

SUBMITTED BY: TIMOTHY STEMMLER, PH.D., INTERIM VICE PRESIDENT FOR RESEARCH

**RECOMMENDATION TO RENEW CHARTER
INSTITUTE OF ENVIRONMENTAL HEALTH SCIENCES/
CENTER FOR URBAN RESPONSES TO ENVIRONMENTAL STRESSORS**

RECOMMENDATION

It is recommended that the Board of Governors renew the charter for the Institute of Environmental Health Sciences/Center for Urban Responses to Environmental Stressors (IEHS/CURES) through January 2029, as recommended by the Center and Institute Advisory Committee-II (CIAC-II). The Vice President for Research concurs with this six-year charter renewal recommendation, as does the Policy Committee of the Academic Senate.

BACKGROUND

Dr. Melissa Runge-Morris became director of IEHS in December 2008. The institute was last reviewed in 2016 and re-chartered for six years. Since the last review, IEHS/CURES has made continued progress including all ten IEHS/CURES faculty (8 full members and 2 joint) successfully obtaining extramural funding, as well as the successful acquisition of a prestigious, \$11.2 million NIH P46 superfund center grant, Center for Leadership in Environmental Awareness and Research (CLEAR). While the failure to renew the CURES P30 Center is of obvious concern, the CIAC-II committee is confident that the exceptional leadership of IEHS/CURES, with appropriate support from Wayne State, should prevail in re-securing the CURES center.

REVIEW

In accordance with the Board of Governors Wayne State University Statute 2.23.01 *Centers and Institutes: Policy on Creation, Operation, Review, and Discontinuance*, the Institute of Environmental Health Sciences (IEHS) underwent a formal review by the Center and Institute Advisory Committee-II (CIAC-II) in fall semester of 2022.

The CIAC-II subcommittee review process included a) the institute's self-study, b) review of past IEHS/CURES self-studies and CIAC-II reports c) a site visit at which CIAC-II subcommittee members met with the director, key personnel and students of the institute. The subcommittee report recommending that the charter for this Institute be renewed for a period of six years was submitted to, reviewed, and approved by the full CIAC-II committee. The full committee submitted a final report to Interim Vice President for Research Timothy Stemmler, Ph.D., and to the Policy Committee of the Academic Senate. The Interim Vice President for Research received the report and prepared a memorandum recommending a six-year renewal. The Policy Committee of the Academic Senate received the report, invited Director Melissa Runge-Morris, M.D. to a follow-up meeting, and prepared a memorandum recommending a six-year renewal.

The CIAC-II subcommittee was impressed, as noted below under strengths, with the progress of the Institute under the leadership of Dr. Runge-Morris. A key strength was the recent award from the National Institutes of Health of a P42 superfund center grant, the Center for Leadership in Environmental Awareness and Research (CLEAR). The CIAC-II subcommittee noted a palpable sense of purpose and resolve among the members of the institute and the subcommittee's impressions of IEHS were very positive and indicated that the Institute is fulfilling its particular mission and objectives. The areas for improvement are outlined below and were not felt to be insurmountable. The full CIAC-II committee supported charter renewal for six years.

STRENGTHS OF THE INSTITUTE OF ENVIRONMENTAL HEALTH SCIENCES/CENTER FOR URBAN RESPONSES TO ENVIRONMENTAL STRESSORS AS INDICATED BY CIAC-II

- IEHS/CURES has a strong leadership team with Melissa Runge-Morris, M.D. as the director. The faculty hold her in high regard and have strong support for her leadership. The transdisciplinary nature of the Institute is attractive to junior faculty and Runge-Morris has shown herself to be effective in maintaining alliances across many disciplines, which is the aegis of a Center. Co-leader Christine Cole Johnson has stepped into her leadership role, representing a Henry Ford Health (HFHS) connection. The alliance with HFHS is critical to the success of IEHS/CURES, because it brings infrastructure and expertise in epidemiology and data management that WSU lacks.
- IEHS/CURES recently obtained a large \$11.2 million P42 superfund center grant, the Center for Leadership in Environmental Awareness and Research (CLEAR). CLEAR brings new collaborators into the Institute, including participants from the College of Engineering. This is a notable achievement as it is the first superfund grant obtained by Wayne State. It also places Wayne State in lofty company, since the other two successful grants this cycle were awarded to Yale and Columbia. The CLEAR grant is expected to enable a variety of new research directions and pairs benchwork conducted at IEHS/CURES with clinical/translational work conducted at HFHS. The proposed geospatial mapping of environmental contaminants, correlation to health disparities, and health communication are exciting aspects of the program that align perfectly with the IEHS/CURES mission.
- Since the last review of IEHS/CURE, a UH3 Environmental Influences on Child Health Outcomes, or ECHO, grant totaling \$7 million from the National Institutes of Health was awarded to Michigan State University, the University of Michigan, Henry Ford Health System, Michigan Department of Health and Human Services and Wayne State University. The Wayne State co-principal investigator is Douglas Ruden, Ph.D., the co-director of the Exposures Signatures Core Facility in CURES. His team is working to determine whether environmental exposures, such as lead and organic pollutants, cause changes in the "epigenome" of the DNA in children.

- All 10 of the current IEHS/CURES faculty (8 full members, 2 joint) have successfully obtained extramural funding.
- IEHS/CURES has set up a mentoring program for young faculty navigating promotion and tenure. Three faculty (Petriello, Kassotis, Pilsner) have been recruited since the last re-chartering period, and negotiations are underway with two additional faculty members. There are numerous opportunities for internal reviewing of grants including by the Advisory Boards, and a well-defined organizational structure for the tenure review process has been established by IEHS/CURES. There is a clear sense of vibrancy among the junior faculty.
- The high quality of the lab infrastructure, open labs with access to equipment and the broad expertise represented by the faculty have been an important aspect of IEHS/CURES to trainees. Trainees are comfortable approaching faculty other than their mentor for help.

AREAS OF IMPROVEMENT FOR THE INSTITUTE OF ENVIRONMENTAL HEALTH SCIENCES/CENTER FOR URBAN RESPONSES TO ENVIRONMENTAL STRESSORS AS INDICATED BY CIAC-II

- A major concern is associated with the failure to renew the CURES P30 center grant, and the consequences for continuation of what has become a very strong Community Engagement (CE) component. IEHS/CURES needs to develop a contingency plan for how to continue these CE efforts. IEHS/CURES may benefit from collaborations to optimize outreach and/or adopting strategies from other WSU Institutes (e.g., the Institute for Gerontology). Alternatively, it may be appropriate to support these efforts with WSU funds and/or to fold some of these efforts into CLEAR. The subcommittee considered the CE component of CURES to be too important to let lapse. Re-securing the P30 grant from which they adopted their new name in 2016 is of critical importance to the identity and continued growth of IEHS/CURES and is an obvious top priority moving forward. WSU should carefully consider what resources may be leveraged to maximize success of the renewal in the next cycle.
- The Henry Ford Health System/Michigan State University partnership is a potential complication to future collaborations with Henry Ford.
- Access to graduate students remains limited. Faculty tend to recruit students through the departments in which they hold their tenure retreat, or in departments where they are teaching. A steady stream of talented trainees is critical to the success of the program. CIAC-II recommended that it would be beneficial for IEHS/CURES to apply for a T-32 training grant.
- The student and postdoc trainees could benefit from more professional development and continuing education opportunities. All trainees, particularly international trainees,

could benefit from assistance in applying for and securing grant funding, including small internal grants, to include on their CVs. Trainees need to be more involved in outreach and community engagement to enhance their professional development while contributing to sustaining the CURES community engagement component.

- Plans for hiring additional faculty and determining the optimal size of the core IEHS/CURES faculty needs to be better defined. Review of start-up fund packages and competitive salaries along with reviewing availability and use of IBio bench space for current and incoming IEHS/CURES faculty is needed. Current available space will be completely full with the addition of the new hires.

ADDITIONAL FACTORS TO CONSIDER

- The lack of a School of Public Health is a limiting factor to IEHS/CURES. The addition of a School of Public Health could aid in addressing programmatic deficits currently being sought out at other institutions such as public health and data coordination sought from Henry Ford Health System and geographic data from Michigan State University.