

The University of California, Santa Cruz

Science & Justice Research Center



*The LEED of STEMM team in front of the UC Santa Cruz Silicon Valley Building as part of the 2024 Kick-Off meeting.
Photo by Colleen Stone.*

Annual Report

2023-2024 Volume 17

[Scijust.ucsc.edu](https://scijust.ucsc.edu)

Director's Letter: Welcome to Science & Justice

As we look forward to the year to come, we appreciate the chance to share with you our accomplishments of the last year.

Science & Justice continues to be in the headlines, making a critical difference in California, the nation and globally. Our faculty served as advisors and reviewers for [the National Academies of Sciences, Engineering and Medicine](#), served on the *Innovation in Society Study Group* for the National Science Foundation, and were featured on [podcasts](#) and in the media communicating about the importance of centering ethics and justice in science and innovation.

Our work continued to produce inspiring collaborations and conversations, both on campus and across the nation and globe. This year we kicked-off our National Science Foundation supported [Leadership in the Ethical and Equitable Design \(LEED\) of STEMM](#) initiative with a meeting and public dialogue at the UCSC Silicon Valley Campus in Santa Clara. The two day event gathered thought leaders in the domain of science and society from the UCs, Stanford, Cal State, the National Science Foundation and Silicon Valley to envision how to build more equitable research practices and communities. We ended with a public reception followed by a panel discussion, [Centering Equity and Justice in Research: What Will It Take?](#). As part of SJRC's long standing goal to transform institutional structures so that they support a more diverse range of scholars and perspectives, we advanced our *Building Just Genomics with HBCUs Initiative*. Finally, advancing our international partnerships, we continued our SJRC/ Seoul National University [international winter school on Innovation, Science and Justice](#).

This year we also continued our commitment to building opportunities to take part in Science and Justice research and learning at the undergraduate level. In collaboration with the Department of Critical Race and Ethnic Studies, we made great progress creating a first of its kind Science and Justice undergraduate minor. Faculty from all five divisions have come together to create this minor, which we look forward to launching. Our SJRC supported research also created opportunities for our undergraduates, who received Building Belonging Fellowships to work with us: **Micah Sargento** (Sociology/History of Art and Visual Culture) made important contributions to the the LEED of STEMM project and **Dimitri Cardona** (Sociology) to *Laboratory Life and Social Death: The Problem of Diversity in Science and Society*.

Despite ongoing budget cuts, the 2023-24 academic year produced much to celebrate. Congratulations to affiliated faculty who were promoted and received tenure - and those who published books - a special feat of the industries. Special congrats to members of our advisory board who were honored for their work. Distinguished Professor of Computer Science **Lise Getoor** was [elected](#) to the American Academy of Arts and Sciences, one of the nation's oldest and most prestigious honorary societies. **Kim TallBear** received the [the University of California, Santa Cruz Distinguished Humanities Graduate Student Alumni Award](#) for her work in championing Indigenous rights and protecting Native American DNA from exploitation.

We are ever thankful for the guidance and support our steering committee and board of advisors continue to provide us, as well as the support of many units and divisions on campus.



Jenny Reardon

Founding Director, Science & Justice Research Center, Professor of Sociology, UC Santa Cruz



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Science & Justice Leadership Team

Founding DIRECTOR | Jenny Reardon, Professor of Sociology

Co-DIRECTOR | James Doucet-Battle, Associate Professor of Sociology

DIRECTOR of Teaching the SJTP | Kriti Sharma, Assistant Professor of Critical Race Science and Technology
Studies

CENTER MANAGER | Colleen Stone

Science & Justice Steering Committee

Jennifer Derr, Associate Professor of History

James Doucet-Battle, Associate Professor of Sociology

Lars Fehren-Schmitz, Professor of Anthropology

Lise Getoor, Professor of Computer Science

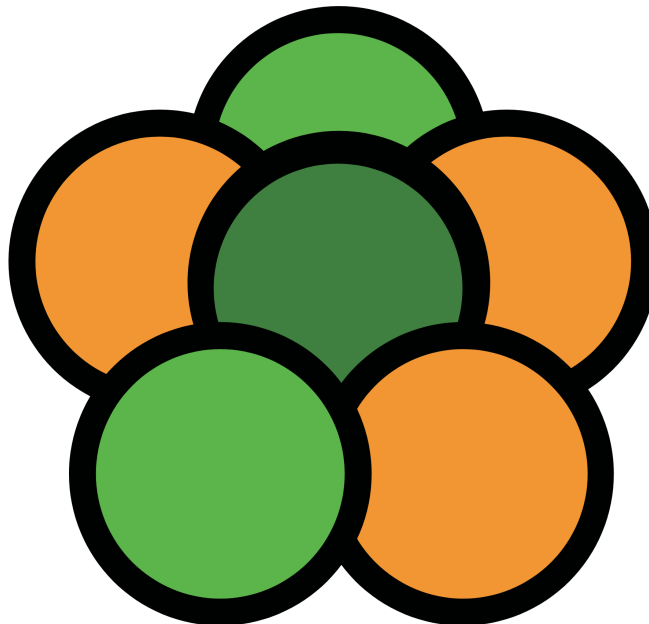
Camilla Hawthorne, Sociology

Dee Hibbert-Jones, Associate Professor of Digital Art and New Media

Jaimie Morse, Assistant Professor of Sociology

Jenny Reardon, Professor of Sociology

Matt Sparke, Professor of Politics



The Science & Justice Mission

The Science & Justice Research Center at the University of California, Santa Cruz is a globally unique endeavor that innovates experimental spaces, engages in collaborative research practices, and fosters emerging alliances between seemingly disparate sectors, disciplines and communities. Biomedical innovation, species extinction, toxic ecologies, access to healthcare, and many other contemporary matters of concern provoke questions that traverse multiple intellectual, institutional and ethico-political worlds. Science & Justice generates modes of inquiry and empirically rigorous research that address these enormous challenges and support livable worlds. The Center is home to the Science and Justice Working Group, the Science and Justice Graduate Training Program (SJTP) and sponsored research projects. The initiative builds on the UCSC campus' historic commitments to socio-ecological justice and strengths in science studies and interdisciplinary research.

Sustaining a Vibrant SJRC Community

The Science & Justice Research Center supports a vibrant, collaborative community. Located in Oakes College, SJRC hosts visitors from across the UC system and around the world. The SJRC community is committed to sustaining an experimental ecosystem for novel ideas, dialogues, methods and collaborations. The Science & Justice Working Group remains the heart of our collective work. We also host regular reading groups and experimental mixers with affiliated graduate students and faculty who seek to further investigate the meanings and practices of science and justice.

Visiting Scholar Program

Since 2009, the SJRC Visiting Scholars Program has been a vibrant hub for interdisciplinary scholars across the UC-system, the nation and the globe. The Science & Justice Research Center offers opportunities for visiting scholars at all levels of their career (regardless of institutional affiliation) to participate in the community through research collaborations, reading groups and experimental mixers. In the 2023-2024 academic year, the Center continued hosting visiting scholars and exchanges. Hosted by Science & Justice Affiliate **Lindsey Dillon** (Sociology), in Summer 2023, Visiting Scholar **Katherine Chandler** (Assistant Professor of Culture and Politics at Georgetown University), was in residence. In April 2024, she returned to convene a roundtable discussion, [Sensing Landscapes, Hidden violence, and Atmospheres of Control](#), with UC Davis faculty guests **Caren Kaplan** (American Studies) and **Javier Arbona** (American Studies, Design). Refer to Appendix 1 to learn more about all our visitors.

This year we again welcomed the [SNU in the World Program on Innovation, Science and Justice](#). Administered by the Office of International Affairs (OIA) at Seoul National University, the *SNU Program* is a university-led and government-funded initiative to train undergraduate students to be globally engaged scholars and leaders. This year we welcomed 26 undergraduates and 2 grad students



Lindsay Hinck (Distinguished Professor of Biomolecular Engineering), pictured, introduces postdoctoral fellow Yohel Rosen to present to SNU students.

to our campus for two-weeks of stimulating sessions led by 5 graduate students and 9 faculty from 4 divisions of our University, and 4 industry leaders. Students also enjoyed sessions with affiliated faculty at UC San Francisco and Stanford along with field trips to the surrounding Bay Area museums, cultural centers, and sites of innovation such as Google. The visit provided invaluable opportunities for exchange between UCSC and SNU students, including the popular dinner with the Everett Program. A highlight this year was a screening of [Richland](#) (a film by Irene Lusztig), a live performance of [Strata: A Performance of Topography](#).

Science & Justice Working Group Events

The Science & Justice Working Group (SJWG) provides a convivial and novel space to cultivate emerging connections, spark new questions for research, and nurture our communities' collaborative ties. In addition to formally convening, our lively informal experimental mixers open space for all SJRC community members. This year we hosted a major event convening 12 universities, countless working group business meetings, 10 Experimental mixers, a potluck and a fundraiser. On October 11, the Center began the academic year by hosting our annual **Meet & Greet**. In addition to a chance to celebrate the new academic year and enjoy each other's company, the annual gathering is always a great chance to welcome new members, welcome back others, and share current work to foster emerging collaborations. On November 1st, we explored [Bias at Work? Artificial Intelligence in the Recruitment Process](#) with Science & Justice Affiliated faculty **Warren Sack** (Film & Digital Media) and guest **Roger Søraa** who provided insight from a European research project on AI-enhanced recruitment processes and what sociotechnical dangers that can lead to. On November 08th we hosted [Algorithmic Bias](#) with Science & Justice Affiliate **Caro Flores** (Philosophy) and **Gabbrielle Johnson** (Assistant Professor of Philosophy at Claremont McKenna College). In Winter, we [kicked-off the LEED of STEMM initiative](#) with a two-day meeting and public event, held a **Potluck**, and **Warren Sack** with **Nicole Starosielski** presented on [STS Approaches to Media Infrastructures](#). Starosielski conducts research on global internet and media distribution, communications infrastructures ranging from data centers to undersea cables, and media's environmental and elemental dimensions. In Spring, we discussed [Precision Public Health After Covid-19](#) with **Martha Kenney** (Department Chair, Women & Gender Studies, San Francisco State University) and **Laura Mamo** (Health Equity Institute Professor of Public Health, San Francisco State University). All events are listed in Appendix 2.

Justice Sparks Innovative and Original Research

The Science & Justice Research Center continues to be an exemplar of how to transform commitments to justice into collaborative research projects. We formulate new methods and institutional practices where scientists and engineers work alongside social scientists, humanists, ethicists, artists and diverse public communities. SJRC affiliates pursue local, regional, national, and international research collaborations on issues that inform and affect institutional and public policy.

In 2023-2024 the center focused on several ongoing and new research projects. Under the direction of SJRC co-Director Reardon, the year witnessed the publication of [the first articles](#) for our National Science Foundation supported [Leadership in the Ethical and Equitable Design \(LEED\) of Science, Technology, Engineering, Mathematics and Medicine \(LEED of STEMM\) Initiative](#).

In addition to these existing initiatives, this year co-Directors **Jenny Reardon** and **James Doucet-Battle** supported a new proposal entitled, "*BioSocioCultural Interdisciplinary Research Network: Rethinking Theories and Research Practices on Biodiversity and Gender*," which was submitted in the "Concurso de Fomento a la

Vinculación Internacional para Instituciones de Investigación, convocatoria 2024” by Pontificia Universidad Católica de Chile. The proposed **BioSocioCultural Interdisciplinary Research Network** is a collaborative international platform that aims to articulate two significant areas of study: the production of data on biodiversity and gender as an epistemological stance. By combining researchers dedicated to work on the production of biodiversity baselines in Patagonia Station UC and those who work from feminist epistemologies, philosophy of science, and critical policymaking, this interdisciplinary research network aims to enhance our understanding of the importance of intersecting these two areas of study to address contemporary issues of the climate crisis and gender inequalities. The proposal was successful, and so in Winter 2025 Reardon and Doucet-Battle will travel to Chile while a group from Chile will visit UC Santa Cruz in Spring of 2025.

Over Summer 2024, **Jenny Reardon** co-organized a Lorentz Center meeting entitled, “[Science and Social Justice: Forging Critical Methods](#).” The meeting contributed to efforts underway globally to expand beyond existing bounded approaches to ethics and research, to ensure they center equity and justice at their heart. The meeting focused on collective work to set goals for action, both immediate and in the long-term scientific international collaborations.

Building on our work with the Robert Wood Johnson Foundation, **James Doucet-Battle** received an invitation to participate in the Salzburg Global Seminar, “Centering on Equity: Transforming the Health Science Knowledge System,” sponsored by RWJF. Doucet-Battle will travel to Salzburg in Fall 2024. The seminar will bring together thought and policy leaders from around the world in a multi-pronged effort to generate ideas and formulate plans aimed at promoting health equity and evidence-based professional competence.

Funding Faculty, Postdoctoral, Undergraduate and Graduate Student Research

SJRC projects and Training Programs support many faculty through course releases and research funds, graduate students with research fellowships, and undergraduate students with paid research opportunities and independent study units.

This year, through a gift from the *SNU in the World Program*, in Winter 2024, SJRC awarded fellowships and gift funds to 10 affiliated faculty (2 in Division of Social Sciences, 1 in Arts, 5 in Humanities, and 2 in Engineering), 2 campus units (the Everett Program in the Division of Social Science, and the UCSC Sustainability Office), and five graduate students fellowships 1 in the Division of Social Sciences, and 4 in Arts. These funds supported our faculty and students to participate and to present lectures that exemplified the original and collaborative research of our Science and Justice community.

The National Science Foundation funded *Leadership in the Equitable and Ethical Design (LEED) of STEMM Research Initiative* provided graduate student research fellowships for two graduate students at UC Santa Cruz (one in the Social Sciences and one in the Arts), one at the University of Washington and a postdoctoral fellow at Columbia University. The teams added ways to include undergraduates in research through the Institute for Social Transformation's



Pictured are **James Karabin** (sociology) and **Chessa Adsit-Morris** (visual studies) who presented on the *Leadership in the Equitable and Ethical Design (LEED) of STEM Research Initiative*.

Building Belonging Initiative.

Additionally, SJRC continues to assist students in identifying and applying for campus funding to conduct original and collaborative research. Students working with us have received awards from the [Undergraduate Research in Science & Technology Endowment](#), the [Genomics Institute's Research Mentoring Internship Program](#), and the [Institute for Social Transformation's Building Belonging Program](#). This year these awards included three from the [Institute for Social Transformation's Building Belonging Program](#): **Micah Sargento** (Sociology/History of Art and Visual Culture) received an award to work on the Leadership in the Equitable and Ethical Design of STEMM with faculty mentor **Jenny Reardon**. **Dimitri Cardona** (Sociology), **Bhavya Kallam** (Biotechnology & Communications) worked with faculty Mentor **James Doucet-Battle** on Laboratory Life and Social Death: The Problem of Diversity in Science and Society. Watch the recording of the [final presentations](#).

For a complete list of the ongoing research our community conducted, refer to Appendix 3.

Creating a UCSC Ethics in Practice

At an increasing rate, many forms of scientific evidence are met not just with questions of curiosity and interest, but also with skepticism and mistrust. Healthcare systems are challenged by entrenched inequalities and profit motives. Algorithms encode bias into the heart of big data approaches to science and engineering. The next generation of leaders in biomedical and life sciences, environmental science, and engineering need to be adept at addressing these challenges. At SJRC, we believe this requires bold new approaches to ethics and research practice in STEM fields. We strive to exceed narrow standards for the ethical approval of science and prepare and support our students and faculty to be powerful stewards of socially robust and reflexive science. Our vision of good science exceeds simple compliance and strives towards institutional change. We work with affiliates to realize this in practice. Examples of our efforts from this year are described below.

A Model for Building Diversity and Interdisciplinarity

National calls for increased attention to diversity, equity, and inclusion in all phases of STEM research, from project inception to publication, have led to an increasing demand for scholars trained in STS who can provide guidance in bioethics to STEM researchers and serve as collaborators on STEM research teams. Yet the lack of diversity in STS threatens to reproduce the same hierarchies of race, gender, class, and sexuality that have long been documented in STEM fields, as well as the broader societal barriers to equity and justice that these calls seek to address. While substantial resources have been allocated to address pipeline issues in STEM and to a lesser extent the social sciences, to our knowledge, few exist that specifically focus on training the next generation of STS scholars of color who can provide critical guidance and nuanced expertise on justice and equity concerns in STEM. Despite this growing demand, there is little guidance on best practices for fostering this integration or for evaluating its effects. As efforts to increase the diversity of both researchers and the researched in STEM have gained in prominence, the number of African and Indigenous descent PhDs working in STS remains low in the United States.

In 2023-2024 Science & Justice continued its history of initiating bold new collaborations. We continued our work with **Genomics Institute** staff and faculty to collaborate on integrating a concern for ethics and justice into genomics research. **James Doucet-Battle** (Sociology), **Jenny Reardon** and **Colleen Stone** worked with **Lars Fehren-Schmitz** (Anthropology), and **Karen Miga** (BME) to reconceive Genomics and Society work.

We also continued our efforts to create a more robust approach to ethics grounded in interdisciplinary collaboration through our partnership with the **Institute for the Biology of Stem Cells**. Working with **Camilla Forsberg** (Biomolecular Engineering) and **Lindsay Hinck** (Molecular, Cellular and Developmental Biology), we created a Science and Justice training component for the successful *EDUC 4: CIRM Research Training Grant "CIRM Scholar" Award*. With the Stem Cell Journal Club. This year this included a joint session with students from Seoul National University. We look forward to continuing working with them, and to expanding training opportunities in stem cell research to include a critical focus on questions of ethics and justice. Refer to this [UCSC news story](#) for more information.

For a complete list of the ongoing research our community conducted, refer to Appendix 3.

Science & Justice Pedagogy

In addition to sparking innovative research, since its beginning the SJRC has supported the creation of innovative pedagogy that fosters transdisciplinary collaborative learning that brings together faculty and students from across the UC Santa Cruz campus, from engineering, physical and biological sciences, social sciences, humanities, and the arts.

Science & Justice Graduate Training Program

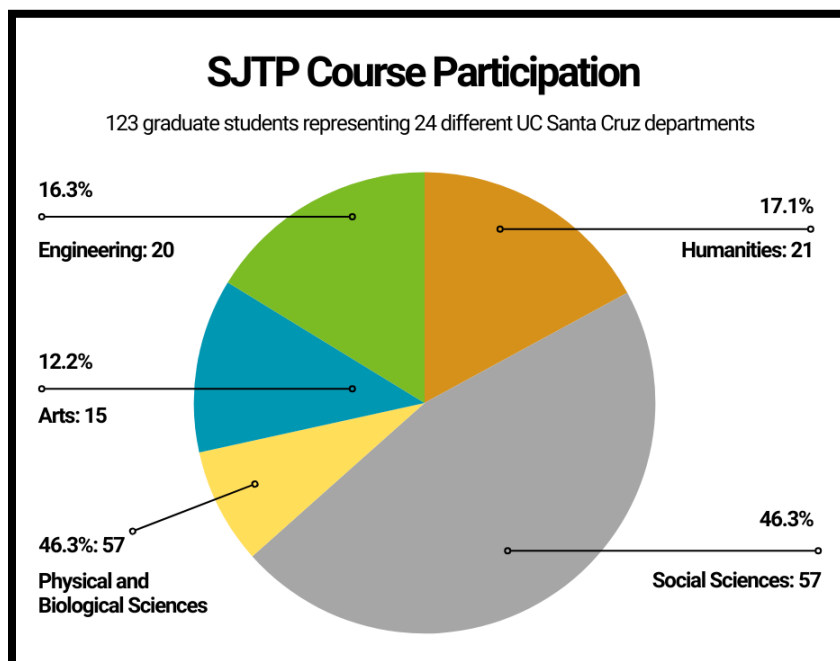
The SJRC is home to the globally unique Science & Justice Training Program (SJTP). The program teaches graduate students from across all five divisions how to collectively address the moments where questions of science meet questions of justice.

Started in 2010 with a grant from the National Science Foundation, the internationally-recognized [Science & Justice Training Program \(SJTP\)](#), draws together masters, early career PhD students and faculty from across all five Divisions of the University.

The training program's introductory course *Science & Justice: Experiments in Collaboration* was offered in Winter 2024 and taught by incoming Assistant Professor **Kriti Sharma** (CRES) who was hired to teach in the area of Science and Justice.

19 Students (Art: 4, Engineering: 7, Humanities: 2, PBSci: 2, Social Sciences: 5) who completed the course were invited to enter the program in Spring and Fellows began conducting original research and collaborative projects over the summer.

Over the last 12 years, the introductory course for the Science & Justice Training Program has trained 123 graduate students representing 24 different UC Santa Cruz departments in creative approaches to science and



justice. Participating in the program helps students build their careers and catalyzes new collaborative initiatives within the university. Our students have already had considerable early career success, demonstrated by their successful applications for fellowships, grants, postdoctoral positions and innovative entrepreneurial efforts.

Building Science and Justice Undergraduate Curriculum

Science and Justice Minor

UC Santa Cruz offers [a wide range of courses](#) across its many disciplines that address the relationships between science and justice. Science & Justice affiliates have long desired to create a large core course that would teach undergraduates the fundamentals of Science and Justice. Over this last year, SJRCs Steering Committee continued to discuss the potential with faculty and staff across campus for creating a minor in Science and Justice. A Science and Justice minor could offer students an opportunity to learn the transdisciplinary field of science and justice studies while at the same time receiving training in their major discipline. SJRC continues to gather faculty to discuss and conceptualize new courses and a proposal for a minor in Science and Justice to be hosted by the newly established Critical Race and Ethnic Studies (CRES) department. With **Felicity Amaya Schaeffer** (Chair of CRES), and support from Humanities for a Science and Justice Minor Hub and Research Cluster, faculty met to develop the minor proposal. They also onboarded Associate Professor of Critical Race Science and Technology Studies (STS) **Kriti Sharma**, a microbial ecologist and philosopher whose work bridges biology, philosophy, and art to re-tell “the story of life” not as struggle and scarcity, but as radical interdependence.

Experience Science at HBCUs: Building Just Genomics

As part of SJRC’s long standing goal to transform institutional structures so that they support a much more diverse range of scholars, we continued our efforts to build diversity in sociology and science and technology studies. Under the direction of Associate Professor of Sociology and SJRC Co-Director **James Doucet-Battle**, this year we moved forward our efforts to *Build Diversity in Sociology and Science and Technology Studies* through partnerships with HBCUs. We continued to work with Dr. Joseph Graves, Professor of Biomolecular Engineering at North Carolina A&T State University to strengthen ties between our two universities. With support from the Graduate Division, and in collaboration with the faculty and staff in the Genomics Institute, we planned to facilitate student and faculty exchanges. In collaboration with the Graduate Division, the African, Black, and Caribbean Resource Center, and North Carolina A&T State University, we organized a Summer 2024 research program for UCSC undergraduate students in Greensboro under the direction of Dr. Joseph Graves. We aimed to avail UCSC students from diverse backgrounds of the opportunity to experience the pedagogical and research cultures of an Historically Black College and University (HBCU), while offering NCATSU students a reciprocal opportunity to visit UCSC, study with faculty working in genomics, and work closely with UCSC researchers and students in laboratories across Science Hill. For more details, refer to Appendix 3.

SNU in The World Program on Innovation, Science and Justice

We successfully hosted, for the second year, Seoul National University for the *SNU in the World Program with SJRC at UCSC on Innovation, Science and Justice*. In [January and February 2024](#), the SJRC hosted Professor **Doogab Yi**, 2 graduate students and 26 undergraduate students for two weeks. The program consisted of a series of lectures with affiliated faculty at UC Santa Cruz, UC San Francisco, and Stanford along with field trips to the



surrounding Bay Area museums, cultural centers, and sites of innovation such as Google. A welcome dinner at the Namaste Lounge with participants and Everett Program Fellows, a screening of [Richland](#) (a film by Irene Lusztig), a live performance of [Strata: A Performance of Topography](#), social gatherings, and a final student presentation over lunch were also planned. Refer to the [Winter 2024 Schedule](#) and [Participant Biographies](#) and the [Rapporteur Report](#).

Funding the Future of Science & Justice

Founding Director **Jenny Reardon** and Manager **Colleen Stone** with the advice of the SJRC Steering Committee continued to work closely with University Relations and Development Officers to develop strategies for funding the future of science and justice at UC Santa Cruz.

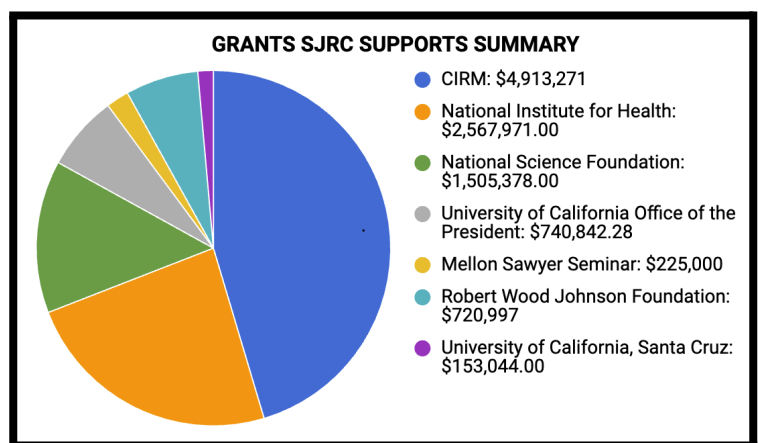
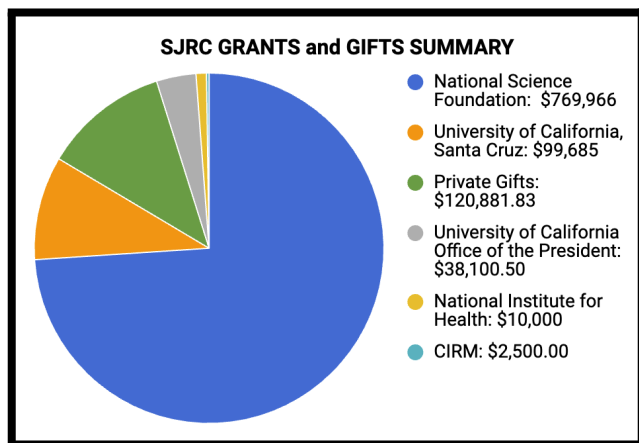
On November 08, we hosted a Giving Day campaign to support SJTP Fellows (pictured), case statements and concrete fundraising goals for the research center and the graduate training program. Our immediate grant-writing and fundraising goals include fellowship support for the Science & Justice Training Program graduate fellows, and support for Center staff and faculty. We will continue to pursue grants to support and endow the Center's collaborative research, training and advocacy activities.

Funding from the UC Santa Cruz Board Foundation contributed to a LEED of STEMM Kick-Off meeting and public dialogue which took place at the UCSC Silicon Valley Campus in Santa Clara from February 26th to 27th 2024. The meeting convened thought leaders, policy makers and representatives of industry to UCSC to launch the

Leadership in the Ethical and Equitable Design (LEED) of STEMM project. Leaders from UCSC also took part, including the Vice Chancellor of Research and the Dean of Physical and Biological Sciences. The meeting was successful in elevating the visibility of UCSC's work in Science and Justice. The visibility helped to promote its relevance for discussions at NSF. The convenor of the UCSC meeting, **Jenny Reardon**, now sits on a study group at NSF tasked with writing memos for the organization on how best to meet legislative requirements to incorporate social and behavioral science expertise into the new Technology, Innovation and Partnerships (TIP) Directorate. Refer to the [LEED Project website](#) for more information.

With the support of the SJRC Steering Committee, since inception, the Science and Justice Research Center (SJRC) has helped faculty across campus raise over \$10.8 million in grants. Currently, the SJRC directly manages \$1,038,275 in funded research and training initiatives and has received a total of \$120,881.83 in gifts (refer to Appendix 6 for a list of active grants and Appendix 8 for a full breakdown).





Additional grant funding and donor contributions will secure our efforts to build an internationally recognized program that trains the next generation of scholars to responsibly take up the important social and scientific problems of our time. Higher levels of grant writing support will help us to develop our research infrastructure and our ability to obtain large-scale grants. Our ambitious fundraising goals and sustained efforts to pursue grant and foundation funding will continue the growth and vitality of our work and community.

As we look to the future, we seek to continue to build SJRC as a hub for extramural funding of research projects with links to science and justice.

Reflecting on Our Progress and Looking Ahead

The 2023-24 academic year marked the end of our twelfth year as a research center. The SJRC has become a dynamic and collaborative infrastructure for training the next generation of scholars from the natural and social sciences, humanities, engineering and the arts to pursue their research and make discoveries in ecosystems where ethics and justice are primary concerns. The Center and its affiliated faculty remain key partners in creating innovative training, curriculum, and research across campus that recognizes the questions of ethics and justice at stake as we forge knowledge and innovations. In particular, we continued to deepen our collaborations with our colleagues in Science and Engineering, particularly through future HBCU Summer Undergraduate programs; and our colleagues in Critical Race and Ethnic Studies to develop an undergraduate minor in Science and Justice. We also deepened and extended our national and international networks through the launch of our LEED of STEMM initiative and our national science policy work.

Reflecting on our progress and growth, we continue to refine Center practices, and document them in the SJRC Handbook. Center Manager, **Colleen Stone** continued to meet with Founding Director **Jenny Reardon** and Sociology Department Manager **Jessica Lawrence** to better understand and delineate responsibilities of administrative tasks related to running the Center. **Reardon**, **James Doucet-Battle**, and **Stone** also continued to envision specific ways in which SJRC can provide effective support to the educational and research efforts of our diverse faculty and student communities.

We are committed to developing future research collaborations, and seek collaborators from all divisions at UCSC and in the UC system, as well as in the community. We will continue to provide a critical and dynamic space that supports the diverse needs of our faculty, researchers, students, and staff.

As we plan the year ahead, we will do our best to keep hybrid activities available. Top activities we look forward to are planning the next winter visit with Seoul National University, and advancing our partnerships with North Carolina A&T and Pontificia Universidad Católica de Chile, and continuing our LEED of STEMM initiative.

SJRC's promise is simple and bold. The benefits are manifold: improved outcomes not just for humans, but for the many non-human lives as well; approaches to science and technology that balance prosperity and justice, health, ecological survival and ethics. Our affiliated researchers and interdisciplinary teams have built decades of scholastic expertise examining the life sciences and biomedicine, health, environment, food, and racial and economic justice. The Center provides the critical milieu in which the creative sharing of this expertise leads to novel science and justice praxis and knowledge sharing that fosters and supports diverse lives and futures.

Thank you for making a more just world possible!

Appendix 1: Visiting Scholars

[Kate Chandler](#) | Assistant Professor of Culture and Politics at Georgetown University. (Summer 2023)

[Doogab Yi](#) | Associate Professor of Science Studies at Seoul National University and Director of *The SNU in the World Program on Innovation, Science and Justice* (Winter 2023, 2024, 2025). For more information refer to the [SNU Project page](#).

Appendix 2: Science & Justice Working Group (SJWG) Events, Experimental Mixers, and Reading Groups

Our 2023-2024 events are linked below for more information.

- [October 11, 2023 | SJRC Meet & Greet](#)
- [November 01, 2023 | Bias at Work? Artificial Intelligence in the Recruitment Process](#)
- [November 08, 2023 | Algorithmic Bias](#)
- [November 08, 2023 | Giving Day](#)
- [November 15, 2023 | Works-in-Progress with Anila Daulatzai](#)
- [December 06, 2023 | SJTP Graduate Training Program Informational Meeting](#)
- [January 10, 2024 | S&J Potluck](#)
- [January 17, 2024 | POSTPONED | Refiguring Worlds Through Local Voices? Epistemic Vulnerability in a Time of Climate Change in Kerala, India](#)
- [January 21-February 03, 2024 | SNU in the World Program Visit](#)
- [February 07, 2024 | Warren Sack and Nicole Starosielski on STS Approaches to Media Infrastructures](#)
- [February 27, 2024 | Centering Equity and Justice in Research: What Will It Take?](#)
- [April 10, 2024 | Sensing Landscapes, Hidden violence, and Atmospheres of Control](#)
- [April 17, 2024 | POSTPONED | Refiguring Worlds Through Local Voices? Epistemic Vulnerability in a Time of Climate Change in Kerala, India](#)
- [April 24, 2024 | Precision Public Health After Covid-19](#)
- [May 1, 2024 | POSTPONED | TechnoScience Improv](#)
- [May 15, 2024 | POSTPONED | Walking in the Ecotone with Jim Clifford](#)
- [May 21, 2024 | CANCELLED | Informational Meeting: Developing a Critical Indigenous Health Studies Network](#)

Appendix 3: Research Clusters & Projects

Building Diversity in Sociology and Science and Technology Studies Initiative

As efforts to increase the diversity of both researchers and the researched in STEM have gained in prominence, the number of underrepresented graduate students working in Science and Technology Studies (STS) remains unacceptably low in the United States. While substantial resources have been allocated to address pipeline issues in STEM and to a lesser extent the social sciences, to our knowledge, few exist that specifically focus on training the next generation of STS scholars of color who can provide critical guidance and nuanced expertise on justice and equity concerns in STEM. We endeavor to better fulfill department and university missions by increasing the number of underrepresented graduate students in STEM and STS. In particular, we aim to create inclusive and innovative spaces that foster intellectual excellence in our fields and which further builds out academic associations that reflect the diversity of our state.

We situate our work examining the interrelated problem of diversity in both science and society at the intersections of sociology and science, technology, and society studies. Our *Building STEM Pathways Project* aims to map out the critical skills needed for building capacities to address current and future problems that require a broad analytical span of disciplines and expert areas of practice. A vitally important aspect of the Pathways Project involves undergraduate students in contributing to making robust intellectual linkages between the social sciences, history, politics, and genomic science to better understand diversity in the lab and in the society. For more information, contact [James Doucet-Battle](#).

Just Biomedicine

Just Biomedicine is a UC Santa Cruz-based research collective that examines the meeting of biomedicine, biotechnology, and big data along the Third Street corridor in the Mission-Bay neighborhood of San Francisco. Many hope that this convergence will democratize access to health information and produce revolutionary new medical treatments that new companies will make available to the public through market mechanisms. Yet, as in other domains, living with technoscientific transformations over time reveals how they produce new inequalities and injustices: new challenges to democratic governance; new surveillance regimes; and new forms of social stratification.

The team continued presenting their findings publicly and at other academic institutions and professional academic associations.

In Winter 2024, graduate student alum **Dennis Browe** (sociology) and SJRC Director **Jenny Reradon** presented on Just Biomedicine at UC San Francisco as part of the *SNU in the World Program*.



Here they are on a walking tour of the Third Street corridor in the Mission-Bay neighborhood of San Francisco. Photo by **Jenny Reardon** in front of the Joan and Sanford Weill Neurosciences Building.

In Spring 2024, the Just Biomedicine Research Group finalized an article to be published over summer in *Social Studies of Science* examining how the logics of speculative revitalization imagine a future in which cities and biomedicine produce wealth and health harmoniously together.

SJRC Founding Director **Jenny Reardon** continued her service on the advisory board for the Center for ELSI Resources and Analysis (CERA). CERA is a new national center establishing a reliable online platform for scientists, scholars, policymakers, journalists and the general public to learn about the ethical, legal and social implications of genetics and genomics (ELSI) and fostering a community of multi-disciplinary researchers focused on ELSI research. CERA is funded by the National Human Genome Research Institute (NHGRI) at the National Institutes of Health (NIH) and co-led by the Stanford Center for Biomedical Ethics and the Division of Ethics at Columbia University in partnership with The Hastings Center and the Personal Genetics Education Project at Harvard University by Co-Principal Investigators **Mildred Cho** (Associate Director Stanford Center for Biomedical Ethics) and **Sandra Soo-Jin Lee** (Chief, Division of Ethics Department of Medical Humanities and Ethics at Columbia University). To get involved, contact [Jenny Reardon](#).

Leadership in the Ethical and Equitable Design of STEMM research (LEED)

Increasingly public and private funders recognize the critical importance of incorporating ethical and societal analysis into the design of science, technology, engineering, and math (STEM) research. Despite this growing demand, there is little guidance on best practices for fostering this integration or for evaluating its effects. This initiative—a national and international collaboration—aims to clarify, review, and revitalize the roles and value of engaging bioethicists and scholars in the social sciences, humanities, and the arts in STEM research. It proceeds in three phases: background research; drafting of LEED Principles and Practices; and International Discussion and Write-Up of LEED Principles and Practices. If you would like to take part in or contribute to this project, email [Jenny Reardon](#). [Learn more](#).

In 2023-2024, we began our second year of the National Science Foundation grant awarded to SJRC Founding Director **Jenny Reardon** to fund the first phase of the *Leadership in the Ethical and Equitable Design (LEED) of Science, Technology, Engineering, Mathematics and Medicine (LEED of STEMM) Initiative*. The [LEED of STEMM](#) initiative aims to clarify, review, and revitalize the roles and value of engaging bioethicists and scholars in the social sciences, humanities, and the arts in STEM research. In collaboration with the LEED Team, the SJRC hosted a Kick-Off meeting and public dialogue at the UCSC Silicon Valley Campus in Santa Clara from February 26th to 27th 2024. The second day featured two public facing sessions to gather thought leaders in the domain of science and society from the UCs, Stanford, Cal State and Silicon Valley to envision how to build more equitable research practices and communities. The day ended with a public reception followed by a panel discussion, [Centering Equity and Justice in Research: What Will It Take?](#) The panel brought together central architects and prime movers of these efforts to reflect on the progress that has been made and the work that lies ahead. We invited the audience to imagine this next chapter of the critical revolution to create just and equitable research systems that not only foster innovation, but create trustworthy sciences, technologies and societies. Learn more about *LEED of STEMM* in this campus news article: [National Science Foundation grant will help establish ethics and equity best practices for emerging forms of science and technology](#) and in this January 2023 *CellPress* publication, [“Trustworthiness matters: Building equitable and ethical science”](#) that announces the collaborative project. Additional publications include a July 2023 open letter from the LEED team in *Nature*, [“Pangenomics: Prioritize Diversity in Collaborations”](#) calling for the Human Pangenome Research Consortium (HPRC) to invest in interdisciplinary teams committed to equitable and diverse collaboration with communities and nations to address longstanding stubborn ethical questions

around genome selection and analysis and a July 2023 article in the *American Journal of Bioethics* (AJOB) is published, "[Unbounding ELSI: The Ongoing Work of Centering Equity and Justice](#)" by **Chessa Adsit-Morris, Rayheann NaDejda Collins, Sara Goering, James Karabin, Sandra Soo-Jin Lee & Jenny Reardon** as part of the ELSIcon Special Issue. The publication calls for researchers to "unbound" ELSI by expanding its traditional scope to center the goals of justice and equity.

In addition to the NSF, this project is supported in part by the National Center for Advancing Translational Sciences, the National Institutes of Health, the UC Santa Cruz Office of Research, and the UC Santa Cruz Institute for Social Transformation. The co-leads of LEED STEMM and the research team are made up of faculty and students from UC Santa Cruz, Columbia University, the University of Washington, Stanford, UCLA and Harvard.

The Leadership in the Ethical and Equitable Design (LEED) of STEM Research Initiative proceeds in three phases: background research; drafting of LEED Principles and Practices; and International Discussion and Write-Up of LEED Principles and Practices. SJRC Founding Director and Professor of Sociology **Jenny Reardon** was the PI of a successful grant application to the National Science Foundation ER2-Ethical & Responsible Research (\$399,994) that supports the first phase. **Sandra Soo-Jin Lee** (Columbia University) and **Mildred Cho** (Stanford) are the co-PIs, and **Evelynn Hammonds** (Harvard), **Aaron Panofsky** (UCLA), **Malia Fulteron** (University of Washington), and **Sara Goering** (University of Washington) are senior personnel.

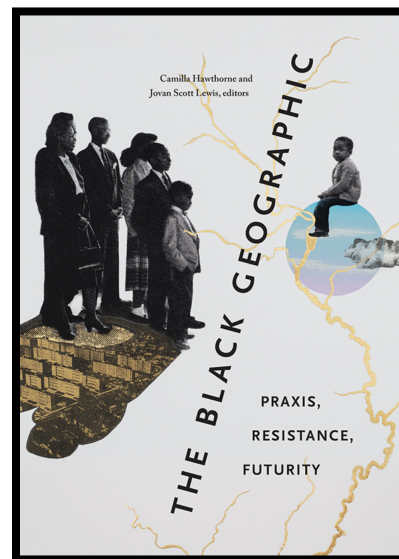
The SNU in the World Program: Innovation, Science and Justice at UC Santa Cruz

The SNU in the World Program, administered by the Office of International Affairs (OIA) at Seoul National University (<https://oia.snu.ac.kr/snu-world-program-swp>) is a university-led and government-funded initiative to train undergraduate students to be globally engaged scholars and leaders. The *SNU in the World Program* with the Science & Justice Research Center (SJRC) at UC Santa Cruz is coordinated through the Science & Justice Research Center's Visiting Scholar Program with Doogab Yi, Associate Professor of Science Studies at Seoul National University (<https://bit.ly/2P9b7Wi>). The *SNU in the World Program* at UC Santa Cruz is one of five other programs selected for funding and focuses on Innovation, Science and Justice. Other SNU Programs include visits to Washington DC (public policy), Japan (sustainable development), and Australia (climate crisis). If you would like to take part in or contribute to this partnership, email [Jenny Reardon](#) and [Colleen Stone](#). [Learn more](#).

Appendix 4: SJRC Publications Launched in 2023-2024

The Black Geographic: Praxis, Resistance, Futurity (Duke University Press, October 2023)

Co-edited by S&J affiliate **Camilla Hawthorne** (Sociology, CRES), contributors to *The Black Geographic* explore the theoretical innovations of Black Geographies scholarship and how it approaches Blackness as historically and spatially situated. In studies that span from Oakland to the Alabama Black Belt to Senegal to Brazil, the contributors draw on ethnography, archival records, digital humanities, literary criticism, and art to show how understanding the spatial dimensions of Black life contributes to a broader understanding of race and space. They examine key sites of inquiry: Black spatial imaginaries, resistance to racial violence, the geographies of racial



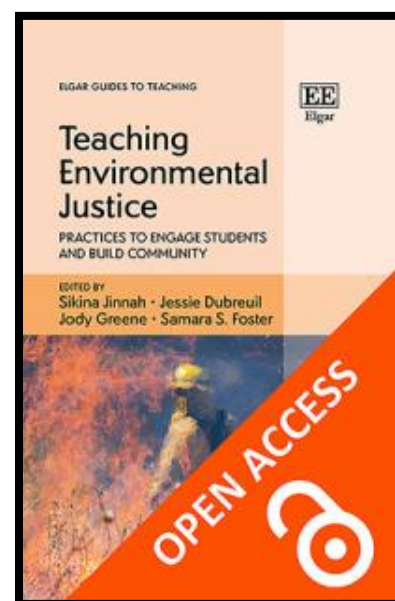
capitalism, and struggles over urban space. Throughout, the contributors demonstrate that Blackness is itself a situating and place-making force, even as it is shaped by spatial processes and diasporic routes. Whether discussing eighteenth- and nineteenth-century abolitionist print records or migration and surveillance in Niger, this volume demonstrates that *Black Geographies* is a mode of analyzing Blackness that fundamentally challenges the very foundations of the field of geography and its historical entwinement with colonialism, enslavement, and imperialism. In short, it marks a new step in the evolution of the field.

The book is available at: <https://www.dukeupress.edu/the-black-geographic>

Contributors included. Anna Livia Brand, C.N.E. Corbin, **Lindsey Dillon** (S&J affiliate, UCSC Sociology), Chiyuma Elliott, Ampson Hagan, Camilla Hawthorne, Matthew Jordan-Miller Kenyatta, Jovan Scott Lewis, Judith Madera, Jordanna Matlon, Solange Muñoz, Diana Negrín, Danielle Purifoy, Sharita Towne

Teaching Environmental Justice: Practices to Engage Students and Build Community (Edward Elgar Publishing, 2023)

Co-edited by S&J affiliate **Sikina Jinnah**, Professor, Department of Environmental Studies and Associate Director of the Center for Reimagining Leadership, *Teaching Environmental Justice* explores ways to integrate environmental justice modules into courses across a wide variety of disciplines. Recommending accessible, flexible, and evidence-based pedagogical approaches designed by a multidisciplinary team of scholars, it centers equity and justice in student learning and course design and presents a model for faculty development that can be communicated across disciplines.



The book is available OPEN ACCESS at:

<https://www.e-elgar.com/shop/usd/teaching-environmental-justice-9781789905052.html>

Appendix 5: Contributions to Policy

Co-Director **Reardon** served as a reviewer for the *National Academies of Sciences, Engineering, and Medicine (NASEM)* consensus study on *Creating a Framework for Emerging Science, Technology, and Innovation in Health and Medicine*. Reardon also participated in a study group to help the National Science Foundation respond to federal legislation that calls for the integration of ethical and social analysis into research funded by its new Technology, Innovations and Partnerships directorate.

Appendix 6: SJRC Funders

Since 2004, the SJRC has helped faculty across campus raise over \$10 million in grants for collaborative research including training grants by the National Science Foundation, National Institutes for Health and California Institute for Regenerative Medicine (CIRM). Below is a summary of active awards. A full breakdown of external and internal grants and gifts can be found in [Appendix 8: Key Accomplishments](#).

Current Funded Initiatives

LEED: Leadership in the Equitable and Ethical Design of Science and Engineering

Funding Agency: National Science Foundation ER2-Ethical & Responsible Research

Principal Investigator: Jenny Reardon

Amount: \$399,994

Science and Justice Minor Research and Planning Cluster

Funding Agency: The UCSC Office of Research, SEED Grant

Principal Investigator: Christine Hong, with Co-PI Jenny Reardon

Amount: \$40,000 (awarded by Division of Humanities)

EDUC 4: CIRM Research Training Grant "CIRM Scholar" Awards

Funding Agency: California Institute for Regenerative Medicine (CIRM)

Principal Investigator: Institute for the Biology of Stem Cells: Camilla Forsberg,
Co-PI: Lindsay Hinck

Amount: \$4,913,271 (\$2,500 SJRC portion)

The SNU in the World Program on Innovation, Science and Justice

Funding Agency: Office of International Affairs (OIA) at Seoul National University

Principal Investigator: UCSC Jenny Reardon; SNU Doogab Yi

Amount: \$43,000



Major Sponsors

Department of Sociology

Division of Graduate Studies

Division of Humanities

Division of Physical & Biological Sciences

Division of Social Sciences

The UC Santa Cruz Office of Research

Appendix 7: SJRC

2023-2024 Org Chart

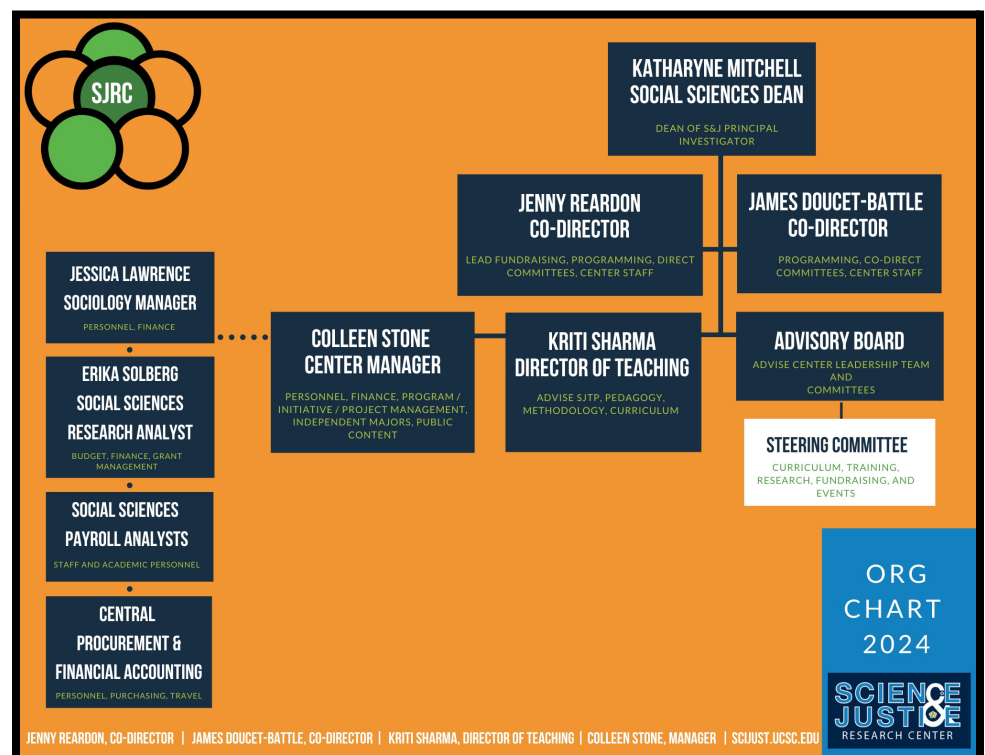
SJRC Org Chart 2023-2024

([PDF](#))

Appendix 8: SJRC

Faculty Affiliates at UC Santa Cruz

The Science & Justice Research Center (SJRC) partners with



multiple regional and international units to provide a discipline-neutral space to freely express and address areas of common concern through facilitated discussions, student exchanges, research, and training. Find out more about [how affiliates support the Center](#).

UCSC Affiliated Faculty

SJRC Affiliated Faculty add to the liveliness of the S&J Community.

[Elliot Anderson](#), Art
[Hillary Angelo](#), Sociology
[Karen Barad](#), Feminist Studies, History of Consciousness, and Philosophy
[Chris Benner](#), Environmental Studies, Sociology
[Angela Brooks](#), Biomolecular Engineering
[Micha Cárdenas](#), Art and Design: Games and Playable Media
[Nancy Chen](#), Anthropology
[Sharon Daniel](#), Film & Digital Media
[Jennifer Derr](#), History
[Lindsey Dillon](#), Sociology
[James Doucet-Battle](#), Sociology
[Madeleine Fairbairn](#), Environmental Studies
[Lars Fehren-Schmitz](#), Anthropology
[Caro Flores](#), Philosophy
[Anna Friz](#), Film & Digital Media
[Lise Getoor](#), Computer Science
[Leilani Gilpin](#), Computer Science and Engineering
[Julie Guthman](#), Community Studies
[Kathleen \(Kat\) Gutierrez](#), History
[Camilla Hawthorne](#), Sociology
[Dee Hibbert-Jones](#), Digital Art and New Media
[Christine Hong](#), Critical Race and Ethnic Studies, Literature
[Zia Isola](#), Center for Biomolecular Science & Engineering
[Sikina Jinnah](#), Environmental Studies
[Naya Jones](#), Sociology, Global and Community Health
[Geri Kerstiens](#), Chemistry
[Amy Krauss](#), Feminist Studies
[Andrew Mathews](#), Anthropology
[Karen Miga](#), Baskin School of Engineering
[Jaimie Morse](#), Sociology
[Dimitris Papadopoulos](#), History of Consciousness
[Tamara Pico](#), Earth and Planetary Sciences
[Maria Puig de la Bellacasa](#), History of Consciousness
[Jenny Reardon](#), Sociology
[Alicia Riley](#), Sociology, Global and Community Health
[Warren Sack](#), Digital Arts and New Media
[Felicity Amaya Schaeffer](#), Feminist Studies
[Beth Shapiro](#), Ecology and Evolutionary Biology

[Matt Sparke](#), Politics
[Beth Stephens](#), Art, E.A.R.T.H. Lab
[Susan Strome](#), Molecular Cell & Developmental Biology
[Anna Tsing](#), Anthropology
[Anjuli Verma](#), Politics

UCSC Steering Committee

Members of the SJRC Steering Committee serve for 1 academic year (renewable). The committee advises the Center on its research, community involvement, programing, and building the Science and Justice platform. It also reviews committee members and assignments, the Center's research themes, events, visiting scholars, and steers the Center's overall programing. The committee meets twice per term.

[Jennifer Derr](#), History
[James Doucet-Battle](#), Sociology
[Lars Fehren-Schmitz](#), Anthropology
[Lise Getoor](#), Computer Science
[Camilla Hawthorne](#), Sociology
[Dee Hibbert-Jones](#), Digital Art and New Media
[Jaimie Morse](#), Sociology
[Jenny Reardon](#), Sociology
[Matt Sparke](#), Politics

Internal Advisory Board

Members of the SJRC Advisory Board serve for 3 academic years (renewable). Board members advise the Center on institutional support and fundraising, cultivate connections and synergy amongst partners, and help forge the overall Center vision and plans. The Board meets annually in Spring.

[Elliot Anderson](#), Art
[Karen Barad](#), Professor of Feminist Studies
[Ed Green](#), Biomolecular Engineering
[Zia Isola](#), Center for Biomolecular Science & Engineering
[Warren Sack](#), Digital Arts & New Media
[Anna Tsing](#), Anthropology

External Advisory Board

[Geoffrey Bowker](#), Bioinformatics, University of California – Irvine
[Joe Dumit](#), Anthropology, University of California – Davis
[Sally Lehrman](#), SJRC Visitor
[Laura Mamo](#), Health Equity Institute, San Francisco State University
[Janet Shim](#), School of Nursing, University of California – San Francisco
[Kim TallBear](#), Native Studies, University of Alberta, Canada
[Fred Turner](#), Communications, Stanford

Appendix 9: SJRC Key Accomplishments

Key Accomplishments (eg: external and internal funding, grants, press coverage, research collaborations) can be found [here](#).

