

JESSICA M. SMITH

Engineering, Design & Society Department, Colorado School of Mines

Phone: 303.273.3944

jmsmith@mines.edu | <https://www.jessicasmith.net>

EDUCATION

- | | |
|------|--|
| 2009 | University of Michigan
<i>Ph.D. in Anthropology, Graduate Certificate in Women's Studies</i> |
| 2003 | Macalester College
<i>B.A. summa cum laude and departmental honors in Anthropology, International Studies and Latin American Studies, minors in Spanish & Women's Studies</i> |
| 2002 | Universidad de la Habana (Cuba)
<i>"Culture, Community and Development," School for International Training</i> |

ACADEMIC POSITIONS

- | | |
|-------------|---|
| 2022 - | <i>Professor</i>
Engineering, Design & Society Department, Colorado School of Mines
Civil and Environmental Engineering (by courtesy) |
| 2018 | <i>British Academy Visiting Fellow</i>
Department of Social Anthropology, University of St. Andrews (Scotland) |
| 2017 - 2022 | <i>Associate Professor</i>
Engineering, Design & Society Department, Colorado School of Mines |
| 2012 - 2017 | <i>Hennebach Assistant Professor of Energy Policy</i>
Liberal Arts & International Studies, Colorado School of Mines |
| 2016 - 2018 | <i>Faculty Affiliate</i>
Center for Science and Technology Policy Research, University of Colorado |
| 2010 - 2017 | <i>Research Affiliate</i>
Center of the American West, University of Colorado |
| 2011 - 2012 | <i>Anthropology Faculty (full time)</i>
Pikes Peak Community College, Colorado Springs, Colorado |
| 2009 - 2010 | <i>National Endowment for the Humanities Fellow</i>
Department of Anthropology, University of Colorado |

RESEARCH INTERESTS

Energy and extractive industries, blue-collar work, gender, corporate accountability, science & technology studies, rural studies

PUBLICATIONS

* denotes graduate student, ** denotes postdoc, *** denotes undergraduate student

PEER REVIEWED BOOKS

1. **Smith, Jessica M.** 2021. *Extracting Accountability: Engineering and Corporate Social Responsibility*. Cambridge, MA: The MIT Press.
2. **Rolston, Jessica Smith.** 2014. *Mining Coal and Undermining Gender: Rhythms of Work and Family in the American West*. New Brunswick: Rutgers University Press.

Winner of the 2018 Western Social Science Association book award

Finalist for the Society for Economic Anthropology book prize and the Society for the Anthropology of Work's book prize

EDITED, PEER-REVIEWED JOURNAL SPECIAL ISSUES

1. High, Mette M. and **Jessica M. Smith**, eds. 2019. *Energy and Ethics? Special issue of the Journal of the Royal Anthropological Institute* 25 (S1): 1-194.
<https://rai.onlinelibrary.wiley.com/toc/14679655/2019/25/S1>
Published as a standalone book of the same name by Wiley-Blackwell
2. Kinchy, Abby, Roopali Phadke and **Jessica M. Smith**. 2018. *Engaging the Underground: An STS Field in Formation. Engaging Science, Technology & Society* 4: 22-164.
<https://estsjournal.org/index.php/ests/issue/view/10>
3. **Smith, Jessica M.** and Mette M. High, eds. 2017. *Exploring the Anthropology of Energy: Ethnography, Energy and Ethics. Special issue of Energy Research and Social Science* 30: 1-116. <https://www.sciencedirect.com/science/journal/22146296/30>

PEER-REVIEWED JOURNAL ARTICLES

1. **Smith, Jessica M.** 2024. The politics of percentage: Informing justice in the US clean energy rush. *Critique of Anthropology*, 44(3), 341–361.
<https://doi.org/10.1177/0308275X241269625>
2. **Smith, Jessica M.** 2024. Racializing rural places through USDA home economics agricultural extension, 1965-1982. *Journal of Rural Studies*, 106, 103240.
<https://doi.org/10.1016/j.jrurstud.2024.103240>
3. **Smith, Jessica**, Cecilia Schroeder*, Kate Smits, Juan Lucena, and Oscar Restrepo Baena. 2023. Pollution, obligation, and care: Perspectives from artisanal and small-scale gold mining and farming in rural Colombia. 2023. *Tapuya: Latin American Science, Technology and Society*, 2243762. <https://doi.org/10.1080/25729861.2023.2243762>
4. Gibson, Casey,* **Jessica Smith**, Kate Smits, Juan Lucena, and Oscar Restrepo Baena. 2023. Rapid Assessment Procedure as a Tool for Front-End Stakeholder Needs Analysis in Engineering Projects. *IEEE Open Journal of Systems Engineering*, 1: 68-80.
<https://doi.org/10.1109/OJSE.2023.3275379>
Reprinted as Gibson, Casey,* **Jessica Smith**, Kate Smits, Juan Lucena, and Oscar Restrepo Baena. 2023. Rapid Assessment Procedure as a tool for stakeholder needs analysis in development engineering projects. In *Science, Engineering, and Sustainable Development Cases in Planning, Health, Agriculture, and the Environment*, eds R. Krueger, Y. Telliel and W. Soboyejo. New York: DeGruyter.
<https://doi.org/10.1515/9783110757507-006>

5. Aziz, M. J., Gayme, D. F., Johnson, K., Knox-Hayes, J., Li, P., Loth, E., Pao, L. Y., Sadoway, D. R., **Smith, J.**, & Smith, S. 2022. A co-design framework for wind energy integrated with storage. *Joule*, 6(9), 1995–2015. <https://doi.org/10.1016/j.joule.2022.08.014>
6. Spahr, Katie*, **Jessica M. Smith**, Terri Hogue, and John McCray. 2021. Reading the Green Landscape: Public Attitudes toward Green Stormwater Infrastructure and the Perceived Nonmonetary Value of Its Co-Benefits in Three US Cities. *Journal of Sustainable Water in the Built Environment* 7(4): 04021017. <https://doi.org/10.1061/JSWBAY.0000963>
7. Mealing, VeeAnder*, Jane Turek, **Jessica M. Smith**, and Amy E. Landis. 2021. Social Sustainability of New Bio-based Feedstocks in the Southwest. *The International Journal of Sustainability in Economic, Social, and Cultural Context*. <http://doi.org/10.18848/2325-1115/CGP>
8. Schwartz, Michelle*, Kathleen Smits, **Jessica Smith**, Thomas Phelan, and Oscar Jaime Restrepo. 2021. Incorporating “Positive Deviance” into Comprehensive Remediation Projects: A Case Study from Artisanal and Small-Scale Gold Mining in the Municipality of Andes, Colombia. *Journal of Environmental Science and Policy* 123 (142-150). <https://doi.org/10.1016/j.envsci.2021.05.021>
9. Marlin-Tackie, Frances* and **Jessica M. Smith**. 2020. Key Characteristics Influencing Public Risk and Trust Perceptions of Unconventional Energy Development. *Journal of Cleaner Production* (251): 119644. <https://doi.org/10.1016/j.jclepro.2019.119644>
10. Marlin-Tackie, Frances*, Shurraaya Denning***, and **Jessica M. Smith**. 2020. Fracking Controversies: Enhancing public trust in local government through energy justice. *Energy Research & Social Science* (65): 101440. <https://doi.org/10.1016/j.erss.2020.101440>
11. **Smith, Jessica M.** 2019. The Ethics of Material Provisioning: Insiders’ Views of Work in the Extractive Industries. *The Extractive Industries & Society* 6: 807-814. <https://doi.org/10.1016/j.exis.2019.05.014>
12. **Smith, Jessica M.** 2019. Boom to Bust, Ashes to (Coal) Dust: The Contested Ethics of Energetic Exchanges in the US Coal Market Collapse. *Journal of the Royal Anthropological Institute* 25 (S1): 91-107. <https://doi.org/10.1111/1467-9655.13016>
13. High, Mette M. and **Jessica M. Smith**. 2019. Introduction: The Ethical Constitution of Energy Dilemmas. *Journal of the Royal Anthropological Institute* 25 (S1): 9-28. <https://doi.org/10.1111/1467-9655.13012>
14. Denning, Shurraaya***, Frances Marlin* and **Jessica Smith**. 2019. Improving Memorandums of Understanding (MOU) for Oil and Gas Development: Community Perception of Unconventional Energy in Colorado’s Front Range. *Journal of Energy & Natural Resources Law* 37(3): 305-325. <https://doi.org/10.1080/02646811.2018.1519903>
15. **Smith, Jessica M.** and Nicole M. Smith. 2018. Engineering and the Politics of Commensuration in the Extractive Industries. *Engaging Science and Technology Studies* 4: 67-84. <https://doi.org/10.17351/ests2018.213>
16. Kinchy, Abby, Roopali Phadke and **Jessica M. Smith**. 2018. Engaging the Underground: An STS Field in Formation. Introduction to the special issue of *Engaging Science, Technology & Society* 4: 22-42. <https://doi.org/10.17351/ests2018.213>
17. **Smith, Jessica** and Johan Thomas van Ierland***. 2018. Framing Controversy on Social Media: #NoDAPL and the Debate about the Dakota Access Pipeline on Twitter. *IEEE Transactions on Professional Communication* 61 (3): 226 - 241. <https://ieeexplore.ieee.org/document/8382288>

Winner of the 2018 Rudolph Joenk Award for Best Paper in the journal
18. Zilliox, Skylar* and **Jessica M. Smith**. 2018. Colorado’s Fracking Debates: Citizen Science, Conflict and Collaboration. *Science as Culture* 27 (2): 221-241. <https://doi.org/10.1080/09505431.2018.1425384>

19. Smith, Nicole, Juan Lucena, **Jessica Smith**, Oscar Jaime Restrepo Baena, Gustavo Aristizabal, and Alejandro Delgado. 2018. A Framework for Research and Education on Artisanal and Small-Scale Mining in Latin America. *International Journal of Georesources and Environment* 4(3): 99-104. <https://doi.org/10.15273/ijge.2018.03.017>
20. **Smith, Jessica M.** and Mette High. 2017. Exploring the Anthropology of Energy: Ethnography, Energy and Ethics. Introduction to the special issue of *Energy Research and Social Science* 30: 1-6. <https://doi.org/10.1016/j.erss.2017.06.027>
21. Zilliox, Skylar* and **Jessica M. Smith**. 2017. Memorandums of Understanding and Public Trust in Local Government for Colorado's Unconventional Energy Industry. *Energy Policy* 107: 72-81. <https://doi.org/10.1016/j.enpol.2017.04.032>
22. Smith, Nicole M. **, **Jessica M. Smith**, Zira Q. John, Benjamin Teschner. 2017. Promises and Perceptions in the Guianas: The Making of an Artisanal and Small-Scale Mining Reserve. *Resources Policy* 51: 49-56. <http://dx.doi.org/10.1016/j.resourpol.2016.11.006>
23. Zilliox, Skylar* and **Jessica M. Smith**. 2017. Supraregulatory Agreements and Unconventional Energy Development: Learning from Citizen Concerns, Enforceability and Participation in Colorado. *Extractive Industries & Society* 4(1): 69-77. <http://dx.doi.org/10.1016/j.exis.2016.11.008>
24. Shaffer, Austin***, Skylar Zilliox* and **Jessica M. Smith**. 2017. Memorandums of Understanding and the Social License to Operate in Colorado's Unconventional Energy Industry. *Journal of Energy & Natural Resources Law* 35 (1): 69-85. <http://dx.doi.org/10.1080/02646811.2016.1216696>
25. **Smith, Jessica M.** and Abraham Tidwell.* 2016. Everyday Lives of Energy Transitions: Contested Sociotechnical Imaginaries in the American West. *Social Studies of Science* 46(3): 327-350. <http://dx.doi.org/10.1177/0306312716644534>
26. Tidwell, Abraham* and **Jessica M. Smith**. 2015. Morals, Materials, and Technoscience: Reimagining Energy Security as a Sociotechnical Imaginary in the United States. *Science, Technology & Human Values* 40(5): 687-711. <http://dx.doi.org/10.1177/0162243915577632>
27. **Rolston, Jessica Smith**. 2015. Turning Mine Protesters into Collaborators: The Opportunities and Challenges of Corporate Social Responsibility in the Mining Industry. *Society and Natural Resources* 28(2): 165-179. <http://dx.doi.org/10.1080/08941920.2014.945063>
28. **Rolston, Jessica Smith**. 2013. The Politics of Pits and the Materiality of Mine Labor: Making Natural Resources in the American West. *American Anthropologist* 115 (4): 582-594. <http://dx.doi.org/10.1111/aman.12050>
29. Mitcham, Carl, Laura Heller, Wang Nan, Corinne Packard, Cortney Holles, Derrick Hudson and **Jessica Rolston**. 2013. Nanotechnology, Ethics and Policy Education: Learning and Sharing Across Boundaries. *Journal of Nano Education* 5(2): 180-187. <http://dx.doi.org/10.1166/jne.2013.1038>
30. **Rolston, Jessica Smith**. 2010. Risky Business: Neoliberalism and Workplace Safety in Wyoming Coal Mines. *Human Organization* 69 (4): 331-342. <http://dx.doi.org/10.17730/humo.69.4.j5158321nn864uu>
31. **Rolston, Jessica Smith**. 2010. Talk about Technology: Negotiating Gender Difference in Wyoming Coal Mines. *Signs: Journal of Women in Culture and Society* 35 (4): 893-918. <http://dx.doi.org/10.1086/651039>
32. **Smith, Jessica M.** and Federico Helfgott. 2010. Corporate Social Responsibility and the Perils of Universalization. *Anthropology Today* 26(3): 20-23. <http://dx.doi.org/10.1111/j.1467-8322.2010.00737.x>

33. **Smith, Jessica M.** 2008. Crafting Kinship at Home and Work: Women Miners in Wyoming. Women and Work issue, edited by Kathlene McDonald, *WorkingUSA: The Journal of Labor and Society* 11(4): 439-458. <http://dx.doi.org/10.1111/j.1743-4580.2008.00218.x>

PEER-REVIEWED BOOK CHAPTERS

1. **Smith, Jessica M.** 2022. Mining. Routledge Companion to Environmental Ethics. New York: Routledge.
2. **Smith, Jessica M.** and Juan Lucena. 2021. Socially Responsible Engineering. In Routledge Handbook of Philosophy of Engineering, Diane Michelfelder and Neelke Doorn, eds. Pp. 661-673. New York: Routledge.
3. **Smith, Jessica** and Stuart Kirsch. 2018. Mining. International Encyclopedia of Anthropology, Hilary Callan, ed. Pp. 4062-4065. New York: Wiley-Blackwell. <https://doi.org/10.1002/9781118924396.wbiea1307>
4. **Smith, Jessica M.** 2017. From Corporate Social Responsibility to Creating Shared Value: Contesting Responsibilization and the Mining Industry. In *Competing Responsibilities: The Ethics and Politics of Contemporary Life*, Susanna Trnka and Catherine Trundle, eds. Pp 118-132. Durham: Duke University Press.
5. **Rolston, Jessica Smith.** 2015. Women in the Mine. Conformity and Conflict: Readings in Cultural Anthropology. David McCurdy and Dianna Shandy, eds. 15th ed. New York: Pearson. Reprinted as Smith, Jessica. 2023. Women in the Mine. Conformity and Conflict: Readings in Cultural Anthropology. D. Shandy, D. McCurdy and J. Spradley, eds. 16th ed. Long Grove, Illinois: Waveland Press.
6. **Rolston, Jessica Smith.** 2013. Specters of Syndromes and Everyday Lives of Energy Workers in Wyoming. In *Cultures of Energy: Anthropological Perspectives on Power*. Sarah Strauss, Stephanie Rupp, and Thomas Love, eds. Pp. 584-592. San Francisco: Left Coast Press.
7. **Smith, Jessica M.** 2010. Workplace Egalitarianism in Nonunion Mines: Lessons from Wyoming's Powder River Basin. In *Anthropology of Labor Unions*. Paul Durrenberger and Karaleah Reichart, eds. Pp. 103-130. Boulder: University Press of Colorado.

ENGINEERING EDUCATION ARTICLES AND CONFERENCE PROCEEDINGS

1. Verdín, Dina, **Jessica M. Smith** and Juan Lucena. (2024). First-generation college students' funds of knowledge support the development of an engineering role identity. *Journal of Engineering Education*, 113(2), 383-406. <https://doi.org/10.1002/jee.20591>
2. **Smith, Jessica M.**, Carrie McClelland, and Oscar Jaime Restrepo. 2023. Sociotechnical Undergraduate Education for the Future of Natural Resource Production. *Mining* 3(2), 387-398. <https://doi.org/10.3390/mining3020023>
3. **Smith, Jessica**, Juan Lucena, Jeff Shragge, Junko Munakata Marr, Megan Sanders, and Kevin Moore. 2023. Funds of Knowledge and Intersectional Experiences of Identity: Graduate Students' Views of Their Undergraduate Experiences. Proceedings of the American Society for Engineering Education conference (Baltimore). <https://peer.asee.org/42813>
4. Schwartz, Michelle*, Kathleen Smits, **Jessica Smith**, and Tom Phelan. 2022. Teaching Students to Incorporate Community Perspective into Environmental Engineering Problem Definition through Iterative Conceptual Site Models. Proceedings of the American Society for Engineering Education conference (Minneapolis). <https://peer.asee.org/40516>
5. Rivera, Angelina***, **Jessica Smith**, and Juan Lucena. 2022. Humanitarian Engineering, Global Sociotechnical Competency, and Student Confidence: A Comparison of In-person, Virtual, and Hybrid Learning Environments. Proceedings of the American Society for Engineering Education conference (Minneapolis). <https://peer.asee.org/41735>

6. Kleine, Marie Stettler, Elizabeth Reddy, and **Jessica Smith**. 2022. The Multiplicity of Care in Engineering Education and Program Building. Proceedings of the American Society for Engineering Education conference (Minneapolis). <https://peer.asee.org/41530>
7. **Smith, Jessica M.** and Juan Lucena. 2022. Literary Contortionists: How Low-Income, First Gen Engineering Students Adapt & Resist to Achieve Literacy. *The Literacies of Design: Studies of Equity and Imagination in Engineering and Making*, Amy Wilson-Lopez, Eli Tucker-Raymond, Alberto Esquinca and Joel Alejandro Mejia, eds. Purdue University Press.
8. **Smith, Jessica M.**, Juan Lucena, Angelina Rivera***, Thomas Phelan, Kathleen Smits and Robin Bullock. 2021. Developing Global Sociotechnical Competency Through Humanitarian Engineering: A Comparison of In-Person and Virtual International Project Experiences. *Journal of International Engineering Education* 3(1) Article 5: 1-29. <https://digitalcommons.uri.edu/jiee/vol3/iss1/5/>
9. Smith, Nicole M., Qin Zhu, **Jessica M. Smith**, and Carl Mitcham. 2021. Enhancing Engineering Ethics: Role Ethics and Corporate Social Responsibility. *Science & Engineering Ethics* (27). <https://doi.org/10.1007/s11948-021-00289-7>
10. Verdín, Dina, **Jessica M. Smith**, and Juan Lucena. 2021. Recognizing the Funds of Knowledge of First-Generation College Students in Engineering: An Instrument Development. *Journal of Engineering Education* 110 (3): 671-699. <https://doi.org/10.1002/jee.20410>
11. Verdín, Dina, **Jessica Smith**, and Juan Lucena. 2021. Funds of Knowledge as Pre-College Experiences that Promote Minoritized Students' Interest, Self-Efficacy Beliefs, and Choice of Majoring in Engineering. *Journal of Pre-College Engineering Education Research* 11(1): 192-213. <https://doi.org/10.7771/2157-9288.1281>
12. Rulifson, Greg and **Jessica Smith**. 2021. Beyond the Social License to Operate: Training Socially Responsible Engineers to Contend with Corporate Frameworks for Community Engagement. Proceedings of the American Society for Engineering Education conference (virtual). <https://peer.asee.org/36747>
13. Rainey, Arielle*, Dina Verdín and **Jessica M. Smith**. 2021. Classroom Practices that Support Minoritized Engineering Students' Sense of Belonging. Proceedings of the American Society for Engineering Education conference (virtual). <https://peer.asee.org/36797>
14. Rivera, Angelina***, **Jessica M. Smith**, Juan Lucena, Robin Bullock, Tom Phelan, and Kate Smits. 2021. Making the most of virtual community engagement for international projects during the COVID-19 pandemic. Proceedings of the American Society for Engineering Education conference (virtual). <https://peer.asee.org/37477>

Best paper award in the Community Engagement Division

15. Gibson, Casey*, **Jessica Smith**, Juan Lucena, Kate Smits, and Oscar Restrepo Baena. 2021. Implementación del Procedimiento de Evaluación Rápida (RAP) para Mejorar las Habilidades de los Estudiantes de Ingeniería de Pregrado para Entender los Contextos Locales y Involucrarse con Comunidades en Proyectos Internacionales. [Implementation of the Rapid Evaluation Procedure (RAP) to Improve Engineering Undergraduate Students' Skills in Understanding Local Context and Working with Communities in International Projects. Encuentro Internacional de Educación en Ingeniería, Asociación Colombiana de Facultades de Ingeniería [International Meeting of Engineering Education, Colombian Association of Engineering Faculty conference].
16. **Smith, Jessica**, Greg Rulifson, Courtney Stanton***, Carrie McClelland, Emily Sarver, Linda Battalora, Stephanie Claussen, Susan Peterson, Rennie Kaunda, and Elizabeth Holley. 2020. Counteracting the social responsibility slump? Assessing changes in student knowledge and attitudes in mining, petroleum, and electrical engineering. Proceedings of the American Society for Engineering Education conference (virtual). <https://peer.asee.org/34338>
17. Verdín, Dina*, **Jessica Smith**, and Juan Lucena. 2020. The Influence of Connecting Funds of Knowledge to Beliefs about Performance, Classroom Belonging, and Graduation Certainty

for First-generation College Students. Proceedings of the American Society for Engineering Education conference (virtual). <https://peer.asee.org/35343>

Finalist for the best paper award in the Educational Research Methods Division

18. **Smith, Jessica**, Greg Rulifson, Cassidy Grady***, Nicole Smith, Linda Battalora, Emily Sarver, Carrie McClelland, Rennie Kaunda, and Elizabeth Holley. 2019. Critical Approaches to CSR as a Strategy to Broaden Engineering Students' Views of Stakeholders. Proceedings of the American Society for Engineering Education conference, Tampa. <https://peer.asee.org/32567>

Finalist for the best paper award in the Engineering Ethics Division

19. Verdín, Dina*, **Jessica Smith**, and Juan Lucena. Recognizing engineering students' funds of knowledge: Creating and validating survey measures. 2019. Proceedings of the American Society for Engineering Education conference, Tampa. <https://doi.org/10.18260/1-2--33226>
20. Claussen, Stephanie and **Jessica Smith**. Incorporation of corporate social responsibility into problem-based learning in a semiconductor device course. 2019. Proceedings of the American Society for Engineering Education conference, Tampa. <https://peer.asee.org/32959>
21. **Smith, Jessica**, Juan Lucena, and Dina Verdin*. Broadening Participation of First-Generation College Students in Engineering: Backgrounds, Experiences and Strategies for Success. 2019. Proceedings of the American Society for Engineering Education conference, Tampa. <https://peer.asee.org/32258>
22. **Smith, Jessica**, Nicole Smith, Greg Rulifson, Carrie McClelland, Linda Battalora, Emily Sarver and Rennie Kaunda. 2018. Student Learning about Engineering and Corporate Social Responsibility: A Comparison across Engineering, Design and Liberal Arts Courses. Proceedings of the American Society for Engineering Education conference, Salt Lake City. <https://peer.asee.org/31007>
23. Smith, Nicole M.***, **Jessica Smith**, Linda Battalora, and Benjamin Teschner.* 2018. Industry-University Partnerships: Engineering Education and Corporate Social Responsibility. 144 (3): *Journal of Professional Issues in Engineering Education and Practice*. [https://doi.org/10.1061/\(ASCE\)EI.1943-5541.0000367](https://doi.org/10.1061/(ASCE)EI.1943-5541.0000367).
24. **Smith, Jessica** and Juan Lucena. 2018. Social Responsibility in Engineering Education and Practice: Alignments, Mismatches and Future Directions. Proceedings of the American Society for Engineering Education conference, Salt Lake City. <https://peer.asee.org/30973>
25. **Smith, Jessica M.**, Carrie McClelland and Nicole Smith. 2017. Engineering Students' Views of Corporate Social Responsibility: A Case Study from Petroleum Engineering. *Science and Engineering Ethics* 23 (6): 1775-1790. <http://dx.doi.org/10.1007/s11948-016-9859-x>
26. LaPorte, David*, Erin Kim*** and **Jessica M. Smith**. 2017. Engineering to Help Communities or Students' Development? An ethnographic case study of an engineering-to-help student organization. *International Journal for Service Learning in Engineering* 12(2): 103-117. <https://doi.org/10.24908/ijlsle.v12i2.6593>
27. **Smith, Jessica M.** and Juan Lucena. 2016. Invisible Innovators: How Low Income, First Generation (LIFG) Students Use Their Funds of Knowledge to Belong in Engineering. *Engineering Studies* 8 (1): 1-26. <http://dx.doi.org/10.1080/19378629.2016.1155593>
28. **Smith, Jessica M.** and Juan Lucena. 2016. "How do I show them I'm more than a person who can lift heavy things?" The Funds of Knowledge of Low Income, First Generation Engineering Students. *Journal of Women and Minorities in Science and Engineering*, 22(3): 199-221. <http://dx.doi.org/10.1615/JWomenMinorScienEng.2016015512>
29. **Smith, Jessica**, Carrie McClelland and Nicole Smith**. 2016. Petroleum Engineering Students' Views of Corporate Social Responsibility. Proceedings of the American Society for Engineering Education conference, New Orleans LA. <https://doi.org/10.18260/p.25895>
30. Zilliox, Skylar*, **Jessica M. Smith**, Corinne Packard, and Carl Mitcham. 2016. Teaching the ethics of science and engineering through humanities and social science: A case study of

evolving student perceptions of nanotechnology. *Teaching Ethics* 16 (2): 161-183.
<http://dx.doi.org/10.5840/tej2016112334>

31. McClelland, CJ, **Jessica M. Smith**, Nicole M. Smith**. 2016. Bringing Corporate Social Responsibility into the Petroleum Engineering Classroom. Proceedings of the Frontiers in Education conference, Erie PA. [10.1109/FIE.2016.7757393](https://doi.org/10.1109/FIE.2016.7757393)
32. **Smith, Jessica** and Juan Lucena. 2015. Making the Funds of Knowledge of Low Income, First Generation (LIFG) Students Visible and Relevant to Engineering Education. American Society for Engineering Education conference, Seattle. <https://peer.asee.org/24464>
33. **Rolston, Jessica Smith** and Elizabeth Cox. 2015. Engineering by Doing: Diversity, Innovation and Hands-On Learning. In *International Perspectives on Engineering Education: Engineering Education and Practice in Context*. Volume 1, S.H. Christensen et al. Pp. 261-278. New York: Springer.
34. **Rolston, Jessica Smith**, Skylar Zilliox*, Corinne Packard, Carl Mitcham and Brian Zaharatos. 2014. Nanoethics and Policy Education: A Case Study of Social Science Coursework and Student Engagement with Emerging Technologies. *NanoEthics* 8:217–225.
<http://dx.doi.org/10.1007/s11569-014-0210-1>

BOOK REVIEWS AND OTHER

1. Hirsch, Jennifer, Kirk Jalbert, Lauren Keeler, Katie O’Connell, Daryl-Lynn Roberts and **Jessica Smith**. 2024. The crucial role of just process for equitable industrial decarbonization: An Action Research agenda for carbon management and other emerging technologies. Commissioned paper for National Academies of Sciences, Engineering and Medicine workshop, Developing and Assessing Ideas for Social and Behavioral Research to Speed Efficient and Equitable Industrial Decarbonization.
<https://www.nationalacademies.org/documents/embed/link/LF2255DA3DD1C41CoA42D3BEFo989ACAEC3053A6A9B/file/DA28720F10708576CEEDCBA5B6E1ED558E10BA76CB0A?noSaveAs=1>
 - Summary of proceedings: <https://nap.nationalacademies.org/catalog/27815/developing-and-assessing-ideas-for-social-and-behavioral-research-to-speed-efficient-and-equitable-industrial-decarbonization>
2. Krahenbuhl, Richard, Sigourney Burch, Jeffrey Shragge, and **Jessica Smith**, 2023. Geophysical and Remote Sensing Investigations at the Former Grand Junction Indian Boarding School, Grand Junction, Colorado.
3. **Smith, Jessica M.**, John Bradford, and Armando Gallegos. 2023. The Global Crux of the Energy Transition: Making Sure Everyone Benefits From the Coming Mining Boom. Real Clear Energy:
https://www.realclearenergy.org/articles/2023/02/19/the_global_crux_of_the_energy_transition_making_sure_everyone_benefits_from_the_coming_mining_boom_882436.html
 - Published in Spanish in Revista Minería (Peru): El quid de la cuestión en la transición energética global – Cómo garantizar que todos se beneficien del próximo boom minero: <https://www.revistamineria.com.pe/otros%20articulos/el-quid-de-la-cuestion-en-la-transicion-energetica-global:-como-garantizar-que-todos-se-beneficien-del-proximo-boom-minero>
4. **Smith, Jessica M.** 2022. Review of Daggett, Cara New. The Birth of Energy: Fossil Fuels, Thermodynamics, and the Politics of Work. (Duke University Press, 2019.) *Journal of the Royal Anthropological Institute* 28(1): 376-377.
<https://rai.onlinelibrary.wiley.com/doi/10.1111/1467-9655.13692>
5. **Smith, Jessica M.** 2022. The Everyday Ethics of Corporate Social Responsibility. *IEEE Technology and Society Magazine* 41(3): 96–97. <https://doi.org/10.1109/MTS.2022.3197118>

6. **Smith, Jessica M.**, Qin Zhu, Nicole Smith, and Carl Mitcham. 2022. Corporate Social Responsibility and Engineering Ethics. In *Encyclopedia of Business and Professional Ethics*, eds. D. C. Poff and A. C. Michalos. Springer. https://doi.org/10.1007/978-3-319-23514-1_1312-1
7. **Smith, Jessica.** 2021. How will we remember coal? SAPIENS Anthropology Magazine. <https://www.sapiens.org/culture/remembering-coal/>
 - Republication of **Smith, Jessica.** 2021. Coal, Care, and Climate Change: When Things Remember What People Forget. Committee for the Anthropology of Science, Technology, and Computing Platypus Blog. <http://blog.castac.org/2021/08/coal-care-and-climate-change-when-things-remember-what-people-forget/>
8. Smits, Kathleen and **Jessica Smith.** 2021. Review of Lyons, Kristina. Vital Decomposition: Soil Practitioners and Life Politics (Duke University Press, 2020). *Vadose Zone Journal* <https://doi.org/10.1002/vzj2.20116>
9. **Smith, Jessica.** 2017. Blind Spots of Liberal Righteousness. Cultural Anthropology Hot Spots series on “The Rise of Trumpism.” January 18, 2017. <https://culanth.org/fieldsights/1044-blind-spots-of-liberal-righteousness>
10. **Smith, Jessica.** 2016. Review of Jacka, Jerry. Alchemy in the Rain Forest: Politics, Ecology, and Resilience in a New Guinea Mining Area. (Duke University Press, 2015). *Journal of Anthropological Research* 72(4): 581-583. <https://doi.org/10.1086/689381>
11. **Smith, Jessica.** 2016. Climate Change Justice and Corporate Responsibility. *Journal of Energy & Natural Resources Law* 34(1): 70-74. <http://dx.doi.org/10.1080/02646811.2016.1120074>
12. **Rolston, Jessica Smith.** 2014. In the “War on Coal,” the industry can be its own worst enemy. LSE (London School of Economics) American Politics and Policy Blog Entry (25 Mar 2014). <http://eprints.lse.ac.uk/58782/>
13. **Rolston, Jessica Smith** and Colleen Kavanaugh***. 2014. Public Perceptions of Unconventional Gas Development in Colorado. Geological Society of America, Vancouver.
14. Mitcham, Carl and **Jessica Smith Rolston.** 2013. Energy Constraints. *Science and Engineering Ethics* 19(2): 313-319. <http://dx.doi.org/10.1007/s11948-013-9446-3>
15. **Rolston, Jessica Smith.** 2012. Review of Rajak, Dinah. In Good Company: An Anatomy of Corporate Social Responsibility (Stanford University Press, 2011). *American Ethnologist* 39 (4): 855-856. https://doi.org/10.1111/j.1548-1425.2012.01398_17.x
16. **Rolston, Jessica Smith.** 2011. Review of Moreton, Bethany. To Serve God and Wal-Mart: The Making of Christian Free Enterprise (Harvard University Press, 2009). *Contemporary Studies in Society and History* 53 (1): 225-226. <https://doi.org/10.1017/S0010417510000733>
17. **Smith, Jessica M.** 2008. Review of Ferry, Elizabeth Emma. Not Ours Alone: Patrimony, Value and Collectivity in Contemporary Mexico (Columbia University Press, 2005). *Anthropology of Work Review* 29 (2): 43-44. <https://doi.org/10.1111/j.1548-1417.2008.00014.x>

FELLOWSHIPS AND GRANTS

2025 – 2027	Andrew Carnegie Fellowship (\$200,000)
2024 – 2027	Department of Energy Award “CarbonSAFE Eos: Developing Commercial Sequestration for Southern Colorado.” (Co-PI, \$32.6 million)
2024 – 2025	Alfred P. Sloan Foundation Award “Assessing Sociotechnical Integration in Energy Technology Research and Development.” (PI, \$250,000)

2024 – 2027	Flexible Hybrid Solid Oxide Fuel Cell CHP System using Low-Carbon Fuels. (Co-PI, \$6 million)
2023	NEXUS Mines/NREL seed grant “Understanding the Sociotechnical Ecosystems of Energy Technology Research, Development, Demonstration, and Deployment” (Co-PI, \$10,000 Mines share)
2021 – 2027	National Science Foundation Grant 2130157 “Humanitarian Engineering and Science Ambassadors (HESA): Leveraging Funds of Knowledge for Student Success.” (Co-PI, \$1.5 million)
2017 - 2023	NSF Grant 1743749 “PIRE-Sustainable Communities & Gold Supply Chains: Integrating Responsible Engineering & Local Knowledge to Design, Implement & Evaluate Sustainable Artisanal Mining in Latin America.” (Co-PI, \$4 million)
2017 - 2021	NSF grant 1734044 “Investigating and Pinpointing the College Success Factors for First-Generation, Underrepresented College Students in Engineering.” (PI, \$300,000)
2015 - 2021	NSF Research Grant 1540298: “The Ethics of Extraction: Integrating Corporate Social Responsibility into Engineering Education” (PI, \$450,000)
2018	British Academy International Visiting Fellowship “Energy, engineering and ethics: Forging new interdisciplinary research visions and practices.” Funding to spend sabbatical at the Department of Anthropology, University of St. Andrews. (PI, \$19,500)
2016 - 2018	NSF grant 1632651 to host the workshop “STS Underground: Investigating the Technoscientific Worlds of Mining and Subterranean Extraction” at CSM (Co-PI, \$25,000)
2013 - 2016	NSF Research Grant 1354087: “Invisible Innovators: How the knowledge and experiences of low-income and first-generation students can contribute to US engineering problem definition and solving” (PI, \$200,844)
2013 -	Mines Undergraduate Research Fellowships to mentor student researchers (4)
2010	National Endowment for the Humanities Fellowship
2007	University of Michigan Rackham Predoctoral Fellowship
2007	Bernard Majewski Fellow, American Heritage Center, University of Wyoming
2007	University of Michigan Institute for Research on Women and Gender Community of Scholars Award (declined)
2006 - 2007	National Science Foundation Dissertation Improvement Grant 0612829
2006	PEO Foundation (Philanthropic Education Organization) Scholar Award
2005 - 2008	Alfred P. Sloan Center for the Ethnography of Everyday Life Pre-Doctoral Fellowship
2005 - 2008	Rackham Graduate School Research and Travel Grants (five total)
2004	National Science Foundation Graduate Research Fellowship honorable mention
2003 - 2005	Beinecke Scholar, The Sperry Fund
2003	University of Michigan Literature, Science and Arts Regents Fellow

HONORS AND AWARDS

- 2025 Andrew Carnegie Fellowship
- 2023 Dean's Fellow, Colorado School of Mines
- 2022 Kavli Fellow, National Academy of Sciences
- 2021 Distinguished Lecturer, American Society for Engineering Education national conference
- 2021 Outstanding Faculty Award (selected by students), Colorado School of Mines
- 2021 Best Paper Award from the Community Engagement Division of the American Society for Engineering Education
- 2020 Finalist, Best Paper Award from the Educational Research Methods Division of the American Society for Engineering Education
- 2019 Finalist, Best Paper Award from the Engineering Ethics Division of the American Society for Engineering Education
- 2018 Rudolph Joenk Award for Best Paper in *IEEE Transactions on Professional Communication*
- 2018 Western Social Science Association book prize for *Mining Coal and Undermining Gender*
- 2016 Exemplar in Engineering Ethics, National Academy of Engineering
- 2015 Martin Luther King Jr. Recognition Award, Colorado School of Mines
- 2015 Finalist, Society for the Anthropology of Work book prize for *Mining Coal and Undermining Gender*
- 2014 Finalist, Society for Economic Anthropology book prize for *Mining Coal and Undermining Gender*
- 2011 Selection to the Early Career Scholars Program of the Work and Family Researchers Network (formerly the Sloan Network)
- 2009 University of Michigan Distinguished Dissertation Award Nominee in Anthropology
- 2008 Association for Feminist Anthropology Sylvia Forman essay prize
- 2008 Phi Kappa Phi honors society
- 2005 St. Clair Drake Award, Society for the Anthropology of North America
- 2005 Best Graduate Student Paper, Central States Anthropological Society
- 2003 Phi Beta Kappa
- 2003 Spradley Research Award for Outstanding Scholarship in Anthropology (Macalester College)

INVITED LECTURES

1. Consent-Based Siting in the Context of Carbon Capture and Storage. 2025. Gordon Research Conference on CCUS, Ventura, California.
2. Coal inheritances in carbon capture futures: Comparing Wyoming and Colorado. 2025. University of Wyoming Department of Anthropology.
3. Social Acceptance, Social Justice, and Mining. 2024. National Academies of Sciences, Engineering and Medicine Climate Crossroads workshop.
4. Finding a place to belong at Mines. 2024. Wednesdays with WISEM (Women in Science, Engineering, and Math) keynote speaker, Colorado School of Mines.

5. From social acceptance to social acceptability of mining. 2023. ARPA-E MINER (Mining Innovations for Negative Emissions Resource Recovery) program launch, Austin, Texas.
6. Carbón como encadenamiento social y de género: rol de las mujeres y comunidades en la industria [Coal as a link with social themes and gender: The role of women and communities in the industry.] Cumbre Colombiana del Carbón 2023 [2023 Colombian Coal Congress], Barranquilla. In Spanish.
7. Mining and the energy transition: The importance of contextualized project planning, implementation and design. 2023. University of Oviedo (Spain) / European Institute of Innovation & Technology HEI Initiative (Innovation Capacity Building for Higher Education).
8. Engineering Studies and Engineering Ethics in the Energy Transition. 2023. Best Practices and Obstacles in Ethics Education for Technological and Scientific Challenges, EU ERASMUS+ Project, Athens, Greece.
9. Engineers and the ethical dimensions of corporate work. 2023. Engineering, Applied Science, and Technology speaker series, Weber State University (Utah).
10. Sustainability and the corporate self: An ethnography of engineers and scientists working in the mining and oil and gas industries. 2023. University of Utah Global Change and Sustainability Center seminar series.
11. We can aim higher than the social license to operate. 2022. National Academies of Science, Engineering, and Medicine, Committee on Earth Resources.
12. Energy ethics and participatory environmental management. 2022. Department of Civil and Environmental Engineering, Colorado School of Mines.
13. Corporate Selves: Personhood, Agency, and Ethics in Controversial Technoscientific Work. 2022. Online Ethics Center/University of Virginia STS.
14. Extracting Accountability. 2022. Humanities Collaborative and Critical Ecologies Research Group, University of South Carolina.
15. Integrating STS Research and Engineering Education: From Energy in the American West to ASGM in Latin America. 2022. University of Virginia Department of Engineering and Society.
16. Engineering Environmental Ethics in the Mining and Energy Industries. 2022. West Virginia University.
17. Social acceptance through participatory co-design. 2022. ARPA-E Fusion Programs Annual Meeting, San Francisco.
18. Mining as a Sociotechnical Activity, from Colorado to Colombia. 2022. Colorado School of Mines SME student chapter.
19. Engineering, social responsibility, and the competing accountabilities of corporate work: Lessons from the field and classroom. Distinguished lecture, 2021 American Society for Engineering Education.
20. Sustainable Resource Futures: From the ethic of material provisioning to a new ethic of relation. 2021. Center for Sustainable Separation of Metals, University of Pennsylvania.
21. Engineering that Matters. 2021. Society of Women Engineers, University of California – Berkeley. With Dot Walch***, Casey Gibson*, and Larkin Martini.*
22. The Environmental Virtues of “Planetary Managers”: Engineers and Corporate Accountability in the Energy Industries. 2021. Energy *In* Society Interdisciplinary Working Group, Calgary Institute for the Humanities, University of Calgary.
23. Engineers as Agents of Sustainability. 2021. XIII National Conference on Mining – CONAMIN, Peruvian Engineers’ Association.
24. Training the Next Generation of Socially Responsible Engineers. 2021. XIII National Conference on Mining – CONAMIN, Peruvian Engineers’ Association.
25. The Social License to Operate and Corporate Accountability. 2021. Kentucky Professional Engineers in Mining (KY-PEM) meeting, sponsored by the Central Appalachian Section of the Society of Mining Engineers, and the University of Kentucky Mining Engineering Department.

26. Engineering “Conscious Capitalism.” 2020. Department of Anthropology, University of Denver.
27. Consulting and new sources of corporate legitimacy. 2019. Seminar lecture, Department of Anthropology, London School of Economics.
28. Engineering the “Win-Win”: CSR in the Extractive Industries. 2019. Center for Science, Technology, and Society, Drexel University.
29. Listening as Leadership: Engineers in Community Development and the Extractive Industries. 2019. Troost Institute for Leadership Education in Engineering, University of Toronto. With Juan Lucena.
30. Inevitable Industry? Engineers and the Practice of Corporate Accountability. 2019. Rowan University.
31. The Crossfire of Corporate Responsibility: Engineers in the Mining & Oil and Gas Industries. 2018. Seminar lecture, Department of Social Anthropology, University of St Andrews.
32. The Death of a Red Lady and the Birth of a Business Case. 2018. Keynote lecture, Stagnation in a Changing World conference, University of St Andrews.
33. “The Biggest Challenges Are Always Social”: Anthropological Studies of Mining from Colorado to Colombia. 2018. Denver Mining Club.
34. Girls Rock! Women and Careers in Mining. 2018. National Mining Hall of Fame and Museum, Leadville, Colorado.
35. Invisible Innovators: How Low Income, First Generation Students Can Redefine Socially Responsible Engineering. 2018. Henry M. Rowan College of Engineering. With Juan Lucena.
36. Humanitarian Engineering: Putting People at the Center of Sustainability. 2018. Resources for Future Generations conference, Vancouver. With Juan Lucena.
37. Engineering “Conscious Capitalism”: Exploring the Environmental Ethics of Engineers in the Extractive Industries. 2018. Macalester College.
38. Translating Engineering for Sustainable Community Development into Professional Practice. Engineers Without Borders – Denver professional chapter, University of Denver. 2018. With Juan Lucena.
39. Socially and Environmentally Responsible Engineering: Past, Present, Future and Possibilities for Collaboration. 2018. Western State Colorado University. With Juan Lucena.
40. The Problem is the Problem: A Strategy for Making Social Justice and Social Responsibility Visible in Engineering Education. 2017. Invited keynote for the Engineering & Social Justice ASEE student chapter conference, Stanford University. With Juan Lucena and Jon Leydens.
41. La educación de los ingenieros ante los retos que enfrenta Colombia/Engineering Education to Address the Challenges Facing Colombia. 2017. Invited keynote for the 2017 Encuentro Internacional de Educación en Ingeniería, Asociación Colombiana de Facultades de Ingeniería/International Meeting of Engineering Education, Colombian Association of Engineering Faculty conference “Engineering Faculty and their Commitment with Society.” With Juan Lucena. [In Spanish]
42. How Can Social Justice and Social Responsibility Add Value to Engineering Research and Professional Practice? 2017. Re-Inventing the Nation's Urban Water Infrastructure (ReNUWIt), Colorado School of Mines simulcast with Stanford University, University of California at Berkeley and New Mexico State. With Jon Leydens.
43. Low Income Literati: Transforming Textual and Practical Funds of Knowledge into Engineering Capital. 2017 Invited lecture for the NSF-funded Literacies in Engineering Access and Participation conference, San Antonio, Texas. With Juan Lucena.
44. Misadventures in “Trump Country”: Ethnography, Empathy and Political Difference. 2017. Williams College.
45. Supreregulatory Agreements and Public Perceptions of Unconventional Energy Development in Colorado. 2017. Center for Science and Technology Policy Research, University of Colorado.

46. Responsible Mining & Mine Closure Activities. 2016. Mining & Metallurgical Society of America Denver section.
47. Ingeniería, Extractivas y el Post-conflicto: CTS al Servicio de la Justicia Social/Engineering, Extractives and the Post-Conflict: STS at the service of social justice. 2016. Closing remarks for the “Ingenuity, Science, Technology and Society: Dialogues and challenges in Colombia,” Engineering Faculty of the Universidad Nacional de Colombia. With Juan Lucena.
48. Inside the Belly of the Beast: How engineers transform Corporate Social Responsibility (CSR) for social justice. 2016. Invited lecture at California Polytechnic University. With Juan Lucena.
49. Memorandums of Understanding: Collaboration During Conflict. 2016. University of Denver Sturm College of Law. With Skylar Zilliox.
50. Policy Approaches to Achieving the Social License to Operate: Comparing Mining and Unconventional Energy Community Conflicts in the American West. 2016. Van Tuyl lecture, Department of Geology and Geological Engineering, Mines.
51. They Have Much to Contribute: Making Low-Income and First-Generation Students Visible and Valued at Mines. 2016. Colorado School of Mines. With Juan Lucena.
52. Undoing Gender in Macho Industries: Ethnographic Perspectives on Women, Men and Mining in Wyoming. 2015. Visiting Women Minority Lecturer/Scholar Series, Michigan Tech, Houghton, MI.
53. Converting the Funds of Knowledge of Low Income, First Generation Engineering Students into Economic, Social and Cultural Capital. 2015. Environmental Engineering Program, University of Colorado at Boulder. With Juan Lucena.
54. Strategies for Supporting Women in the Mining Workforce. 2015. Women in Mining group, Denver.
55. “How do I show them that I’m more than a person who can lift heavy things?” Connecting the Funds of Knowledge of Low Income, First Generation Students and Engineering Education. 2015. Department of Anthropology, Wayne State University, Detroit, MI.
56. Ethics in NanoScience. 2015. Renewable Energy Research Experience for Undergraduates summer program, Mines. With Corinne Packard.
57. Destabilizing the Macho World of Mining. 2014. Hennebach Program in the Humanities Lecture, Mines.
58. Integrating Women into Historically Masculine Industries: A Perspective from Extractive Industries. 2014. Renewable Energy Research Experience for Undergraduates summer program, Mines.
59. Women Miners of the Powder River Basin. 2013. Campbell County Rockpile Museum, Gillette, WY.
60. Gender and Workplace Diversity. 2013. Government Accountability Office, Denver, CO.
61. Intimacy and Ignorance in Energy Networks. 2013. University of Wyoming College of Education training for K-12 science teachers.
62. Mining and Corporate Social Responsibility. 2012. Hennebach Lecture, Mines.
63. Closing remarks, Shepard Symposium on Environmental Social Justice. 2010. University of Wyoming.
64. Advancements of Women in Western Coal Mining. 2009. Conference speech, Rocky Mountain Coal Mining Institute annual meeting, Aspen, Colo.
65. The Cowboy Spirit of the Clean Coal Campaign. 2009. Graduate Student Speaker Series, Department of Anthropology, University of Colorado at Boulder.
66. Kinship, Labor, and the Law: Women’s Engagement with Wyoming’s Coal Mining Industry. 2007. Majewski Lecture, American Heritage Center, University of Wyoming.

CONFERENCE PRESENTATIONS (since 2006)

1. **Smith, Jessica M.** and Vivian Underhill. 2024. "We're not doing this like an oil company:" The oil and gas inheritances within carbon-capture futures." American Anthropological Association, Tampa.
2. **Smith, Jessica M.** 2024. "Just right" regulation for corporate environmentalism: National policymaking through 1970s Colorado mining conflicts. American Society for Environmental History, Denver.
3. **Smith, Jessica M.** 2023. The Politics of Percentage: The politics of percentage: Informating justice in the US clean energy rush. Contested Transitions workshop, University of Lausanne (Switzerland).
4. **Smith, Jessica M.** 2023. Ghosts of industry past in the clean energy investment rush. Energy Ethics 2023, St Andrews, Scotland.
5. Gibson, Casey and **Jessica M. Smith.** 2022. Working on the Farm or in the Hole: Vertical Geopolitics of Rural Colombian Livelihoods. 4S, Cholula.
6. Rojas, Mateo, Juan Lucena, **Jessica Smith**, and Oscar Restrepo. 2022. Governing the Value of the Underground: Multidimensional Geopolitics of Processing Centers in Artisanal Gold Mining. 4S, Cholula.
7. **Smith, Jessica M.** 2021. The Power to Move: Transnational Corporations, Careers, and Contested Accountabilities. American Association of Geographers conference (virtual).
8. **Smith, Jessica.** 2021. The Social License to Operate and Corporate Accountability: Lessons from Engineers Working on High Conflict Projects. Society for Mining, Metallurgy & Exploration (SME) conference, Denver.
9. **Smith, Jessica** and Greg Rulifson. 2021. Beyond the Social License to Operate: Training Socially Responsible Engineers to Contend with Corporate Frameworks for Community Engagement. American Society for Engineering Education conference (virtual).
10. Rainey, Arielle*, Dina Verdín and **Jessica M. Smith.** 2021. Classroom Practices that Support Minoritized Engineering Students' Sense of Belonging. American Society for Engineering Education conference (virtual).
11. Rivera, Angelina***, **Jessica M. Smith**, Juan Lucena, Robin Bullock, Tom Phelan, and Kate Smits. 2021. Making the most of virtual community engagement for international projects during the COVID-19 pandemic. American Society for Engineering Education conference (virtual).
12. **Smith, Jessica**, Greg Rulifson, Courtney Stanton***, Carrie McClelland, Emily Sarver, Linda Battalora, Stephanie Claussen, Susan Peterson, Rennie Kaunda, and Elizabeth Holley. 2020. Counteracting the social responsibility slump? Assessing changes in student knowledge and attitudes in mining, petroleum, and electrical engineering. Proceedings of the American Society for Engineering Education (ASEE) conference (virtual).
13. Reddy, Elizabeth and **Jessica Smith.** 2020. Humanitarian Engineering and Science: Opening Space for Multiplicity. Society for Social Studies of Science (4S) virtual conference.
14. **Smith, Jessica.** 2019. Environmental ethics and extractivist logics. American Anthropological Association (AAA), Vancouver.
15. **Smith, Jessica.** 2019. Engineering Accountability in the Extractive Industries. 4S, New Orleans.
16. **Smith, Jessica** and Juan Lucena. 2019. Craft and Engineering: The Politics of Design for First Generation Engineering Students. Society for History of Technology, Milan.
17. **Smith, Jessica.** 2019. Beyond Philanthropy: Key Areas of Social Responsibility Practice for Engineers. Society for Mining, Metallurgy & Exploration (SME) conference, Denver.
18. **Smith, Jessica**, Greg Rulifson, Cassidy Grady***, Nicole Smith, Linda Battalora, Emily Sarver, Carrie McClelland, Rennie Kaunda, and Elizabeth Holley. 2019. Critical Approaches to CSR as a Strategy to Broaden Engineering Students' Views of Stakeholders. ASEE, Tampa.

19. Claussen, Stephanie and **Jessica Smith**. Incorporation of corporate social responsibility into problem-based learning in a semiconductor device course. 2019. ASEE, Tampa.
20. **Smith, Jessica** and Juan Lucena. 2018. Beyond Engineering Ethics: How to Integrate Social Justice and Social Responsibility in the Engineering Curriculum. Union College Engineering and Liberal Education Symposium.
21. **Smith, Jessica**. 2018. Learning from the past to chart the future: Early innovations in Corporate Social Responsibility at AMAX. Panel “The Benefits of Stakeholder Dialogue: Creating Shared Value in the Mining Sector” at SME, Minneapolis.
22. **Smith, Jessica**, Nicole Smith, Greg Rulifson, Carrie McClelland, Linda Battalora, Emily Sarver and Rennie Kaunda. 2018. Student Learning about Engineering and Corporate Social Responsibility: A Comparison across Engineering, Design and Liberal Arts Courses. ASEE, Salt Lake City.
23. **Smith, Jessica** and Juan Lucena. 2018. Social Responsibility in Engineering Education and Practice: Alignments, Mismatches and Future Directions. ASEE, Salt Lake City.
24. **Smith, Jessica**. 2018. Rethinking Rural Communities and Natural Resource Production: Rural Engineers. Western Social Science Association, San Antonio.
25. **Smith, Jessica**. 2017. Humanities, Engineering and Corporate Social Responsibility. Part of the panel “Humanities-STEM Integration in Undergraduate Education” at the National Humanities Conference, Boston.
26. Smith, Nicole and **Jessica Smith**. 2017. La minería artesanal y de pequeña escala: Definición y solución de problemas socio-técnicos entre ingenieros y comunidades. Taller La dimensión social en el desarrollo exitoso de proyectos mineros – Caso minería artesanal y a pequeña escala. Universidad Nacional de Colombia Sede Medellín.
27. **Smith, Jessica** and Juan Lucena. 2017. Justicia social en la educación del ingeniero para las industrias extractivas. VII Convención Cubana de Ciencias de la Tierra (GEOCIENCIAS 2017), “Las Geociencias al servicio de la Sociedad y el Desarrollo.” / Social Justice in engineering education for the extractive industries. VII Cuban Convention on the Earth (Geosciences 2017), “The Geosciences at the Service of Society and Development.” [In Spanish]
28. **Smith, Jessica**, Nicole Smith, CJ McClelland and Linda Battalora. 2017. Where are the people? Including social sustainability in the circular economy. Engineering Solutions for Sustainability: Materials and Resources 3, Denver. Panel: Educating the Future Engineer.
29. Smith, Nicole, **Jessica Smith**, Qin Zhu and Carl Mitcham. 2017. Deepening Engineering Ethics by Exploring the Corporate Dimensions of Social Responsibility. Association for Applied and Professional Ethics, Dallas.
30. Smith, Nicole, **Jessica Smith**, Benjamin Teschner, and Linda Battalora. 2017. Social Responsibility and Petroleum Engineering Education: Lessons from Field-Based Education. Society for Petroleum Engineers-Health Safety Security Environment and Social Responsibility conference – North America. New Orleans.
31. Smith, Nicole and **Jessica Smith**. 2017. CSR as an Engineering Competency for the Mining Industry. SME, Denver.
32. **Smith, Jessica**. 2016. Dirty Energy, Dirty Jobs? Ethical Entanglements in the US Coal Market Collapse. Energy Ethics conference, University of St Andrews (Scotland).
33. **Smith, Jessica**. 2016. Engineering the Underground to Settle the Surface: Sociotechnical Responsibility and Engineering in the Extractive Industries. 4S, Barcelona.
34. Lucena, Juan and **Jessica Smith**. 2016. Engineering By Other Means: How the marginalized knowledges of low-income engineers contribute to sustainable community development. 4S, Barcelona.
35. **Smith, Jessica** and Juan Lucena. 2016. How Humanitarian Engineering & Corporate Social Responsibility Shape Mining Engineering Education. Society of Mining Professions 4th Regional Meeting, Latin America. Facultad de Minas, Universidad Nacional de Colombia Sede Medellín.

36. **Smith, Jessica.** 2016. Boom to Bust, Ashes to (Coal) Dust: Living the Coal Collapse in Wyoming. AAA, Minneapolis.
37. **Smith, Jessica.** 2015. Understanding Competing Responsibilities for the panel Designing Professional Communication and Responsibilities: Beyond Professional Codes of Ethics in Engineering at the International Communication Association Nordic Regional Conference Responsible Communication and Governance conference, Copenhagen Business School.
38. **Smith, Jessica M.,** Sklyar Zilliox* and Austin Shaffer*. 2015. Technopolitical Trust: Memorandums of Understanding and Public Engagement with Natural Gas Development in Colorado. AAA, Denver.
39. **Smith, Jessica and Abe Tidwell.** 2015. Working for the I(man)ginaries: Labor, Energy and the "Good Society." Society for Social Studies of Science, Denver.
40. **Lucena, Juan and Jessica Smith.** 2015. Making Meaning, Doing Social Justice: The Emotional Roller Coaster of Integrating Corporate Social Responsibility in Engineering Education. 4S, Denver.
41. **Smith, Jessica and Juan Lucena.** 2015. Making the Funds of Knowledge of Low Income, First Generation Students Visible and Relevant to Engineering Education. ASEE, Seattle.
42. **Rolston, Jessica Smith.** 2014. Temporal Politics of Obligation and Bounds of Corporate Responsibility. Invited paper for the Rethinking Responsibilities Colloquium, Harvard University.
43. **Rolston, Jessica Smith** and Colleen Kavanaugh*. 2014. Public Perceptions of Unconventional Gas Development in Colorado. Geological Society of America, Vancouver.
44. **Lucena, Juan and Jessica Smith Rolston.** 2014. Invisible Innovators: How low-income students' agency, critical questioning, and funds of knowledge might connect engineering/design for development with social justice. Annual meeting of the Engineering for Social Justice and Peace conference, Buenos Aires, Argentina.
45. **Lucena, Juan and Jessica Smith Rolston.** 2014. Invisible Innovators: Exploring the links between low income students, social justice, and engineering/design for development. Engineering/Design for Development & Wellbeing / Agency / Justice. TU Delft, Netherlands.
46. **Rolston, Jessica Smith** and Juan Lucena. Engineering Education and the Politics of Invisible Knowledges. 2014. Annual meeting of the American Ethnological Society, Boston.
47. **Rolston, Jessica Smith.** 2014. Everyday Lives and Energy Transitions. Biennial meeting of the Society for Cultural Anthropology, Detroit.
48. **Rolston, Jessica Smith.** 2014. Energy Security and Sociotechnical Imaginaries in the Productive American West. Annual meeting of the Society for Economic Anthropology, Austin.
49. **Rolston, Jessica Smith,** Skylar Huzyk Zilliox*, Corinne Packard and Carl Mitcham. 2014. Nanoethics and Policy Education Effectiveness. Association for Practical and Professional Ethics, Tampa.
50. **Rolston, Jessica Smith.** 2013. Moral Economies of Market Collapses: Coal Mining and Precarity in the American West. AAA, Chicago.
51. **Rolston, Jessica Smith.** 2013. Ghost Mines: Experiences of Energy Market Downturns in Wyoming. Annual meeting of the Society for Applied Anthropology, Denver.
52. **Rolston, Jessica Smith.** 2013. From Mine Protestors to Mine Monitors: Corporate and NGO collaboration in the American West. International Symposium on Society and Resources, Estes Park.
53. **Rolston, Jessica Smith.** 2012. Mining Language: Gender Difference and Everyday Talk In Wyoming. AAA, San Francisco.
54. **Rolston, Jessica Smith.** 2012. Risk and Resource Materialities: Coal Extraction in Wyoming. Engaging Resources: New Anthropological Perspectives on Natural Resource Environments, Balsillie School of International Affairs, Waterloo, Canada.
55. **Rolston, Jessica Smith.** 2010. What Are Good Intentions Good For? Corporate Social Responsibility in the Mining Industry. AAA, New Orleans.

56. **Rolston, Jessica Smith.** 2010. Commodity Networks and the Cowboy Spirit of the Clean Coal Campaign. Society for the Anthropology of North America/Association of Black Anthropologists annual meeting, University of Colorado at Denver.
57. **Rolston, Jessica Smith.** 2010. Indigenous Communities, Mining Companies and Environmental Justice in Peru. Shepard Symposium on Social Justice, University of Wyoming.
58. **Smith, Jessica.** 2009. Rethinking Kinship and Gender Difference: Men and Women in a U.S. Mining Community. AAA, Philadelphia.
59. **Smith, Jessica.** 2008. "You Want Me to Sign What?" Implications of IRB Imaginations for Fieldwork Collaboration. AAA, San Francisco.
60. **Smith, Jessica.** 2008. Jumbled Talk, Confused Women? Language, Technology and the Gendering of Expertise in Wyoming Coal Mines. Michigangoan Graduate Student Conference in Linguistic Anthropology, University of Chicago.
61. **Smith, Jessica.** 2007. Microwave Outlaws and Other Workplace Pranksters: Joking and the Construction of Crew Camaraderie. American Ethnological Society annual meeting, Toronto, Canada.
62. **Smith, Jessica.** 2006. Making It Home Safely: Using Anthropology to Improve Coal Mine Safety Programs. Invited session at the AAA, San Jose.
63. **Smith, Jessica.** 2006. Ethical Economics: Audit Culture and the Generation of Value in the Mining Industry. Society for Cultural Anthropology annual meeting, Milwaukee.

TEACHING AWARDS

- 2021 Outstanding Faculty Award (selected by students), Colorado School of Mines
- 2016 Exemplar in Teaching Engineering Ethics, National Academy of Engineering (1 of 25 national programs/courses)
- 2012- Recognition by the following Mines student organizations for outstanding teaching: Women's basketball team; Society for Women Engineers; Pi Beta Phi; Sigma Phi Epsilon; Phi Gamma Delta
- 2008 Michigan Teaching Fellow, Center for Research on Learning and Teaching
- 2005 Outstanding Teaching Award, Panhellenic Association and Interfraternity Council. Nominated and selected by students representing 60 University of Michigan fraternities and sororities to receive one of two annual awards.
- 2005 Outstanding Graduate Student Instructor, Rackham Graduate School, departmental nomination.
- 2004 Outstanding Graduate Student Instructor, Department of Anthropology. Awarded by faculty based on student evaluations.

TEACHING AND STUDENT MENTORING

*Courses taught (*Colorado School of Mines)*

Corporate Social Responsibility*
 Community Based Research/Engineers Engaging Communities*
 Cultural Anthropology*
 Energy and Society*
 Explorations in the Modern World (Cultural Anthropology honors course)*
 Anthropology of Energy
 Cross-Cultural Communication
 Introduction to Anthropology
 Introduction to Sociology

Primary advisor

- 2 PhD students
- 3 postdoctoral fellows
- 2 international predoctoral fellows
- 6 Humanitarian Engineering & Science MS thesis students
- 2 Environmental Engineering MS thesis students
- 4 Humanitarian Engineering & Science MS non-thesis students
- 3 MS in International Political Economy of Resources students
- 4 Mines Undergraduate Research Fellowship students
- 4 ConocoPhillips Center for a Sustainable WE²ST undergraduate scholars
- 2 undergraduate student researchers at Mines REMERSEC summer REU

Service on graduate committees

- 24 PhD committees at Mines (Mechanical Engineering, Petroleum Engineering, Mining Engineering, Mineral and Energy Economics, Geophysics, Geological Engineering, Environmental Engineering, Hydrology, and Advanced Energy Systems)
- 1 Engineering Education PhD at Purdue University
- 1 Science, Technology & Society PhD at Rensselaer Polytechnic Institute
- 1 Anthropology PhD at University of Colorado – Boulder
- 1 Public Policy PhD at University of Colorado – Denver

External examiner

- 2 PhD dissertations in Department of Anthropology, London School of Economics
- 1 PhD dissertation in the Department of Anthropology, University of St. Andrews
- 1 PhD dissertation in the Facultad de Minas, Universidad Nacional de Colombia – Medellin [in Spanish]
- 1 PhD dissertation in the Division of History at KTH Royal Institute of Technology, Stockholm

PROFESSIONAL SERVICE

Service to the profession

- | | |
|--------|--|
| 2025 - | Member, National Academies' Committee on Geological and Geotechnical Engineering |
| 2024 - | Member, Women in Resource Management Expert Group, United Nations Economic Commission for Europe |
| 2023 - | Editor-in-Chief, <i>Engineering Studies</i> |
| 2023 - | Executive board, International Network for Engineering Studies |
| 2023 | Expert panel, Government Accountability Office study on critical minerals |
| 2023 | Committee Member, United States-Indonesia Frontiers of Science Symposium |
| 2022 - | Panel reviewer, Department of Energy |

2022 Chair, International Network for Engineering Studies

2021 - Editorial board member, *Energy Research & Social Science*

2021 - 2023 Editorial board member, *IEEE Transactions on Professional Communication*

2021 - Panel reviewer, National Science Foundation

2020 Panel reviewer, National Endowment for the Humanities

2020 - 2021 Vice-Chair, International Network for Engineering Studies

2018 - Co-Convener, STS Underground Network

2014 Panel reviewer, National Science Foundation

2013 Panel reviewer, National Endowment for the Humanities

2011 - 2017 Judge, Thompson Writing Awards, University of Colorado Center of the American West

2009 - 2015 Contributing editor, *Anthropology News*

2009 - 2015 Executive board member, Association for Feminist Anthropology

Conferences, workshops, and panels

2024 Panelist, Future Innovation Needs for Responsible Mining of Critical Minerals workshop, US Department of Energy and US Energy Association.

2024 Discussant, Green Hands, Black Jobs: Unpacking decarbonization through through green labour. European Social Anthropology Association annual meeting, Barcelona.

2024 Panelist, Sustainable Artisanal and Small-Scale Mining Impact Night, Hunt Institute for Engineering and Humanity, Southern Methodist University.

2023 Co-organizer and co-chair, Climate and Social Science panel, National Academy of Sciences US-Indonesia Kavli meeting, Balikpapan, Indonesia

2023 Panelist, Roundtable on Care and Harm for the 2023 Gordon Cain Conference, Science in Humanities, Humanities in Science: Embedded Connections, Science History Institute, Philadelphia.

2023 Panelist, United Nations Economic Commission for Europe's panel on Critical Raw Materials in Vulnerable Geographies: Impact on Women

2022 Discussant, *The Anthropology of Resource Extraction* book launch, The Nordic Africa Institute, Uppsala University (Sweden)

2022 Discussant, Unsettling Problems in Engineering, AAA Seattle

2022 Co-organizer, Reconfiguring engineering studies... [to what ends?] session, 4S Cholua

2022 Program committee, IEEE – ETHICS conference, Purdue University

2021 Co-organizer, International Network of Engineering Studies global virtual workshop, "Living in a Crisis Moment: Empirical Research, Social Action, and Mentorship in Engineering Studies"

- 2021 Program committee, IEEE - ETHICS conference, “Engineering and Corporate Social Responsibility”
- 2021 Organizer, “Engineering Education and CSR” panel, IEEE-ETHICS conference
- 2020 Panelist, US Department of State Energy Resource Governance Initiative and Payne Institute for Public Policy webinar, “The social license to operate: Transparency and growth of ESG [environment, society, governance] concerns in mining”
- 2020 Panelist, Mines Humanitarian Engineering webinar, “Nurturing global engineering education during the COVID-19 pandemic”
- 2020 Co-developer and Panelist, Society of Mining Professors webinar, “Integration of Sustainable Development into Mining Engineering Curricula”
- 2020 Co-organizer of three STS Underground panels at the (virtual) Society for Social Studies of Science (4S) conference.
- 2019 Co-organizer of three STS Underground panels at 4S, New Orleans.
- 2019 Co-lead of the invited workshop “Redefining Engineering Leadership: Listening as Social Justice and Social Responsibility,” University of Toronto with Juan Lucena.
- 2019 Co-lead of the invited workshop “Engineering as it should be: Strategies to integrate engineering and social justice,” Swansea University (UK) with Juan Lucena.
- 2019 Discussant, Engineering Entanglements panel, American Anthropological Association meeting, Vancouver
- 2018 - 2019 Moderator for the 1st Generation/Socioeconomic Status Leadership Roundtables, ASEE annual conferences, Salt Lake City and Tampa
- 2018 – 2019 Scientific committee for the Energy & Society in Transition conference held at Arizona State University in May 2019.
- 2018 Co-organizer of the “Forging new interdisciplinary research visions and practices” faculty panel and graduate student workshop, University of St Andrews.
- 2018 Co-organizer of the Project Based Learning workshop at the Colorado School of Mines, bringing WPI faculty to mentor engineering faculty to integrate social responsibility and social justice in their courses.
- 2017 Co-organizer of the NSF-funded “STS Underground: Exploring the Technoscientific Worlds of Mining and Subterranean Extraction” at Mines with Roopali Phadke and Abby Kinchy. <http://www.mines.edu/STSU>
- 2017 Co-organizer of the “Engineering for Social Justice and Social Responsibility: A Multi-space and Multi-strategy Approach for Transforming Engineering Education” workshop at ASEE Columbus. With Jon Leydens and Juan Lucena.
- 2017 Moderator for two sessions at the international workshop “Las dimensión social en el desarrollo exitoso de proyectos mineros – Caso minería artesanal y a pequeña escala.” Universidad Nacional de Colombia Sede Medellin. [In Spanish]
- 2016 Co-organizer of the international “Energy Ethics: Fragile Lives and Imagined Futures” conference at the University of St Andrews, funded by the British Academy, with Mette High. <http://energyethics.wp.st-andrews.ac.uk/>

- 2016 Co-organizer of the “What’s Missing in the Technical? Rendering the Social Visible by Integrating Social Justice Where It Matters Most—Engineering Problem Definition and Solution” workshop at ASEE New Orleans. With Jon Leydens and Juan Lucena.
- 2016 Steering committee, “Reasonable Expectations for Mine Closure” conference, Colorado School of Mines.
- 2016 Co-organizer of the panel “STS Underground: Ignorance and Invisibility in the Worlds of Mining and Underground Extraction,” 4S Barcelona.
- 2016 Co-organizer of the Engineering & Social Justice CSM faculty workshop.
- 2015 Discussant, Anthropology Underground: The Politics of Contemporary Resource Extraction conference, University of Michigan.
- 2015 Discussant, Corporate Expertise panel, AAA meeting, Denver.
- 2015 Discussant, Author-Meets Critic session for *Refining Expertise* (by Gwen Ottinger), winner of the Society for Social Studies of Science Rachel Carson Prize, 4S, Denver.
- 2015 Co-organizer of the international “Corporate Social Responsibility in Extractive Industries: Putting Communities First Makes Sense for Business, Learning and Social Change” conference at Colorado School of Mines.
- 2015 Co-organizer of the “Corporate Social Responsibility and Sustainable Development: Exploring Opportunities in Engineering Education” workshop, Engineering Education for Sustainable Development conference, Vancouver.
- 2015 Co-organizer of the panel “The Labor of Energy Transitions: Work, Technoscience, and the Lived Experience of Energy Producers,” 4S, Denver. With Abe Tidwell.
- 2015 Co-organizer, Engineering and Social Justice CSM faculty workshop.
- 2013 Co-organizer, “Energy and the American West” panel, Society for Applied Anthropology annual conference, Denver. With Jen Schneider.
- 2012 Co-organizer and chair, “Gender and Natural Resources: Global Perspectives on Extractive Economies and Communities” panel, AAA, San Francisco.

Institutional service

- 2023 - Member, University Promotion & Tenure committee
- 2022 Member, Director of Federal Relations, Research & Technology Transfer, search committee
- 2022 - 2024 Member, Research Integrity and Security Committee
- 2021 Member, Vice President for Research & Technology Transfer search committee
- 2019 - 2022 Director, Humanitarian Engineering and Science Graduate Program
- 2019 - 2024 Member, Mines Research Advisory Board
- 2019, 2024 Chair, Engineering, Design & Society Search Committee
- 2017 - Member, Engineering, Design & Society Promotion and Tenure Committee
- 2017 - 2018 President’s Council on Diversity
- 2016 - 2019 Co-Director, Humanitarian Engineering program

2014 - 2018	Leadership Team, ConocoPhillips Center for a Sustainable WE ² ST (Water-Energy Education, Science and Technology)
2015 – 2016	Chair, Liberal Arts and International Studies Search Committee
2015- 2017	Member, Colorado School of Mines Graduate Council
2012 - 2016	Member, Humanitarian Engineering Advisory Committee
2012 - 2016	Member, Energy Minor Curriculum Committee
2012- 2016	Member, Hennebach Advisory Committee (chair, Spring 2013)
2013 - 2015	Member, Colorado School of Mines Undergraduate Council
2013 - 2015	Member, Liberal Arts and International Studies Curriculum Committee

Occasional Reviewer

- Current Anthropology; American Ethnologist; American Anthropologist; Cultural Anthropology; Social Anthropology; Anthropological Quarterly; Journal of Material Culture; Economic Anthropology; Journal of Latin American and Caribbean Anthropology; Latin American and Caribbean Ethnic Studies
- Social Studies of Science; Science, Technology & Human Values; Engineering Studies; Science and Engineering Ethics; Energy Research & Social Science
- Journal of Engineering Education; Journal of Women and Minorities in Science and Engineering; International Journal of STEM Education; IEEE Transactions in Professional Communication
- Journal of Cleaner Production; Society & Natural Resources; Environmental Sociology; Extractive Industries and Society; Environmental Sociology; Antipode; Geoforum; Journal of Community Engagement and Scholarship
- Stanford University Press; Duke University Press; The MIT Press; Columbia University Press; University of California Press; Berghahn Books; Routledge; University of Kansas Press

PROFESSIONAL MEMBERSHIPS

Society for Social Studies of Science

American Anthropological Association

American Society for Engineering Education

International Network for Engineering Studies