the year. Within the approved budget, the faculty steering committees of the individual program areas (i.e., Cancer, Precision Medicine, Clinical and Translational Neuroscience) advise how resources will be used.

- *Describe the funding strategy, including any internal or external support, and as applicable, plans for replacing internal funding support with external funds and endowments.*

Funding for IHSI currently comes from the OVCR recurring budget. Our plans as an Institute will be to eventually incorporate additional services on a fee-for-service basis.

OUTCOMES:

- *Describe the criteria and outcomes that will be used to demonstrate the quality and effectiveness of the unit.*

The outcomes and criteria of success for IHSI are determined on an ongoing basis by the IHSI Advisory Committee and the Vice Chancellor for Research. These criteria transition from project to project, but, overall, IHSI is monitored with weekly internal meetings, monthly internal administrative-core meetings, a monthly meeting with the IHSI Advisory Committee, annual reports to the OVCR, annual budget meetings with the OVCR; as well, our Assistant Director meets monthly to discuss financial activities with the Assistant VCR, and our Director meets monthly with the VCR. Further, by VCR invitation, our Director has regularly attended the VCR's CRAWG and Institutes Director's monthly meetings.

- *Describe how the unit will be evaluated. What external inputs will be used, including methods of evaluation and frequency? Indicate, as applicable, how members of an Advisory Board (external and/or internal) will be chosen, including proposed qualifications, term of appointment, responsibilities and meeting schedule.*

The Director of IHSI reports directly to the Vice Chancellor for Research by way of monthly one-on-one meetings (as reported above). Further, the IHSI Director will be formally evaluated every five years, as detailed in Provost Communication 24.

The Interdisciplinary Health Science Advisory Committee (IHSAC) was established in 2010, and was recently reappointed by the Vice Chancellor for Research. Each member was selected from units across campus for their insights of the health sciences funding landscape and related internal activities. The IHSAC has monthly meetings throughout the year and is charged with the following:

- Provide campus perspectives on proposed or existing areas of research excellence in the health sciences, and clinical and translational research needs.
- Help identify potential infrastructure needs in our health science research ecosystem and whether and how those should be addressed through IHSI.
- Provide advice on and evaluation of the IHSI annual plans and activities.
- Provide a rapid response review team for health related limited submissions review or requests for internal funding.

Current Interdisciplinary Health Sciences Advisory Committee Members:

Chair: John Erdman, Professor Emeritus, Food Science and Human Nutrition
Milan Bagchi, Department Head, Molecular and Integrative Physiology
Rohit Bhargava, Professor, Bioengineering
Stephen Boppart, Professor, Electrical and Computer Engineering, Bioengineering
Barbara Fiese, Director, Family Resiliency Center
Martha Gillette, Professor, Cell and Developmental Biology
Chris Larrison, Associate Professor, Social Work
Deana McDonagh, Professor, Industrial Design
Brent Roberts, Professor, Psychology
Susan Schantz, Professor, Comparative Biosciences
Stephen Sligar, Director, Molecular and Cellular Biology
Brad Sutton, Associate Professor, Bioengineering
Richard Tapping, Professor, Medical Microbiology
Bryan White, Professor, Animal Sciences
Jeffrey Woods, Professor, Kinesiology and Community Health
Ex Officio: Neal Cohen, Interdisciplinary Health Sciences Initiative
Ex Officio: Ruth Sosnoff, Interdisciplinary Health Sciences Initiative
Ex Officio: Molly Tracy, Associate Vice Chancellor for Institutional Advancement


Our plans as an Institute include adding an External Advisory Committee consisting of notable health science experts that will help to further guide our endeavors.

Note for units seeking Phase 1 status, information provided in the initial proposal will be used as a reference point when Phase 2 status is sought. Units seeking initial Phase 2 status will be reviewed by Illinois Board of Higher Education on a regular cycle and may be reviewed as a part of campus-level or college-level review processes.

CLEARANCES:

A letter of support from the unit to which the proposed unit will directly report must be included.

(Clearances should include signatures and dates of approval. **These signatures must appear on a separate sheet.** If multiple departments or colleges are sponsoring the proposal, please add the appropriate signature lines below.)




Neal J. Cohen, PhD
Director, Interdisciplinary Health Sciences Initiative (IHSI)

8/15/16
Date



John Erdman, Jr., PhD
Deputy Director, Interdisciplinary Health Sciences Initiative (IHSI)

8/15/2016
Date



Ruth Sosnoff, PhD
Assistant Director, Interdisciplinary Health Sciences Initiative (IHSI)

8/15/2016
Date



Peter E. Schiffer, PhD
Vice Chancellor for Research

8/15/16
Date



Interdisciplinary Health Sciences Initiative

Research & Program Development

The Interdisciplinary Health Sciences Initiative (IHSI) catalyzes, connects, supports, and engages health sciences research on the University of Illinois at Urbana-Champaign campus. To assist with this mission, IHSI has a team of research development specialists who work closely with faculty and administration in a number of essential ways that include:

- Growing the health sciences research communities and programs
- Identifying, expanding, and supporting emerging research initiatives
- Connecting potential collaborators
- Fostering connections between academic researchers and clinical partners
- Initiating, guiding, and advising clinical studies (*including internal seed funding projects*)
- Identifying grant funding opportunities and supporting application submissions
- Supporting new interdisciplinary, multi-year proposals and strategies
- Assisting with the creation and coordination of large center-type proposals
- Building capacity in health sciences research communities and programs
- Acting as the liaison between external partners and organizations including Carle and Mayo Clinic
- Leading and supporting programs and events designed for faculty development

THE IHSI RESEARCH DEVELOPMENT TEAM

For more information or to utilize our services, contact a research development specialist listed below or email healthinitiative@illinois.edu.



Margaret Browne Huntt, PhD | mbrowne@illinois.edu
Senior Research Development Specialist

Programs and Activities:
Cancer Community at Illinois, Health Equity Working Group, and Community-based Projects



Gillian Cooke, PhD | gcooke@illinois.edu
Research Development Specialist

Programs and Activities:
Clinical and Translational Neuroscience and REDCap



Maggie Miller, PhD | meberg@illinois.edu
Research Development Specialist

Programs and Activities:
Precision Medicine and the NIH Grant Writing Series

Our goal is to help everyone navigate the landscape of clinical and translational research as smoothly as possible.

UNIVERSITY OF ILLINOIS
AT URBANA-CHAMPAIGN

Center on Health, Aging, and Disability

College of Applied Health Sciences
1008 Huff Hall, MC-586
1206 South Fourth Street
Champaign, IL 61820



August 29, 2016

Dear Members of the Senate Committee on Educational Policy:

As an Associate Dean for Research and Director of the Center on Health, Aging, and Disability in the College of Applied Health Sciences (AHS) and a long-time faculty member in the Department of Kinesiology and Community Health, I strongly support the proposal for creation of the Interdisciplinary Health Sciences Institute (IHSI).

I view the IHSI as value-added infrastructure to the College of AHS. Indeed, AHS has faculty representation on IHSI's Advisory Committee, AHS is partnering with IHSI in setting up biostatistics core for campus, IHSI has provided support of AHS faculty research including seed grants, infrastructure support, and access to clinical opportunities at both Carle and Mayo, in the areas of kinesiology, cancer, MS, neuropsychology, and nutritional neuroscience, AHS is partnering with IHSI in campus-wide health disparities/health equity grant writing, coordinated by IHSI, and community outreach, and AHS will be participating in IHSI's new clinical neuroscience grand rounds. I have no doubt that IHSI will assist AHS in their scholarship resulting in increased productivity and external grant funding.

Let me know if I can be of further assistance in conveying the benefits of IHSI for AHS.

Sincerely,

A handwritten signature in black ink, appearing to read 'Jeffrey A. Woods'.

Jeffrey A. Woods, PhD
Professor of Kinesiology and Community Health
Associate Dean for Research, College of AHS
Director, Center on Health, Aging, and Disability

UNIVERSITY OF ILLINOIS
AT URBANA-CHAMPAIGN

Office of the Vice Chancellor for Research
420 Swanlund Administration Building
601 East John Street
Champaign, IL 61820



August 11, 2016

Dear Members of the Senate Committee on Educational Policy:

I strongly support the proposal for creation of the Interdisciplinary Health Sciences Institute (IHSI). Over the last several years, its predecessor, the Interdisciplinary Health Sciences Initiative, has developed into a fully functioning interdisciplinary research support organization, ready to assume Institute status on our campus.

IHSI contributes greatly to our campus by serving as the force that catalyzes, supports, and unifies health sciences research on our campus, with the overarching goal of solving the grand health challenges facing the world today. IHSI's efforts have resulted in an impressive record of accomplishments and grant activity, documented in its proposal. As an Institute, IHSI will become a permanent part of our campus' research infrastructure, with the committed financial support of the OVCR, which will allow further collaboration in settings including monthly institute meetings where campus leaders gather to shape research directions and address grand challenges facing our campus and society.

The new Institute will strengthen and sustain our campus efforts to enhance and build our global reputation in the health sciences via research, education, clinical partnerships, outreach, and supporting and supplementing the new Carle Illinois College of Medicine. IHSI has already been playing a critical role in supporting the research component of the Carle Illinois College of Medicine and will continue to grow and support collaborations and connections as the College progresses in its development.

Thank you for your consideration.

Sincerely,

A handwritten signature in black ink, appearing to read 'Peter Schiffer'.

Peter Schiffer
Vice Chancellor for Research

UNIVERSITY OF ILLINOIS
AT URBANA - CHAMPAIGN

Interdisciplinary Health Sciences Initiative
901 West University Avenue, MC-261
Urbana, IL 61801



September 7, 2016

Dear Members of the Educational Policy Committee;

Attached please find the revised version of EP.17.01, "Proposal from the Office of the Vice Chancellor for Research to Create a Permanent (phase 2) Institute named the Interdisciplinary Health Sciences Institute (IHSI)".

Following our visit to the Committee, the proposal was revised with the following edits:

- IHSI's role in addressing the Grand Challenges was clarified (namely, to "support" and "strive towards") on pages 4-5.
- IHSI's role in needs assessments (i.e., facilitating) was clarified on page 7.
- The persons and committees that determine how IHSI funding is budgeted and spent was clarified on pages 8, 10-11, 15, and 18-19.
- Clarification of the role of VCR Schiffer in appointing the members of the IHSAC was added on pages 15 and 20.
- The definition of health related research was clarified on page 3.
- "Illinois" was changed to "UIUC" or "the Urbana campus" throughout the document.
- Minor edits, including word use and comma placements, were made throughout the document, as suggested by Professor Geil.

Also please find attached an additional letter of support, this one from Interim Chancellor and Dean of the College of Liberal Arts and Sciences, Barbara Wilson.

We appreciate the time you have devoted to evaluation of this proposal. Please don't hesitate to let us know what else you may require.

Best regards,

Neal Cohen, Ph.D.
Director, Interdisciplinary Health Sciences Initiative (IHSI)

UNIVERSITY OF ILLINOIS
AT URBANA-CHAMPAIGN

Office of the Vice Chancellor for Research
420 Swanlund Administration Building
601 East John Street
Champaign, IL 61820



September 6, 2016

**INTERDISCIPLINARY HEALTH SCIENCES INITIATIVE ADVISORY COMMITTEE
2016 – 2017**

John W. Erdman, Jr., *Committee Chair*, Emeritus Professor, Food Science & Human Nutrition
Milan K. Bagchi, Professor, Molecular & Cellular Biology
Rohit Bhargava, Professor, Bioengineering
Stephen A. Boppart, Professor, Bioengineering
Barbara Fiese, Professor, Human Development & Family Studies
Martha Gillette, Professor, Cell & Developmental Biology
Christopher R. Larrison, Associate Professor, School of Social Work
Deana C. McDonagh, Professor, Industrial Design
Brent W. Roberts, Professor, Psychology
Susan L. Schantz, Professor, Comparative Biosciences
Stephen G. Sligar, Professor, Biochemistry
Brad Sutton, Associate Professor, Bioengineering
Richard I. Tapping, Professor, Medical Microbiology
Bryan A. White, Professor and Graduate Program Coordinator, Animal Sciences
Jeffrey A. Woods, Professor, Kinesiology and Community Health

Dear Colleagues:

Thank you for agreeing to serve on the Interdisciplinary Health Sciences Initiative Advisory Committee (IHSI Advisory Committee) for the 2016 – 2017 academic year.

The charge of this committee is to advise the leadership of IHSI, and specifically to:

- Provide campus perspectives on proposed or existing areas of research excellence in the health sciences, and clinical and translational research needs, and how IHSI can support researchers in those areas.
- Help identify potential infrastructure needs in our health science research ecosystem and whether and how those should be addressed through IHSI.
- Provide advice and guidance for the enhancement of community engagement and community research programs in the health arena.

Staff support for the committee's work will be provided by IHSI. Again, thank you for your willingness to serve.

Sincerely,



Peter Schiffer
Vice Chancellor for Research

c: Neal Cohen
Ruth Sosnoff
Leta Summers

UNIVERSITY OF ILLINOIS
AT URBANA-CHAMPAIGN

Office of the Chancellor
Swanlund Administration Building
601 East John Street
Champaign, IL 61820



September 7, 2016

Dear Members of the Senate Committee on Educational Policy:

I am pleased to express my support for designating the Interdisciplinary Health Sciences Initiative (IHSI) as a permanent (Phase 2) institute.

In both my role as Interim Chancellor of the University of Illinois at Urbana-Champaign and as Dean of the College of Liberal Arts and Sciences, I have seen how the work of IHSI is positively impacting a wide range of departments and units on the Urbana campus. This has been evident in many ways including the diversity of departments and colleges represented on its advisory board, the number of faculty IHSI has assisted with clinical collaborations, the infrastructure IHSI is successfully building for clinical and translational research—including HIPAA compliance and the development of a biostatistics core, and the mentoring of early career faculty with workshops on grant writing or engaging with federal funding agencies.

The support of faculty in the areas of clinical and translational neuroscience, cancer, and precision medicine are three areas that I believe have had a particularly visible impact on our campus. To support these research areas IHSI has developed and supported the Carle Illinois Collaborative Seed Funding Program, fostered collaborations among Illinois faculty, and helped research groups and clinical partners find connections that have the promise of ultimately addressing some of society's most pressing grand challenges.

IHSI has played a critical role in the early stages of the Carle Illinois College of Medicine, and as the new college gets off the ground, I believe IHSI will continue to play an essential role in facilitating research and helping faculty across campus navigate connections to the clinical world.

I have every confidence that IHSI is very much ready to transition to an institute that will allow our campus' research portfolio to grow and will enhance our reputation as a global innovator in the space of the health sciences.

If I can be of further assistance, please let me know.

Sincerely,

A handwritten signature in black ink, appearing to read 'B. Wilson'.

Barbara J. Wilson
Interim Chancellor

UNIVERSITY OF ILLINOIS
AT URBANA-CHAMPAIGN

Carl R. Woese Institute for Genomic Biology
1206 Gregory Drive
Urbana, IL 61801-3799

29 August 2016

Prof. Bettina Francis
Chairperson, Senate Committee on Education Policy
Campus

Dear Bettina and Members of the Senate Committee on Educational Policy:

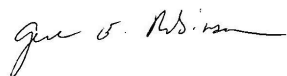
I write to express my strong support for the proposal to create the Interdisciplinary Health Sciences Institute. The Illinois Health Sciences Initiative (IHSI) already is making strong contributions to enhance the environment for biomedical research on campus, which has benefited research teams at the Carl R. Woese Institute for Genomic Biology (IGB).

IHSI is working closely with NCSA to implement a HIPAA-compliant environment on campus, which is critical for all big data efforts in biomedicine, including projects at the IGB. IHSI also is working to support the CompGen Initiative, which is co-run by IGB and the Coordinated Science Laboratory, through its role in managing the Mayo Illinois Alliance. Several CompGen grants, including a \$9.2M NIH Center of Excellence grant and a \$1.5M NSF Industry/University Cooperative Research Center grant, are in partnership with Mayo and were made possible by the Alliance. The graduate fellowship program with Mayo provides opportunities for training in big data approaches to clinical data, including genomic medicine data that involve IGB research teams. In addition, IHSI's work in building connections with Carle are increasing research opportunities for the IGB, and I am confident that new funding for IGB-Carle teams will be awarded as a result of these connections.

IHSI Director Neal Cohen and I meet regularly to discuss joint opportunities and coordinate activity at the IGB and IHSI. Prof. Cohen has worked tirelessly and successfully to enhance the clinical and translational research landscape on campus and I am sure his efforts will be even more effective if IHSI becomes an institute.

For these reasons I strongly support the proposal for the creation of the Interdisciplinary Health Sciences Institute.

Sincerely yours,



Gene E. Robinson
Director
Swanlund Chair and Center for Advanced Study Professor of Entomology and Neuroscience

UNIVERSITY OF ILLINOIS
AT URBANA-CHAMPAIGN

EP.17.01

Office of the Provost and Vice Chancellor
for Academic Affairs

Swanlund Administration Building
601 East John Street
Champaign, IL 61820



August 15, 2016

Bettina Francis, Chair
Senate Committee on Educational Policy
Office of the Senate
228 English Building, MC-461

Dear Professor Francis:

Enclosed is a copy of a proposal from the Office of the Vice Chancellor for Research to create a permanent (phase 2) institute called the Interdisciplinary Health Sciences Institute.

Sincerely,

A handwritten signature in black ink that reads 'Kathryn A. Martensen'.

Kathryn A. Martensen
Assistant Provost

Enclosures

c: N. Cohen
J. Erdman
R. Sosnoff