

CYNTHIA SELIN

EDUCATION

2006	Copenhagen Business School PhD Knowledge and Management Institute for Politics, Philosophy and Management Dissertation: <i>Volatile Visions: Transactions in Anticipatory Knowledge</i>	Copenhagen, Denmark
2000	Roskilde University Maastricht University MA Science and Technology Studies Thesis: <i>Professional Dreamers: The Art and Science of Scenario Planning</i>	Roskilde, Denmark Maastricht, Netherlands
1996	University of California, Santa Cruz BA American Studies Honours thesis: <i>The Promise and Peril of Nanotechnology</i>	Santa Cruz, CA, USA

ACADEMIC APPOINTMENTS

2017-present	<i>Associate Professor</i> - School for the Future of Innovation in Society & School of Sustainability Arizona State University	
2014- 2015	<i>Marie Curie Fellow</i> - Department of Management Engineering Danish Technical University	
2013- 2014	<i>Visiting Scientist</i> - Department of Management Engineering Danish Technical University	
2013-present	<i>Associate Fellow</i> - Saïd Business School University of Oxford	
2011- 2017	<i>Assistant Professor</i> - School of Sustainability & the Consortium for Science, Policy and Outcomes Arizona State University	
2011- 2014	<i>Faculty Affiliate</i> - School of Public Affairs Arizona State University	
2010	<i>Visiting Scholar</i> - Institute for the Future Palo Alto, California	
2010- 2011	<i>Faculty Affiliate</i> - School of Sustainability Arizona State University	
2009- present	<i>Assistant Director for Outreach</i> - Center for Nanotechnology in Society Arizona State University	
2007- 2011	<i>Assistant Research Professor</i> - Consortium for Science, Policy and Outcomes Arizona State University	
2006- 2007	<i>Post Doctoral Research Associate</i> - Center for Nanotechnology in Society Arizona State University	
2000- 2006	<i>Research Fellow & PhD Student</i> - Systems Analysis Department Risoe National Laboratory Institute for Politics, Philosophy & Management Copenhagen Business School	

AWARDS

2018 Graduate College Outstanding Faculty Mentor Award, Doctoral Mentoring (nomination).

Olga Amsterdamska Award 2018 for a significant creative collaboration in an edited book in field of science and technology studies presented by the Council of EASST to J. Chilvers & M. Kearnes for (2016), *Remaking Participation: Science, Environment and Emergent Publics*, London: Routledge.

2017 British Academy of Management Education Practice Award for *New Life for an Old Trick: Teaching and Learning through the Live Case Method for Improved Impact of Business Schools*.

EC Marie Curie International Incoming Fellowship. "Energizing Futures: Investigating the Infusion of IT and Design into Novel Foresight Practices" Hosted at the Technical University of Denmark [5/2014- 11/2016] \$400K

2011 Arizona State University President's Award for Sustainability for *The Future of Phoenix: Crafting Sustainable Development Strategies*

RESEARCH

PUBLICATIONS

BOOKS

1. Hannah, D., J. Eschrich, B. Cooper and C. **Selin**. 2018. *A Year Without a Winter*. Columbia University Press.
2. Wetmore J, E Fisher, and C **Selin**. (Eds.) 2008. *Presenting Futures: Yearbook of Nanotechnology in Society*. New York, NY: Springer. 23 chapters.
3. **Selin** C. 2006. *Volatile Visions: Transactions in Anticipatory Knowledge*. Copenhagen, Denmark: Samfundslitteratur. [Published Dissertation].

PEER-REVIEWED ARTICLES

1. Nelson, JP*, C. **Selin** & C. T. Scott. 2021. "Toward anticipatory governance of human genome editing: a critical review of scholarly governance discourse" *Journal of Responsible Innovation*.
2. Andersen, PA, Hansen, M. & C. **Selin**. 2021. "Stakeholder inclusion in scenario planning—A review of European projects." *Technological Forecasting and Social Change* (169).
3. **Selin** C, KC Rawlings, K de Ridder-Vignone, J Sadowski*, C Altamirano Allende*, G Gano, S Davies, D Guston. 2017. "Experiments in Engagement: Designing PEST for Capacity Building." *Public Understanding of Science*, 26 (6), 634-649.
4. Altamirano-Allende C* & C **Selin**. 2016. "Seeing the city: photography as a place of work." *Journal of Environmental Studies and Sciences*, 6 (3), 460-469.
5. **Selin** C, L Kimbell, R Ramirez, & Y Bhatti. 2015. "Scenarios and Design: Scoping the Dialogue Space." *Futures*, 74: 4-17.

6. **Selin C.** 2015. "Merging art and design in foresight: Making sense of Emerge." *Futures*, 70: 24-35.
7. **Davies SR, C Selin, S Rodegher*, C A Allende*, M Burnam-Fink*, C DiVittorio**, C Glerup*, C Keys*, M Kimball*, M Liao*, C Monfreda*, B Trinidad*.** 2015. "Studying Emerge: Findings from an Event Ethnography." *Futures*, 70: 75-85.
8. **Ramírez R and C Selin.** 2014. "Plausibility and probability in scenario planning." *foresight*, 16(1): 54 – 74.
9. **Selin C & AG Pereira.** 2013. "Pursuing Plausibility." *International Journal of Foresight and Innovation Policy*, 9(2/3/4): 93-109.
10. **Wiek A, D Guston, S van der Leeuw, C Selin & P Shapira.** 2013. "The Nano-Enhanced City: Sustainability Challenges and Anticipatory Governance." *Journal of Urban Technology*, 20(2): 45-62.
11. **Davies SR, C Selin, G Gano*, AG Pereira.** 2013. "Finding Futures: A Spatio-Visual Experiment in Participatory Engagement." *Leonardo: The International Society for the Arts, Sciences and Technology*, 46(1): 76-77.
12. **Davies SR, C Selin, G Gano*, A. G. Pereira.** 2012. "Citizen Engagement and Urban Change: Three Case Studies of Material Deliberation." *Cities*, 29(6): 351-357.
13. **Davies SR & C Selin.** 2012. "Energy Futures: Five Dilemmas of the Practice of Anticipatory Governance." *Environmental Communication: A Journal of Nature and Culture*, 6(1): 119-136
14. **Selin C.** 2011. "Negotiating Plausibility: Intervening in the Future of Nanotechnology." *Science and Engineering Ethics*, 17(4): 723-737.
15. **Selin C & P Boradkar.** 2010. "Prototyping Nanotechnology: A Transdisciplinary Approach to Responsible Innovation." *Journal of Nano Education*, 2(1-2): 1-12.
16. **Selin C & R Hudson**** 2010. "Envisioning Nanotechnology: New Media and Future-Oriented Stakeholder Dialogue." *Technology in Society*, 32(3): 173-182.
17. **Selin C.** 2008. "Sociology of the Future: Tracing Stories of Technology and Time." *Sociology Compass*, 2(60): 1875-1895.
18. **Selin C.** 2007. "Expectations and the Emergence of Nanotechnology." *Science, Technology and Human Values*, 32(2): 196-220.
19. **Selin C.** 2006. "Time Matters: Temporal Harmony and Dissonance in Nanotechnology Networks." *Time & Society*, 15(1): 121-139.
20. **Selin C.** 2006. "Trust and the Illusive Force of Scenarios." *Futures* 38(1): 1-14.

JOURNAL ARTICLES

1. **Scott, C. T. and C. Selin.** 2019. "What to Expect When Expecting CRISPR Baby Number Four." *The American Journal of Bioethics*, 19(3): 7-9.
2. **Hannah D and C Selin.** 2016. "Unseasonal Fashion: A Manifesto." *The Avery Review: Critical Essays on Architecture*. [online April 7]
3. **Selin, C.** 2014. "On Not Forgetting Futures." *Journal for Responsible Innovation*, 1(1): 103-108.

PEER-REVIEWED BOOK CHAPTERS

1. **Withycombe-Keller, L., M. Bernstein & C. Selin.** 2019. "Intervening through Futures for Sustainable Presents: Scenarios, Sustainability and Responsible Research and Innovation." In **Grunwald, A. A Losch, M. Meister & I. Schulz-Schaeffer (eds)** *Socio-technical Futures Shaping the Present*. Springer. 255-282.
2. **Selkirk, K., C. Selin & U. Felt.** 2018. "A Festival of Futures: Recognizing and Reckoning Temporal Complexity in Foresight." *Handbook of Anticipation: Theoretical and Applied Aspects of the Use of Future in Decision Making*, Springer.
3. **Konrad K, H van Lente, C Groves, and C Selin.** 2016. "Performing and Governing the Future

- in Science and Technology.” In Miller C, Smith-Doerr, U Felt & R Fouche (Eds.) *The Handbook for Science and Technology Studies*. Cambridge, MA: MIT Press.
4. **Selin** C & J Sadowski*. 2016. “Against Blank Slate Futuring: Noticing Obduracy in the City through Experiential Methods of Public Engagement.” in Kearnes, M & J Chilvers (Eds). *Remaking Participation: Science, Environment and Emerging Publics*. Abingdon: Routledge. 218-237.
 5. **Selin** C & G Gano*. 2015. “Seeing Differently: Enticing Reflexivity through Mediated Participation in Place in the Futurescape City Tours.” in Gubrium, A and K Harper (Eds). *Engaging Participatory Visual and Digital Methods*. Walnut Creek, CA: Left Coast Press. 87-100. (
 6. **Selin** C. 2011. “Travails, Travels, and Trials: Report from the SNET Roundtable on Plausibility.” In Zülsdorf et al (Eds.) *Quantum Engagements: Social Reflections of Nanoscience and Emerging Technologies*. Heidelberg: AKA GmbH: 237-242.
 7. **Selin** C. 2007. “Professional Dreamers: The Past in the Future of Scenario Planning.” In Sharpe B & K van der Heijden (Eds). *Scenarios for Success: Turning Insight into Action*. London: Wiley. Pp. 27-51.

BOOK CHAPTERS

1. Barben D, E Fisher, C **Selin**, & D Guston. 2008. “Anticipating Nanotechnology: Governance, Engagement, and Reflexivity.” In Hackett, EJ, Amsterdamska, O, Lynch, M & J Wajcman (Eds.). *The New Handbook of Science and Technology Studies*, Third Edition. Cambridge, MA: MIT Press. 979-1000.
2. **Selin** C. 2003. “The Art and Science of Scenario Planning.” *Danish Anthology on Research Management*. Aarhus, DK: Danish Institute for Studies in Research and Research Policy: 126-134.

MANUSCRIPTS IN REVIEW OR UNDER DEVELOPMENT

1. Nelson, J.P.*, C. Selin, L. Lambert* and C. Scott. 2021. “Amplifying the Call for Anticipatory Governance.” *American Journal of Bioethics*.
2. Nelson, J.P.* & C. **Selin**. “Seven open questions in the futures of human genome editing. *Biosocieties*.
3. **Selin**, C. et al. “Researching the Future Scenarios to Explore the Future of Gene Editing” *BCM Medical Ethics*.
4. Selin, et al. “Anticipatory Capacities/Anticipatory Conditions.” *Futures*.
5. Loughman, J.* & C. **Selin**. “Comparative Solar Futures.”
6. Barlevy, D. “Expert Insights and Foresights on Human Genome Editing.” *Social Studies of Science*.
7. **Selin**, C. et al. “Virtually Orienting to the Future: Design Principles of Effective Online Scenario Planning.” *Journal of Futures Studies*.

REPORTS

1. **Selin**, C et al. 2020. *PGET Scenarios Report*. Arizona State University, Baylor College of Medicine.
2. **Selin**, C. and S. Wasserman*. 2019. *Open Positioning of Futures Workshop Report*. Center for the Study of Futures, Arizona State University.
3. Wasserman, S., L. Lambert & C. **Selin**. *Future Design: Exploring Affirmative Futures Through an Intergenerational Outlook*. White Paper, Center for the Study of Futures, Arizona State University.
4. Anbar A. et al. 2016. *Planetary Design Climate Design Workshop Report*. Planetnetworks, Arizona State University.
5. **Selin** C. 2011. *Gaming the Future*. Center for Nanotechnology in Society Report # R11-0003.

6. **Selin C.** 2011. *Scoping Anticipation: A Select Review of Futures Research and Education Programs*. Global Institute of Sustainability, Arizona State University.
7. **Davies SR, C Selin & R Allen**** 2010. *Solar to Fuels: Interdisciplinary Energy, Policy and Society Workshop*. Center for Nanotechnology in Society Report #R10-0002.
8. **Wiek A and C Selin.** 2009. *The Future of Phoenix- Crafting Sustainable Development Strategies for Phoenix*. School of Sustainability, Arizona State University.
9. **Selin C.** 2008. *The Future of Medical Diagnostics*. Scenario Workshop Report. Center for Nanotechnology in Society Report #R08-0001.
10. **Selin C.** 2008. *CNS Visioning Workshop: Creating Scenarios about the Future of Anticipatory Governance*. Center for Nanotechnology in Society Report #R08-0003.

OTHER PROFESSIONAL WRITING

1. Ramirez, R., C. Khong, T. Lang and C. Selin. 2019. "Planning for the Future." Letter. *The Economist*. 1 August 2019.
2. **Selin, C.** 2016. "Tough Love for Technology." *Science* [19 August], 353 (6301): 756. [Invited review of Jasanoff, S. *The Ethics of Invention: Technology and the Human Future*].
3. **Selin, C & J Banks.** 2014. *Futurescape City Tours: A Novel Method for Public Engagement*. Guidebook for Practitioners. Center for Nanotechnology in Society, Arizona State University
4. **Selin, C.** 2010. Entries for "Anticipation" (pp. 13-16); "Foresight" (p. 245-253). In Guston, D (ed) *Encyclopedia of Nanoscience and Society*. Thousand Oaks, CA: Sage.
5. Miller C, D Guston, D Barben, C **Selin**, E Fisher & JM Wetmore. 2008. "Nanotechnology & Society: Ideas for Education and Engagement" CNS white paper distributed to hundreds of museums.

DIGITAL MEDIA WORKS

1. "Center for the Study of Futures" institutional webpage (2018- current)
<https://ifis.asu.edu/content/center-study-futures>
2. "A Year Without a Winter" web portal (2016-current) co-produced with D Hannah,
<http://ayearwithoutawinter.org/>
3. "Futurescape City Tours Digital Exhibition" (2013-14) responsible for the design, production and curation with [K de Ridder-Vignone](http://www.futurescapecitytours.org/), <http://www.futurescapecitytours.org/>
4. "Futurescape City Tours: A Novel Method for Civic Engagement" by C Altamirano Allende*, oversaw production and scripting for 2014 short film on research project.
5. "Where is your Nano?" by Alex Gino, oversaw production and co-wrote script for 2012 short film for CNS outreach and training.

EXHIBITIONS AND GALLERY SHOWS

Emerge: A Festival of Futures (2020) Exhibition/Public Event, Arizona State University, Tempe, AZ. postponed. (Co-Director; responsible for overall curation, design, marketing & promotion, and production.)

Emerge: A Festival of Futures (2019) Exhibition/Public Event, Arizona State University, Tempe, AZ. March 30, 2109. (Director; responsible for overall curation, design, marketing & promotion, and production.)

Emerge: A Festival of Futures (2018) Exhibition/Public Event, Arizona State University, Tempe, AZ. March 30, 2109. (Co-Director; responsible for overall curation, design, marketing & promotion, and production.)

Emerge: A Festival of Futures (2017) Exhibition/Public Event, Arizona State University, Tempe, AZ. February 25, 2107. (Director; responsible for overall curation, design, marketing & promotion, and production.)

Material Matters (2016) Exhibition, Advancing the Legacy of Anticipatory Governance Gala. Tempe, AZ. May 3-5, 2016. (Co-curator; responsible for selecting pieces; co-installing exhibition; designing visitor interactions; and co-writing curatorial statement of small exhibition)

Futurescape City Tours (2015) Project Exhibition, Making and Doing, Society for the Social Studies of Science. Denver, CO. Nov. 11-14. (Project lead; responsible for exhibit application and design of small exhibition)

Future Things (2014) Exhibition, Oxford Futures Forum. University of Oxford. May 30-31. (Co-curator; responsible for initiating and framing call for works; selecting pieces; installing exhibition; designing visitor interactions; and writing curatorial statement)

Futurescape (2012) Public Gallery. First Friday, Phoenix, AZ. December 7. (Project lead; responsible for designing exhibition, selecting, curating and installing multi-media artefacts, publicizing show, and writing curatorial statement)

Emerge: Redesigning the Future (2012) Gallery Exhibition, ASU Art Museum, April 10 - August 25, 2012. (Co-curator; responsible for the selection and production of artefacts from studio work, drafting of curatorial statement and artefact descriptions, publicity and gallery opening)

APPLIED FORESIGHT RESEARCH

These Applied Foresight Research projects are transdisciplinary future-oriented workshops initiated, designed and led by Selin, regularly drawing students and faculty in dialogue with local and international stakeholders, publics and experts. While a workshop may take place over 1-3 days, substantive preparatory research and coordination precedes the event, and detailed engagement, analysis and writing occur afterwards.

Future of Human Genome Editing Technologies (2020) Selin lead a research team through the design, development and delivery of a 2-day virtual scenario building workshop.

Open Positioning Systems (2019)- Selin, with HSD's Wasserman and organized a 2-day international workshop and design spree with sponsorship from the Global Futures Lab.

A Year Without A Winter (2016)- Selin, with SFIS's Hannah and the EC's Joint Research Centre, organized a 2-day seminar and workshop held in Ispra, Italy to explore and articulate the policy relevance of artistic and humanistic perspectives on climate futures.

Exploring the Future of Connectedness (2016)- Selin, with Intel strategist Luciano Oviedo, developed a 1.5 foresight workshop focused on the prospects of emerging autonomous technologies for ~80 technology companies at Intel's headquarters in Silicon Valley.

Sensors and Humans in Networked Environment (2016)- Selin with ASU faculty and Intel professionals, co-organized a two-day workshop that drew together a cross-disciplinary and cross-sectoral group to explore the human and social dimensions of the Internet of Things.

Planetary Design: Climate 3.0 (2016)- Selin, with faculty in the School of Space and Earth Exploration at ASU, co-organized this two-day event and was responsible for designing and facilitating 1-day visioning dialogue that engaged ~80 faculty from diverse disciplines in rigorously imagining the world in 2116.

Future of Wastewater Sensing Technology (2015)- Selin, with post-doc Withycombe Keeler, organized and executed this scenarios based research initiative with Rolf Halden and Paul Westerhoff (Sustainable Engineering and the Built Environment, ASU) that engaged 26 people over 1.5 days.

Future of Health Monitoring and Pre-symptomatic Medicine (2015)- Selin, with post-doc Withycombe Keeler, organized and executed this scenarios based research initiative with Stephen Johnston and Neal Woodbury (Center for Innovations in Medicine, ASU) that engaged 24 people over 1.5 days.

Future of Grid-Connected Devices (2013)- Selin, with ASU's Center for the Future of Utilities, directed the 6-month long scenario planning intervention and helped coordinate the assembling of ~25 nation-wide utilities professionals to consider strategic responses to uncertainty.

Futurescape City Tours (2012-2014)- Selin directed this national public engagement research program that engaged ~200 citizens, scientists and policy experts in 6 cities across North America in deliberation about emerging urban innovation and sustainability.

Emerge: Science and Artists Redesign the Future (2012)- Selin, with ASU law professor Garreau and the Thanassis Rikakis (Arts, Media and Engineering, ASU), founded and directed this large-scale event and research enterprise that engaged over 1000 faculty, students, professional and members of the public.

Solar to Fuels: Interdisciplinary Workshop on Energy, Policy and Society (2010)- Selin, with post-doc Sarah Davies, convened ~20 ASU faculty in this custom designed future-focused research workshop that explored a suite of emerging energy technologies.

Visions of Anticipatory Governance (2008)- Selin co-organized this 1.5 day visioning workshop that engaged leaders from across the Center for Nanotechnology in Society in strategic direction setting.

National Citizens' Technology Forum (2008)- Selin was responsible for planning, recruitment, session design and facilitation of the Tempe-based, 2 two-day public engagement sessions with ~20 participants.

The Future of Medical Diagnostics (2007)- Selin organized and executed this scenarios based research initiative with Stephen Johnston and Neal Woodbury (Center for Innovations in Medicine, ASU) that engaged 24 diverse stakeholders over 1.5 days.

GRANTS FUNDED

National Institutes of Health. Preparing for Genome Editing Technologies: An Anticipatory Approach. (PI with Chris Scott of Baylor University) [2019-2023] \$1,603,000

National Science Foundation Research Traineeship (NRT) Program. “Citizen-Centered Smart Cities and Smart Living.” [2018-2023] (Co-PI) \$2,999,997

NSF-ENG-EED. Co-PI, “Cross-Disciplinary Education in Social and Ethical Aspects of Nanotechnology” [2013-2016], 37% of \$200K

Science Museum Minnesota. PI, “Civic Scenarios on Climate Adaptation” [2011-2012], 100% of \$10K

EU FP7 Science in Society. Senior Researcher, “Integrated Assessment of Societal Impacts of Emerging Science and Technology from within Epistemic Networks” [2012-2014], \$9K of \$2.1M

NSF NSEC/Center for Nanotechnology in Society (#0937591). Senior Investigator [2010-2016], 8% of \$6.9M

EESE Collaborative Research: Energy Ethics in Science and Engineering Education. Senior Researcher [2011-2013], 8% of \$125K

NSF NSEC/Center for Nanotechnology in Society (#0531194). Senior Investigator (from 2007) [2005-2010], 2% of \$5.4M

PRESENTATIONS

† = Invited talks; Post-docs underlined, asterisks for graduate students, double asterisks for undergraduates

ACADEMIC AUDIENCE

1. “PIT Futures: Exploring the Role of Anticipation” PIT UN. Arizona State University. 2021.
2. “Researching the Future: Scenarios to Inform the Future of Genome Editing.” Society for the Social Studies of Science. Montreal/online. 2021.
3. “Approaches to Foresight around Science and Technology Policy.” ST Global. 2021†
4. “How might Covid-19 transform how scenario planning is conducted?” University of Oxford, online. 2020.
5. “Re-Wilding Anticipation.” Invited keynote at the International Conference on Anticipation. Oslo School of Architecture and Design, Oslo, Norway. 2019. †
6. “Perceptual Shifts in Future-Focused Deliberation.” Opening and Enacting New Futures International Conference. Institute for Nature and Humanity, Kyoto, Japan. 2019.
7. “Discovering Futures of Nuclear Power through Scenario Planning.” (with Z. Dungarwalla, & P. Jensen). 7th Annual Conference on Governing Emerging Technologies. Tempe, AZ. 2019.
8. “Foresight and Anticipation.” Intergenerational Futures Workshop. Arizona State University. 2019.
9. “Tempting Futures.” Invited keynote at the Grappling with the Futures symposium. Harvard University, Boston. 2018. †

10. "Festival of Futures." Invited talk at the Salzburg Global Forum on *The Shock of the New: Arts, Technology and Making Sense of the Future*. Salzburg, Austria. 2018. †
11. "Sustainability and Social Justice: Investigating Innovation." Invited talk at the Bioneers Annual Conference. San Rafael, CA. 2018. †
12. "Building Public Capacity for Governance of Science and Technology Issues." Climate Engineering Governance Workshop, ASU. 2018. †
13. "Waiting for Trevor to Start: Performing Participatory Anticipation." Anticipation Conference. London, England. 2017.
14. "Future of Health, Data Sharing and Self-Experimentation". CHI. Denver, CO. (with D. Kera and L. Withycombe Keeler). 2017.
15. "Inclusive planning in transport and energy STI-policies." European Forum for Studies of Policies for Research and Innovation. Vienna, Austria. (with Andersen, P.D., M. Hansen). 2017.
16. "Center for the Study of Futures." Enlightening lunch. Arizona State University. Tempe, AZ (with D. Kera and L. Withycombe Keeler). 2017. †
17. "Turning Innovation into Progress." ADT-CET Research Design Council for Sustainability. ASU, Tempe, AZ. (with S. Kitch and S. Xin Wei). 2017
18. "Exploring Uncertain Futures." The Eleventh Annual Emeritus College Symposium. Tempe, AZ. 2016. †
19. "Engaging Publics in Critical Inquiry." Engagement Philosophies Workshop. Tempe, AZ. 2016. †
20. "Adapting in the Anthropocene: Contests and Collaborations in Climate Design." 4th Annual Conference on Governing Emerging Technologies. Tempe, AZ. 2016.
21. "Envisioning Urban Nanotechnologies through the Futurescape City Tours." 4th Annual Conference on Governing Emerging Technologies. Tempe, AZ. 2016.
22. "What Will the Desert City of 2050 Look Like?" The Future We Want: A Research Symposium on Desert Cities. Tempe, AZ. (with D White, D Hannah, and A Jenik) 2015. †
23. "Parity and Participation: The Role of Social Influence in Scenario Planning." International Conference on Anticipation. Trento, Italy. (with S Rodegher*) 2015.
24. "Mediation and Scenarios: Unpacking Power, Politics and Persuasion in Future-Oriented Inquiry." International Conference on Anticipation. Trento, Italy. (with A Guimarães Pereira and G Gano) 2015.
25. "Mediated Scenarios: The Infusion of Art and Design in Scenario Practices" 5th International Conference on Future-Oriented Technology Analysis (FTA) Brussels, Belgium. 2014.
26. "Scenario Planning for Sustainability: Are Diverse Voices Heard?" 16th International Conference on Ethics Across The Curriculum. Scottsdale, AZ. (with S Rodegher*) 2014. †
27. "Triggering Tempered Futures: Temporality in Public Engagement with Urban Nanotechnology" Society for the Social Studies of Science Annual Meeting. Buenos Aires, Argentina. 2014.
28. "Prototyping Nanotechnology: Experiences with Design Education." Technology and Innovation Management Research Seminar. Danish Technological University. 2013. †
29. "Mediating Urban Imaginaries: Designing and Doing the Futurescape City Tours." Society for the Social Studies of Science. San Diego, CA. 2013.
30. "Incorporating the Temporal, Sensual and Material in Public Engagement with Nanotechnology." Science and Its Publics: Exploring Emergent Forms of Public Engagement, UC Irvine. (with K Ridder-Vigonne & G Gano*) 2013. †
31. "Materializing Futures: How Artifacts, Prototypes and Objects Support Public Deliberation of Alternative Futures." Participatory Governance Initiative/ School of Public Affairs Colloquium Series, ASU. 2012. †
32. "Emerge: Scientists and Artists Redesign the Future." Welcome lecture and master of ceremonies. ASU, Tempe, AZ. 2012.

33. "Climate change adaptation imaginaries: civic scale scenarios for collaborative decision-making." Poster presentation, Adaptation Futures Conference, Tucson, AZ (with A Minowitz*) 2012.
34. "Rethinking Urban Governance: Knitting Together Foresight and Sustainability." Resilience, Innovation and Sustainability: Navigating the Complexities of Global Change. Tempe, AZ. 2011.
35. "Scenaric Thinking and Earth Systems Engineering and Management: A Generative Dialogue." CESEM Distinguished Lecture Series, ASU. 2011. †
36. "How Do We Communicate Both the Knowns and Unknowns of Climate Change?" American Geophysical Union, Fall Meeting (with P Hamilton & R Garfinkle). 2011.
37. "Diagnosing Futures: How Scenarios Support Reflexive Governance of Socio-Technical Systems." School of Sustainability, ASU. 2011.
38. "Future Scenarios of Nanotechnology." Society for the Study of Nanotechnology and Emerging Technologies. Tempe, AZ. 2011.
39. "Nanotechnology and Plausibility." Society for Risk Analysis. Salt Lake City, UT. 2010.
40. "Material Deliberation: Tapping the Dilemmas of Water, Technology and the City." Space and Flows Conference, UCLA, Los Angeles, CA. 2010.
41. "Plausibilistic Reasoning in Nanotechnology Futures." Society for the Study of Nanotechnology and Emerging Technologies. Darmstadt, Germany. 2010.
42. "Nanotechnology & Plausibility." Society for the Social Studies of Science. Tokyo, Japan. 2010.
43. "Sustainability meets Anticipatory Governance in Phoenix." CSPO Enlightening Lunch, ASU (with A Wiek) 2009. †
44. "Diagnosing Futures." Society for the Social Studies of Science. Washington, DC. 2009.
45. "Deliberation and Anticipation." Society for the Study of Nanoscience and Emerging Technologies. Seattle, WA. 2009.
46. "Nano and the City: Anticipation and Deliberation." Danish Technical University. Lyngby Denmark. 2009. †
47. "Scenarios for Converging Technologies." Gordon Research Conference on Governing Emerging Technologies. Big Sky, Montana. 2008.
48. "Between Hope and Prudence: Experiments in Scenaric Learning." Society for the Social Studies of Science, Annual Meeting. Montreal. 2007.
49. "Hope and Prudence: Experiments in Scenaric Learning." Futures of Life: Acquiring and Creating Anticipatory Knowledge. Cornell University. 2007. †
50. "Anticipatory Governance through Scenarios." Global Environmental Futures: Interrogating the Practice and Politics of Scenarios. Watson Institute for International Studies. Brown University. 2007. †

INDUSTRIAL/PRIVATE SECTOR AUDIENCE

51. "Inevitable Changes". APS Attorney's Retreat. Heart Museum. Phoenix, AZ. 2017
52. "Futures of IoT." AVNET Collaboration Seminar. ASU. Tempe, AZ. 2017.
53. "Uncertainties, Drivers, Scenario Archetypes" TMAG57 Exploring the Future of Connectedness. Intel, Santa Clara, CA. 2016. †
54. "Brexit Strategies and Scenario Planning - What do Organisations Need to Consider?" Said Business School public webinar. 2016. †
55. "Tensions and Tenants of the Future Tense." Sustainability in Science Museums Fellowship Program. Tempe, AZ. 2016. †
56. "Persuasion and Influence in Scenario Planning: Overcoming Barriers to Learning from the Future." Society of Psychologists in Management Annual Meeting. Scottsdale, AZ (with S Rodegher*). 2013. †

57. "Futuring and Foresight in Nanotechnology." CNS Private Sector Engagement Workshop, Tempe AZ. 2011. †
58. "The Future of Sustainable Phoenix." Institute for the Future, Palo Alto, CA. 2010. †
59. "Foresight and Scenarios." Nanoscale Informal Science Education Network Annual Meeting. San Francisco, CA. 2010.
60. "The Future of Organizing." Organization Design Forum Annual Meeting, Denver, CO. 2010. †
61. "Using Scenarios and Foresight to Manage Turbulence." Organization Design Annual Meeting, Tacoma, WA. 2009. †
62. "Scenarios for Nanotechnologies Development." Presentation at Nano and Giga Challenges in Electronics and Photonics: From Atoms to Materials to Devices to System Architecture, Tempe, Arizona. 2007.

GOVERNMENT AND PUBLIC AUDIENCE

63. "Future Imperfect: Critical Approaches to Foresight Deliberation" Contro-Corrente Seminars, JRC, European Commission. Ispra, Italy. 2015. †
64. "Futurescape City Tours." Deliberative Session. Phoenix, AZ. 2013.
65. "Scenario Planning for Institutional Learning." National Breast Cancer Coalition. Washington, DC. 2013. †
66. "Futurescape City Tours." Orientation to research project. Phoenix, AZ. 2012.
67. "Emerge: Scientists and Artists Redesign the Future." Welcome lecture and master of ceremonies. ASU, Tempe, AZ. 2012.
68. "Exploring the Emerge Exhibition." *Spirit of the Senses*. Tempe, AZ. 2012. †
69. "Redesigning the Future." *CNS-ASU Science Café*. Arizona Science Center, Phoenix, AZ. 2012. †
70. "Urban Foresight: Rethinking Technology in Complex Systems." Joint Research Centre, European Commission. Ispra, Italy. 2011. †
71. "Climate of Uncertainty: Civic Scenarios for Decision Making." New Tools for Science Policy, CSPO. Washington, D. C. 2011. †
72. "Museums as Mediums for Engaging Citizens in Climate Change Adaptation Scenario Planning." Dupont Summit 2011: Pressing Issues, Little Time. Washington, D.C. 2011.
73. "Democratizing Science: Should the Public Have a Voice in Science Research and Development." *CNS-ASU Science Café*. Arizona Science Center, Phoenix, AZ. 2008. †
74. "Real Time Technology Assessment: Anticipation, Integration & Engagement." Risoe National Laboratory. Roskilde, Denmark. 2007. †
75. "Visions of Nanotechnology." *CNS-ASU Science Café*. Changing Hands Bookstore, Tempe, AZ. (with I Bennett). 2006. †
76. "Volatile Visions: Transactions in Anticipatory Knowledge." European Environmental Agency. Copenhagen, DK. 2006. †
77. "The Emergence of Nanotechnology: Expectations and Ethics." Invited Presentation at Small Wonders, Big Questions. Danish Centre for Bioethics and Risk Assessment – CeBRA, Copenhagen, DK. 2005. †
78. "The Emergence of Nanotechnology: Ethical, Legal, Social & Environmental Aspects (ELSA)." European Workshop on Social and Economic Issues of Nanotechnologies and Nanosciences. Research Directorate-General, European Commission. Brussels. 2004. †

TEACHING

ASU COURSES TAUGHT

The Politics and Ethics of Smart Cities (HSD 598) Human and Society Dimensions of Science and Technology, ASU. 3-credit hour. Lead instructor for this graduate course as part of the NRT on Smart and Inclusive Smart Cities. Spring 2020.

Rethinking Community Engagement (SOS 591) School of Sustainability, ASU. 3-credit hour. Selin co-designed this co-taught course that different engagement philosophies inform sustainability science. Spring 2019.

Innovation in Society (FIS 201). School for the Future of Innovation in Society, ASU. 3-credit hour. Selin designed this 60-person new course for Spring 2018, integrating problem-based learning, collaborative projects, innovation professionals, and experts covering different elements of innovation. Spring 2018; Spring 2019.

Futures Thinking and Strategy (SOS 311). School of Sustainability, ASU. 3-credit hour. Selin developed this new course in Spring '13 and in '14, Selin created an online offering. As of Spring '15, this now core SOS course is offered year-round, both online and on campus. Spring 2013; Spring 2014; Fall 2016; Fall 2017; Fall 2019.

Winter School on the Anticipatory Governance and Responsible Innovation of Emerging Technologies. Center for Nanotechnology in Society, ASU. Selin has offered two modules each year for the ~15 international students in this weeklong PhD course. January 2012- 2017; 2020.

Sustainable Futures Studio (SOS 594). School of Sustainability, ASU. 3-credit hour. This problem-based learning studio course engaged graduate students in designing and piloting an innovative public engagement protocol. Fall 2012

After Emerge Studio (AME 499/592). Arts, Media & Engineering, ASU. 3-credit hour. This studio worked to analyse ethnographic and documentary data from a large-scale research project into a gallery exhibition. Spring 2012

Foresight Methodologies (SOS 494). School of Sustainability, ASU. 3-credit hour. New course developed by Selin. Spring 2012

Future Scenarios, Anticipatory Governance, and Sustainability – Urban Development in Phoenix (SOS 594). School of Sustainability, ASU. 3-credit hour. Co-taught with A. Wiek, this new award winning, ~25 graduate student, problem-based learning course used the City of Phoenix as a live case for developing and testing a framework for sustainability transitions. Spring 2010

InnovationSpace. The Design School, ASU. Selin served as the CNS Liaison for P. Boradkar led course that engaged business, engineering, and design students in new product design. 2007-2013

Justice and the Future (JUS 394). Justice and Social Inquiry, ASU. 3-credit hour. New course developed by Selin.
Spring 2007

INTERNATIONAL TEACHING

Oxford Scenarios Programme. Saïd Business School, University of Oxford, England.
Selin co-teaches this weeklong executive education course twice a year. Each session involves 42 professionals and scholars. 2013- present

Strategic Foresight in Engineering. Department of Management Engineering. Technical University of Denmark.
Selin co-led this weeklong PhD course developed for international engineering graduate students focused on the theory and practice of technological foresight. August 2015

INVITED UNIVERSITY LECTURES

Selin regularly guest lectures at ASU in a variety of different departments; noted here are invited lectures or course seminars at other universities.

1. “Amplifying Anticipatory Capacities.” NRT Seminar on Entrepreneurship. Arizona State University. 2021.
2. “Anticipatory Competences and Conditions.” Global Leadership Masters course, Thunderbird School of Global Management at Arizona State University. 2021.
3. “Narrative Development.” Organizational Learning, Performance and Change Doctoral Program, Colorado State University. 2019.
4. “Design Fiction and Imaginary Futures.” School of Design, Carnegie Melon University. 2015.
5. “Public Engagement through Material Deliberation.” Department of Media, Cognition and Communication, University of Copenhagen. 2015.
6. “Art and Design in Foresight.” Technology and Innovation Management, Technical University of Denmark. 2014.
7. “Evidencing the Future and other Dilemmas Working in the Future Tense.” Anthropology Department, Rice University. 2009.

OTHER TEACHING

Mexichem. Created and facilitated a 1-day session with E. Finn & R. Wylie on “Becoming Future Fit.” Thunderbird, Phoenix, AZ. 2018.

Country Director Leadership & Pipeline Program (CDLP). 1-day scenario planning training module for country leaders of the humanitarian aid organization, Mercy Corps. Portland, Oregon. 2015.

Futurescape City Tours National Training. 2-day research team retreat to teach and vet novel public engagement methodology to six university partners. Arcosanti, AZ. 2013.

Facilitation Training Workshop. ½ day workshop to teach facilitation methods to School of Sustainability and HSD graduate students. ASU. 2010.

The Future of Organizing. 2-day scenario planning training for organization design practitioners in collaboration with the Organization Design Forum (with Claudia Murphy, MS). Chicago, IL. 2009.

POST-DOCTORAL MENTORSHIP

Lauren Withycombe-Keeler (2015-2016) sustainability science & future studies; now Assistant Professor SFIS/ASU.

Hannah Star Rogers (2014-2015) science & technology studies

Kathryn De-Ridder Vignone (2012-2014) informal science communication; now Executive Director of the Duke Energy Center for Innovation (Clemson University)

Sarah R Davies (2010-2012) public understanding of science; now at the Department of Media, Cognition and Communication, Copenhagen University, DK.

GRADUATE MENTORSHIP

Graduate Committee Chair (completed)

Kaethe Selkirk, PhD, Human and Social Dimensions of Science and Technology, completed in 2019. Now Program Manager, Experience Design, Autodesk.

Sandra Rodegher, PhD in Sustainability, completed 2015, now Manager of National Outreach Initiatives, Office of Outreach and Diversity at Boston University.

Molly Cresto, MS Science and Technology Policy, completed 2011, now Project Manager, KP Environmental.

Graduate Committee Chair (present)

Carlo Altamirano, PhD, Human and Social Dimensions of Science and Technology, 2012-

Joshua Loughman, PhD, Human and Social Dimensions of Science and Technology, 2016-

Sherri Wasserman, PhD, Human and Social Dimensions of Science and Technology, 2018-

Lauren Lambert, PhD, School of Sustainability, 2019-

Graduate Committee Member (completed)

Teresa Lorenzo, PhD, School of Sustainability, 2015- 2021.

Maryam Heidaripour, PhD, IIT Institute of Design, 2018-2020. Now Visiting Assistant Professor, Indiana University.

Camilla Jensen, PhD, School of Design, completed in 2017. Now Innovation Program Leader at DTU Sky Lab

Gretchen Gano, PhD, Human and Social Dimensions of Science and Technology, completed 2014. Now Director of Research at Prescott College.

Jathan Sadowski, MS Applied Ethics, completed 2013, now Research Fellow at Monash University.

SERVICE

SERVICE TO ARIZONA STATE UNIVERSITY

Interim Director, MS Futures and Design, School for the Future of Innovation in Society 2020-present

Member, Curriculum Committee, College of Global Futures, 2021- present

Member, Search Committee Public Engagement, School for the Future of Innovation in Society (SFIS), 2019-2020

Course Coordinator, School of Sustainability 2019-2020

Member, Search Committee Leonardo/ASU Executive Director, School for the Future of Innovation in Society (SFIS) and Arts Media & Engineering, 2019

Member of Organizing Committee, CSPO 20th Anniversary Event, 2018-2019

Member, Search Committee Art-Science Nexus, School for the Future of Innovation in Society (SFIS), 2017 & 2018

Member, Search Committee VAP, School for the Future of Innovation in Society (SFIS), 2016

Member, Personnel Committee, School of Sustainability (SOS), 2015- 2019

Member, Executive Committee, Human and Social Dimensions of Science and Technology, 2015- 2018

Organizer, SFIS Faculty Retreat & Launch, 2015

Member, SOS Problem and Project Based Learning Committee, 2011-2014

Member, SOS Graduate Methods Committee, 2011-2012

Program Faculty, Human and Social Dimensions of Science and Technology, 2009- present

Program Faculty, Professional Science Masters Program in Science and Technology Policy, 2009-present

Member, CSPO Professional Master's Degree Planning Committee, 2008-2009

Member, CSPO Website Committee, 2007-2011

Chair, CSPO Works in Progress Initiative, 2007-2009

Member, CSPO Outreach and Outcomes Working Group, 2007-2008

Member, CSPO Strategic Plan Committee, 2007

SERVICE TO PROFESSION

RESEARCH WORKSHOPS & SEMINARS ORGANIZED

These gatherings are designed to bring together interdisciplinary scholars and scientists in joint and carefully facilitated exploration of a new research domain with an explicit intent to catalyze new collaborations.

GFL Collaboration Strategies (2020)- Selin organized, designed and facilitated this 2-day workshop aimed at exploring the structures, processes and rewards that support cross-disciplinary collaboration.

Opening and Enacting New Futures (2019)- Selin & Van der Leeuw organized, designed and facilitated this 3-day international workshop at the Research Institute for Humanity and Nature in Kyoto, drawing together ~30 scholars focused on foresight, food and global change.

Future Design: Exploring Affirmative Futures through an Intergenerational Outlook (2019)- Selin & Van der Leeuw organized, designed and facilitated this 2-day international workshop at ASU, drawing together ~20 scholars focused on creative methods of foresight.

Engaging Pasts, Presents & Futures (2018)- With doctoral student Selkirk, Selin developed a workshop session for faculty, students and international visitors on scenario methodologies.

Oxford Futures Forum (2017)- Selin co-convened this 2-day forum with ~80 peer-reviewed scholars and practitioners, held in Oxford, England in cooperation with the Saïd Business School

A Year Without a Winter (2016)- Selin co-convened, with the Center for Science and the Imagination, science fiction authors and play-writes to a ½ day academic seminar and 1-day writers' retreat at Arcosanti, Arizona to prepare an upcoming anthology.

Oxford Futures Forum (2014)- Selin co-convened this 2-day forum with ~80 peer-reviewed scholars and practitioners, held in Oxford, England in cooperation with the Saïd Business School

Designing the Futures Initiative (2012-2013)- Selin with A Kinzig (GIOS-ASU) formed this ASU working group and seminar series to intensify futures-oriented research and training in the field of sustainability.

Ethics, Plausibility and Innovation (2012)- Selin co-organized this 2-day research seminar for 20 specially selected international scholars, held in Ispra, Italy with the EC-Joint Research Centre's Institute of Protection and Security of the Citizen

Gaming the Future (2011)- Selin organized this 1-day meeting to draw ~15 ASU faculty together with game designers to develop and integrate gaming principles and designs into ASU's teaching and research endeavors.

Practices of Anticipatory Governance: Building Strong Collaborations (2010)- Selin drew together 15 ASU scholars and visiting faculty to identify the ingredients of successful collaborations between social scientists and natural scientists and engineers.

Nano-scale Informal Science Education Network & CNS Collaboration (2010)- Selin organized this 1-day meeting at ASU to facilitate interactions between museum professionals and social scientists to concoct ways of working to integrate societal concerns in museum materials and programming about nanotechnology.

International Workshop on Plausibility (2009)- Selin co-organized with A Wiek (SOS-ASU) this ~ 30 person, 2-day workshop at ASU designed to investigate the conceptual and methodological dimensions of plausibility.

INTERNATIONAL ACADEMIC CONFERENCES ORGANIZED

Scientific Committee Member. **Society for the Study of New and Emerging Technologies.** Phoenix, AZ. 2017.

Program Committee Member. **Governance of Emerging Technologies Conference.** Center for Law, Science & Innovation. ASU. Tempe, AZ. 2016.

Program Committee Member. **Society for the Study of Nanotechnology and Emerging Technologies.** Tempe, AZ. 2011.

PANELS ORGANIZED & CHAIRED

Panel organizer- Preparing for Human Genome Editing. Society for the Social Studies of Science Annual Meeting. Montreal/online. 2021.

Chair- Governing Blindspots: Omission, Obsolescence and Discontinuity & Questioning the Policies and Practices of Nanotechnology. Society for the Study of New and Emerging Technologies. Phoenix, AZ. 2017.

Panel organizer- Anticipation Conference. Trento, Italy. 2015.

Panel organizer- New Designs for Engagement: Theories and Practices of Material Deliberation. Society for the Social Studies of Science Annual Meeting. Buenos Aires, Argentina. 2014.

Panel organizer- Futurescape City Tours: Incorporating the Temporal, Sensual and Material in Public Engagement with Nanotechnology. Society for the Social Studies of Science Annual Meeting. San Diego, CA. 2013.

Co-chair- Redesigning Public Engagement: Innovation in Practice and Analysis. Society for the Social Studies of Science Annual Meeting. Copenhagen, DK. 2012.

Panel Organizer- Sustainable Anticipatory Governance: Understanding Resilience, Obduracy and the Long Term in Theory and Practice. Resilience, Innovation and Sustainability: Navigating the Complexities of Global Change. 2011.

Roundtable Chair- Finding Futures. *Panel Chair-* Gaining Traction on Futures. Society for the Study of Nanotechnology and Emerging Technologies. Tempe, AZ. 2011.

Chair- Citizen Science Panel. *Conference Activity Leader-* Finding Futures. Science in a Digital Society. Lisbon, Portugal. 2011.

Roundtable Organizer- Plausibility. Society for the Study of Nanotechnology and Emerging Technologies. Darmstadt, Germany. 2010.

Convenor- Oxford Futures Forum. Saïd Business School. Oxford, UK. 2008

Chair- Managing the Uncertainty of Nanotechnologies. Challenges to Law, Ethics, and Policy Making. University of Padua. Italy. 2008

REVIEW ACTIVITIES

Member of editorial board of *Futures*.

Peer-reviewer for *Science, Technology and Human Values, NanoEthics, Social Studies of Science, Futures, Environmental Research Letters, Environmental Science and Policy*.

Proposal reviewer for the National Science Foundation's STS program and the Austrian Science Fund.

SERVICE TO COMMUNITY

MEDIA INTERVIEWS & PROFILES

1. "We Asked 105 Experts What Worries Them Most About the Future." (2018). *Motherboard/VICE*. December 5.
2. "Oxford Scenarios Programme." (2015). Filmed interview of C **Selin**. University of Oxford, Saïd Business School.
3. "The Impact of the Invisible." (2013) IEEE Spectrum. Recorded interview of D Guston and C **Selin** for podcast by L Howell.
4. "Emerge: Artists, Scientists Redesigning the Future." (February 28, 2012). Live television interview of **Selin** C, Rikakis T and Garreau J on KAET Horizon Program.
5. "Future Forward." (Dec 2012). Interview of C **Selin** for feature by T Mueller in *ASU Magazine*.
6. "Sustainability & Nanotechnology: Generating Excitement in Emerging Sciences." (2012) Filmed interview of C **Selin** & A Wiek by BD Johnson. Intel Tomorrow Project.

SELECT CONSULTANCY PROJECTS

Arizona Public Service, Palo Verde Generating Station, scenario planning, 2017- 2020.

University of Oxford, Saïd Business School, Prudential Agility Programme, 2014-2018.

National Legal Aid Defenders Association, Strategic Planning, 2014

Western Heritage Insurance Company, Scenario Planning, 2011

Arizona Public Service, Long Term Strategic Planning, 2009