

RAQUEL VELHO

Associate Professor, Science & Technology Studies
Rensselaer Polytechnic Institute | School of Humanities, Arts, and Social Sciences
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RESEARCH INTERESTS

Sociology of infrastructure • Disability studies • Science and Technology Studies • Standards and classification in governance • Big Science and the global South • Interdisciplinarity and collaboration

EDUCATION

2017	PhD, Science and Technology Studies — University College London, UK <i>Fixing the Gap: an investigation into wheelchair users' shaping of London public transport</i> Supervisors: Prof Brian Balmer and Dr Catherine Holloway
2013	MSc (with Distinction), Science, Technology, Medicine and Society — Imperial College London, UK
2012	BA (mention <i>assez bien</i>), Sociology — Université de Nantes, France (with semester abroad at Università degli Studi Roma Tre, Italy)

ACADEMIC APPOINTMENTS

2024–present	Associate Professor (with Tenure), Science & Technology Studies, Rensselaer Polytechnic Institute, Troy, NY
2017–2023	Assistant Professor (tenure-track), Science & Technology Studies, Rensselaer Polytechnic Institute, Troy, NY
2013–2017	Postgraduate Teaching Assistant, University College London, UK
2013	Research Assistant, Imperial College London & University College London, UK

LANGUAGES

Fluent: English, Portuguese, French
Conversational: Spanish, Italian

PUBLICATIONS

Citations: 600+ | h-index: 7 (Google Scholar)

Books

1. **Velho, Raquel.** *Hacking the Underground: Disability, Infrastructure, and London’s Public Transport System.* Seattle: University of Washington Press, 2023.

Peer-Reviewed Journal Articles

In press / forthcoming

1. **Velho, Raquel.** "When is infrastructure... invisible? Elaborating on a pivotal description of technoscience." In *Research Handbook on the Sociology of Science & Technology*, ed. Hauke Riesch, Neil Stephens, Sandra P. González-Santos. (Forthcoming.)
2. Zdrodowska, Magdalena, Miryang Kang, Ashley Shew, Robert Stock, **Raquel Velho**, and Bess Williamson. "Repairing, fixing, adjusting. On disability and technology." *Technology and Culture* (Forthcoming.)

Published (since joining Rensselaer, 2017–present)

1. **Velho, Raquel** and Michael Gastrow. "Science and Power In Situ: New Lenses for Understanding the Entanglements of Astronomy Clusters with Host Communities in Chile and South Africa." *Science, Technology and Society*, OnlineFirst, (2026).
2. **Velho, Raquel** and Sebastián Ureta. "Latin American Infrastructure Studies: The fragility of modernist projects." In *Latin American Breakthroughs in STS Theory*, ed. Noela Invernizzi and Leandro Medina, pp. 113–138, 2025.
3. Shannon N. Conley et al. [incl. **Raquel Velho**]. "STS and Critical Pedagogies: Provocations from an NSF-funded workshop." *Engaging Science, Technology, and Society* 10, no. 1–2 (2024).
4. **Velho, Raquel**, Michael Gastrow, Caroline Mason, Marina Ulguim, and Yoliswa Sikhosana. "What is the space for 'place' in social studies of astronomy?" *Minerva* 62, no. 4 (2024).
5. Sandes-Guimarães, Luisa and **Velho, Raquel**. "Interdisciplinary Research and Policy Impacts: Assessing the Significance of Knowledge Coproduction." *Research Evaluation* 31, no. 3 (2022): pp. 344–354.
6. **Velho, Raquel**. "'They're changing the network just by being there': reconsidering infrastructures through the frame of disability studies." *Disability Studies Quarterly* 41, no. 2 (2021).
7. **Velho, Raquel** and Ureta, Sebastián. "Fragile modernities: Latin American infrastructures between repair and ruination." *Tapuya—Latin American Science & Technology Studies* (2019): pp. 428–441.
8. **Velho, Raquel**. "Public transport accessibility for wheelchair users: A qualitative analysis of health and inclusion." *International Journal of Transport Science and Technology* 8, no. 2 (2019): pp. 103–115.
9. **Velho, Raquel**. "Infraestruturas de transportes e inclusão social... ou, como os cadeirantes se revoltam." *Tecnologia e Sociedade* 14, no. 32 (2018): pp. 138–155.

Published (prior to joining Rensselaer)

1. **Velho, Raquel**, Catherine Holloway, Andrew Symonds, and Brian Balmer. "The Effect of Transport Accessibility on the Social Inclusion of Wheelchair Users: A Mixed Method Analysis." *Social Inclusion* 4, no. 3 (2016): pp. 24–35.
2. Kostkova, Patty, et al. [incl. **Raquel Velho**]. "Who Owns The Data? Open Data for health care." *Frontiers in Public Health* 4 (2016).
3. **Velho, Raquel**. "Gerar (e gerir) expectativas: novas áreas de pesquisa nos estudos sociais da ciência." *Liinc em Revista* 10, no. 2 (2014): 665–73.

Book Reviews

1. **Velho, Raquel**. Review of *Risco, ambiente e saúde* by Gabriela di Giulio. *Critical Reviews on Latin American Research* 5, no. 1 (2016): pp. 32–34.

Non-Refereed and Invited Articles

1. **Velho, Raquel**. "Planning for an Accessible Future: Paths towards designing equity into our infrastructures." *Journal of Critical Infrastructure Policy* 5, no. 2 (2024): pp. 65–68. [Invited commentary.]

2. **Velho, Raquel.** “Arecibo telescope’s fall is indicative of global divide around funding science infrastructure.” *The Conversation*, 2020.
3. **Velho, Raquel.** “E isso te isola, porque o mundo fica cada vez menor...’: Acessibilidade em transporte público e inclusão social.” *Com Ciência* 175 (2016).

Edited Volumes and Special Issues

1. **Velho, Raquel** and Sebastián Ureta (eds.). Special issue: “Fragile Modernities: Latin American infrastructures between repair and ruination.” *Tapuya—Latin American Science, Technology, and Society*, 2019.
2. **Velho, Raquel** and Laura Kemmer (eds.). Special issue: “Science, Technology, Society—and the Americas?” *CROLAR—Critical Reviews on Latin American Research* 5, no. 1 (2016).

Public Scholarship

1. Podcast interview: *Peoples & Things*, episode 80 (2024). “Raquel Velho on Disability, Infrastructure, and London’s Public Transport System.”
2. Podcast interview: *People’s Science*, episode 6 (2020).
3. Radio interview: *Hudson Mohawk Magazine*, “Upstate Mixtape—Interview with Jammella Anderson and Raquel Velho” (2020).
4. Podcast interview: *Áudios de WhatsApp*, episode 4 “Processos Criativos” (2019).

GRANTS AND FELLOWSHIPS

Funded Grants (Active)

NSF Scholars Award — The Lifecycles of the Arecibo Observatory

Sponsor: National Science Foundation | Amount: \$57,827 | Role: PI | Start: September 2024

Funded Grants (Completed)

NEH Grant — Dangers and Opportunities of Technology: The Lifecycles of the Arecibo Observatory

Sponsor: National Endowment for the Humanities | Amount: \$63,274 | Role: PI | 2024 (cancelled April 2025 due to NEH funding cuts)

HASS FLASH Grant — Experiencing Infrastructures

Sponsor: HASS, Rensselaer | Amount: \$1,463 | Role: PI | AY 2022–23

Teaching and Learning Collaboratory Grant — Classroom as Laboratory

Sponsor: Rensselaer | Amount: \$15,000 | Role: Co-PI (with Brainard, Lokko, Sharifi) | AY 2019–20

CAPES Doctoral Fellowship — Between wheelchairs and engineers

Sponsor: Brazilian CAPES Foundation | Amount: Full doctoral grant | Role: PI | 2013–17

Grand Challenges Grant — How to get on (with) a bus

Sponsor: UCL Grand Challenges on Human Wellbeing | Amount: £2,500 | Role: PI | 2013

Pending Proposals

ART Track 2: GROW — NSF, \$6,000,000, Co-PI, proposed January 2026

Efficient and Equitable Dynamic Management of Material Convergence — NSF, \$2,000,000, Co-PI, proposed September 2024

Autonomous Freight Solutions for Equity and Safety in Rural and Tribal Communities — Department of Transportation, \$10,000,000 (matched), Co-PI, proposed April 2024

Earlier Grants and Bursaries

- 2016: UCL STS Travel Grant — £550 (4S Conference, Barcelona)
- 2015: 4S Conference Student Travel Grant — \$800 (Denver)
- 2015: STS Italia Scholarship — Full scholarship, 3rd STS Italia Summer School (Padova)
- 2014: UCL Postgraduate School Travel Grant — £450 (4S Conference, Buenos Aires)
- 2012: BSHS Bursary — £1,000 for Master's degree

HONORS AND AWARDS

- **2024** Rensselaer Trustees' Celebration of Faculty Achievement — recognized for promotion to Associate Professor with Tenure
- **2024** HASS Excellence in Curriculum Development Award, Rensselaer Polytechnic Institute
- **2023** Rensselaer Trustees' Celebration of Faculty Achievement — recognized for book publication, editorial board appointment, and Phalanx Honor Society
- **2023** Honorary Member, Phalanx Leadership Honor Society, Rensselaer Polytechnic Institute [only 153 faculty/staff inducted since 1912]
- **2020** HASS Exceptional Service Award, Rensselaer Polytechnic Institute
- **2019** Rensselaer Trustees' Celebration of Faculty Achievement — recognized for invited lectureship at UNICAMP, Brazil

TEACHING

Courses at Rensselaer Polytechnic Institute

Average instructor rating: 4.75/5 across all courses taught.

Undergraduate Course Focus

- **IHSS/INQR 1610 Design & Innovation Studio I** — Introductory design process course covering problem definition, concept ideation, and low-resolution prototyping. Primary instructor, taught most fall semesters, 2018–present. New course preparation.
- **STSS/STSO 4961 Infrastructures: Systems and Politics** — Advanced undergraduate seminar on the politics of infrastructure development, maintenance, and destruction. New course preparation.
- **STSS/STSO 4970 Design & Innovation Senior Project** — Capstone course for the Design, Innovation, and Society program. Redesigned with weekly deliverables and structured prototype presentations. Taught most spring semesters, 2018–present. Have therefore advised 60+ undergraduate student theses.

Graduate Course Focus

- **STSS/STSO 6961 Disability, Technology, and Society** — Graduate seminar on the intersections of disability studies and science & technology studies. Developed from scratch.
- **STSS/STSO 6961 Infrastructure Studies** — Graduate seminar on infrastructure as a sociological and political object. Developed from scratch.
- **STSS/STSO 6010 Concepts in STS** — Core introductory graduate course in STS theory. Revised with new thematic structure including “reading otherwise” exercises.
- **STSS 6960 Writing Practicum** — Graduate writing support seminar.
- **Advanced Research Methods** — In development, Spring 2026.

Courses at University College London (Teaching Assistant, 2013–2017)

- **HPSC 1004 Introduction to Science Policy** — Undergraduate; five semesters, 2014–2017.
- **HPSC 1007 Investigating Science and Society** — Undergraduate qualitative methods; Fall 2016.
- **HPSC 1010 Revealing Science** — Introductory STS undergraduate course; Fall 2013.

- **HPSC 3036 Governing Emerging Technologies** — Advanced undergraduate seminar; Fall 2014.

Curriculum and Program Development

- **Rensselaer-wide Honors Program:** Led design and delivery of proposal as undergraduate program director; currently moving through higher administration.
- **Environmental Design Minor:** New cross-school minor developed in collaboration with the School of Architecture.
- **Integrated Pathways:** Developed departmental and cross-cutting pathways for the HASS Core.
- **STSO 2100 Investigating Society:** Co-developed qualitative research methods survey course.
- **Design, Innovation, and Society Program Redesign:** Co-led program restructuring workshops resulting in scaffolded 3-course Studio sequence.

Graduate Student Supervision

Doctoral Dissertations — Chair

- **Venetia Palamari** — “Human genetic enhancement for space exploration: knowledge production, space colonization and the genetic cyborg in the context of space medicine.” PhD candidate, STS, RPI. May 2025–present.
- **Caroline Mason** — *The World Digital Library and the Politics and Promises of Knowledge Societies*. PhD in STS, RPI, 2024.

Doctoral Dissertations — Committee Member

- **Beck Corby** — *More than a third option: Methods and politics of quantifying gender-diverse populations*. PhD in STS, RPI, 2025.
- **Nishanth Kunnukattil Shaji** — *At the Interstices of Pain and Relief: People, Technology and Governance in a Palliative Care Social Movement in India*. PhD in STS, RPI, 2024.
- **Nathaniel “Bucky” Stanton** — *Arcadian Pasts and Futures: Making and Breaking a Lignite Coal Landscape at Megalopolis*. PhD in STS, RPI, 2023.
- **Yoehan Oh** — *Heterogenous Navigating Through Platform Expansionisms/Protectionisms: The Sociotechnical Construction of Naver, 1994–2019*. PhD in STS, RPI, 2023.
- **Luisa Veras de Sandes Guimarães** — *Os desafios da sociedade não têm fronteiras: Impacto da pesquisa interdisciplinar em políticas públicas*. PhD in Business and Management, University of São Paulo, 2020. [External member]
- **Leo Bachinger** — *Adaptation Governance in Rural Austria and New York*. PhD in STS, RPI, 2020.

Master's Theses — Committee Member

- **Marina Heredia** (Universidad de Buenos Aires) — *Usuarios, tecnologías y saberes: El implante coclear en personas sordas profundas*. Master's in Science and Technology Policy and Management, 2025.

Independent Studies Supervised

10+ independent studies (undergraduate and graduate), 2018–2024: topics including open-source assistive technologies, disability and design, infrastructures of Big Science, cyborg anthropology, and participatory design, among others.

SERVICE

Editorial Boards and Journal Service

- **2022–present:** Editorial Board, *Catalyst—Feminism, Theory, Technoscience*
- **2020–present:** Associate Editor, *Tapuya—Latin American Science, Technology and Society*
- **2020–present:** Editorial Board, *International Journal of Disability and Social Justice*
- **2018–present:** Editorial Board, *Alter—European Journal for Disability Research*

Peer Review

Peer reviewer for 25+ articles and book chapters since 2013, including for *Science, Technology & Human Values*; *Technology and Culture*; *Disability Studies Quarterly*; *Minerva*; *Engaging Science, Technology, and Society*; *Science as Culture*; *Research Evaluation*; *Children's Geographies*, and others. Research proposal reviewer for the Israeli Ministry of Science and Technology (2018).

University Service

- **Aug 2025–present:** Chair, STS Department Portfolio Exam Committee
- **Aug 2023–present:** Member, Institute-wide LGBTQ+ Taskforce
- **Aug 2021–June 2024:** Undergraduate Program Director, STS Department
- **Jan 2019–June 2024:** HASS Curriculum Committee member
- **Aug 2022–June 2023:** Departmental Graduate Committee member; Departmental Search Committee member (three searches)
- **Fall 2019–present:** Faculty Liaison, DIS/STS Alumni Network
- **Fall 2017–Fall 2024:** Faculty advisor, Rensselaer chapter of Design for America
- **2017–present:** Departmental Undergraduate Curriculum Committee member

Professional Service

- **2021–present:** Founder and organizer, *Cafézim/Cafecito* — semi-formal networking and mentorship group for Latinx scholars in the global North
- **2023–2024:** Member, Scientific Committee, XV Jornadas Latinoamericanas de Estudios Sociales de Ciencia y Tecnología (ESOCITE)
- **2019:** Track chair (Transportation), *Maintainers III* conference, Gallaudet University, Washington, D.C.

INVITED PRESENTATIONS

Selected Invited Lectures and Keynotes

- **2025, December** — Invited Speaker, Arecibo Science Advocacy Partnership. “The Arecibo Observatory: A Social and Political History.”
- **2025, November** — Invited Speaker, Universidad de Puerto Rico: Arecibo and Mayagüez. “A possibility to come back to the island: The Arecibo Observatory as a Puerto Rican institution?”
- **2024, July** — Invited Panelist, ICOHTEC/SHOT, Santiago de Chile. Presidential Plenary: “Repairing, fixing, healing: disability and technology.”
- **2021, November** — Invited Speaker, S&TS Colloquium, Cornell University. “‘I’m Invisible Still’: Rethinking Infrastructures with Disability Studies.”
- **2021, November** — Invited Speaker, STS Lunch Seminar, Tufts University (virtual).
- **2021, November** — Invited Speaker, STS Seminar Series, Virginia Tech (virtual).

- **2020**, February — Invited Speaker, STS Futures Symposium, York University, Canada.
- **2019**, October — Invited Speaker, In-Faux-Structure exhibit, Opalka Gallery, Albany.
- **2018**, August — Invited Lecturer, Seminar Series, Dept. of Scientific and Technological Policy, UNICAMP, Brazil.
- **2016**, June — Keynote Speaker, Accessibilité et Mobilité Urbaine, EHESS, Paris, France.

(Full list of invited presentations available upon request.)

Selected Conference Presentations

- **2025**, August — Society for Literature, Science, and the Arts. “Risks of Interdisciplinarity Roundtable.” (Virtual)
- **2025**, September — 4S Conference. Author’s Roundtable on Disability, Access, and Infrastructure (virtual participant); Discussant, “Site-making: How Science Materializes Research Interests in Place.”
- **2024**, March — Society for the Advancement of American Philosophy, Boston. “The Pragmatism in Infrastructures and its Consequences.” (with Erman Sozudogru, UCL)
- **2022**, December — 4S Conference, Cholula, Mexico. “Space Science Research Infrastructures In Situ.” (with Michael Gastrow)
- **2021**, October — 4S Conference (virtual). “Astroprospecting: Accounting for ‘Place’ in Space Science Exploration.”
- **2019**, September–November — 4S Conference, New Orleans; National Women’s Studies Association, San Francisco.
- **2018**, April — American Association of Geographers, New Orleans. “Beyond Access: what disability studies can teach us about transport and infrastructure.”
- **2017**, September — 4S Conference, Boston. “Mending the Gap.”

(Full conference list available upon request.)

PROFESSIONAL MEMBERSHIPS

- **2013–present**: Society for the Social Studies of Science (4S)
- **2016–present**: Association for Studies in Innovation, Science and Technology (AsSIST-UK)
- **2019–2020**: National Women’s Studies Association
- **2017–2018**: American Association of Geographers
- **2015–2018**: STS-Italia
- **2012–2014**: British Society for the History of Science

LEAVES AND SABBATICALS

January–December 2025: Sabbatical leave for research on the social and political history of the Arecibo Observatory. Funded through NEH and NSF grants.