Ruth K Schmidt

Institute of Design (ID) at Illinois Tech

3137 South Federal Street

Chicago, IL 60616

Email: schmidt@id.iit.edu

Phone: 773-398-5186

Website: www.ruthkschmidt.com

I. Professional and scholarly history

Education

2009	**Masters of Design (MDes)**	Design Strategy. *Institute of Design, Illinois Tech, Chicago, IL, USA*
2007	**Postgraduate certificate**	Public Interest Design. *Archeworks, Chicago, IL, USA*
1991	**Bachelor of Arts (BA)**	Art/Semiotics. *Brown University, Providence, RI, USA*

Professional history

2019-	**Associate professor**	*Institute of Design, Illinois Tech, Chicago, IL, USA*
2018-2019	**Visiting industry professor**	*Institute of Design, Illinois Tech, Chicago, IL, USA*
2017-2018	**Director of strategic initiatives**	*Institute of Design, Illinois Tech, Chicago, IL, USA*
2009-2017	**Innovation program lead**	*Doblin|Deloitte, Chicago, IL, USA*
2001-2006	**Design director**	*NogginLabs, Inc., Chicago, IL, USA*
1998-2001	**Interface design director**	*Cognitive Arts, Chicago, IL, USA*
1995-1998	**Interface design manager**	*The Institute for the Learning Sciences, Northwestern University, Chicago, IL, USA*
1993-1995	**Design consultant**	*Technovations, New York, USA*

Academic publications

Peer-reviewed journal articles

[01] **Schmidt, R**. & Stenger, K. (2023). Frame plurality and 'or/rationality': A dialogic approach to the behavioral state. *Behavioural Public Policy*. 1-20. https://doi.org/10.1017/bpp.2023.34

[02] **Schmidt, R.,** Chen, Z. & Paz Soldan, V. (2022). Choice posture, architecture, and infrastructure: Behavioral systems design in public health policy. *She Ji: The Journal of Design, Economics, and Innovation, 8*(4):504-525. https://doi.org/10.1016/j.sheji.2022.08.002

[03] **Schmidt, R**. (2022). A model for choice infrastructure: Beyond choice architecture in Behavioral Public Policy. *Behavioural Public Policy*. 1-26. https://doi.org/10.1017/bpp.2021.44

[04] **Schmidt, R**. & Reid, S. (2022). Wicked behavioral design. *Journal of Design Strategies: The Design of Influence, 10*(1): 42-55. https://issuu.com/journalofdesignstrategies/docs/parsons_jds10-final

[05] **Schmidt, R**., Hatch, A. & Curry, S. (2021) Creating SPACE to evolve academic assessment. *eLife*. https://doi.org/10.7554/eLife.70929

[06] **Schmidt, R**. & Stenger, K. (2021). Behavioral brittleness: The case for strategic behavioral public policy. *Behavioural Public Policy*. 1-26. https://doi.org/10.1017/bpp.2021.16

[07] **Schmidt, R.** & Stenger, K. (2021). Behavioral planning: Improving behavioral design with "roughly right" foresight. *Strategic Design Research Journal, 14*(1):138-148. https://doi.org/10.4013/sdrj.2021.141.12

[08]   Nogueira, A. & **Schmidt, R.** (2021). Participatory prototyping for food public policy: Applications of systems and behavioral design. *Policy Design & Practice*, *5*(1). https://doi.org/10.1080/25741292.2021.1888399

Peer-reviewed papers in conference proceedings

[01]   Krishnaswami, L. A., Gonsher, I., Rutter, W. & **Schmidt, R.** (2023) "Positive Sum Design: Design methods and strategies." Applying Education in a Complex World. *AMPS Proceedings Journal Series, Series 33***.** ISSN 2398-9467

[02]   **Schmidt, R.** (2023). "Choice conditions and behavioural leverage points in complex and adaptive systems," in *Proceedings of Relating Systems Thinking and Design*, *RSD12 (Paper 46).* 7 October 2023.

[03]   **Schmidt, R.** (2022). "Employing choice infrastructure and choice posture to achieve positive-sum systems design," in *Proceedings of Relating Systems Thinking and Design*, *RSD11 (Paper 115).* 13-16 October 2022. https://rsdsymposium.org/employing-choice-infrastructure-and-choice-posture-to-achieve-positive-sum-system-outcomes/

[04]   **Schmidt, R.** & Stenger, K. (2021). "Overcoming bounded scalability: Achieving interoperability through behavioral boundary objects," in Markopoulos E., Goonetilleke R.S., Ho A.G., Luximon Y. (eds.) *Advances in Creativity, Innovation, Entrepreneurship and Communication of Design. AHFE 2021. Lecture Notes in Networks and Systems, 276*: 3-10. 27-29 July 2021. https://doi.org/10.1007/978-3-030-80094-9_1

[05]   **Schmidt, R.** (2020). "Strange bedfellows: Design research and behavioral design," in Boess, S., Cheung, M. and Cain, R. (eds.), *Synergy–DRS International Conference 2020*: 1443-1457. 11-14 August 2020. https://doi.org/10.21606/drs.2020.252

Edited book chapters, reports, and comments

[01]   **Schmidt, R.** (forthcoming; 2024). "Choice posture and embodiment in anthropological behavioral design," in *The Routledge Companion to Practicing Anthropology and Design.* Chris Z. Miller and Jenessa Mae Spears (eds.). New York: Routledge.

[02]   **Schmidt, R.** (forthcoming; 2024). "Behavioral implications and emerging legal issues in innovative and digital product design," in *Emerging Issues at the Intersection of Commercial Law and Technology.* Nancy Kim and Stacy-Ann Elvy (eds.). Cambridge: Cambridge University Press.

[03]   Klotz, L., Pickering, J., **Schmidt, R**. & Weber, E. (2019). "Design behaviour for sustainability," *Nature Sustainability, 2*: 1067–1069. https://doi.org/10.1038/s41893-019-0449-1

[04]   "Twenty questions about design behavior for sustainability: Report of the International Expert Panel on behavioral science for design," (2019) *Nature Sustainability*. https://doi.org/10.18130/v3-mqnr-xh35

Completed manuscripts currently under review

[01]   Stenger, K. & Schmidt, R. Synthesizing and structuring behavioral solutions in complex systems through a pattern language.

Other published works (whitepapers, non-academic articles, anthology contributions)

[01]   **Schmidt, R.** (2024, forthcoming). "What can behavioral design learn from universal design," *Behavioral Scientist.*

[02]   **Schmidt, R.** (2023). "Three tensions behavioral design must navigate," *Behavioral Scientist.*

[03]   **Schmidt, R.** & Stenger, K. (2021) "(Dis)embodied rationality and 'choice posture': Addressing behavioral science's mind-body problem," (whitepaper). *SSRN*. http://dx.doi.org/10.2139/ssrn.4185086

[04]   **Schmidt, R.** & Stenger, K. (2021). "Embracing complexity through behavioral planning." *Behavioral Scientist.*

[05]   **Schmidt, R.** (2021). "Prototyping systems design-informed behavioral public policy: Learning by doing for methodology development," (whitepaper). *SSRN*. https://dx.doi.org/10.2139/ssrn.3814442

[06]   **Schmidt, R**. (2021). "Behavioral design 2021," (invited contribution). *Behavioral Design Hub*

[07]   **Schmidt, R.** & A. Hatch. (2020). "Rethinking research assessment: Addressing institutional biases in review, promotion, and tenure decision-making," *PLOS. https://theplosblog.plos.org/?category=2693*.

[08] **Schmidt, R.** (2020). "The benefits of statistical noise," *Behavioral Scientist.*

[09] **Schmidt, R.** (2020). "Imagining the next decade of behavioral science," *Behavioral Scientist*

[10] **Schmidt, R.** (2020). "Behavioral science graduate guide," (invited contribution). *Behavioral Design Hub*

[11] **Schmidt, R.** (2020). "Behavioral design 2020 and beyond," (invited contribution). *Behavioral Design Hub*

[12] **Schmidt, R.** (2019) "Research assessment as a human-centered design problem," (invited contribution) *DORA.*

[13] Reid, S. & **Schmidt, R.** (2019). "Reframing Innovation: Integrating behavioural science and design," *Rotman Management Magazine,* 12(2).

[14] **Schmidt, R.** (2019). "Broadening the nature of behavioral design," *Behavioral Scientist.*

[15] **Schmidt, R.** (2018). "Reflections on Intersections," Proceedings from the *Design Intersections: Design + Data + Behavior conference.*

[16] Reid, S. & **Schmidt, R.** (2018) "A new model for integrating behavioral science and design," *Behavioral Scientist.*

[17] **Schmidt, R.** (2017). "How behavioral design can help de-risk innovation," *Innovation Excellence.*

[18] **Schmidt, R.**, Schoenwaelder T. & McLain, S. (2017). "Achieving innovation in CPG: Innovation index and behavioral design," *2017 Grocery Manufacturers Association (GMA) Leadership Forum.*

[19] **Schmidt, R.**, Schoenwaelder T. & McLain, S. (2017). "Deep-dive on innovation in CPG: New insights on how innovation leaders are creating value," *Deloitte Perspectives*

[20] **Schmidt, R.** (2016). "Five behavioral design tips for ringing out the year," *Huffington Post*

[21] **Schmidt, R.** (2016). "Three ways to tackle flu shot inertia," *Deloitte Center for Health Solutions*

[22] **Schmidt, R.** (2016). "Design thinking in HR: The arc of an experience," *HR Times: Business-Driven Insight for Human Capital*

[23] **Schmidt, R.** (2015). "Helping consumers get unstuck," *CMO Today—Wall Street Journal*

[24] **Schmidt, R.** (2015). "Frozen: Using behavioral design to overcome decision-making paralysis," *Deloitte University Press*

[25] **Schmidt, R.** & Pinkard, N. (2011) "Building a badge framework to ignite student learning identities," (whitepaper). *Gates Foundation.*

[26] Pinkard, N. & **Schmidt, R.** (2011) "Igniting learning through role trajectories: supporting youth in learning activities," (whitepaper). *Gates Foundation.*

Conference and symposia presentations

Invited

[01] "Behavioral science and design," *Behavioral Science and Policy Association (BSPA) annual conference.* 2-3 May 2024 (forthcoming)

[02] "Project TARA: Tools for reforming scholarly impact" (« Projet TARA : Outils pour réformer l'impact scientifique »), *Research Impact Canada (RIC) annual meeting.* 20-22 September 2023.

[03] "Behavioral science > design or Behavioral science + design?" *IIEX Behavior.* 13-14 September 2022

[04] "Behavioral design and collaborative learning spaces," (opening co-keynote), *Empowering Collaborative Culture through Active Learning Spaces symposium, IIT.* 23 October 2020

[05] "Participatory prototyping as foresight methodology," Participatory Policy Design symposium, *Lee Kuan Yew School of Public Policy, National University of Singapore.* 20 March 2020

[06] "Research assessment reform as a human-centered behavioral systems challenge," *Driving Institutional Change for Research Assessment Reform symposium, American Society for Cell Biology and Howard Hughes Medical Institute.* 22 October 2019

[07] "Nature Sustainability: Behavioral science and design toward global sustainability," *University of Virginia, Convergent Behavioral Science Initiative, and Nature Sustainability.* 14 January 2019

[08] "(Re)defining the role of design in behavioral design," *Nudgeapalooza symposium, Deloitte Behavioral Science Group.* 13 December 2018

[09] "De-risking user-centered design: Behavioral design," (opening keynote), *IDSA Education Conference.* 16 August 2017

[10] "The Behavioral Design toolkit," *Nudgeapalooza symposium, Deloitte Behavioral Science Group.* 8 December 2016

[11] "Behavioral design from 9 to 5: Applications in organizations," *Adaptive Path Service Experience Conference.* 7 November 2016

Refereed

[01] "Choice conditions and behavioural leverage points in complex and adaptive systems," *RSD12 (co-presented with the Fourth International Conference on Design Research (CIDI-IV) Horizon+(en), Bogotá).* 7 October 2023

[02] "Behavioral leverage points: Expanding places to intervene in systems," *International Behavioural Public Policy Conference (IBPPC), University of North Carolina, Chapel Hill.* 6-8 Sept 2023.

[03] "Positive Sum Design: Design methods and strategies," *AMPS (Architecture, Media, Politics, Society): Applying Education in a Complex World, Toronto.* 26-28 April 2023.

[04] "Bend, don't break: A case for adaptive behavioral design in public policy," *International Behavioural Public Policy Conference (IBPPC), London School of Economics (LSE).* 9-10 Sept 2022.

[05] "Choice infrastructure in a governance context," *Design-led approaches to renewing public management and governance symposium, International Research Society for Public Management (IRSPM).* 3-4 Feb 2022.

[06] "Making SPACE to evolve academic assessment," *FORCE2021 (Future of Research Communications and e-Scholarship).* 8 December 2021.

[07] "Prototyping systems design-informed behavioral public policy: Learning by doing for methodology development," *International Public Policy Association Conference (ICPP5).* 7 July 2021.

[08] "Behavioral design for networked organizations: The Last Heist," *Relating Systems Thinking and Design (RSD8) 2019 Symposium.* 13-15 October 2019.

[09] "Sentient consent: Designing consent in the age of data and information," *Informed Experiences, Designing Consent symposium, IIT.* 6 April 2019.

[10] "Behavioral design," *Design Principles & Practices Conference.* 14 February 2010.

Invited speaking (public lectures, webinars, panels, podcasts, interviews)

[01] "From learners to leaders," *Institute of Design, Illinois Tech (panel).* 23 October 2023

[02] "Tools for research assessment reform: From What to How," *Navigating DORA* speaker series, The University of Calgary *(webinar).* 27 September 2023.

[03] "Choice infrastructure: Creating effective organizational choice conditions through behavioral design," Oregon State University visiting scholar lecture series, Design and Innovation Management program *(lecture).* 19 May 2023.

[04] "What if human-centered design isn't enough?" *With Intent (podcast).* 1 March 2023.

[05] "Building blocks for open research impact," *Bay Area Open Science Group: Stanford, UCSF, & UC-Berkeley virtual community (webinar).* 28 February 2023.

[06] "Positive sum design: Creating win-win conditions for emergent behavior," *Nelson Center for Entrepreneurship, Brown University (panel).* 16 February 2023.

[07] "How institutions can make a difference: Rethinking job applications, promotions/tenure, and careers," second in the series 'Navigating science, life, and careers in a (post) COVID world'. *Whitehead Institute for Biomedical Research at MIT (panel).* 22 June 2022.

[08] "Technology as tool or trainer? Addressing behavioral and decision-making 'plumbing' in healthcare," *Center for Healthcare Delivery Science and Innovation (HDSI), University of Chicago Medical Center (webinar).* 18 May 2022.

[09] "Designing decision-making: Behavioral design in practice," *Institute of Design, IIT (panel).* 20 April 2022.

[10]   "Positive sum design," *Center for Engineering, Innovation, and Design, Yale University (panel)*. 08 April 2022.

[11]   "Behavioral design for organizational leadership," *Design Leaders Council at The Conference Board (webinar)*. 24 March 2022.

[12]   "Research assessment reform as a systems challenge," *DORA (panel)*, 11 February 2022.

[13]   "Food Climate League: 2021 Partner roundtable," *Food Climate League (panel).* 14 December 2021.

[14]   "Behavioral design and choice infrastructure," *The Decision Lab (podcast).* 2 November 2021.

[15]   "Behavioral design in youth education," *National Academy Foundation (webinar).* 29 September 2021.

[16]   "Behavioral mental models in innovation," *Amazon UX Lab (webinar). 17* September 2021.

[17]   "Behavioral design in innovation contexts," *EY Dubai Innovation Team (webinar). 29* July 2021.

[18]   "Careers in behavioral science," *Action Design Chicago (panel).* 28 July 2021.

[19]   "Combatting bias in research assessment (Australasia)," *American Society for Cell Biology (webinar).* 20 July 2021.

[20]   "Behavioral science: One-on-one," *Money on the Mind Behavioral Design Expert Practitioner Series (interview)*. 13 July 2021.

[21]   "Combatting bias in research assessment (US/Europe)," *American Society for Cell Biology (webinar).* 3 June 2021.

[22]   "Behavioral planning," *Google Foresight Group (webinar).* 11 May 2021.

[23]   "Behavioral design: The next ten years," *Harvard Behavioral Insights Group (webinar).* 27 April 2021.

[24]   "A new model for integrating behavioural science and design" *TD Wealth executive series: Accelerating Change through Technology (keynote)*. 19 April 2021.

[25]   "'Roughly right' behavioral planning," *Sample of One (podcast).* 2 March 2021.

[26]   "Humanity-centered behavioral design," *New Zealand Behavioural by Design (presentation)*. 8 December 2020.

[27]   "Future framing: Considering the future today for tomorrow" *Behavior, Energy, and Climate Change (BECC) Conference (panel).* 7 December 2020.

[28]   "Interdisciplinary behavioral design," *Action Design Chicago (panel)*. 28 October 2020.

[29]   "Behavioral design and persuasion," *Annenberg School of Communication, University of Southern California (seminar). 6* Oct 2020.

[30]   "Dis/embodied behavioral design," *Convergent Behavioral Science Initiative, University of Virginia (seminar).* 2 Oct 2020.

[31]   "Human-centered behavioral design," *AI Collaborative (guest presentation).* 10 January 2020.

[32]   "Behavioral science & wicked problems," *Action Design Chicago (presentation).* 14 November 2019.

[33]   "Behavioral design for healthcare," *UIC Innovation Center Healthcare Lab (seminar).* 24 Jun 2019.

[34]   "Designing healthcare interventions using behavioral design," *Design Grand Rounds, Institute for Healthcare Delivery Design at UIC (public presentation)*. 15 May 2019.

[35]   "Beyond behavior change: Behavioral design in public health," *TH Chan School of Public Health, Harvard University (presentation).* 19 April 2019.

[36]   "Behavioral design and emerging technologies," *Innovation Group, Northern Trust (presentation).* 20 March 2019.

[37]   "Owning our ethics: Principles for design(ers)," *Chicago Design Week (panel)*. 1 November 2018.

[38]   "The intersection of behavioral science and design," *Action Design Radio (podcast),* 10 October 2018.

[39]   "Utilizing elements of behavioral design in improving hospital-OPO communication," *Gift of Hope and Organ Donation & Transplantation Alliance (webinar).* 8 May 2018.

[40]   "Positive friction in human-centered design," *Action Design Chicago (presentation).* 7 March 2018.

[41]   "Access and algorithms: The interplay of design and ethics," *5x5 series (interview)*, 27 April 2018.

[42]   "HR and design thinking: Architecting the employee experience," *dBriefs: HR Executive Series (webinar)* 9 July 2016.

[43]   "Applied methodology for behavioral design," *Deloitte Federal Practice Behavior Insights Group (presentation).* 14 January 2016.

[44]   "Behavioral design," *Sustainability Forum series, Illinois Institute of Technology (presentation). 29* March 2013.

Tools and frameworks

Design employs methods and frameworks to systematically analyze research, develop insights, and inform solutions. The tools and frameworks listed below were developed through participatory design approaches and vetted through peer review cycles to ensure their quality and applicability for their intended audiences.

[01]   **Schmidt, R.** (2022). "Building blocks for impact." https://doi.org/10.5281/zenodo.7249187

[02]   **Schmidt, R.** (2022). "Debiasing committee composition and deliberative processes." https://doi.org/10.5281/zenodo.7249223

[03]   Hatch, A. & **Schmidt, R.** (2021). "SPACE to evolve academic assessment: A rubric for analyzing institutional conditions and progress indicators." http://doi.org/10.5281/zenodo.4927605

[04]   **Schmidt, R.** & Hatch, A. (2020). "Rethinking research assessment: addressing institutional biases in review, promotion, and tenure decision-making." *DORA.* https://sfdora.org/resource/rethinking-research-assessment-unintended-cognitive-and-systems-biases/

[05]   Hatch, A & **Schmidt, R.** (2020). "Rethinking research assessment: Ideas for action." *DORA.* https://sfdora.org/resource/rethinking-research-assessment/

[06]   **Schmidt, R.** (2017). "Behavioral Design toolkit and user guide." *Doblin|Deloitte.* https://ruthkschmidt.com/work#/doblin-behavioral-design-toolkit/

Workshops and executive education

[01]   **Behavioral design for organizational leadership,** *ID Academy.* May-June 2022
Executive education course, aimed at introducing leaders to behavioral design concepts in the context of applying behavioral insights to consumer offerings as well as cultivating and practicing effective leadership behaviors.

[02]   **Ibero-American university applications of SPACE rubric for research assessment reform,** Centro Interuniversitario de Desarrollo (*CINDA*)**.** April 2022.
Introduced senior academic leaders from the CINDA network to the SPACE rubric, helping their member institutions across Latin and Central America cultivate and maintain capabilities to support evolved research assessment reform practices. Delivered in English and Spanish.

[03]   **Making SPACE for European research assessment reform,** *CESAER.* April 2022.
Introduced senior academic leaders and representatives from the CESAER network to the SPACE rubric, helping their 57 member universities across the European continent cultivate and maintain capabilities to support evolved research assessment reform practices.

[04]   **Tools to Advance Research Assessment (TARA),** *DORA.* September-November 2021.
Developed and co-led international workshops to elicit contributions to the creation of an academic assessment "dashboard" and accompanying set of tools to support research assessment reform.

[05]   **The SPACE rubric: Creating institutional capabilities for research assessment reform,** *DORA.* July 2021.
Introduction to the SPACE rubric, designed to support the creation of institutional capabilities and conditions for evolving research assessment reform practices.

[06]   **Conserving futures,** *TH Chan School of Public Health, Harvard University; Association of Fish and Wildlife Agencies (AFWA); US Fish and Wildlife Service (USFWS).* February 2021.
Used design methods to help governmental and civic leaders adapt traditional environmental conservation models to 21st-century disruptions and realities such as climate change, social and environmental justice.

[07]   **The Last Heist,** *Office of Institutional Advancement, IIT.* August 2019.
Scenario-based team- and network-building experience in a low-risk environment, employing concepts, frameworks, and reflection from organizational and behavioral science theory.

[08] **Behavioral design,** *ID Design Camp.* July 2019.
Presented strategies to employ behavioral design in the effective development and communication of innovation concepts to an audience of senior executives.

[09] **Behavioral design in networked organizations,** *Design Intersections: Design + Networks + Activation.* May 2019.
Scenario-based team- and network-building experience in a low-risk environment, employing concepts, frameworks, and reflection from organizational and behavioral science theory.

[10] **Prototyping data privacy policy in healthcare,** *Harvard Kennedy School, Harvard University.* April 2019.
Workshop with Boston Children's Hospital and Center for Medicare and Medicaid Services to prototype perspectives on the DETOUR Act using human-centered and behavioral design frameworks.

[11] **Design thinking bootcamp: Behavioral design,** *Allstate Innovation.* October-November 2018.
Presented strategies to employ behavioral design in the effective development and communication of innovation concepts to an audience of senior executives.

[12] **Behavioral design for organizational leadership,** *Design Intersections: Design + Data + Behavior.* May 2018.
Half-day interactive workshop introducing concepts, frameworks and strategies to tackle behavior within organizations, including the impact of organizational structure and addressing leadership blind spots.

[13] **Design for teambuilding,** *Kresge Foundation Arts and Culture group.* April 2018.
Team building workshop designed to unlock new ways of thinking and working by providing exposure to each other's roles and to cultural/social trends that impact their work.

[14] **Behavioral design in undergraduate wellness and wellbeing,** *Deloitte Women's Network.* 2016-2017 (multiple).
Short immersive trainings in behavioral design problem-solving applied to undergraduate wellness.

[15] **Design thinking in an HR context,** *CHRO Academy.* March 2016.
Exposed Chief Human Resources Officer (CHRO) attendees to the value of a design perspective, including when, how, and why a design mindset can be useful during hiring, onboarding, and performance management.

[16] **Introduction to behavioral design,** *CEDIM, Center of Higher Studies of Design of Monterrey.* May 2015.
Intensive two-and-a-half-day workshop introducing graduate students to behavioral design.

[17] **Innovation 101,** *Doblin | Deloitte.* 2012-2017 (multiple).
Introducing innovation methodology to new Doblin employees, focusing on behavioral design, communication design, and synthesis activities in the context of an innovation concept development project.

[18] **Communicating at the fuzzy front end,** *Executive education workshop.* October 2011.
Day-long workshop for senior executives, providing communication design techniques and tools to better provide information, influence and inspiration when depicting new ideas.

[19] **Badge development lab,** *Learning, Freedom, and the Web, Mozilla Drumbeat Festival.* November 2010.
Led activities to define an emerging taxonomy for learning badges and develop badge examples to prototype.

[20] **Learning trajectories design charettes,** *Chicago Learning Network.* June-November 2010.
Monthly workshops with members from 20+ Chicago-area organizations to evolve a perspective on youth engagement and develop a theory for learning trajectories.

Grants and research support

Funded

2022   **Behavioral Design Action Lab**
Faculty research support for cross-institutional work on positive sum design to engage a community of practice, and develop frameworks, methods and case studies to concretize and communicate the concept.
Institute of Design — $10k

2022   **SPACE workshop development**
Faculty research support for development of workshops to support adoption of SPACE rubric to increase equitable institutional research assessment reform.
ASCB (American Society of Cell Biology) — $7.5k

2021-24   **Project TARA (Tools to Advance Research Assessment)**
Subgrant to design a dashboard for research assessment activity and equip academic US/EU institutions with tools to advance research assessment reform.
Arcadia Foundation, a Charitable Fund of Lisbet Rausing & Peter Baldwin — $75k to IIT (of $1.2M)

2020   **Research assessment toolkit**
Development of systems map and communication artifacts to support open research and open science, in conjunction with DORA (Declaration on Research Assessment).
HHMI (Howard Hughes Medical Institute) — $20k to IIT

2019   **Decumulation after retirement**
Funding to develop behavioral approaches for decumulation after retirement, including 'prototyping' retirement and reframing the value of negative progress.
Fidelity Labs — $25k to IIT

2010-12   **Affinity learning model — Digital Youth Network**
Learning ecology model through the design, implementation, and documentation of conceptual frameworks, a social learning network platform and badge system, and a digital writing curriculum.
The Bill and Melinda Gates Foundation — $125k/year for two years (of $2.6 MM total grant)

Applied, not funded

2023   **CRISES planning grant**
(Co-PI) Proposing a transdisciplinary center for design-led approaches to climate change, employing humanity-centered design in concert with social and behavioral sciences, engineering, and generative data science through a networked model of expertise.
NSF — $100,000

2022   **AISL-ERC: Center for Informal Connected Learning & Equity in STEM (CICLES)**
Advancing equity of STEM for youth by surfacing informal STEM learning innovations, building capacity through community-driven engagement, and addressing distributed expertise and lack of infrastructure.
NSF — $1.2MM

2020   **Sustainable regional systems research networks (Planning grant)**
SCC-IRG Track 1: Chicagoland Food Equity Data (FED)
NSF — $2,496,249

2020   **SRS RN: Planning for sustainable food systems**
Convergent, network approach to overcome oversimplified views of rural agricultural areas growing food to supply urban areas through highlighting dynamic paths and linkages in regional food systems.
NSF — $149,889

2020   **Advancing equity and sustainability in urban food systems through innovations in data science**
Facilitating more equitable and sustainable outcomes in urban food systems by integrating data science platforms and analytics/modeling techniques with an understanding of human behavior.
Foundation for Food and Agriculture Research (FFAR), Seeding Solutions Grant — $1.2MM

2020   **AI Institute planning grant: Trustworthy data for human-centered AI**
(Senior Personnel) Establishing an AI Institute for Trustworthy Data to build and communicate approaches to safe, reliable, and trustworthy AI systems.
NSF — $500k planning grant

2019   **EMERGE**
Proposal led by clinician-researchers at UIC and University of Chicago to achieve large-scale adoption of genomic-based risk assessment and management through the development of clinical decision-making tools in electronic health records, with a specific focus on improving the inclusion and care of those previously underrepresented in genomic research.
NSF—$7.5MM (Subcontractor)

Professional honors and recognition

2023   **Honorable Mention,** Fast Company World Changing Ideas Awards (in *Urban Design* and *Politics and Policy*)
Faculty co-lead for student project *Reimagining the Resident-Government Relationship*, conducted in partnership with the Chicago City Clerk's office with the goal of creating a more equitable and sustainable city through reformed revenue policies and practices.

2021-22   **Provost Fellow,** Strategic Envisioning Committee, Illinois Institute of Technology
Selected as one of two inaugural Provost Fellows to advance and shape the University's strategic efforts in alignment with the current strategic plan.

2020   **Best of 2020 (Awarded),** Habit Weekly content awards
For short-form article "The Benefits of Statistical Noise" https://behavioralscientist.org/the-benefits-of-statistical-noise/

2020   **Best Behavioral Design content person (Nominated),** Habit Weekly content awards
Shortlist of best behavioral design writers and producers for 2020.

II. Teaching, advising, and curricular development

Curricula developed and taught

Behavioral design courses

Behavioral Design (1.5 credits)
The field of behavioral science provides evidence-based insight into how people judge options and make choices; harnessing this knowledge can help commercial and civic organizations design more effective solutions based on how people actually think and act, rather than what they say they will do. This course introduces fundamental behavioral science principles and concepts and applies them to human-centered design challenges through frameworks, articles, discussions, and hands-on practice. Taught every semester from 2009-2023.

Advanced Behavioral Design (1.5 credits)
Using concepts and frameworks from applied behavioral science and strategic design to develop students' POV on how and when behavioral perspectives can be used most effectively. Students apply a behavioral perspective, grounded in frameworks and in-class working sessions, across the full arc of the design process to both develop solutions and reflect on how these concepts can be applied more broadly. In parallel, students present on and discuss current issues in this quickly evolving field informed by articles and in-class conversations each week. Taught yearly from 2019-2022.

Behavioral Design Workshop (3.0 credits)
Where Behavioral Design provides the foundation for students to understand and develop facility with concepts and approaches from behavioral science in a human-centered design context, this course focuses on the application of these concepts to a real-world or client challenge. Students employ behavioral design frameworks and concepts to diagnose potential behavioral issues, understand the conditions that support unhealthy behaviors, and propose directional solutions to helps users overcome common behavioral barriers. Taught in 2019 and 2022.

Critical thinking courses

Bias and Sensemaking (1.5 credits)
The ability to recognize and manage for bias at different scales—personal, organizational, cultural, systemic, and algorithmic—is increasingly a necessary skill for designers. Because bias shows up in many forms and is often seemingly objective and natural, embedded in the very language we use, we need a range of approaches, tools, and lenses to anticipate and address it. This class explores the various ways in which bias shows up, suggests new ways to recognize signals that indicate the presence of bias, and encourages students to develop and bring sensemaking strategies to wrangle bias into their professional practice. Taught in 2018, 2020, and 2022.

Semiotics (1.5 credits)
We are surrounded by meaning that is culturally constructed, and yet because it is shared it can feel natural and self-evident. Semiotics is the study of these sign systems and how meaning is created through "signifiers" to which we ascribe meaning. This is highly relevant to design given that visual, experiential, and cultural cues can radically affect how people interpret and orient themselves to designed things or environments. Taught in 2012 and 2016.

Strategic communication design courses

Strategic Communication (1.5 credits)
Communication methods can accelerate synthesis and give tangible form to valuable information throughout the development process when used in three ways: as a thinking tool, as a narrative tool, and as an activation tool. Through a mix of lecture, group activities, critique and exercises, students are introduced to relevant theories of language, visual perception, visual representation, and communication, and receive hands-on experience to ensure concepts are trained into the process. ID cornerstone course; taught from 2011-2013 and 2018-2023.

Design Rhetoric (1.5 credits)
Design requires the effective and deliberate communication of complex ideas. The ability to do this successfully typically leverages tools of strategic communication to get clarity on your intent, and then employs a combination of visual and verbal/rhetorical devices, like metaphors, to structure and deliver that message appropriately to the audience. This course provides concrete strategies communicating new, complex, and challenging ideas, and plentiful opportunities to practice them to develop a comfort level with this difficult but important skill. Taught 2018 and 2023.

Metaphor and Analogy (1.5 credits)
Metaphors, analogies, and other visual/verbal devices have the power to transform the way people think and act. Metaphors allow large amounts of information to be assimilated quickly, complicated ideas to be conveyed simply, alternative perspectives to be experienced viscerally and new inferences to be drawn. Facility with metaphors can help designers communicate design work more effectively to clients, teammates, and end users. Taught in 2017 and 2018.

Communication Design I (3.0 credits)
This course provides fundamentals for non-designers to convey visual information in an effective and clear way. Students first learn concepts, techniques, and principles for structuring visual elements to craft effective visual messages, and then apply these skills in both long-form assignments and shorter "sprint" applications to hone their ability to design visual communications for a variety of contexts and challenges. Taught yearly from 2009-2015.

PhD committees and student supervision (*primary advisor; **external advisor)

Kristin Gecan*	*Design rhetoric and communication* (2027, projected)
Zeya Chen*	*From principles to practice: Design for sustainable AI innovations (2026, projected)*
Jennifer Shin*	*Recovering emergent places from planned spaces: A study of Golmoks as urban instillation for social capital (2025, projected)*
Sandeep Deobhakta*	*Risk and uncertainty in financial services innovation (2025, projected)*
Salena Burke	*Designing equitable learning environments (2025, projected)*
Irem Tekogul	*How do we design futures with care (2024, projected)*
Amanda Geppert	*Design for equivalence: Mutual learning and participant gains in participatory design processes (2023)*
Jaime Rivera	*Research through provocation: A structural theory-driven design approach for persuasive technologies (2023)*
Katelyn Stenger**	*Synthesizing and structuring behavioral solutions in complex systems through a pattern language (2022)*
Jessica Meharry	*Sensemaking for power asymmetries in anti-oppressive design practice (2022)*
Roberto Faller	*Expanding the Magic Circle and the Self: Integrating discursive topics into games (2020)*
Santosh Basapur	*Framework for semiotics enhanced systems analysis and design (2020)*

Masters student supervision

Xiaoqiao Tang **Andreya Veintimilla**	*RemoteID* (2020) —Human-centered behavioral design approach to the Covid-19 pandemic that informed ID's pivot to remote learning and institutional studio culture.
Pooja Chaudary **Yuke Huang** **Prachi Saxena**	*Opportunity spaces in financial services* (2018) — Development of opportunity spaces for Fidelity Labs' innovation intake processes, including key questions to address, rationale, precursor examples of activity in the space, and guiding insights for further development.
Miguel Cervantes **Ann Hintzman** **Jerad Lavey** **Jennifer Lee** **Nikki Pfarr** **Van Vuong**	*Brains, Behavior, and Design toolkit* (2009-10) — Drawing from academic research in behavioral economics, cognitive psychology, and design, the toolkit helped designers and business leaders design better products, services, and outcomes based on a richer understanding of people by integrating behavioral research with design practice.

III. Service History

Contributions to the University

2024	**Senior faculty affiliate**, Center for Learning Innovation	

2023-4   **Research Committee**, Illinois Tech

2023   **LMS evaluation committee**, Office of the Provost

2022   **ID dean search committee**, Office of the Provost

2022-   **Founding member**, PITUN (Public Interest Technology University Network)

2021-2   **Provost Fellow/steering committee**, Strategic Envisioning Committee
Led the design and facilitation of milestone workshops for Illinois Tech's Strategic Envisioning committee, tasked with generating and aligning strategic planning across seven high-priority competencies and institutional capabilities through workshopping and structured ideation, culminating in a President's report to the Board of Trustees.

2020-3   **Faculty affiliate**, Center for Learning Innovation
Invited to join faculty advisory group led by the Center for Learning Innovation (CLI), to advise on promoting online learning and facilitate faculty's involvement with online teaching within IIT.

2020-21   **Appendix K committee**, UFC special committee on digital IP and scholarship

2020   **Co-chair**, Learning Culture | Learning Spaces symposium

2019-22   **University faculty council** (UFC)

2019-20   **AI committee**

Contributions to the Institute of Design

2021-22   **Faculty lead,** MDM Program redesign
Faculty lead for redefinition of ID's Master of Design Methods (MDM) as a program for senior professionals wanting to integrate design as a business capability within their organizations.

2021-22   **Founding faculty**, ID Academy
Designed and taught in ID's inaugural set of ID Academy courses, as part of ID's effort to develop new revenue streams and impact outside of traditional degree programs.

2021-22   **Strategic communication committee**
Provided feedback and guidance on revised ID brand positioning and related initiatives.

2020-22   **Latham fellowship committee**
Framed approach and selected speakers for series at the intersection of design and strategy, and moderated November 2021 panel discussion "Why are we making this?"

2020-21   **RemoteID faculty lead**, ID pandemic remote learning/studio culture strategy
Led ID strategy for remote learning and studio culture in the wake of the University's shutdown due to Covid-19 in March 2020. Results allowed ID faculty to quickly adopt evidence-based approaches to teaching, critiquing, and engaging in scholarly and creative work in an online setting, with principles for instilling collaborative studio culture.

2019-20   **Steering committee,** ID future strategy committee
Provided guidance on direction of ID strategic initiatives and competitive marketplace positioning.

2018-19   **Conference advisor**, Design Intersections: Design + Networks + Activation

2017-18   **Executive chair**, Design Intersections: Design + Data + Behavior
Conceived, curated, and hosted a two-day conference to exploring the intersection of data science, behavioral design, and humanity-centered design, attracting a sellout crowd of international attendees and generating a $37k in profit with NPS of 88 for panels/speaker programs and NPS of 100 for workshops.

Contributions to the profession

2023-   **Advisory panel**, CivicDataLab
             Provided expert guidance at the intersection of design and public policy to inform a proposal for G20's Think20 Task Force on Affordable, Accessible and Inclusive Digital Public Infrastructures.

2022-   **Board member**, Bescy (formerly *Action Design Network*)
             Member of leadership board for a global network with the mission of educating current and adjacent field practitioners as well as general interest audiences about applied behavioral science and design.

2022-   **Academic advisor**, d4d: Design for Decisions (Boulder, CO, USA)
             Advise on behavioral design strategies for a brand strategy consulting firm focused on the intersection of brand strategy, human-centered design, and behavioral science.

2022   **Assessment evaluator**, Vall d'Hebron Research institute (Barcelona)
             Reviewed self-assessments of a consortium of Spanish medical centers and provided feedback to evolve current research assessment strategies beyond traditional quantitative indicators, and suggested steps for cultural change necessary to reach these goals.

2021-   **Academic advisor**, Food for Climate League (Evanston, USA)
             Advise an international network of food-related organizations and institutions on human-centered behavioral approaches to food and sustainability challenges.

2021-   **Academic advisor**, City Health Tech (Chicago, USA)
             Advise a startup focused on technology platforms for public health that combine design, engineering, and digital assets on behavioral design considerations for product development.

2020-21   **Founding advisor/faculty**, Behavioral Change Society

2020-21   **Program director**, Design Leaders Council, *The Conference Board*
             Curated and facilitated programming for senior US design leaders, including cultivating a more diverse design workforce, measuring and communicating the value of design, and exploring strategies to incorporate data science into organizational design capabilities.

2020   **External program reviewer**, OSU Design Program/Business School Unit review, *Oregon State University*

2020   **Recurring columnist**, "Behavioral Science and Design," *Habit Weekly*

2019-21   **Partner,** M-CERF (Midwest Consortium for Equity, Research and Food Justice)

2019-20   **Partner**, Institute for Healthcare Delivery Design, *UIC*

2018   **Juror,** End of Year Critique, *Notre Dame Art/Design Program, South Bend, IN, USA*

2018   **Juror,** Design Planning for Innovation *MMM Program (Kellogg), Northwestern University*

2016-17   **Founding member**, Behavioral Insights Group Senior Leadership Team, *Deloitte*

2013-16   **Design capability lead**, Doblin | Deloitte, *Chicago, IL USA*
             Set the strategic direction for the design arm of Doblin, an innovation function acquired by Deloitte in 2012, represented strategic design perspectives in meetings with senior leaders, and held regular meetings with design staff to elicit input.

2012   **Expert advisor**, Open Badges for Lifelong Learning whitepaper, *The Mozilla Foundation, Peer 2 Peer University and The MacArthur Foundation (co-sponsors)*

2012   **Juror,** Behavioral Design for Innovation, *Innovation Chase competition, Chicago, IL, USA*

2010-12   **Leadership team**, Chicago Learning Network (HIVE Chicago), *USA*

2010   **Communication chair**, 7th Emotion and Design Conference, *Design and Emotion Society (DES) and Institute of Design, IIT (co-sponsors)*

2008   **Juror**, Senior Review: Interior Architecture, *Columbia College*, *Chicago, IL, USA*

Journal and publication peer review

Behavioural Public Policy

Cambridge University Press

Design Principles & Practices

The International Journal of Design in Society

Journal of Design Research

Journal of Engineering Design

Policy Design & Practice

She Ji: The Journal of Design, Economics, and Innovation

Professional memberships and associations

Design and Policy Network

International Behavioral Public Policy Association (IBPPA)

Applied Behavioral Science Association (ABSA)

International Public Policy Association (IPPA)

Design Research Society (DRS)

Consulting

2023	**Busara**
2021	**Ampersand Partners**
2020-21	**Thrivent Financial Services**
2019	**Advocate Health**
2019	**Poolside LLC**
2019	**Feeding America**
2018	**Relish (Gordon Foods)**
2018	**Humana**
2016-18	**Gift of Hope**
2016	**State of Illinois**