



**Michigan
Technological
University**

FY23 Annual Report

Dr. Stefka Hristova, Director

Dr. Soonkwan Hong, Associate Director

Mission Statement, Vision, and Core Values

The Institute for Policy, Ethics, and Culture (IPEC) pursues scholarly engagement to address the massive changes and disruptive forces driven by emergent technologies. By bringing ethics and culture into the center of inquiry vis-a-vis policy implications, IPEC creates collaborative scholarly and research opportunities for its members in order to investigate techno-socio-cultural issues.

Summary of FY Activities and Highlights

a. Primary Activities & Accomplishments

Our activity report includes activity up to September 30, 2023.

i. Governance Structure

IPEC adopted a new charter and bylaws as well as a new leadership structure that orients the Institute as a hub for interdisciplinary research. The Institute continues to be led by a Director but has added the position of Associate Director and assigned the roles of Research Area Leads to five IPEC Executive Committee Members. The identified Research Areas and Research Areas Leads are the following:

- Social Media & Society; Research Area Lead Richard Canevez, Assistant Professor Communication, Culture & Media, Humanities.
- Human Machine Culture; Research Area Lead Jason Archer, Assistant Professor, Communication and Media Technologies, Humanities.
- Ethics & STEM; Research Group Area Alexandra Morrison, Associate Professor of Philosophy, Humanities.
- Justice & Security in Energy Transitions; Research Area Lead Roman Sidortsov, Associate Professor, Energy Policy, Social Sciences and Mark Rouleau, Associate Professor, Social Sciences.
- Algorithmic Culture; Research Area Lead Stefka Hristova, Associate Professor of Digital Media, Humanities and Soonkwan Hong, Associate Professor of Marketing, College of Business.

ii. Qualifications for Affiliation

To become a member, individuals fill out a form available on the IPEC website in which they are asked to 1) request affiliation, 2) explain how their research interests connect with IPEC, 3) agree

to link their profiles to the IPEC website, and 4) agree to consider IRAD designation to the institute when proposals warrant it.

iii. New Members

Ten new members joined IPEC in FY23.

Member recruitment efforts are on the way as the Director and Associate Director have presented IPEC's new focus to the College of Engineering and the College of Sciences and Arts Chair Councils in September 2023.

iv. Member Involvement

In addition to executive committee meetings and a general membership meeting each term, current and new IPEC members participated in planning and delivering the IPEC virtual speaker series, "Work in Transition." Members interviewed speakers during live broadcasts, hosted visits to classes, and participated in follow-up discussion. Executive members are consulted on major decisions, such as on the establishment of a small grants program.

IPEC has emerged as a communication platform, amplifying the voices of its scholar members. In the summer of 2023, the institute launched our podcast IPEC Presents. The first episode featured the work of Dr. Richard Canevez, Research Lead for the Social Media and Society research area. The director has met with members of UMC in order to create a playbook for promoting member research through social media, podcasts, and connections to external news sources where they are to be positioned as subject matter experts.

Member Publications and Dissemination Activities

- Zwarun, L., Canevez, R. (2023). Looking Back to Look Forward: Ukraine's Evolving Use of Digital Space for Resistance and Public Diplomacy, 2014-2022. ESSACHESS – Journal for Communication Studies.
- Canevez, R., Maikovska, K. (Forthcoming 2023). The Ukrainian Cyber Resistance: Individual Paper-in-Progress on Non-State Actor Tactics on Telegram. In The National Communications Association Annual Conference (NCA '23). Washington, D.C.
- Presented Melusina Calls to the Loon for solo violin composed by Libby Meyer with Isle Royale soundscapes (Chris Plummer) at Sound Kitchen as part of the Prague Quadrennial, June 11, 2023, Prague, CZ.
- From a Place of Listening, composed by Libby Meyer, premiered at Michigan State University as part of the Falling Tree Collaborative. The Falling Tree Collaborative concert series is an ongoing collaboration between scientists and composers with the goal to increase scientific literacy of the public through a novel combination of scientific presentation and musical performance. This

concert series is designed to bring the sounds of the proverbial “tree falling in a forest” to new audiences and explores themes of climate change, sustainable food production, and general wonder of our shared natural world with a special focus on systems involving plants.

- Archer, J., (2023). Haptics, Human Augmentics, and Human–Machine Communication, Andrea L. Guzman, Rhonda McEwen, & Steve Jones (eds.), *The Sage Handbook of Human–Machine Communication*, (pp. 474 - 482), SAGE.
- Archer, J. (May, 2023). In the Arms of the Surgical Machine. Paper presented at the International Communication Association Annual Conference (ICA '23), Toronto, Canada.
- Archer, J. (May, 2023). Surgery Beyond the Limits of the Human Hand™. Paper presented at Uncommon Senses IV, Montreal, Canada.
- Hong, S. et al. (Forthcoming 2023). Food prosumption technologies: A symbiotic lens for a degrowth transition. *Marketing Theory*.
- Hong, S. (2023). Transcendence up for sale: cracking the onto-existential codes for Übermensch. *Consumption, Markets & Culture*. <https://doi.org/10.1080/10253866.2023.2234293>
- Dholakia, N. & Hong, S. (2022). The Asiatic Mode of Marketing. *Japan Marketing History Review*. 1 (1), 128-137.
- Hong, S. (2023). Transhuman Market(ing) and the Concomitant. Presented at the Consumer Culture Theory Conference (June), Lund, Sweden.
- Hristova, S. (2022). Proto-Algorithmic War: How the Iraq War Became a Laboratory for Algorithmic Logics. Palgrave Press, Social and Cultural Studies of Robots and AI series.
- Hristova, S. (2022). “Traces: Photographic Negatives and the Quest for Truth,” *Visual Resources Journal*. Special Issue “What is an Image, Now?”
- Hristova, S. (2022). “Sociality, Appearance, and Surveillance in Digital Political Activism.” In *Visual Activism in the 21st Century: Art, Protest and Resistance in an Uncertain Worlds*, edited by Stephanie Hartle and Darcie White, 252-263. London: Bloomsbury Visual Arts.
- Hristova, S. (2022). “Emptied Faces: In search for an algorithmic punctum.” In *Faces on Screen: New Approaches*, edited by Alice Maurice, 75-90. Edinburgh: Edinburgh University Press.
- Morrison, A. & Wallace, C. (2022) "Making It Strange: Disrupting Assumptions About Technology and Ethics in Engineering and Computing Education," in *IEEE Technology and Society Magazine*, vol. 41, no. 3, pp. 81-90, doi: 10.1109/MTS.2022.3197274.
- Morrison, A., Wellstead, A. M., & Dickinson, H. (2023). Reclaiming public service ethics through algorithms: Implications for teaching and development. *Teaching Public Administration*, 0(0). <https://doi.org/10.1177/01447394231191940>
- Marin, L., Morrison A., & Voinea, C. (Forthcoming 2023) “Reflective and Dialogical Approaches in Engineering Ethics Education” in *The Routledge International Handbook of Engineering Ethics Education*. Routledge: London and New York.
- Soonkwan Hong was supported for presenting at the Consumer Culture Theory Conference in June 2023.

- Stefka Hristova was supported in presenting at the CEPE Annual Conference in May 2023.

v. Member Capacity to Pursue External Sponsored Funding

IPEC has begun conversations with other centers on campus in order to explore synergetic opportunities for its members. Notable here are the Ecological Science Center, Great Lakes Research Center, as well as the Michigan Transportation Research Institute.

Members have been supported through research funding identification opportunities. A list of external funding sources were identified and posted on the IPEC website. These are also being distributed through the IPEC Newsletter which goes out to members monthly. Additionally, the Institute Manager Erin Syth has been facilitating proposal submissions through the institute. IPEC has also been supporting members grant proposals through cost-share and seed grant opportunities. Upcoming in October will be a Cayuse workshop tailored to the needs of the general IPEC membership.

Associate Director, Soonkwan Hong, has been working diligently to establish connections with a select number of foundations, such as the Joyce and MacArthur foundations. A Letter of Intent in collaboration with Research Lead Richard Canevez has been submitted.

Dr. Archer is serving as an advisory board member for the Sustainable Robots for the HMC community project organized by COMBOTLABS at Western Michigan University. In his advisory role he plans to develop future research collaborations with board members from other domestic and international institutions.

Dr. Canevez has successfully acquired externally sponsored funding from the Waterhouse Family Institute for Communication and Society to support a project examining the use of religious imagery transmitted via social and digital media technologies to support Ukraine's resistance to the Russian invasion of 2022. This project is in collaboration with colleagues from the University of Missouri - St. Louis.

Additionally, Dr. Hristova and Dr. Hong are participating in a series of networking events presented by the Ethics Centers Coalition where inter-institutional collaborations are being discussed.

Sponsored Events

IPEC hosted the Work in Transition Speaker Series, March 14-28, 2023, which included three virtual speakers, 2 in-person speakers, class visits, and related events. The estimated participation was 600+ and collaborators included the Rozsa Center for the Performing Arts, Office of Diversity and Inclusion, the Portage Lake District Library, and MIHumanities. IPEC members chose speakers, interviewed speakers in the live broadcast, and hosted speakers in classroom settings. New

members were welcomed to IPEC through this event.

IPEC co-sponsored, with the Colleges of Computing and Engineering, “Robot101”, August-December, 2022 through member participation and \$1,000 in cost-share:

<https://robot101.mtu.edu/> . Art in Silico events with the Institute for Computing and Cybersystems were facilitated through Institute Manager Syth’s participation in the planning committee, IPEC member organization and participation in panel “The Work of Art in the Age of AI Generation,” April 2023, and \$500 in cost-share contribution.

IPEC contributed \$2,500 in cost-share for the event “How Black College Students Learn Code Switching” with speaker George Passewe and the Office of the Vice President for Diversity, Equity, and Inclusion, September 12, 2023.

IPEC co-sponsored for \$2,500 an Art+Activism panel and art installation with the Rozsa Center for Performing Arts by artist Erin Hoffman in the Rozsa Gallery (September 14-15, 2023). Following a presentation and discussion of Hoffman’s work, IPEC and the Rozsa Center co-hosted a panel discussion including Hoffman, Stefka Hristova, Terri Frew, and Richard Canevez.

Student Support

Aritra Chakrabarty (SS) was supported to attend the Annual International Public Policy Association Conference, Toronto, CA as executive committee member of newly formed Global South - Public Policy Research Network; \$1000. Kendall Belopavlovich (HU) was supported with a Graduate Research Summer Fellowship for Summer 2023 for the Development of grant-based newsletters for IPEC members and research podcasts; \$2800. Ogetay Kayali (Physics) received a Graduate Research Summer Fellowship for Summer 2023 to conduct research on misinformation with Social Media & Society Research Lead Rich Canevez; \$560.

Looking forward, the five research areas are preparing seed grants and summer fellowships for graduate and undergraduate students working in ethics, policy, and/or culture. We have begun conversations with the Essential Education leadership as well as the President of the Graduate Student Government.

International and Corporate Collaboration

Manager Erin Syth continues to maintain three working groups within the IKEA, Linnaeus University, and Michigan Tech partnership. The 17-member group is working toward mutually beneficial collaborative research projects and educational opportunities. IPEC, with CFRES, hosted a 5-person Swedish delegation from both Linnaeus and IKEA, Oct 30-Nov. 3, 2022. IPEC member

Mark Rudnicki (CFRES) and David Flaspohler (CFRES) attended the Swedish-American Chamber of Commerce SIREUS Chancellors Forum, February 21-22, 2023, Washington, D.C. Executive Director of Communications Stefanie Sidorstova attended SIRUES Members Forum, Swedish-American Chamber of Commerce, May 31, 2023, Washington D.C. An international student collaboration was held between Tech and Linnaeus in the fall 2022. Currently, a student exchange program and a faculty-led exchange program are being established between Michigan Tech and Linnaeus University, and Xinfeng Xie (CFRES) is on sabbatical at Linnaeus building research opportunities this fall.

Richard Canevez is working with Ukrainian scholars internationally to explore the technologized aspects of Ukraine’s resistance on social and digital media platforms. This working group spans collaborators in the United States and abroad, particularly close work with a graduate student from Kyiv who is currently situated at the University of Vienna. Currently we are moving towards collaborative publications of our work on the resistance on social media platform Telegram and writing articles tailored to a broader, non-academic audience to discuss the state of scholarship on the Russia-Ukraine war.

b. Member List Appendix

See page 11.

Budget Overview

a. FY23 Budget Summary

FY23 IPEC Budget	
Income	
Tech Forward Funding Received	\$180,110
2022 Carryforward	\$70,195
VPR Office Institute Manager Salary	\$30,110
Total	\$280,415
Major Expenditures	
Director Summer Salary (Slack/Hristova)	\$18,000
Associate Director Summer Salary	\$6,000
Research Group Leads Summer Salary	\$20,000
PEC PhD Development Stipends	\$10,000
Institute Manager Salary	\$32,939

Speaker Series Project Manager Salary	\$3,397
Grad Research Assistant Salary	\$2,400
Fringes	\$24,582
Travel	\$13,138
IPEC Speaker Series	\$50,000
Event Cost-share & Outreach	\$6,000
Miscellaneous Expenses	\$9,346
Total	\$195,802

b. IPEC IRAD

IPEC will use its \$6,382 FY23 IRAD funds to support the institute manager’s efforts to assist faculty efforts to develop proposals for external funding by applying them to the manager's salary.

c.

FY23 IPEC Proposals Submitted				
<u>Principal Investigator/Members</u>	<u>Title</u>	<u>Sponsor</u>	<u>Amount</u>	
Elizabeth Meyer	New Music at Michigan Tech	NEA	\$48,615	
Elizabeth Meyer	Pamela Z and HUB Residency	NEA	\$10,000	
Richard Canevez	The Digital Contestation of Truth in Conflict: A Comparative Study of Ukrainian and Taiwanese Fact-Checking Organizations	NEH	\$74,899	
Charles Wallace, Alexandra Morrison, Susanna Peters, Brianna Bettin, Wenbin Zhang	Responsible Computing: Making It Real	Mozilla Foundation	\$149,005	
Roman Sidortsov	Technical, Socioeconomic, and Environmental Frontiers of Offshore Wind: Research Conference and Summer School	NSF	\$100,000	

FY23 IPEC External Funds Awarded

<u>Principal Investigator/Members</u>	<u>Title</u>	<u>Sponsor</u>	<u>Amount</u>
Sarah Green, Mark Rouleau, Roman Sidortsov	Collaborative Research: GP-GO: Climate Leaders Academy: a professional development opportunity in the geosciences	NSF	\$126,913
Kathleen Harter, Stefka Hristova	Adapt Copper TRACES In-Park Education Event to Digital Format (Externally Submitted)	NEH	\$45,913
Erin Syth	MIHumanities Bridging Michigan: Work in Transition	NEH	\$1,500
Elizabeth Meyer	New Music at Michigan Tech	NEA	\$25,000
Richard Canevez	Commodification of Religious Iconography as Resistance in Saint Javelin (Externally Submitted)	Waterhouse Family Institute	\$5,225

d. Budget Projection

ASPIRE 5-year Forecast					
	Y24	Y25	Y26	Y27	Y28
Proposals in Progress (6)	\$97,621	\$20,515	\$0	\$0	\$0
Anticipated Awards (1)	\$0	\$44,017	\$36,014	\$0	\$0
IRAD Returns	\$6,382	\$3,263	\$1,468	\$0	\$0

Future Plans and Goals

Continued

- a. Continue to support Research Proposal Development
- b. Continue to facilitate Interdisciplinary collaboration for research
- c. Continue Grant Processing Support
- d. Continue and Expand Seed Grants in the five research areas
- e. Develop and Distribute Grant Opportunities Listings
- f. Facilitate Brown Bag Research Events
- g. Establish Connections to Foundations
- h. Support Graduate Students Summer Fellowships

- i. Support Undergraduate Students SURF
- j. Promote research through podcasts, social media presence, and connection to journalists

New Initiatives

- a. Collaborate with other institutions within the Michigan Ethics Center Coalition
- b. Develop a Social Media Monitoring Lab through foundation grant(s)
- c. Increase the visibility of the Institute on and off campus through targeted outreach
- d. Develop Social Robotics Collaborative to support research, education, and outreach
- e. Develop international collaborations to support research and pursue research funding from multinational agencies (e.g. NATO)
- f. The Social Media & Society area will develop a public-facing blog that can discuss current events and issues pertinent to the intersection of social media and community life (both locally and more broadly), politics, and social justice.
- g. Work with Graduate Students on examining their relationship between academic work, life, and labor justice.
- h. Rouleau and Sidortsov will utilize the results of the EU-funded JUSTNORTH project and the JUSTscore assessment and negotiation tool to seek external funding. They will direct their effort to the industry and private foundations for piloting JUSTscore in various settings (e.g. wind power development) and government funding agencies for using artificial intelligence to increase the capabilities of the tool.
- i. The institute plans to collaborate with the University of Lapland's Arctic Centre as part of the REBOUND project that was recently funded by the Finnish Academy of Sciences. The institute plans to host the project PI, Dr. Tanja Joona, in February 2024 to develop a detailed plan.
- j. The institute will be represented at the UNFCCC COP28 and hold information and networking sessions targeting participating academics, students, and policymakers.

Challenges and Barriers

From the Social Media & Society Research Area Lead: as the research area is in the process of being established, it will be essential that we increase both the research area as well as IPEC's campus and community footprint. While we are internally exploring and pushing down avenues of developing campus and community outreach, this process will require attention going forward as we work to enhance the overall footprint of the institute.

Member List Appendix

Director—Dr. Stefka Hristova, Associate Professor Digital Media, Humanities

Associate Director—Dr. Soonkwan Hong, Associate Professor of Marketing,
College of Business

Institute Manager—Erin Syth

Executive Committee Members

Jason Archer

Assistant Professor,
Communication and Media
Technologies

Stefka Hristova

Associate Professor of Digital
Media, Humanities; Director,
Communication, Culture, and
Media Undergraduate Program

Alexandra Morrison

Associate Professor of
Philosophy, Humanities; Ethics
and Philosophy Minor Advisor

Richard Canevez

Assistant Professor,
Communication, Culture, &
Media, Humanities

Mary Jennings

Director, Rozsa Center for the
Performing Arts

Mark D. Rouleau

Associate Professor, Social
Sciences; Graduate Director,
Social Sciences

Soonkwan Hong

Associate Professor of
Marketing, College of Business

Libby Meyer

Teaching Professor, Visual and
Performing Arts; Director, Music
Composition Program

Roman Sidortsov

Associate Professor, Energy
Policy

General Membership

<u>College</u>	<u>Department</u>	<u>First Name</u>	<u>Last Name</u>
College of Business		Soonkwan	Hong
College of Computing	Computer Science	Laura	Brown
College of Computing	Computer Science	Leo	Ureel
College of Computing	Computer Science	Charles	Wallace
College of Engineering		Kimberly	Geiger
College of Engineering	Chemical Engineering	Caryn	Heldt
College of Forest Resources and Environmental Science		Mark	Rudnicki
College of Forest Resources and Environmental Science	MS Student, Applied Ecology	Cassandra	Van Dam
College of Forest Resources and Environmental Science		John	Vucetich
College of Forest Resources and Environmental Science, GLRC		Valoree	Gagnon
College of Science and Arts	Biological Sciences	Amy	Marcarelli
College of Sciences and Arts	Humanities	Jason	Archer
College of Sciences and Arts	PhD Student, Humanities	Kendall	Belopavlovich
College of Sciences and Arts	PhD Student, Environmental and Energy Policy	Josephine	Amponsem
College of Sciences and Arts	Humanities	Richard	Canevez
College of Sciences and Arts	PhD Student, Environmental and Energy Policy	Aritra	Chakrabarty
College of Sciences and Arts	Humanities	Andrew	Fiss
College of Sciences and Arts	Chemistry	Sarah	Green
College of Sciences and Arts	MS Student, Environmental and Energy Policy	Zachary	Hough Solomon
College of Sciences and Arts	Visual and Performing Arts	Mary	Jennings
College of Sciences and Arts	Visual and Performing Arts	Libby	Meyer

College of Sciences and Arts	Humanities	Alexandra	Morrison
College of Sciences and Arts	Visual and Performing Arts	Lara	Neves
College of Sciences and Arts	PhD Student, Humanities	Favour	Normeshe
College of Sciences and Arts	Social Sciences	Susanna	Peters
College of Sciences and Arts	Social Sciences	Mark	Rhodes
College of Sciences and Arts	Social Sciences	Roman	Sidortsov
College of Sciences and Arts	Cognitive and Learning Sciences	Kelly	Steelman
College of Sciences and Arts	Humanities	Kette	Thomas
College of Sciences and Arts	Social Sciences	Adam	Wellstead
Great Lakes Research Center		Erika	Vye
	Director for the Center for Diversity and Inclusion	Gabriel	Escobedo
	Career Services	Nicholas	Kwiek
	Advancement	William	Roberts
	Advancement	Stefanie	Sidortsova