Erin M. Scanlon (she/her)

Curriculum Vitae

University of Connecticut

Updated as of 04/02/2024

Contents

1 Curriculum Vitae

1.1 Contact Information

University of Connecticut, Avery Point
Department of Physics
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Groton, CT 06340
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1.2 Professional Appointments

- 2020 — Present, Assistant Professor in Residence, Department of Physics, University of Connecticut-Avery Point
- 2017 — 2020 Preeminent Postdoctoral Scholar, Department of Physics, University of Central Florida
- 2012 — 2017, Instructor, Department of Physics, Texas Lutheran University
- 2013 Lecturer, Department of Physics and Astronomy, Texas State University

1.3 Education

- Texas State University, Doctor of Philosophy in Developmental Education, 2017
  - Thesis: Introductory Physics Students' Physics and Mathematics Epistemologies
  - Advisor: Jodi Holschuh
- Georgia Institute of Technology, Master of Science in Physics, 2012
  - Advisor: Michael Schatz
- Michigan Technological University, Bachelor of Science in Physics, 2011
  - Minor: Mathematical Sciences

2 Grants

2.1 Summary

- Awarded $1,424,227 USD total as PI or Co-PI
- Awarded $1,314,430 USD in external funding

2.2 Awarded

Name	Funding Agency	Project Team	Timeframe	Amount
Collaborative Research: From Courses to Careers (C2C) - addressing ableism in physics through faculty-student partnerships	National Science Foundation - Improving Undergraduate STEM Education	Daryl McPadden (MSU-PI), Erin Scanlon (UConn-PI), Xian Wu (Co-PI), and Matthew Guthrie (Co-PI)	2024 - 2026	$720,018
PHYS 1050Q: The Physics of Movies	UConn's CCC+ Committee's New Course Grant	Erin Scanlon, Diego Valente (Co-PI), Deepak Sainju (Co-PI), Matthew Guthrie (Co-PI), Sylvanie Wallington (Co-PI)	2024-2025	$6,500
Collaborative research: Investigating video-based Graduate Teaching Assistant professional development to support Universal Design for Learning in chemistry instruction	National Science Foundation- Improving Undergraduate STEM Education	Erin Saitta (UCF-PI), Jacquelyn Chini (Co-PI), Erin Scanlon (UConn-PI)	2023-2026	$594,412
Investigating Experiences of Marginalized Physics Students in Group Work Settings	UConn College of Liberal Arts and Sciences Diversity, Equity, and Inclusion Grant	Matthew Guthrie (PI), Erin Scanlon (Co-PI), Xian Wu (Co-PI)	2022-2023	$8,000
Impacts of the Guide to Fostering Effective and Inclusive Group Work	UConn's Office of the Vice President of Research's Scholarship Facilitation Fund	Erin Scanlon (PI), Xian Wu (Co-PI), Matt Guthrie (Co-PI)	2022-2023	$2,000

Integrating Inclusive Teaching Practices in the Physics Labs at Avery Point	UConn's College of Liberal Arts and Sciences Course Improvement Grant	Erin Scanlon (PI)	2022	$30,009
Future of a Diverse STEM Community begins with Undergraduate Group Work	NASA CT Space Grant Consortium	Erin Scanlon (PI) Mona Peyravi (Recipient)	2022-2023	$5,000
Course Development Grant: PHYS 1010Q	UConn's General Education Oversight Committee	Erin Scanlon (PI), Matt Guthrie (Co-PI), Kenneth Perez (Co-PI)	2022	$7,500
Avery Point STEM Faculty Learning Community about Disability	UConn's College of Liberal Arts and Sciences Diversity, Equity, and Inclusion Grant	Erin Scanlon (PI), Michael Finiguerra (Co-PI), Jamie Kleinman (Co-PI)	2022	$8,000
Supporting Inclusive Group Work in Studio-Style Physics Courses	UConn's College of Liberal Arts and Sciences Scholarship of Teaching and Learning Grant	Erin Scanlon (Co-PI), Xian (Co-PI), Matt Guthrie (Senior Project Personnel)	2021-2022	$30,000
Women in STEM Scholars Grant	ADVANCE Florida Network	Erin Scanlon (Recipient)	2018	$900
Doctoral Research Support Fellowship	Texas State University	Erin Scanlon (PI)	2016	$4,288
Center for Teaching and Learning Pedagogy Grant	Texas Lutheran University	Erin Scanlon (PI) and Calvin Berggren (co-PI)	2016	$3,000
Professional Development Grant	Texas Lutheran University	Erin Scanlon (PI)	2014	$600
Instructional Development Grant	Texas Lutheran University	Erin Scanlon (PI)	2013	$2,000
Summer Research Grant	Texas Lutheran University	Erin Scanlon (PI)	2013	$2,000

2.3 Under Review

Name	Funding Agency	Project Team	Time Frame	Amount
Collaborative Research: Synthesizing Literature about Disability in Postsecondary STEM	National Science Foundation Workplace Equity for Persons with Disabilities in STEM and STEM Education	Erin Scanlon (PI) and Jacquelyn Chini (Co-PI)	2024 - 2026	$600,000
Collaborative Research: DIS-MANTLE: Disability In STEM: Measuring Ableism in Networks, Teaching, and Learning Environments	National Science Foundation Workplace Equity for Persons with Disabilities in STEM and STEM Education	Allison Lombardi (UConn-PI), Erin Scanlon (Co-PI), Emily Tarconish (UIUC-PI), and Carlyn Mueller (UW-PI)	2024 - 2026	$1,500,000

2.4 Unfunded

Name	Funding Agency	Project Team	Time Frame	Amount
Conducting a National Survey of STEM Instructors' Beliefs about and Use of Inclusive Teaching Strategies	Spencer Foundation - Small Research Grant	Erin Scanlon (PI), Allison Lomardi (Co-PI), Joseph Madaus (Co-PI), Nicole Krauss (Co-PI), Erin Rizzie (Co-PI), and Niluka Wasalathanthri(Co-PI)	2024 - 2026	Unfunded
Disability is Diversity: Investigating STEM Instructors' Views about Inclusive Teaching Strategies	UConn's Justice, Equity, Diversity, and Inclusion Research Initiative	Erin Scanlon (PI), Allison Lombarid (Co-PI), Joseph Madaus (Co-PI), Nicole Krauss (Co-PI), Niluka Wasalathanthri (Co-PI), Erin Rizzie (Co-PI)	2023	Unfunded
Collaborative Research: Creation of video lessons for GTA professional development designed to support inclusive instruction in postsecondary chemistry courses	National Science Foundation Improving Undergraduate STEM Education	Erin Scanlon (PI)	2023	Unfunded
Physics INCLUDeS (Physics Instructors' Norms, Conduct, and Logistics of Universal Design Strategies)	National Science Foundation Improving Undergraduate STEM Education	Erin Scanlon (PI), Jacquelyn Chini (co-PI)	2023	Unfunded
MASS-DPC (Measuring Access and Support for Students with Disabilities in Physics Courses)	National Science Foundation Improving Undergraduate STEM Education	Erin Scanlon (PI), Jacquelyn Chini (co-PI)	2023	Unfunded
Collaborative Research: Empowering faculty to improve accessibility and inclusivity in group-based physics courses	National Science Foundation Improving Undergraduate STEM Education	Xian Wu (PI), Erin Scanlon (Co-PI), Matthew Guthrie	2023	Unfunded

3 Teaching Experience

* indicates courses developed, † indicates studio-style courses, ‡ indicates semesters taught in the distance learning format

3.1 University of Connecticut

- PHYS 1010Q: Elements of Physics * — Sp21 ‡, Su21 ‡, F21, Sp22, F22, Sp23, F23, Sp24
- PHYS 1030Q: Physics of the Environment * — Sp23, Sp24
- PHYS 1201Q: General Physics — F20 ‡, Sp21 ‡, F21, F22, F23
- PHYS 1202Q: General Physics II — Sp21 ‡, Sp22, Su22, Sp23, Sp24
- PHYS 1401Q: General Physics with Calculus I — F21, F22, F23
- PHYS 1402Q: General Physics with Calculus II — Sp22
- PHYS 1502Q: Physics for Engineers II † — F20 ‡
- PHYS 5010: Independent Study — Sp23

3.2 Texas Lutheran University

- PHYS 141: General College Physics I * — F13, Su14, F14, F15, Sp16, Su16, F16
- PHYS 141-L: General College Physics I Lab * — F13, Su14, F14, Su15, Sp16, Su16, Sp17
- PHYS 142: General College Physics II * — Sp14, Su15, Sp16
- PHYS 142-L: General College Physics II Lab * — Sp14, Su15, Su16, F16
- PHYS 143-L: Physics of Modern World Issues Lab * — F15
- PHYS 179/144: Conceptual Physics * † — S14, Sp15. Sp16, Sp17
- PHYS 279: 20^{th} Century Physics * † — F13
- PHYS 279-L: 20^{th} Century Physics Lab * — F13
- PHYS 421: Senior Seminar — Sp14

3.3 Texas State University

- PHYS 1315: General Physics I — Sp13

4 Publications

(*graduate student author, **undergraduate student author)

4.1 Summary

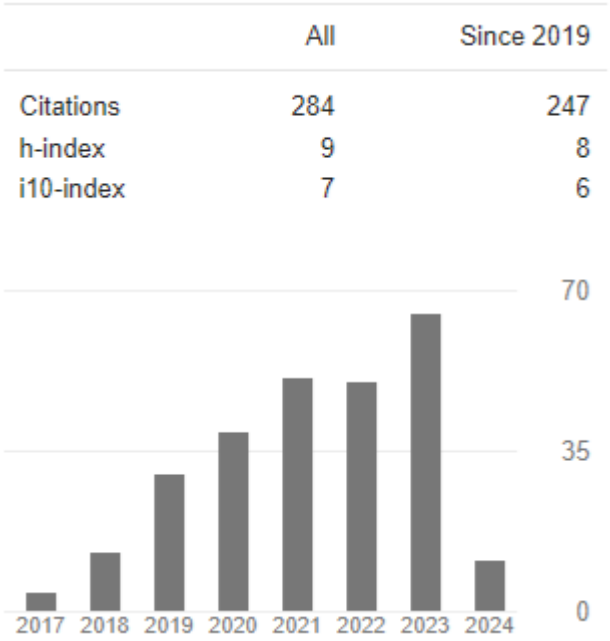

Figure 1: Google Scholar (Updated as of 04/02/2024)

4.2 Book Chatpers

2. Chini, J. J., & Scanlon, E. (2023). Teaching physics with disabled learners: A review of the literature. In *The International Handbook on Physics Education Research: Special Topics*, 1, 1. `https://doi.org/10.1063/9780735425514_001`

1. Scanlon, E., Tarconish, E., Lombardi, A., & Chini, J. J. (Under review). Supporting Disabled Learners Through the Planning for Variations Tool and Universal Design: Enabling, Mitigating, and Disabling Instructional Practices. *The New Accessibility in Higher Education*, Oxford University Press.

4.3 Refereed Journal Articles

13. McPadden, D., Sawtelle, V., Scanlon, E., Chini, J. J., **Chahal, H., **Levy, R. & **Reynolds, A. (2023). Planning for participants' varying needs and abilities in qualitative research. *Physical Review: Physics Education Research.* `https://journals.aps.org/prper/abstract/10.1103/PhysRevPhysEducRes.19.020143`

12. **Bustamante, C., Scanlon, E., & Chini, J. J. (2021). Supporting students with ADHD in introductory physics courses: 4 simple steps for instructors *The Physics Teacher*. https://aapt.scitation.org/doi/abs/10.1119/10.0006465

11. Scanlon, E., *Taylor, Z. W., & Chini, J. J. (2021). Physics webpages create barriers to participation for people with disabilities: Five steps to increase digital accessibility. *International Journal of STEM Education*. https://doi.org/10.1186/s40594-021-00282-3

10. *Lannan, A., Scanlon, E., & Chini, J. J. (2021). Resources for supporting students with and without disabilities in your physics courses. *The Physics Teacher*.https://aapt.scitation.org/doi/full/10.1119/10.0003662

9. *James, W., **Bustamante, C., **Lamons, K., Scanlon, E., & Chini, J. J. (2020). Disabling barriers experienced by students with ADHD in postsecondary introductory physics *Physical Review Physics Education Research*. https://journals.aps.org/prper/abstract/10.1103/PhysRevPhysEducRes.16.020111

8. Scanlon, E., *Zamarripa Roman, B., **Ibadlit, E., & Chini, J. J. (2019). A Method for Analyzing Instructors' Purposeful Modifications to Research-Based Instructional Strategies. *International Journal of STEM Education, 6* (12). https://doi.org/10.1186/s40594-019-0167-2

7. Scanlon, E., Legron-Rodriguez, T., *Schreffler, J., **Ibadlit, E., Vasquez, E., and Chini, J. (2018). Postsecondary chemistry curricula and universal design for learning: Planning for variations in learners' abilities, needs, and interests. *Chemistry Education Research and Practice, 19* (4). https://doi.org/10.1039/C8RP00095F

6. Martinez Ortiz, A., Rodriguez Amaya, L., Kawaguchi Warshauer, H., *Garcia Torres, S., Scanlon, E., & Pruett, M. (2018). They Choose to Attend Academic Summer Camps? A Mixed Methods Study Exploring the Impact of a NASA Academic Summer Pre-Engineering Camp On Middle School Students in a Latino Community. *Journal of Pre-College Engineering Education Research (J-PEER), 8* (2). https://doi.org/10.7771/2157-9288.1196

5. Scanlon, E., *Schreffler, J., *James, W., Vasquez, E., and Chini, J. (2018). Postsecondary physics curricula and universal design for learning: Planning for diverse learners. *Physical Review Physics Education Research, 14*. https://doi.org/10.1103/PhysRevPhysEducRes.14.020101

4. Rosen, R., Scanlon, E., & Smith, J. (2016). Aquatic science education pathway from headwaters to ocean is a model for place-based experiential learning for protecting and stewarding gulf states' freshwater and marine resources. *Gulf Coast Association of Geological Societies Transactions, 66*. http://archives.datapages.com/data/gcags/data/066/066001/475_gcags660475.htm

3. Holschuh, J., Scanlon, E., Shetron, T., & Caverly, D. (2014). Techtalk: Mobile apps for disciplinary literacy in science. *Journal of Developmental Education, 37*(3).

2. Caballero, M., Burk, J., Aiken, J., Douglass, S., Scanlon, E., Thomas, B., & Schatz, M. (2014). Integrating numerical computation into the modeling instruction curriculum. *The Physics Teacher, 52*. https://doi.org/10.1119/1.4849153

1. Sua, Y., Scanlon, E., Beaulieu, T., Bollen, V., & Lee, K. (2011) Intrinsic quantum correlations of weak coherent states for quantum communication. *Physical Review Letters A, 83*. https://doi.org/10.1103/PhysRevA.92.022124

4.4 Refereed Conference Proceedings:

21. *Willison, J., Scanlon, E., & Chini, J. J. (2023). Examining faculty choices while implementing the Next Gen PET curriculum through Revealed Causal Mapping, Proceedings of the Physics Education Research Conference. https://doi.org/10.1119/perc.2023.pr.Willison

20. *Oleynik, D., Doty, C., Scanlon, E., & Chini, J. J. (2023). Three axes for expressing disability models and experiences: The cause, the effect, and the ability/disability dichotomy. Proceedings of the Physics Education Research Conference. https://doi.org/10.1119/perc.2023.pr.Oleynik

19. Doty, C., *Oleynik, D., Scanlon, E., & Chini, J. J. (2023). Using clusters of models of disabilities to describe support for mentees with disabilities, Proceedings of the Physics Education Research Conference. https://doi.org/10.1119/perc.2023.pr.Doty

18. Wu, X., Guthrie, M., & Scanlon, E. (2023). Analyzing the dimensionality of the Energy and Momentum Conceptual Survey using Rasch Measurement Theory, Proceedings of the Physics Education Research Conference. https://doi.org/10.1119/perc.2023.pr.Wu

17. Scanlon, E., Syharat, C., Zaghi, A. E., Chrysochoou, M., & Gabriel. (2023). Engineering instructors' constructions of the universality or individuality of neurodiversity, 2023 ASEE Annual Conference & Exposition. https://216.185.13.174/43321y

16. *Oleynik, D. P., Scanlon, E., & Chini, J. J. (2022). The Epic and the Tragedy: Narratives of a Disabled Physics Student, Proceedings of the Physics Education Research Conference. doi:10.1119/perc.2022.pr.Oleynik https://www.per-central.org/items/detail.cfm?ID=16255

15. *Coffie, C. A., James, W., Scanlon, E.. & Chini, J. J. (2022). Identifying Academic Ableism: Case Study of a UDL-Learning Community Participant, Proceedings of the Physics Education Research Conference. doi:10.1119/perc.2022.pr.Coffie. https://www.per-central.org/items/detail.cfm?ID=16217

14. Chini, J. J. & Scanlon, E. (2022). Synthesizing disabled physics students' pathways to access: a call for more access talk Proceedings of the Physics Education Research Conference. doi:10.1119/perc.2022.pr.Chini. https://www.per-central.org/items/detail.cfm?ID=16216

13. Wu, Xian, Guthrie, M. W., **Peyravi, M., Scanlon, E. (2022). They're not buying what we're selling: comparing student-requested supports with instructional practice during group work. Proceedings of the Physics Education Research Conference. doi:10.1119/perc.2022.pr.Wu https://www.per-central.org/items/detail.cfm?ID=16283

12. Scanlon, E., Vignal, M., Wilcox, B.R. & Chini, J.J. (2021) Students' use of disability acommodations in emergency remote teaching, Proceedings of the Physics Education Research Conference. https://www.compadre.org/per/items/detail.cfm?ID=15785

11. Chini, J.J. Saitta, E.K.H., Kara, A. & Scanlon, E. (2021). Explicating universal design for learning-aligned instructional practices for postsecondary STEM, Proceedings of the Physics Education Research Conference. https://www.compadre.org/per/perc/conference.cfm?Y=2021

10. *Oleynik, D.P., Scanlon, E. & Chini, J.J. (2021). Examining physcists' perspectives of career viability and knowledge of impairment, Proceedings of the Physics Education Research Conference. https://www.compadre.org/per/items/detail.cfm?ID=15769

9. Scanlon, E., *Oleynik, D., & Chini, J. J. (2020). Practicing physicists' knowledge about disability: Development of the Disability and Physics Careers Survey (DPCS). *Proceedings of the Physics Education Research Conference.* https://doi.org/10.1119/perc.2020.pr.Scanlon

8. Scanlon, E., & Chini, J. J. (2019). Physics instructors' views about supporting learner variation: Modifying the Inclusive Teaching Strategies Inventory. *Proceedings of the Physics Education Research Conference*, Provo UT. https://doi.org/10.1119/perc.2019.pr.Scanlon

7. *James, W., **Lamons, K., **Spilka, R., **Bustamante, C., Scanlon, E., & Chini, J. J. (2019). Hidden walls: STEM course barriers identified by students with disabilities. *Proceedings of the Physics Education Research Conference*, Provo UT. https://doi.org/10.1119/perc.2019.pr.James

6. Scanlon, E., & Chini, J. J. (2018). Ability profiles: A framework for conceptualizing dimensions of ability. *Proceedings of the Physics Education Research Conference*, Washington DC. https://doi.org/10.1119/perc.2018.pr.Scanlon

5. Martinez Ortiz, A., Rodriguez Amaya, L., Kawaguchi Warshauer, H., *Garcia Torres, S., Scanlon, E., & Pruett, M. (2017). They Choose to Attend Academic Summer Camps? A Mixed Methods Study Exploring the Impact of a NASA Academic Summer Pre-Engineering Camp On Middle School Students in a Latino Community. *Proceedings of the American Society of Engineering Education Conference.* https://www.asee.org/public/conferences/78/papers/19230/view

4. Rosen, R., Scanlon, E., & Smith. J. (2017). Future water stewardship and fact-based water policy: An aquatic science education pathway model. *Proceedings of the XVIth IWRA World Water Congress.* https://iwra.org/member/index.php?page=286&abstract_id=3748

3. Rosen, R., Scanlon, E., and Smith, J. (2016). Aquatic science education pathway from headwaters to ocean is a model for place-based experiential learning for protecting and stewarding gulf states' freshwater and marine resources. *Proceedings of the Annual Gulf Coast Association of Geological Societies Convention.* http://archives.datapages.com/data/gcags/data/066/066001/475_gcags660475.htm

2. Scanlon, E. (2016). Introductory physics students' epistemological resources. *Physics Education Research Conference Proceedings, 304-307.* https://doi.org/10.1119/perc.2016.pr.072

1. Aiken, J., Caballero, M., Douglass, S., Burk, J., Scanlon, E., Thomas, B., & Schatz, M. (2012). Understanding student computational thinking with computational modeling. *Proceedings of the Physics Education Research Conference, USA, 1513.* https://doi.org/10.1063/1.4789648

4.5 Other Articles:

6. Scanlon, E. (2022) *How to conference: Recommendations for physics education conference attendees. Physics Education Research Consortium of Graduate Students (PERCoGS) Newsletter.* https://drive.google.com/file/d/1S6bC8S7k8iH3hEvmp5SXrZReFgwXu8p9/view

5. Scanlon, E. (2022). Toward a truly inclusive classrom: OPN talks to a physics professor whose research focuses on reimagining education to better include students with disabilities. *Optics and Photonics News.* https://www.optica-opn.org/home/articles/volume_33/february_2022/departments/toward_a_truly_inclusive_classroom/

4. Dounas-Frazer, D., Gillen, D., Herne, C. M., Howard, E., Lindell, R., McGrew, G. I., Mumford, J. R., Nguyen, N., Osadchuk, L. C., Principato Crane, J., Pugeda, T. M., Reeves, K., Scanlon, E., Spiecker, D., Xu, S. Z. (2022) Increase investment in accessible physics labs: A call to action for the physics education community *American Association of Physics Teachers Committee on Laboratories.* https://arxiv.org/ftp/arxiv/papers/2202/2202.00816.pdf

3. Chini, J. J., & Scanlon, E.. (2021) Designing for difference: Conceptualizing and planning for vartiations in learners' needs, abilities, and interests. *American Association for the Advancement of Science (AAAS) Improving Undergraduate STEM Education (IUSE) blog.* https://www.aaas-iuse.org/designing-for-difference/

2. Bertschinger, E., Brown, E., Esquivel, J., Lollie, M., Pando, J., Plisch, M., Potvin, G., Price, E., Ratcliff III, W., Scanlon, E., & Williams, L. (2021). Transforming the culture of physics. *APS News Back Page.* https://www.aps.org/publications/apsnews/202109/backpage.cfm

1. Scanlon, E. (2019). Physics education research and disability. *Physics Education Research Consortium of Graduate Students (PERCoGS) Newsletter.* https://drive.google.com/file/d/1Y675eNFi8odY5FJbZgVyVd6f6skdnLOz/view

5 Presentations

5.1 Keynote Addresses

1. Scanlon, E. (2023, June). *Preparing for the Variety of Learners' Needs, Abilities, and Interests with Universal Design for Learning.* Keynote address presented at the Facilitating Accessibility in STEM at Two Year Colleges conference.

5.2 Invited Talks

24. Scanlon, E., & Chini, J.J. (2024, Feb.). *Addressing Ableism in Physics Higher Education: Planning for Variation.* Plenary addess presented to the SEA Change collaboration.

23. Scanlon, E. (2022, Sept.). *Preparing for the Variety of Learners' Needs, Abilities, and Interests with Universal Design for Learning* . Invited talk presented at the Center for Teaching and Learning at Michigan Technological University.

22. Scanlon, E., (2022, May). *Preparing for the Variety of Learners' Needs, Abilities, and Interests with Universal Design for Learning* . Invited talk presented at University of Connecticut INCLUDE program.

21. Scanlon, E. (2021, October). *Preparing for learner variation with universal design for learning.* Invited talk presented at University of Texas-Austin's Physics Education Forum.

20. Scanlon, E. (2021, October). *Preparing for the Variety of Learners' Needs, Abilities, and Interests with Universal Design for Learning.* Invited talk presented in UConn's Grad 6000 teaching course.

19. Vignal, M., Wilcox, B.R., Scanlon, E., & Chini, J.J. (2021, August). *Student's Differential Experiences with Emergency Remote Teaching in Fall 2020.* Invited talk presented at the American Association of Physics Teachers conference, virtual conference.

18. Scanlon, E. (2021, June). *Preparing for learner variation with universal design for learning.* Invited talk presented at University of Pittsburgh's dBSERC.

17. Scanlon, E. (2021, March). *What is Discipline-Based Education Research (DBER)?.* Invited talk presented at the Women in Physics Club at University of Connecticut.

16. Scanlon, E. (2021, March). *Engaging PER in Universal Design for Learning and other interests.* Invited talk presented at Kansas State University's KSUPER group.

15. Nissen, J., & Scanlon, E. (2020, November). *Using QuantCrit to Investigate Equity in College Courses.* Invited talk presented at the 2020 International Learning Assistant Conference.

14. Scanlon, E., & Chini, J.J. (2020, June). *Physics and Disability: Supporting the Variety of Peoples' Needs, Abilities, and Interests.* Invited talk presented at Fermilab's Inclusion, Diversity, and Equality Seminar.

13. Scanlon, E. (2019, December). *Physics Instructors' Views about Supporting Learner Variation.* Invited talk presented at the Designing for Equity and Achievement for All Learners: A UDL-IRN Florida Regional Event.

12. Scanlon, E. (2019, October). *Instructors' Purposeful Modifications to SCALE-UP: A Look Across the Country.* Invited talk presented at the Texas Section of the American Association of Physics Teachers conference, Lubbock, TX.

11. Scanlon, E. (2019, October). *Physics and Disability: Supporting the Variety of Peoples' Needs, Abilities, and Interests.* Invited talk presented to Michigan State's PER seminar, East Lansing, MI.

10. Scanlon, E. (2019, October). *Physics and Disability: Supporting the Variety of Peoples' Needs, Abilities, and Interests.* Invited talk presented to University of Central Florida's DBER seminar, Orlando, FL.

9. Scanlon, E., Schreffler, J., James, W., Vasquez, E., & Chini, J. J. (2019, July). *What Are the Supports and Barriers in Introductory Physics Curricula for Students with Disabilities?* Invited talk presented at the American Association of Physics Teachers conference, Provo, UT.

8. Scanlon, E., Schreffler, J., Legron-Rodriquez, T., James, W., Ibadlit, E., Vasquez, E., & Chini, J. J. (2018, April.) *Postsecondary STEM Curricula: Preparing for Diverse Learners.* Invited talk presented at UCF's Physics Women Society Research Symposium, Orlando, FL.

7. Scanlon, E., Schreffler, J., Legron-Rodriquez, T., James, W., Ibadlit, E., Vasquez, E., & Chini, J. J (2018, February.) *Postsecondary STEM Curricula: Preparing for Diverse Learners.* Invited talk presented at FIU DBER group lunch, Miami, FL.

6. Scanlon, E. (2018, January.) *Physics Education Research.* Invited workshop presented at the Conference of Undergraduate Women in Physics, Jacksonville, FL.

5. Scanlon, E. (2017, April.) *How to Sell Yourself to Prospective Employers.* Invited talk presented at Texas State University's Developmental Education Brown Bag series, San Marcos, TX.

4. Scanlon, E. (2017, February.) *A Graduate Student's Thoughts on Conferences.* Invited talk presented at the University of Texas Physics Education Forum, Austin, TX.

3. Scanlon, E. (2016, November). *Epistemology: This, That, and the Other.* Invited talk presented at the University of Texas Molotov Seminar, Austin, TX.

2. Scanlon, E. (2016, September). *Epistemology: This, That, and the Other.* Invited talk presented at the University of Texas Physics Education Forum, Austin, TX.

1. Scanlon, E. (2013, April). *Family Physics Night: The Good, The Bad, and The Ugly.* Invited talk presented at the University of Texas Physics Education Forum, Austin, TX.

5.3 Invited Panels

4. Finiguerra, M., Kleinman, J., & Scanlon, E. (2022, November). *Accessibility in STEM using Universal Design.* Invited panel presented at UConn.

3. Brueggemann, B., Zaghi, A. E., & Scanlon, E. (2022, May). *Beyond accommodations: systems of accessibility and inclusion.* Invited panel at UConn CETL's May Days.

2. Scanlon, E., Principato Crane, J., Gillen, D., Osadchuck, L.C., Spiecker, D., & Dounas-Frazer, D. (2021, January). *Making Physics Labs More Accessible: Perspectives of Former Physical Science Students.* Invited panel at the American Association of Physics Teachers Conference, Virtual.

1. Scanlon, E. (2020, January.) *Professional Skills for Students.* Invited panel at the American Association of Physics Teachers Conference, Orlando, FL.

5.4 Contributed Talks

41. Scanlon, E., & Chini, J. J. (2023, Oct.). Teaching Physics with Disabled Learners: A Review of the Literature. Talk presented at the New England section meeting of the American Association of Physics Teachers (AAPT-NES) meeting, Storrs, CT.

40. Scanlon, E., & Chini, J. J. (2023, Oct.). Teaching Physics with Disabled Learners: A Review of the Literature. Talk presented at the Inclusion in Science Learning a New Direction, conference on disability and STEM (ISLAND) conference, Princteon, NJ.

39. Wu, X., Shao, H., Scanlon, E., & Guthrie, M. (2023, July). Item Response Theory Analysis of the Energy and Momentum Conceptual Survey in Calculus-Based Physics for Life Sciences. Talk presented at the American Association of Physics Teachers conference, Sacramento, CA.

38. Doty, C., Coffie, C., Oleynik, D., Scanlon, E., & Chini, J. (2023, July). Physics Instructor Perspective of Students Who Need Flexible Instructional Strategies. Talk presented at the American Association of Physics Teachers conference, Sacramento, CA.

37. McPadden, D., Sawtelle, V., Scanlon, E., Chini, J. J., Chahal, H., & Levy, R. (2023, July). Planning for Participants' Varying Needs and Abilities in Qualitative Research. Talk presented at the American Association of Physics Teachers conference, Sacramento, CA.

36. Oleynik, D., Doty, C., Scanlon, E., & Chini, J. J. (2023, July). Three axes for expressing disability models and experiences - The Cause, the Effect, and the Ability/Disability Dichotomy. Talk presented at the American Association of Physics Teachers conference, Sacramento, CA.

35. Willison, J., Scanlon, E., & Chini, J. J. (2023, July). Examining professors' choices while implementing the Next Gen PET curriculum through Revealed Causal Mapping. Talk presented at the American Association of Physics Teachers conference, Sacramento, CA.

34. Chini, J. J., Doty, C., & Scanlon, E. (2023, July). Applying a Three-Dimensional Framework of Disability Models to Postsecondary Physics Education. Talk presented at the American Association of Physics Teachers conference, Sacramento, CA.

33. Scanlon, E. (2023, July). Describing a Faculty Online Learning Community about Disability. Talk presented at the American Association of Physics Teachers conference, Sacramento, CA.

32. Wu, X., Peyravi, M., Guthrie, M. W., & Scanlon, E. (2022, July). Supporting physics instructors to facilitate effective and inclusive group work. Talk presented at the American Association of Physics Teachers conference, Grand Rapids, MI.

31. Peyravi, M., Wu, X., Guthrie, M., & Scanlon, E. (2022, July). Fostering Group Work in Studio Physics: Developing an Instructor Guide. Talk presented at the American Association of Physics Teachers conference, Grand Rapids, MI.

30. Chini, J. J. & Scanlon, E. (2022, July). Modeling Pathways to Access in Physics Learning and Research Environments. Talk presented at the American Association of Physics Teachers conference, Grant Rapids, MI.

29. Willison, J., James, W., Scanlon, E., & Chini, J.J. (2022, July). Causal mapping analysis of Universal Design for Learning-aligned instructional changes. Talk presented at the American Association of Physics Teachers conference, Grant Rapids, MI.

28. Coffie, C., James, W., Scanlon, E., & Chini, J. J. (2022, July). Identifying Academic Ableism: Case Study of a UDL-Learning Community participan.Talk presented at the American Association of Physics Teachers conference, Grant Rapids, MI.

27. Oleynik, D., Scanlon, E., & Chini, J. J. (2022, July). The Epic and the Tragedy: Narratives of a Disabled Physics Student. Talk presented at the American Association of Physics Teachers conference, Grant Rapids, MI.

26. Scanlon, E., Wu, X., & Guthrie, M. (2022, January). *Fostering effective and inclusive group work*. Invited talk presented at UConn's Department of Physics.

25. Oleynik, D., Scanlon, E., & Chini, J.J. (2021, August). *Examining Physicists' Perspectives of Career Viability and Knowledge of Impairment.* Talk presented at the American Association of Physics Teachers conference, virtual meeting.

24. Scanlon, E., Vignal, M., Chini, J.J., & Wilcox, B.R. (2021, August). *Students' Use of Disability Accommodations in Emergency Remote Teaching.* Talk presented at the American Association of Physics Teachers conference, virtual meeting.

23. Chini, J.J., Scanlon, E., James, W.D., & Cartagena, S. (2021, August). *The Universal Design for Learning Instructional Practices Observation Protocol (UDL-IPOP).* Talk presented at the American Association of Physics Teachers conference, virtual meeting.

22. Wu, X., Guthrie, M., & Scanlon, E. (2021, August). *Improving group work in studio-style physics courses.*Talk presented at the American Association of Physics Teachers conference, virtual meeting.

21. Coffie, C., Scanlon, E., & Chini, J. J. (2021, August) *Disciplinary tensions in applying universal design for learning to postsecondary STEM.* Talk presented at the American Association of Physics Teachers conference, virtual meeting.

20. Oleynik, D., Scanlon, E., & Chini, J.J. (2021, January). *Variations in practicing physicists' beliefs about inclusive teaching strategies.* Talk presented at the American Association of Physics Teachers conference, virtual meeting.

19. Scanlon, E., & Chini, J.J. (2020, July) *Practicing Physicists' Knowledge about Disability.* Talk presented at the American Association of Physics Teachers conference, virtual meeting.

18. Oleynik, D., Scanlon, E., & Chini, J.J. (2020, July). *Comparing Attitudes of Students and Faculty About Inclusive Teaching Practices.* Talk presented at the American Association of Physics Teachers conference, virtual meeting.

17. Scanlon, E., Ibadlit, E., Carolus, S., & Chini, J. J. (2020, January) *Instructors' Purposeful Modifications to Group Work: The Case of SCALE-UP at Nine Institutions.* Talk presented at the American Association of Physics Teachers conference, Orlando, FL.

16. Chini, J. J., & Scanlon, E. (2019, July). *Exploring assumptions of dis/ability in physics education.* Symposium talk presented at Physics Education Research Conference, Provo, UT.

15. Scanlon, E., Taylor, Z., & Chini, J. J. (2019, July). *Accessibility Analyses Demonstrate Physics Websites Create Barriers to Participation.* Talk presented at the American Association of Physics Teachers conference, Provo, UT.

14. Scanlon, E., & Chini, J. J. (2019, July). *Postsecondary STEM curricula: Preparing for diverse learners.* Talk presented at the Association on Higher Education And Disability (AHEAD) conference, Boston, MA.

13. Chini, J. J., James, W., Schreffler, J., Vasquez E., & Scanlon, E. (2019, July). *Inclusive teaching strategies can increase accessibility in physics education.* Panel presented at the American Association of Physics Teachers conference, Provo, UT.

12. Scanlon, E., & Chini, J. J. (2018, November). *Ability profiles: Preparing for variation in physics learners' needs, abilities, and interests.* Talk presented at the Discipline-Based Educational Research Seminar, Orlando, FL.

11. Chini, J. J., Scanlon, E., James, W., Schreffler, J., & Vasquez, E. (2018, August.) *Using Universal Design for Learning to Prepare for Learner Variation in Postsecondary Physics.* Talk presented at the American Association of Physics Teachers Conference, Washington DC.

10. Scanlon, E., James, W., Schreffler, J., Vasquez, E., & Chini, J. J. (2018, August.) *Investigation of Introductory Physics Curricula Through an Accessibility Lens.* Talk presented at the American Association of Physics Teachers Conference, Washington DC.

9. Chini, J. J., Scanlon, E., Wilcox, M., Klinger, N., & Von Korff, J. (2018, Jan.) *Variations in introductory studio physics across institutions.* Talk presented at the American Association of Physics Teachers Winter Meeting, San Diego, CA.

8. Scanlon, E. (2017, October.) *Introductory Physics Students' Physics and Mathematics Epistemologies.* Talk presented at the Discipline-Based Educational Research Seminar, Orlando, FL.

7. Scanlon, E. (2017, July.) *Epistemological Resources and Sign Usage.* Talk presented at the Physics Education Research Conference, Cincinnati, OH.

6. Scanlon, E. (2017, July.) *Introductory Physics Students' Mathematics and Physics Epistemological Resources.* Talk presented at the American Association of Physics Teachers Conference, Cincinnati, OH.

5. Scanlon, E. (2017, May.) *Introductory Physics Students' Epistemological Rosurces and Usage Patterns.* Talk presented at the International Congress on Qualitative Inquiry, Champaign, IL.

4. Scanlon, E. (2017, March.) *Introductory Physics Students' Epistemological Resources - Group Differences.* Talk presented at the Texas Section of the American Association of Physics Teachers Conferences, San Antonio, TX.

3. Scanlon, E. (2016, November). *Introductory Physics Students' Epistemological Resources.* Talk presented at the International Research Conference, San Marcos, TX.

2. Acee, T., Flaggs, D., Hoang, T., Scanlon, E., & VanderLind, R. (2016, April.) *Value Interventions With Writing and Messages Facilitate Interest and Performance in Undergraduate Physics*. Roundtable session presented at the American Educational Research Association National Conference, Washington, D.C.

1. Scanlon, E. (2015, March). *What is Epistemology and Why Should You Care?*. Talk presented at the meeting of the Texas Section of the American Association of Physics Teachers, the American Physics Society, and the Society of Physics Students, Baytown, TX.

5.5 Workshops

6. Scanlon, E., Wu, X., & Guthrie, M. (2022, August). *Fostering effective and inclusive group work*. Invited talk presented at UConn's Center for Excellence in Teaching and Learning.

5. Scanlon, E., Wu, X., & Guthrie, M. (2021, December). *Fostering effective and inclusive group work*. Invited talk presented at UConn's Center for Excellence in Teaching and Learning.

4. Chini, J. J., Oleynik, D., & Scanlon, E. (2021, August). *Doing physics education research inclusively: Designing for variation in participants' needs, abilities, and interests.* Workshop presented at the Physics Education Research Conference.

3. Scanlon, E. (2021, July). *Preparing for the Variety of Learners' Needs, Abilities, and Interests with Universal Design for Learning.* Workshop presented at the Center for Excellence in Teaching and Learning at the University of Connecticut.

2. Scanlon, E. (2021, May). *Preparing for the Variety of Learners' Needs, Abilities, and Interests with Universal Design for Learning.* Workshop presented at the Center for Excellence in Teaching and Learning at the University of Connecticut.

1. Chini, J. J., Scanlon, E., & James, W. (2019, July) *Using universal design for learning to prepare for variation in physics learners' needs, abilities and interests.* Workshop presented at the meeting of the American Association of Physics Teachers Conference, Provo, UT.

6 Service

6.1 University Committees

- Chair of Avery Point Diversity, Equity, and Inclusion Committee, 2021 - present
- Member of the Common Curriculum Committee (CCC+), 2023 - present
- Faculty Navigator for the Common Curriculum Committee (CCC+), 2023 - present

6.2 Service to the University

- Hosted a Faculty Online Learning Community (FOLC) for STEM faculty at Avery Point about disability, 2021.
- Hosted a Faculty Online Learning Community (FOLC) for faculty within the College of Liberal Arts and Sciences about disability, 2023.
- Hosted a Faculty Online Learning Community (FOLC) for physics faculty about supporting graduate students from marginalized race/ethnic groups, 2024.

6.3 External Service

- Founding Steering Committee member of American Physical Society's Inclusion Diversity, and Equity Alliance (APS-IDEA), 2019-2022.
- Chair of Working Group on Conference Accessibility (WGCA), 2019-2023
- Co-Chair of the Working Group on Conference Accessibility (WGCA), 2023 - present
- Physics Education Research Leadership and Organizing Council, 2019-2022

6.4 Ad Hoc Service

- UConn Hiring Search Committee
  - Hartford Campus APiR for Department of Physics - 2022
  - Stamford Campus APiR for Department of Physics - 2022
- Journal Referee
  - National Science Foundation Review Panels
  - Physical Review: Physics Education Research
  - Proceedings of the Physics Education Research Conference
  - Chemistry Education Research and Practice
  - International Journal of STEM Education
  - The Physics Teacher

6.5 Outreach

- Presentation about diversity, equity, and inclusion at the Mansfield Cub Scouts meeting, 2023.
- Panelist at E.O. Smith's Discourse and Deliberation event, 2023.
- Organizer of Family Physics Night, 2013-2016.

7 Awards and Honors

- 2021 PERC Proceedings Notable Paper (awarded to 4 out of 77 manuscripts)
- 2020 University of Connecticut Provost's Letter of Recognition for Teaching Excellence
- 2020 PERC Proceedings Notable Paper (awarded to 4 out of 99 manuscripts)
- 2018 PERC Proceedings Notable Paper (awarded to 3 out of 113 manuscripts)
- 2018 Physical Review: Physics Education Research Editor's Suggestion Paper
- 2017 Preeminent Postdoctoral Program (P3) award
- 2017 Honorable Mention Best Paper for the ASEE Annual Conference and Exposition
- 2018-2019 Texas State University Outstanding Dissertation Award in the Social Sciences
- 2010 Michigan Technological University's Woman of Promise Award
- 2009 Michigan Tech Physics Department Outstanding Teaching Assistant of the Year

8 Supervised Personnel

8.1 Dissertation committees

- Daniel Oleynik (UCF, 2023 -)
- Liam McDermott (Rutgers, 2024 -)

8.2 PhD students on temporary projects

- Jasmine Byard (UCF, 2019)

8.3 Undergraduate students supervised on research

- Rica Moellering (TLU, 2014)
- Alyssa Johnson (UCF, 2017-2018)
- Colin Lee (UCF, 2018)
- Steven Carolus (UCF, 2018-2019)
- Caroline Bustamante (UCF, 2018-2019)
- Elijah Ibadlit (UCF, 2017-2020)
- Mona Peyravi (UConn, 2021-2022)

9 Brief Bio

Dr. Erin Scanlon (she/her) is an Assistant Professor in Residence at the University of Connecticut-Avery Point. She teaches introductory physics courses as well as she conducts physics education research focusing on moving the physics community toward being more diverse, equitable, inclusive, and socially just. Her service work focuses on higher education policy and supporting physics education professional organizations. Dr. Scanlon enjoys singing and spending time at the beach.