



IPEC

Institute for Policy, Ethics, and Culture

**Michigan
Technological
University**

2019-2020 Annual Report

Summary of Accomplishments

Introduction

The Institute for Policy, Ethics, and Culture (IPEC) launched as a Michigan Tech Institute on September 12, 2019. Overall, IPEC's aim is to infuse the structure and climate of the university with attention to socially and culturally responsible engagement with the opportunities and challenges of our changing technocultural circumstances.

The institute's mission, as approved by the University, in our founding document is to promote research, policy engagement, and teaching that address the ethical and cultural challenges, implications, and strategies unique to the emerging technocultural environment. By bringing policy, ethics, and culture into the center of inquiry, IPEC creates collaborations on topics key to understanding technocultural change: issues such as algorithmic culture, medicine, biotechnology, and ethics; technology and autonomy; surveillance and privacy; and reconfiguring human relationships in and with a changing environment. The institute brings together faculty and staff from diverse departments to collaborate on and support research, policy, and teaching that responds to the changing technological environment. IPEC is where digital media and communication experts, public policy analysts, ethicists, philosophers, computer scientists, environmental chemists, artists, musicians, and engineers explore the policy implications, ethical considerations, and cultural significance of life in a connected world.

IPEC Structure, Hiring, and Membership

IPEC emerged from the Tech Forward Initiative, undertaken at the request of President Rick Koubek and facilitated by Provost and Senior Vice President for Academic Affairs Jacqueline Huntoon and Vice President for Research David Reed. As the Policy, Ethics, and Culture Tech Forward Initiative met during spring 2019, we realized that our goals could best be met through the formal structure of an institute. Our vision for the institute differs somewhat from the culture of institutes at Michigan Tech in that, as can be seen from the mission statement, we place equal emphasis on programming for the university community, support for research and researchers, and curriculum development. All these we deem crucial to moving the university structure forward in the changing technocultural environment. We received strong support for this vision of the institute during the process of approval: from members of departments, chairs, deans, the Provost, the Vice President for Research, the Dean of the Graduate School, the University President, and the Board of Trustees. The institute was approved on September 12, 2020. Our first year was devoted to putting the structure of the institute into motion, making the transition from Tech Forward Initiative to institute.

The PEC Tech Forward group leader, Distinguished Professor of Communication and Cultural Studies Jennifer Daryl Slack, was appointed by the provost and vice president for research to be director of the institute. The PEC Tech Forward committee became the executive board of IPEC and several new members were added to increase representation. In an open invitation, members of the University were invited to become IPEC members. Qualifications for affiliation require 1) a request for affiliation, 2) an explanation of how their research interests connect with IPEC, 3) a willingness to link their profiles to the IPEC website, and 4) a willingness to consider IRAD designation to the institute when proposals warrant it. The executive board now consists of 13 executive members (faculty and staff) representing Humanities, Social Science, Business, Visual and Performing Arts, Forest Resources, Chemistry, Advancement, and University Marketing and Communications. IPEC's total membership includes 23 individuals with representation in Mechanical Engineering-Engineering Mechanics, Chemical Engineering, and the College of Computing. We are in the early stages of developing an IPEC Graduate Student Organization.

Key to developing the institute is adding staff and active membership. Our first staff member is the institute manager. After members of the IPEC executive committee interviewed three promising candidates, we hired Erin Syth, who began February 10, 2020 as a half time, hourly employee. As of September 8, 2020, in response to the growing workload, her position was increased to .75 FTE. In the interest of promoting broad university membership, Director Slack gave presentations to Departments of Engineering, Social Science, Humanities, and Forest Resources. Further visits were postponed due to COVID-19.

Funding

IPEC is initially funded by a 5-6 year, one million dollar commitment from the Tech Forward Initiative. The expectation is that by year six, IPEC will have secured funding to insure its sustainability. Given the somewhat unusual nature of IPEC, the likelihood is that funding sources will be a combination of foundation funding, endowments, donations, and IRAD assigned from members's external funding sources.

Within the first year, IPEC was allocated \$200,000 from Tech Forward and spent \$78,563; that disparity is accounted for by the time it took to hire the institute manager, the reduction in expenses resulting from COVID-19 (cancellation of programs, halt to purchasing equipment for an office), and a careful and deliberate effort to develop the structure of the institute as thoroughly as possible with involvement of a broad swath of university departments.

As an institute building from the ground up, we do not have a history of obtaining external funding. One of IPEC's major challenges is to build a community where obtaining outside funding on issues of policy, ethics, and culture is facilitated, supported, and successful. Given that, we have demonstrated what we consider a successful start. Four MTU grants designated IRAD for IPEC (one awarded, two rejected, and one in progress). Adam Wellstead's (SS) grant "Era of Labification: Solving Disruptive Social Problems Through Policy and Social Innovation Labs" contributed \$1,834 in IRAD to IPEC. A recently awarded European Commission—Horizon 2020 grant designates IPEC for support in local programming, member travel, and seminar attendance. The IPEC institute manager is currently facilitating the work of IPEC member Andrew Fiss as Co-PI on a potential \$15 million NSF Coastlines and People proposal to be submitted through the Great Lakes Research Center; if awarded, the grant will potentially fund 13.3% of the institute manager's salary.

We are not using our limited \$1,834 in IRAD funds at this time but reserving them in anticipation of reaching a sufficient level that we can use them constructively and specifically to support faculty research. We envision using those funds to support the institute manager's efforts to assist faculty efforts to develop proposals for external funding by applying them to the manager salary. Institute Manager Syth has undertaken training to develop her skills in providing such assistance. Currently, she is being mentored by Beth Hoy at the Great Lakes Research Center in the application of the NSF Coastlines and People grant. She is a member of the National Organization for Research Development Professionals, has attended many Tech Research and Development seminars, and is working with Jessica Brassard from AVP for Research Development to develop an IPEC-specific grant writing workshop.

IPEC began working with Jessica Brassard in late spring 2020 to develop our sponsored research infrastructure. We have had several meetings with Brassard thus far, one focusing on grant opportunities beyond STEM grants, and a second to begin a process of Strategic Doing to focus on developing IPEC as a vibrant center of research development.

We have begun the process of exploring options for foundation funding. Having identified several potential foundations with interests that support policy, ethics, and culture, we have been working with University Advancement to build productive relationships with long term funding.

Advancement prioritized IPEC in University engagement with potential donors in the fall of 2019. While promising, at this point COVID-19 uncertainty has slowed efforts to secure donations.

Programming

One of our main contributions to the Tech community is offering quality programming on critical themes in the emerging technological arena as they involve matters of policy, ethics, and culture. These programs are chosen 1) to enhance university-wide knowledge of critical emerging issues involving policy, ethics, and culture in the changing technocultural arena, 2) to promote and support new opportunities for research that address policy, ethics, and culture, and 3) to promote inter- and intra-university networking and collaborations. 2019-2020 themes for programming were “Algorithmic Culture” and “Designing the Anthropocene.”

In fall 2019 we sponsored three speakers on “Algorithmic Culture:” Marika Pfefferkorn, John Cheney-Lippold, and Meredith Broussard. Speakers offered unique and diverse perspectives and engaged with both faculty and students in different ways given their expertise. Pfefferkorn contributed to the 1984 programming at the Rozsa Center for the Performing Arts along with IPEC sponsored participants Laura Brown (CC) and Stefka Hristova (HU); she also met with Tech administrators on diversity issues. Attendance at speakers’ individual lectures was 125, 125, and 200, respectively, including many undergraduates. As our first speaker series, we considered it a huge success.

In addition to the benefits of infusing the Tech community with knowledge of the importance of algorithms in relation to policy, ethics, and culture, faculty research has benefited measurably. Stefka Hristova (HU), Soonkwan Hong (SBE), and Jennifer Daryl Slack (HU) edited a collection on Algorithmic Culture, scheduled for publication November 2020. Slack delivered a keynote lecture on culture and change, and consulted with administrators on IPEC’s mission and goals at Hong Kong Baptist University. Slack and Hristova delivered conference presentations on algorithms. Ongoing and productive relationships have been cultivated with the College of Computing.

The spring 2020 theme on “Designing the Anthropocene” was to be even more ambitious, but COVID-19 resulted in having to cancel some of our programming. IPEC sponsored the film “Anthropocene” during the fall 41 North Film Festival, and IPEC executive committee member Sarah Green (Chem) spoke about the film and about IPEC. We sponsored a successful on campus visit by videographer and climate activist Peter Sinclair in January/February. Attendance at his lecture was approximately 400 people. In collaboration with World Water Day, we cosponsored what was switched to an online lecture with climate scientist Joellen Russell (attendance 55). Sarah Green presented a lecture on the United Nations Framework Convention on Climate Change in March (attendance 25). Right at the beginning of the lockdown, we co-sponsored artwork on “Environmental Graphiti,” still up across campus; accompanying programming was curtailed. We have in storage the striking artwork of Cori Champagne on “Transformational Clothing,” an

exhibition scheduled for March, which we have postponed. We cancelled a visiting lecture from Raj Patel scheduled for April, a visit from two members of Wisconsin Green Fire scheduled for April, and an Earth Day collaboration on a Climate Negotiation Game, also scheduled for April.

In relation to “Designing the Anthropocene” programming, Sarah Green was awarded two weeks summer support for program development. Green was also awarded \$1,800 to attend the United Nations framework Convention on Climate Change. This resulted in a presentation titled “IPEC Discussion on Climate Policymaking” attended by IPEC members, students, and other members of the University community.

In the midst of the COVID-19 pandemic, searching for ways to understand and contribute to addressing the moment, we instituted a “1,000 Words Project” in which IPEC affiliated faculty, staff, and students write from their various areas of expertise on “What Kind of Crisis is This?” These essays can be read on our website, and we continue to work with University Marketing & Communications to pursue further publication. One of the essays has been utilized as course content. Another essay led to a presentation at the Keweenaw Unitarian Universalist Fellowship.

Curriculum

Efforts to develop curricula on ethics involved both programming and faculty support for research. A grant to develop ethics modules across campus was submitted by Alexandra Morrison (HU), Charles Wallace (CS), and Jennifer Daryl Slack. Although denied, the response from reviewers was very positive, which will lead to further grant applications. Nancy Barr (MEEM) was awarded \$991.10 to attend IEEE International Symposium on Technology and Society for sessions on integrating ethics into the engineering curriculum; Both Morrison and Barr were scheduled to give presentations on ethics and engineering in March, which were cancelled due to COVID-19.

Efforts to develop curricula on policy included Adam Wellstead (SS) being awarded 1 week summer support for redesigning a course in policy in line with IPEC priorities. Wellstead also published several articles on trust in policy, which is evidence of faculty reorienting research in response to the concerns of IPEC.

We suggested and outlined a nine course certificate in policy, ethics, and culture for potential delivery in Southeast Michigan. This effort has been stalled due to COVID-19. We are also in the process of proposing a Ph.D. in policy, ethics, and culture. We explored providing a professional development initiative in engineering ethics, leading to the conclusion that, without a continuing education office on the Tech campus to handle marketing and enrollment, IPEC did not have the

resources to manage such a program at this time. IPEC executive committee members developed and implemented course materials for several courses and visiting class lectures were given on IPEC themes.

Promotion

We have been working closely with University Marketing and Communications to promote our mission. Notably, the Michigan Tech Magazine 56:1 featured our work on “Algorithmic Culture.” Institute Manager Erin Syth has developed and maintains the IPEC website, with people, events, resources, and projects. www.mtu.edu/ipec. She also maintains our twitter site: @ipec_mtu. We have six short promotional videos on IPEC in the works, temporarily stalled due to COVID-19.

Space and Facilities Requirements

As a new institute, IPEC requires an office to house the institute manager, with space for executive committee meetings and various other meetings. The Department of Humanities generously donated 139 Walker, which is currently adequate, though not quite large enough to hold executive committee meetings comfortably. We have internet connectivity, telephone service, and a computer, all purchased with Tech Forward funds. We will be purchasing appropriate office furniture as soon as COVID-19 restrictions allow and a printer, both from Tech Forward funds. Ongoing support is required for internet connectivity, telephone, service, and computer upgrades.

As IPEC develops, we will require a conference room and offices for additional personnel: support staff, graduate students, and postdocs. Our expectation is that these would be funded through a combination of foundation support, department support, endowments, donations, and IRAD.

FY20 Major Expenditures

Supplies (office equipment, events, etc.)	\$25,441
Faculty time	\$18,309
Lecturers and associated costs	\$12,922
Employee Salary	\$8,325
Travel	\$7,566
Videographer fees	\$6,000
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Total	\$78,563

Awards and Expenditures for IPEC, FY19-FY20

Number of Awards		Award \$		Number of Projects		Expenditures		IRAD Returns	
FY19	FY20	FY19	FY20	FY19	FY20	FY19	FY20	FY19	FY20
-	1	-	\$26,790	-	2	-	\$30,013	-	\$1,834

Plan for Year 2: 2020-2021

In response to the twin circumstances of the coronavirus pandemic and reduced funding, IPEC has adapted its work and will continue to assess what is needed and possible as the situation evolves. Most prominently, IPEC decided not to schedule on campus face-to-face events at this time, but to focus on 1) developing long term sustainability and promotion of our mission, 2) supporting faculty efforts to obtain sponsored research, 3) contributing to the curriculum, and 4) offering innovative projects and online programming.

1. Long Term Sustainability and Promotion: Under the current circumstances, our long term contributions to the university will be best achieved through the dedicated work of our members and the institute manager, whose position is now at .75 FTE, an increase from .50 FTE. In this way, the institute manager will commit more time assisting with the work outlined here. We will prioritize a search for long term, external funding, working with Jodi Lehman, starting with an application to the Mellon Foundation to hold a Sawyer Seminar in fall 2021 or spring 2022; continue to build the relevance and accessibility of our website and Twitter feed; promote the work of IPEC members in concert with University Marketing and Communications, and produce the six short promotional videos we have contracted for. We will also continue to recruit members among the university community and contribute to meeting their needs as scholars, teachers, and community members. Finally we are supporting the development of an IPEC graduate student group. IPEC also supports a Strategic Faculty Hiring Initiative to hire a replacement for Syd Johnson in the area of applied ethics.

Our financial projections for year two include obtaining support from the Mellon Foundation, obtaining support from donations or endowments through Advancement, and increasing IRAD. Given the enormous uncertainty COVID-19 has introduced to the economy, it is impossible at this time to project exactly how much that might be, especially because we are a new project. We are proceeding in the belief that we will receive Mellon support, but we also know that we have a couple of more years to work out sources of sustainable funding.

2. Sponsored Research: We are spending the year developing and organizing a structural capacity to search for, support, and administer grants for IPEC members. We aspire to work one-on-one with our membership to tailor opportunities and support to achieve this goal. We have asked that Jessica Brassard continue to work with us in support of this endeavor and to assist Erin Syth to eventually take over this role. In addition, Brassard's work with us using a Strategic Doing process will continue, focusing on making IPEC a vibrant research community, part of which is cultivating a

climate where applying for and administering grants relevant to our work is facilitated. We are in the process of developing a grant writing workshop specific to the needs of faculty in humanities and other faculty interested in IPEC-oriented funding sources.

3. Curriculum: As we were encouraged to do so by the Dean’s council, IPEC will propose a Ph.D. in policy, ethics, and culture in fall 2020. The Ph.D. will place policy, ethics, and culture at the center of research, teaching, and engagement in the changing technocultural climate. The Ph.D. will become key to the institute’s development: involving key faculty from across the campus, and supporting research, graduate students, postdocs, and programming. To fund this endeavor we are actively seeking foundation support. IPEC will submit an application to the Mellon Foundation for the sponsorship of a Sawyer Seminar to be held in fall 2021 or spring 2022 in conjunction with the potential launch of the Ph.D. program. The goal of this application is three-fold: 1) initiate a relationship with a reputable foundation, 2) secure funding for a postdoctoral fellow and two graduate students, and 3) establish a seminar series.

In response to a request from the Provost, IPEC developed a series of short courses to be offered in Southeast Michigan. Once the COVID-19 situation lightens up, we envision these efforts will continue to be pursued, perhaps with online availability.

A grant could be pursued to initiate a professional development course in ethics in engineering to meet certification requirements of professional engineers if broader support is offered by the University to market and manage such a program through a continuing education office. We are also cooperating with the Tech Forward Education for the 21st Century IDEA HUB GenEd in the development of an undergraduate pathways program.

4. Programming and Projects: Along with almost every unit on campus, we are searching for innovative ways to engage the university community under the assumption that face-to-face events will be limited. To that end, we are planning primarily for online programming for the school year that focuses on “transitions” in policy, ethics, and culture responsive to the challenges we are currently facing. Our first such endeavor, the “1,000 Words Project” on the SARS-Cov-2 pandemic, is in process (visible on our website). Several of the 1,000 word essays have been picked up and shared by other institutions, thereby promoting the research and scholarship of Michigan Tech Faculty. The IPEC graduate affiliate group will also be participating, and University Marketing & Communications is assisting us with further avenues of distribution.

We are currently planning the speaker series for spring 2021 on the theme of “Justice in Transition”; the long-term goal being establishing an external funding source for an annual

seminar. Our first speaker is in cooperation with Michigan Humanities, the Portage Lake District Library, and the Rozsa Center for the Performing Arts: Dr. Mona Hanna-Attisha discussing her book on the Flint water crisis, *What the Eyes Don't See* (October 14, 2020). IPEC will also work to develop its relationship with the newly founded Keweenaw Energy Transition Lab.



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AREAS OF INVESTMENT

The mission of the Institute for Policy, Ethics, and Culture (IPEC) is to promote research, policy engagement, and teaching that address the ethical and cultural challenges, implications, and strategies unique to the emerging technocultural environment. To that end, IPEC will focus on four distinct areas of development in FY20.

CURRICULUM



IPEC will propose a Ph.D. program in policy, ethics, and culture; continue to explore the potential delivery of a nine course certificate in policy, ethics, and culture in Southeast Michigan; and advocate for the development of a continuing education office in pursuit of fulfilling engineering professional development requirements in ethics.

SPONSORED RESEARCH



IPEC will develop and grow an IPEC-oriented grant writing culture through investment in the position of institute manager and an IPEC-specific grant writing workshop, as well as through facilitating interdisciplinary relationships both on and off the Tech campus.

FOUNDATION DEVELOPMENT



IPEC will build a relationship with the Mellon Foundation through the Sawyer Seminar application and pursue relationships with other foundations in keeping with IPEC's mission.

PROGRAMMING



IPEC will establish an externally funded speaker series featuring emergent and critical issues in the changing technocultural climate.

People

Institute Director—Dr. Jennifer Daryl Slack, Distinguished Professor of
Communication and Cultural Studies, Humanities

Institute Manager—Erin Syth

Executive Committee Members

Marina Choy

PhD Student, Humanities

Mary Jennings

Director of Programming,
Rozsa Center for the
Performing Arts

Roman Sidortsov

Assistant Professor, Energy
Policy

Jennifer Daryl Slack

Distinguished Professor of
Communications and Cultural
Studies, Humanities

Audrey Mayer

Professor of Ecology and
Environmental Policy; Director
of Graduate Studies; Interim
Vice President of Diversity and
Inclusion

Stefanie Sidortsova

Executive Director for
Communications, University
Marketing and
Communications

Sarah Green

Interim Department Chair,
Chemistry; Professor,
Chemistry

Libby Meyer

Lecturer, Visual and
Performing Arts; Director,
Music Composition Program

Adam Wellstead

Professor of Public Policy,
Social Sciences

Soonkwan Hong

Associate Professor of
Marketing, College of Business

Alexandra Morrison

Assistant Professor of
Philosophy, Humanities

Stefka Hristova

Associate Professor of Digital
Media, Humanities; Co-Leader
for Tech Forward Education for
the 21st Century IDEA HUB
GenEd

William Roberts

Vice President for
Advancement and Alumni
Engagement; Vice President,
Michigan Tech Fund

General Members

Carlos Amador

Associate Professor of Spanish and Culture Studies; Director, Modern Language Program, Humanities

Nancy Barr

Professor of Practice, Mechanical Engineering-Engineering Mechanics; Director, Engineering Communications Program

Laura Brown

Associate Professor, Computer Science; Director, Data Science Graduate Program, Computer Science

Andrew Fiss

Assistant Professor of Technical & Professional Communication; Director & Technical Communication Program

Valoree Gagnon

Director, University-Indigenous Community Partnerships, Great Lakes Research Center; Research Assistant Professor, College of Forest Resources and Environmental Science

Caryn Heldt

Director, Health Research Institute; James and Lorna Mack Chair in Bioengineering; Professor, Chemical Engineering

Patricia Sotirin

Professor of Communication, Humanities

Charles Wallace

Associate Professor, Computer Science; Associate Dean for Curriculum & Instruction, College of Computing; Affiliated Associate Professor, Cognitive and Learning Sciences

Richelle Winkler

Professor of Sociology and Demography, Social Sciences

Shan Zhou

Shan Zhou; Assistant Professor, Environmental and Energy Policy