Curriculum Vita
Michael "Bodhi" Rogers, PhD, RPA

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Professional Experience

Aug-19-Present	Professor of Physics, University of Colorado Denver, Denver, CO 80204
Aug-15-Aug-19	Professor of Physics and Astronomy, Ithaca College. Ithaca, NY 14850
Aug-09-Aug-15	Associate Professor of Physics, Ithaca College. Ithaca, NY 14850
Aug-03-Aug-09	Assistant Professor of Physics, Ithaca College. Ithaca, NY 14850
Sep-09-Aug-19	Associated Faculty, Anthropology Program, Cornell University, Ithaca, NY 14850

Education

Jun-03	Ph.D. in Physics, Oregon State University, Corvallis, OR. *Effect of iron redistribution in soils on cesium magnetometer surveys at the Oregon State University research dairy.*
Jun-01	M.A. Interdisciplinary Studies with a focus in Archaeology, Oregon State University, Corvallis, OR. *Detection of burials at the Confederated Tribes of Siletz Indians historic period cemetery, Oregon: A comparison of ground-based remote sensing methods.*
Jun-99	M.S. in Physics, Oregon State University, Corvallis, OR.
May-94	B.A. in Physics (major), Mathematics (major), Applied Computers (minor), and Anthropology (minor), SUNY at Geneseo, Geneseo, NY.

Professional Certifications

2023-Present	FAA Remote Pilot, License 4828822
2016-Present	Registered Professional Archaeologist, License 39722070

Professional Positions Held

2020-Present	Zone 14 Councilor, Society of Physics Students
2019-Present	Chair, Department of Physics, University of Colorado Denver
2019-Present	Faculty Advisor, CU Denver Chapter, Society of Physics Students
2016-2019	Director, Ithaca College IC3D-Lab for design, ideation, and 3D printing & scanning
2014-2019	Zone 2 Councilor, Society of Physics Students
2013-2019	Coordinator, Ithaca College Science Teaching Program
2013-2015	Chair, New York State Section, American Physical Society
2011-2013	Vice-Chair, New York State Section, American Physical Society
2007-2017	Vice-President, Finger Lakes Chapter, New York State Archaeological Association
2003-2019	Faculty Advisor, Ithaca College Chapter, Society of Physics Students
2005-2019	Executive Committee, New York State Section, American Physical Society
2008-2012	Co-Director, Kalavosos and Maroni Built Environments Project
2008-2019	Co-Director, White Springs Native American Village Site Project
2007-2010	Faculty Trustee, Ithaca College Board of Trustees
2006-2010	School of Humanities and Sciences Faculty Senate (Vice President 2009-10, Treasurer 2008-09. Executive Committee Member 2006-10)

Leadership and Assessment Experience

2023—Present Member of Bachelor of Applied Science Working Group

- Identify barriers for Associates of Applied Science recipients earning a BA or BS in 60 credits.
- Create new program proposal materials.
- Assess and adjust program as students enter the new major.

2023—Present Member of Program Viability and Curricular Innovation Working Group

- Collaborate with a talented and diverse team to develop recommendations for a clear, data-informed, and transparent set of processes and protocols for the early ongoing detection and required realignment of academic programs to current workforce needs and learner demand.

2024 Delegate, Association for Preservation Technology International Summit on Digital Guidelines

- Discussion of current and future state of digital preservation technology.
- Outline of guidelines to practitioners

2020—2021 Co-Chair, Educate for the Future Strategic Planning Vision Team, University of Colorado Denver

- Dean Rebecca Kantor and I successfully led a team of 17 talented faculty and staff in producing a recommendations report for Chancellor Marks

2019—Present Chair, Department of Physics, University of Colorado Denver

- Navigated separation of the four-decades-long shared relationship with MSU Denver Physics in collaboration with the physics faculty and our Dean of the College of Liberal Arts and Sciences.
- Restructured the physics department organizational chart to have upper division and lower division laboratory coordinators.
- Oversaw complete restructuring of introductory experimental physics laboratory courses
- Facilitated the creation of a 4+1 track with the Physics BS and the Masters of Integrated Sciences
- Facilitated in collaboration with Electrical Engineering the creation of a quantum computing microcredential and quantum information technology certificate.
- Collaborated with the office of development to secure several alumni donations and gift-in-kind donations from industry partners.

2013—2019 Coordinator, CAEP Accreditation of Ithaca College Science Teaching Program; achieved successful accreditation without conditions.

2013 Leader, NCATE Accreditation of Ithaca College Science Teaching Program; achieved successful accreditation without conditions.

2012 Leader, Physics & Astronomy Department Programmatic Assessment

2011 Facilitator, Mathematics Department Programmatic Review Planning Retreat

2010 Facilitator, ENVS Department Programmatic Review Planning Retreat

2010 Leader, Physics & Astronomy Department Programmatic Assessment

2005 Committee Member, Physics & Astronomy Department Programmatic Assessment

2007—2017: Vice-President, Finger Lakes Chapter of the New York State Archaeological Association

2005—2019: Chair 2013-2015, Vice-Chair 2011-2013, Executive Committee Member 2005-Present, New York State Section of the American Physical Society.

2007—2010 Faculty Trustee on the Ithaca College Board of Trustees

2004—2010 H&S Faculty Senate (Vice President May 2009-10, Treasurer May 2008-09. Executive Committee member Fall 2006-10)

Funded External Grants & Grant Proposals Under Review

Mar-24	Learned on Nov 25, 2024 not selected for funding. Will edit and resubmit March 2025: Co-Investigator: National Science Foundation S-STEM	$1,200,000
Nov-20	Co-Investigator: Trimble Inc., University of Colorado Denver Trimble Technology Laboratory	$234,648
May-19	PI: National Science Foundation DUE-1852870, Preparation of STEM Teachers for Professional Growth and Effectiveness [Note that I stepped down as PI when I moved to CU Denver	$1,199,384
Aug-11–Jul-17	PI: National Science Foundation Grant Number DUE-1136320, Ithaca College Robert Noyce Teaching Scholarship Program.	$1,197,000
May-09–Apr-12	PI: National Science Foundation Grant Number BCS-0917734, Collaborative Research: The Kalavasos and Maroni Built Environments Project. Investigating Social Transformation in Late Bronze Age Cyprus +$107,570 awarded to Cornell University	$60,638
Mar-09–Apr-12	Co-PI: National Science Foundation Grant Number DUE-0837721, Multidisciplinary Sustainability Modules: Integrating STEM Courses	$149,104
Mar-09–Feb-11	PI: National Science Foundation Grant Number DUE- 0837301, Collaborative Research: Paradigms in Physics: Creating and Testing Materials to Facilitate Dissemination of the Energy and Entropy Module +$72,136 awarded to U.of Maine and $44,564 to Oregon State Univ.	$33,299
Jun-07–May-08	PI: National Science Foundation Grant Number DUE-0722572, Acquisition of Geophysics Survey Instruments for Archaeological Geophysics Research and Training	$188,071
Jan-07–Dec-09	PI: National Science Foundation Grant Number DUE-0536246, Creating a Performance-Based Physics Program for Introductory Physics and Astronomy Classes Using the SCALE-UP Model of Teaching Physics	$150,000

External Research Contract and Research Collaborations

2024	3D documentation of Native American Rock Art, Lincoln County, NV. Co-PI in collaboration with Kat Vlahos (PI), Archaeological Research Group, Inc., and the Bureau of Land Managment	$78,189
2023	Ground-penetrating Radar surveys to identify impacts on cultural material during the Interstate Bridge Replacement project, Vancouver, WA. PI.	$99,214
2022	Heart Mountain 3D laser scanning. Co-PI in collaboration with Kat Vlahos (PI), the National Park Service, and the Heart Mountain Foundation.	$50,639
2022	Sakura Square 3D laser scanning and Historic American Building Survey report creation. Co-PI in collaboration with Kat Vlahos (PI), the National Science Foundation, and the Sakura Square Foundation.	$24,679
2018	Ground-penetrating Radar, Magnetometery, and Laser Scanning surveys at Rose Hill Mansion, Geneva, NY. SUNY ESF and Garden Club of America, Jennifer Lauer Masters Thesis.	$950
2016	Ground-penetrating Radar Survey of African Burial Grounds, Schenck Park, Brooklyn, NY. Hartgen Archaeology Inc.	$4,652
2016	Geophysical Archaeology and 3D Laser Scanning at Seward House Museum National Historic Landmark, Auburn, NY. Hartgen Archaeology Inc.	$3,000
2015	Archaeogeophysical Investigations of the Larder Site, Henderson, NV. HRA, Inc.	$33,268
2014	Archaeogeophysical Investigations at the Perry Public Library, Perry, NY. Perry Public Library.	$1,370
2013	Archaeogeophysical Investigations and 3D Laser Scanning of Washingtonian Hall, Endwell, NY. Public Archaeology Facility at Binghamton University.	$950

2012	Archaeogeophysical Investigations of the Chemung Village Site, near Elmira, NY. Public Archaeology Facility at Binghamton University.	$13,105
2011	Archaeogeophysical Investigations of the God's Acre Cemetery site, Weedsport, NY. Public Archaeology Facility at Binghamton University	$1,120
2010	Archaeogeophysical Investigations of the White Springs Village site, Geneva, NY. Cornell University.	$1,695
2010	Archaeogeophysical Investigations of the Revolutionary War era Rockaway Presbyterian Cemetery. Robert Nichols.	$500
2009	Archaeogeophysical Investigations of the White Springs Village site, Geneva, NY. Cornell University.	$1,848
2009	Archaeogeophysical Investigations of the Colonial Era House Forts in the Mohawk Valley, NY. Funk Foundation.	$661
2009	Archaeogeophysical Investigations of the Springs Preserve Pithouse Village Site, Las Vegas, NV. Springs Preserve.	$12,000
2009	Archaeogeophysical Investigations of the White Springs Village site, Geneva, NY. Cornell University.	$375
2008	Archaeogeophysical surveys at a bronze age village site, Cyprus. Travel, Room, and Board funded by Sturt Manning, Cornell Classics Department	$5,000
2007	Equipment training and deployment fee in support of Tiffany Tchakirides's (Cornell Univ. Graduate Student) research in Honduras.	$875
2006	Magnetometer and ground-penetrating radar surveys in support of Schuylerville, New York's National Park Service Battlefield protection program grant to locate the remains of Ft. Hardy. Funded by Hartgen Archaeological Associates, Inc.	$5,028
2006	Magnetometer and ground-penetrating radar surveys in support of the family search for the precise location of the three burials in the Weaver family plot north of Watkins Glen, NY	$100
2005	Magnetometer surveys in support of Cultural Resource Management archaeological surveys at the Bett's Historic Farmstead site near Troy, NY	$2,874
2004	John Confer's Sterling Forest Golden-winged Warbler Project: Support for equipment, travel, 3 student salaries, and faculty salary to establish a longitudinal wildlife census survey grid.	$4,607
2004	Travel Reimbursement from University of Nevada-Las Vegas archaeological field school for magnetic investigation of the Gila Encantada Pithouse Village Site near Silver City, NM.	$1,493

Internal Funding while at University of Colorado Denver

AY2425	Grand Challenges; Office of Research Services. Meet Our Moment: Engineering Can Work for Everyone. PI David Mays	$100,000
Summer 2022	Office of Research Services : Visualizing 3D Laser Scans	$8,000
	match from CLAS and Physics	$3,680
Fall 2021	Office of Research Services : Magnetometry surveys at the medieval village of Ferns, Ireland	$5,850

Funding secured by students to join my research team while at CU Denver

Summer 2024	College Track Emerson Collective Fellowship: Andre Rojas : 3D Laser Scanning of Castles and Monastic Sites in Ireland.	$10,000
Summer 2023	College Track Emerson Collective Fellowship: Andre Rojas : Creating 3D models from 3D Laser Scans.	$10,000
Summer 2023	McNair Scholarship: Shi Davis : Exploring Physics Major "Readiness".	$5,000
Summer 2022	Summer EuRECA Fellow : Daisy Wanless : Learning how to program a HoloLens for interactive tours and visualizing hard to visualize physics.	$5,200

Internal Funding while at Ithaca College

Summer 2018	Physics Ford Research Fund: Alexis Farrington	$3,600
Summer 2018	2018 Dana Internship : Kurt Burdick	$5,200
Summer 2018	Ithaca College capital equipment allocation for procurement of a DJI Phantom and DJI Matrice Pro 600 for use in historic preservation and archaeological studies.	$22,629
Summer 2017	2017 Dana Internship: Kevin Pomer	$5,200
Summer 2017	2017 Dana Internship: Alex Tuong	$5,200
Summer 2017	Ithaca College capital equipment allocation for procurement of Artec Eva and Artec Spider 3D laser scanners	$35,899
Summer 2016	Noyce Research Intern: Chidi Anyata	$3,600
Summer 2016	Physics Ford Research Fund: Joshua "Dimitri" Hector	$1,800
Summer 2016	Physics Ford Research Fund: Alex Tuong	$3,600
Summer 2016	Physics Ford Research Fund: Benjamin "Ryan" Bouricius	$3,600
Summer 2016	Physics Ford Research Fund: Thomas Steele	$3,600
Summer 2016	2016 Dana Internship: Harrison Kesel	$5,200
Summer 2016	Ithaca College capital equipment allocation for procurement of a Leica P-40 3D laser scanner	$95,000
Summer 2015	Physics Ford Research Fund: Nate Antonacci	$3,600
Summer 2015	Physics Ford Research Fund: Kevin Coldren	$3,600
Summer 2015	Physics Ford Research Fund: Ryan Fedora	$3,600
Summer 2015	Physics Ford Research Fund: Addison Hebert	$3,600
Summer 2015	2015 Dana Internship: Jeff Hejna	$5,100
Summer 2015	Physics Ford Research Fund: Evan Van de Wall	$3,600
Spring 2015	Academic Challenge Grant	$2,936
Summer 2015	Academic Challenge Grant	$4,000
Summer 2014	Physics Ford Research Fund: Corinne Steffens	$3,600
Summer 2014	Physics Ford Research Fund: Evan Van de Wall	$3,600
Summer 2014	2014 Dana Internship: Greg Fobes	$5,100
Summer 2014	2104 Dana Internship: Colleen Mahoney	$5,100
Summer 2013	2013 Dana Internship: Rachel Hallock	$5,100
Summer 2013	2013 Dana Internship: Cory Wydysh	$5,100
Summer 2013	Office of the Provost & VPEA Travel Funding Request	$1,392
Summer 2012	2012 Dana Internship: Zach Matuszach	$5,100

Summer 2012	H&S EGI Award	$500
Summer 2012	Ithaca College capital equipment allocation for procurement of a Leica C-10 3D laser scanner	$95,095
Summer 2011	2011 Dana Internship: Caitlin Davis	$5,100
Summer 2011	2011 Physics Ford Research Fund: Spencer Weigold	$3,500
Spring 2011	Ithaca College capital equipment allocation for procurement of a ground-penetrating radar instruments.	$42,000
Summer 2011	H&S EGI Award	$850
Summer 2010	H&S EGI Award	$676
Summer 2010	2010 Dana Internship: Zach Mink	$5,000
Summer 2010	2010 Dana Internship: Joyce Wu	$5,000
Summer 2009	2009 Dana Internship: Caitlin Ahearn	$5,000
Spring 2008	2008 Physics Ford Research Fund: Christopher Hastings	$3,350
Spring 2008	2008 Physics Ford Research Fund: Kevin Hurley	$3,350
Spring 2008	2008 Physics Ford Research Fund: Charlie Simkin	$3,350
Spring 2008	2008 Summer Faculty Salary Grant: Archaeological Geophysical Surveys at an Iron Age Hill Top Fort in Azerbaijan and a Bronze Age Village Site in Cyprus.	$3,350
Spring 2008	Grants for Creative, Collaborative, and Community Service and/or Service Learning Projects: Archaeological Geophysical Surveys at an Iron Age Hill Top Fort in Azerbaijan and a Bronze Age Village Site in Cyprus.	$750
Spring 2008	Humanities and Sciences Educational Initiative Grant: Travel funds for undergraduate student researcher to travel with me to conduct archaeological geophysical surveys in Cyprus summer 2008.	$1,000
Summer 2008	Physics Department Ford Research Fund matching grant	$1,000
Fall 2008	Center for Faculty Research and Development Release Time: Assessing teaching innovations to enhance student learning in general education astronomy and introductory algebra-based physics	$3,350
Spring 2007	2007 Physics Ford Research Fund: John Bassage	$3,350
Spring 2007	2007 Physics Ford Research Fund: George DeBeck V	$3,350
Spring 2007	2007 Dana Internship: Colin Howard	$5,000
Spring 2007	2007 Dana Internship: Nik Batruch	$5,000
Summer 2007	Physics Department Ford Research Fund matching grant	$1,000
Fall 2007	Humanities and Sciences Education Grant: Equipment for Applied Geophysics research/course to purchase a range of archaeological instruments to include Munsell soil charts, trowels, and measuring instruments.	$800
Fall 2007	Center for Faculty Research and Development Release Time: Manuscript preparation of summer research conducted 2005 and 2006 at the Corey Cayuga Village Site and at the Burnt Hills Mound Complex	$3,350
Spring 2006	Summer Faculty Salary Grant: Cesium Magnetometer and Topographic Survey Studies at the Burnt Hill Mound Complex in the Finger Lakes National Forest, New York.	$3,350
Spring 2006	Ithaca Fund: Proposal submitted by my research students Michael Stark and Kevin Faehndrich titled " Acquiring a clinometer to support studies to correct for the pitch and roll of a ground-penetrating radar antenna.	$531
Spring 2006	Sustainability Mini-Grant	$1,000
Spring 2006	2006 Dana Internship: Nik Batruch	$5,000

Spring 2006	2006 Physics Ford Research Fund: Kyle Stone	$3,350
Spring 2006	School of Humanities & Sciences capital funding to purchase computers and experimental equipment in support of the creation of a performance-based physics laboratory	$100,000
Summer 2006	Grants for Creative, Collaborative, and Community Service and/or Service Learning Projects: Cesium Magnetometer and Topographic Survey Studies at the Burnt Hill Mound Complex in the Finger Lakes National Forest, New York.	$750
Summer 2006	Physics Department Ford Research Fund matching grant	$1,000
Summer 2006	Ithaca College capital equipment allocation for procurement of a ground-penetrating radar instrument.	$30,000
Summer 2006	Ithaca College capital funding to renovate Center for Natural Sciences to create a performance-based physics laboratory.	$425,000
Fall 2006	Center for Faculty Research and Development Release Time: Manuscript preparation of summer research conducted 2005 and 2006 at the Corey Cayuga Village Site and at the Burnt Hills Mound Complex	$3,350
Fall 2006	Small Grants for Faculty Research / Scholarship: Page Charges for: Soil Iron Content Effects on the Ability of Magnetometer Surveying to Locate Buried Agricultural Drainage Pipes.	$250
Spring 2005	Applying Science to Sustainability summer 2005 mini-grant: Incorporating sustainability in PHYS32000 Thermodynamics	$1,000
Spring 2005	2005 Dana Internship: Kristiyan Georgiev	$4,375
Spring 2005	2005 Physics Ford Research Fund: Kevin Faehndrich	$3,350
Spring 2005	Ithaca Fund: Interdisciplinary Magnetic Surveys at the Corey Site, Aurora, NY	$900
Spring 2005	School of Humanities & Sciences capital funding to purchase computers and experimental equipment in support of the creation of a performance-based physics laboratory	$100,000
Summer 2005	Grants for Creative, Collaborative, and Community Service and/or Service Learning Projects: Cesium Magnetometer Studies to Locate a War of 1812 Shipbuilding Site Near Sackets Harbor, NY	$750
Summer 2005	Physics Department Ford Research Fund matching grant	$1,000
Fall 2005	Center for Faculty Research and Development Release Time: Coordination and support of faculty efforts to move introductory physics courses into the SCALE-UP model of teaching physics	$3,500
Fall 2005	Physics Department Ford Research Fund matching grant to the Ithaca Fund for acquisition of extension cables.	$475
Fall 2005	Ithaca Fund: Acquisition of magnetometer control extension cables to further error reduction studies using a non-magnetic survey cart designed and built by Ithaca College student researchers summer 2005.	$475
Spring 2004	2004 Dana Internship: Greg Shear	$4,375
Spring 2004	2004 Physics Ford Research Fund: Kevin Faehndrich	$3,350
Spring 2004	Grants for Creative, Collaborative, and Community Service and/or Service Learning Projects: Cesium Magnetometer Studies at the Gila Encantada Pit House Village Site, Southwestern New Mexico	$750
Spring 2004	2004 Summer Faculty Salary Grant	$3,350
Spring 2004	Ithaca Fund. Installing personal response receivers in Textor 102 in support of PHYS10100 and PHYS10200	$990
Summer 2004	Physics Department Ford Research Fund matching grant	$1,000

Fall 2004	Center for Faculty Research and Development Release Time: Curriculum development in support of the Physics Department's adaptation and implementation of the SCALE-UP approach to teaching introductory physics.	$3,500
Fall 2003	Center for Faculty Research and Development Release Time: Developing a collaborative research design to conduct remote sensing surveys at the Corey and Wells Barn sites with Jack Rossen, IC Anthropology.	$3,500
Fall 2003	H&S Honors Program Faculty Release Time for Development of Honors Seminar	$3,500

Book Chapters

Barry Lacey, Michael Rogers, Denis Shine, Ger Dowling, Anne-Julie Lafaye, David McIlreavy, and Stephen Mandal. Chasing St Aidan's monastery at ferns. In Stephen Mandal, Michael Potterton, and Denis Shine, editors, *Discovering Medieval Ferns, Co. Wexford*, chapter 8, pages 199–255. Four Courts Press Ltd, 2023.

Michael Rogers and Samuel S. Chen. Captured: A digital approach to representing medieval ferns. In Stephen Mandal, Michael Potterton, and Denis Shine, editors, *Discovering Medieval Ferns, Co. Wexford*, chapter 14, pages 314–322. Four Courts Press Ltd, 2023.

Scott Stull, Michael Twomey, and Michael Rogers. Castle viewscapes in literature and landscapes. In Karl Kinsella, Hannah Bailey, and Daniel Thomas, editors, *Architectural Representation in Medieval Textual and Material Culture*, chapter 5, pages 99–126. Four Courts Press Ltd, 2023.

Michael Rogers, Ryan Bouricius, Denis Shine, and Stephen Mandal. Capturing Carrick – a digital approach to constructing and deconstructing the modern and relict landscape. In Stephen Mandal Denis Shine, Michael Potterton and Catherine McLoughlin, editors, *Carrick, County Wexford Ireland's first Anglo-Norman stronghold*, chapter 8. Four Courts Press Ltd, 2019.

Scott Stull, Michael Rogers, and Len Tantillo. The surrender and aftermath of the battles. In William Griswold and Donald Linebaugh, editors, *The Saratoga Campaign: Uncovering an Embattled Landscape*, chapter 7, pages 163–178. University Press of New England, 2016.

Michael Rogers. Archaeogeophysical surveys. In Jack Rossen, editor, *Corey Village and the Cayuga World: Implications from Archaeology and Beyond*, chapter 2, pages 35–40. Syracuse University Press, 2015.

Michael Rogers and Scott Stull. Visualizing an integrated landscape through ground-based lidar, geophysical archaeology, and archaeological excavation. In Scott Stull, editor, *From West to East: Current Approaches to Medieval Archaeology*, chapter 1, pages 6–19. Cambridge Scholars Publishing, 2015.

Michael Rogers. Archaeological geophysics: Seeing deeper with technology to compliment digging. In Richard V.N. Ahlstrom Matthew Seddon, Heidi Roberts, editor, *Archaeology in 3D: Deciphering sites in the Wester U.S.*, volume 3, chapter 8, pages 114–137. Society for American Archaeology Press, 2011.

M. Reza Ehsani Barry Allred, Michael Rogers and Jeffrey Daniels. Magnetometry, self-potential, and seismic: additional geophysical methods having potentially significant future use in agriculture. In M. Reza Ehasni Barry Allred, Jeffrey Daniels, editor, *Handbook of Agricultural Geophysics*, chapter 8, pages 147–164. CRC Press, 2008.

Peer Reviewed Publications

Diana G Douleh, Todd Baldini, Patrick Carry, Michael Rogers, Fraser J Leversedge, and Alexander Lauder. Ligament-sparing volar radiocarpal arthrotomy during distal radius fracture repair: Biomechanical implications on wrist stability in a cadaveric model. *The Journal of Hand Surgery*, 2022.

Diana G Douleh, Todd Baldini, Michael Rogers, Fraser J Leversedge, and Alexander Lauder. Ligament-sparing volar radiocarpal arthrotomy during distal radius fracture repair: Anatomical description and quantification of articular surface area visualized in a cadaveric model. *The Journal of Hand Surgery*, 2022.

Nathan Antonacci, Michael Rogers, Thomas Pfaff, and Jason Hamilton. Figures and first years: An analysis of calculus students' use of figures in technical reports. *Numeracy: Advancing Education in Quantitative Literacy*, 10(2):1–18, 2017.

Peregrine Gerard-Little, Amanda Moutner, Kurt Jordan, and Michael Rogers. The production of affluence in central new york: the archaeology and history of geneva's white springs manor, 1806–1951. *Historical Archaeology*, 50(4):36–64, 2016.

Matthew Price and Michael Rogers. Teaching nature of science through scientific models: the geocentric vs. heliocentric cosmology. *Journal of College Science Teaching*, 46(2):58–62, 2016.

Jared Saltzman, Matthew Price, and Michael Rogers. Initial study of neutral post-instruction responses on the maryland physics expectation survey. *Physical Review Physics Education Research*, 12(1):013101–1–013101–6, 2016.

Philip Davidowsky and Michael Rogers. Debunking a video on youtube as an authentic research experience. *The Physics Teacher*, 53(5):304–306, 2015.

Michael Rogers, Luke Keller, Andrew Crouse, and Matthew Price. Implementing comprehensive reform of introductory physics at a primarily undergraduate institution: a longitudinal case study. *Journal of College Science Teaching*, 44(3):82–90, 2015.

Michael Rogers, Thomas Pfaff, Thomas, Jason Hamilton, and Ali Erkan. Using sustainability themes and multidisciplinary approaches to enhance stem education. *International Journal of Sustainability in Higher Education*, 16(4):523–536, 2015.

Scott Stull, Michael Rogers, and Kevin Hurley. Colonial houses and cultural identity in new york state's mohawk river valley. *Archaeological Discovery*, 2(4):1–13, 2014.

Jason Hamilton, Thomas Pfaff, Michael Rogers, and Ali Erkan. On jargon: 21st century problems. *The UMAP Journal of Undergraduate Mathematics and Its Applications*, 34(4):327–338, 2013.

Michael Rogers, Thomas Pfaff, Jason Hamilton, and Ali Erkan. Incorporating sustainability and 21st-century problem solving into physics courses. *The Physics Teacher*, 51(6):372–374, 2013.

David Roundy and Michael Rogers. Exploring the thermodynamics of a rubber band. *American Journal of Physics*, 81(1):20–23, 2013.

Scott Stull, Michael Rogers, and Nik Batruch. Finding fort hardy: Combining documentary research, archaeogeophysics and excavation to locate a french and indian war fort. *Northeast Anthropology*, 79-80:125–143, 2013.

Peregrine A.Gerard-Little, Michael B. Rogers, and Kurt A. Jordan. Understanding the built environment at the seneca iroquois white springs site using large-scale, multi-instrument archaeogeophysical surveys. *Journal of Archaeological Science*, 39(7):2042–2048, 2012.

Ali Erkan, Tom Pfaff, Jason Hamilton, and Michael Rogers. Sustainability themed problem solving in data structures and algorithms. In *SIGCSE'12: Proceedings of the 43rd ACM technical symposium on Computer Science Education*, pages 9–14, 2012.

Michael Rogers, Jeffrey F. Leon, Kevin D. Fisher, Sturt W. Manning, and David Sewell. Comparing similar ground-penetrating radar surveys under different moisture conditions at kalavasos-ayios dhimitrios, cyprus. *Archaeological Prospection*, 19(4):297–305, 2012.

Julia Kregenow, Michael Rogers, and Matthew Price. Is there a" back" of the room when the teacher is in the middle? *Journal of College Science Teaching*, 40(6):45–51, 2011.

Thomas Pfaff, Ali Erkan, Jason Hamilton, and Michael Rogers. Multidisciplinary engagement of calculus students in climate issues. *Science Education and Civic Engagement-An International Journal*, 3(1):52–5, 2011.

Thomas Pfaff, Michael Rogers, Ali Erkan, and Jason Hamilton. Go figure: Calculus students' use of figures and graphs in technical report writing. *Numeracy*, 4(1):6, 2011.

Ali Erkan, Jason Hamilton, Tom Pfaff, and Michael Rogers. Use of satellite imagery in multidisciplinary projects. In *SIGCSE'10:Proceedings of the 41st ACM technical symposium on Computer science education*, pages 32–36, 2010.

Jason G. Hamilton, Michael Rogers, Thomas J. Pfaff, and Ali Erkan. Multidisciplinary collaborations in the traditional classroom: Wrestling with global climate change to improve science education. *Transformations: The Journal of Inclusive Scholarship and Pedagogy*, 21(1):89–98, 2010.

Julia Kregenow, Michael Rogers, and Mark Constas. Multidimensional education research: Managing multiple data streams. *Astronomy Education Review*, 9(1):010104–1–010104–16, 2010.

Michael Rogers, Kevin Faehndrich, Barbara Roth, and Greg Shear. Cesium magnetometer surveys at a pithouse site near silver city, new mexico. *Journal of Archaeological Science*, 37(5):1102–1109, 2010.

Michael Rogers. An inquiry-based course using "physics?" in cartoons and movies. *The Physics Teacher*, 45(1):38–41, 2007.

Michael Rogers, John Baham, and Maria Dragila. Soil iron content effects on the ability of magnetometer surveying to locate buried agricultural drainage pipes. *Applied Engineering in Agriculture*, 22(5):701–704, 2006.

Michael Rogers, James Cassidy, and Maria Dragila. Ground-based magnetic surveys as a new technique to locate subsurface drainage pipes: a case study. *Applied Engineering in Agriculture*, 21(3):421–426, 2005.

Editorially Reviewed Articles

Michael Rogers. How to build a strong cv and résumé. *The SPS Observer*, LVII(2):62, 2023.

Michael Rogers and Kat Vlahos. Ground-based lidar for historic preservation, increased accessibility, and virtual tourism. *The Bridge: Magazine of IEEE-Eta Kappa Nu honor society*, 119(1):13–17, 2023.

Michael Rogers. Bringing students together after remote learning, and beyond. *The SPS Observer*, LVI(2):18–19, 2022.

Muiris O'Sullivan, Michael Rogers, Denis Shine, and Stephen Mandal. Seir Kieran - place, pilgrimage, and tradition in the monastic midlands. *Offaly Heritage Journal*, 10:21–42, 2018.

Michael Rogers, Ryan Bouricius, Denis Shine, Stephen Mandal, and Scott Stull. Laser-scanning Trim Castle. *Archaeology Ireland*, 32(3):34–39, 2018.

Michael Rogers, Kevin Fischer, Jeffrey Leon, and Sturt Manning. Large-scale archaeogeophysical surveys at the late bronze age settlements at Kalavasos-Ayios Dhimitrios and Maroni-Vournes/-Tsaroukkas in Cyprus. In Robert Fry, editor, *International Society of Archaeological Prospection News*, volume 32, pages 8–10, 2012.

Caitlin Ahearn, Colin Howard, and Michael Rogers. Sustainably charging batteries using compost. In *Proceedings of the National Conference of Undergraduate Research (NCUR)*, pages 319–320, 2010.

Michael Rogers and Scott Stull. A multi-method examination of an american revolutionary war era house fort in New York State's Mohawk valley. In W. Neubauer, I. Trinks, R. Salisbury, and C. Einwogerer, editors, *Archaeological Prospection: Extended Abstracts for 10th International Conference on Archaeological Prospection*, pages 319–320, 2010.

Non Peer-Reviewed Technical Papers and Project Reports

Michael Rogers. Ground-penetrating radar surveys in support of the Interstate Bridge Replacement Project, Vancouver, WA. Report for the Interstate Bridge Replacement Project Cultural Resource Team, 2024.

Michael Rogers. Ground-penetrating radar survey at the Schenck playground in Brooklyn, NY. Report for Hartgen Archaeology Inc., 2017.

Michael Rogers. Locating unmarked grave shafts with archaeogeophysical surveying, Maplewood Cemetery, Genoa, NY. Report for the Maplewood Cemetery Association, 2017.

Michael Rogers. Ground-penetrating radar and magnetometry surveys at the Larder Site, Clark County, NV. Report for HRA Inc., Conservation Archaeology, 2015.

Michael Rogers. Locating unmarked grave shafts with archaeogeophysical surveying, Perry Public Library, Perry, NY. Report submitted to the Perry Public Library Board of Trustees, 2014.

Jeff Leon, Michael Rogers, Kevin Fisher, and Sturt Manning. Interim report on the Kalavasos and Maroni Built Environments Project: The 2011 Field Season. Report submitted to the Department of Antiquities, Cyprus, 2013.

Michael Rogers. Locating unmarked burials with archaeogeophysical surveying, Pioneer Park, Dansville, NY. Report submitted to the Dansville Area Historical Society, 2013.

Daniel Bradac and Michael Rogers. Archaeogeophysical investigations of the Revolutionary War Era Rockaway Presbyterian Cemetery, Rockaway, NJ. . Report submitted to cemetery sexton Robert Nichols, 2011.

Kevin Fisher, Jeff Leon, Sturt Manning, Michael Rogers, and David Sewell. The Kalavasos and Maroni Built Environments Project: Introduction and Preliminary Report on the 2008 and 2010 Seasons. Report submitted to the Department of Antiquities, Cyprus, 2011.

Michael Rogers. Locating unmarked burials with ground-penetrating radar, Weedsport, NY. Report submitted to the Public Archaeology Facility, Binghamton University, 2011.

Michael Rogers. Archaeological geophysical investigations of the Springs Preserve Pithouse Village Site, Las Vegas, NV. Report submitted to the Springs Preserve, NV, 2009.

Michael Rogers. Cesium magnetometer and ground-penetrating radar studies at the Burnt Hill Mound Complex, Finger Lakes National Forest, NY. Report submitted to the National Forest Service and Seneca Nation, 2007.

Michael Rogers. Cesium magnetometer and ground-penetrating radar studies at Fort Hardy Park, Schuylerville, NY. Report for Dr. Scott Stull, Hartgen Archaeological Associates, Inc., 2006.

Michael Rogers. Cesium magnetometer studies at the Betts Historic Farmstead Site near Troy, NY. Report submitted to Chris Hazel, RPA, HAZEx, 2006.

Michael Rogers. Establishing longitudinal wildlife census quadrangles in Sterling Forest State Park, Sterling Forest, NY. Report submitted to John Confer, Ithaca College, 2005.

Michael Rogers. Ultra high resolution cesium magnetometer feasibility study at the Bridge Maintenance Shop Site (Site # 35CS64) near Bridge, Oregon. Report Submitted to Stephan R. Samuels, BLM District Archaeologist Bureau of Land Management Coos Bay District North Bend, OR, 2002.

Michael Rogers. Ultra high resolution cesium magnetometer feasibility study at the Klondike Gold Rush City of Dyea, Alaska. Report Submitted to Dr. David Brauner, Department of Anthropology, Oregon State University, 2002.

Michael Rogers. Cesium magnetometer survey of the Corvallis Historic Water Front, Oregon State University's 2001 Archaeological Field School Site, Corvallis, Oregon, USA. Report Submitted to Dr. Barbara Roth, Department of Anthropology, Oregon State University, 2001.

Michael Rogers. Ground-penetrating radar survey of the Toledo Turntable Site : Toledo, Oregon. . Report submitted to The Yaquina Pacific Railroad Historical Society, Toledo, OR, 1999.

Non Peer-Reviewed Curriculum Materials

Matthew Stephens, Michael Rogers, and Derrick Hilger. Physics and Roller Coasters: Activities Workbook 3rd Edition. Oregon State University.

Derrick Hilger, Michael Rogers, and Matthew Stephens. Physics and Roller Coasters: Problems Workbook 3rd Edition. Oregon State University, 2005.

Michael Rogers. PH205 Solar System Laboratory Instructor's Guide. Oregon State University, 2005.

Michael Rogers, Matthew Stephens, and Derrick Hilger. Physics and Roller Coasters: Content Workbook 3rd Edition. Oregon State University, 2005.

Michael Rogers, Matthew Stephens, and Derrick Hilger. Physics and Roller Coasters: Teacher's Guide 3rd Edition. Oregon State University, 2005.

Michael Rogers. PH206 Stars and Stellar Evolution Laboratory Instructor's Guide. Oregon State University, 2003.

Michael Rogers. PH206 Stars and Stellar Evolution Laboratory Manual. Oregon State University, 2003.

Michael Rogers. PH207 Galaxies, Quasars, and Cosmology Laboratory Instructor's Guide. Oregon State University, 2003.

Michael Rogers. PH207 Galaxies, Quasars, and Cosmology Laboratory Manual. Oregon State University, 2003.

Undergraduate Theses Supervised

S. Davis. Understanding University of Colorado Denver physics major 'readiness' and recommendations for improving student success. BS Thesis, University of Colorado Denver, Anticipated 2025.

A. Garcia St. George. Exploring the use of photogrammetry with lens extenders to create higher resolution 3d models of cadaveric wrist joint surfaces. BS Thesis, University of Colorado Denver, Anticipated 2025.

M. Papavasiliou. Evaluating the feasibility of 3d photogrammetry for visualizing ligaments in distal radius repair using a volar ligament-sparing approach. BS Thesis, University of Colorado Denver, Anticipated 2025.

F. Ramirez. Comparing the Leica ScanStation P40 and the RTC360 at Bective Abbey, ireland. BS Thesis, University of Colorado Denver, Anticipated 2025.

F. Rojas. Calculating visible joint surface of cadavric elbow joints using structured light scanning and 3d modelling. BS Thesis, University of Colorado Denver, Anticipated 2025.

M. Barru. Retention and persistence of physics students at University of Colorado Denver from 2013-2023: What is a cohort? BS Thesis, University of Colorado Denver, 2024.

B. Kassir. Introductory experimental physics lab classes at the University of Colorado Denver. BS Thesis, University of Colorado Denver, 2024.

M. Markgraf. Comparing dorsal and volar approaches for wrist surgery: A surface area analysis. BS Thesis, University of Colorado Denver, 2024.

D. Wanless. Comparing terrestrial-based to drone-based laser scanning for historic preservation. BS Thesis, University of Colorado Denver, 2024.

C. Ridder. Pseudo gradient viability in optically pumped cesium magnetometers. BS Thesis, University of Colorado Denver, 2023.

C. Cuzzi. Modelling history: Bringing digital lidar scans of ferns castle to life with fused deposition modelling. BA Thesis, Ithaca College, 2020.

A. Polcari. The velocity, release and attack angle and total distance of an ultimate frisbee disc. BA Thesis, Ithaca College, 2020.

S. Weeks. Visualizing in 3d: Generating a 3d point cloud from laser scan data in a web browser. BA Thesis, Ithaca College, 2020.

S. Lazarevic. The mechanical and conductive properties of caramel. BA Thesis, Ithaca College, 2019.

K. Cosentino. Harvesting electricity from a cryptocurrency mining chip. BA Thesis, Ithaca College, 2018.

H. Kesel. Examining the national parks service statements on using laser scanners to collect measurements for a historic american building survey. BA Thesis, Ithaca College, 2018.

K. Pomer. Creating accurate digital and physical models of the papier-mache ceiling figures in philipse manor hall. BA Thesis, Ithaca College, 2018.

B. Bouricius. Get a grip: An exploration of 3d printed mechanical prosthetic hands. BA Thesis, Ithaca College, 2017.

R. Fedora. Using drone-based photogrammetry to supplement ground-based 3d laser scanning for historic preservation. BA Thesis, Ithaca College, 2017.

M. Fischler. 2 ground penetrating radar and its applicability in determining underground materials and subsurface structures on asteroid surfaces. BA Thesis, Ithaca College, 2017.

T. Steele. Reducing warping in architectural fused deposition models. BA Thesis, Ithaca College, 2017.

N. Antonacci. Quantitative literacy in first-year college calculus students. BA Thesis, Ithaca College, 2016.

K. Coldren. Using 3d laser scanning as a method for architectural preservation and analysis. BA Thesis, Ithaca College, 2016.

J. Hejna. Automating magnetometer data & processing using java. BA Thesis, Ithaca College, 2016.

D. Larsen. Using discourse analysis to further understand einstein's and poincare's 1905 papers on special relativity. BA Thesis, Ithaca College, 2016.

E. Van de Wall. The use of 3d laser scanning for architectural conservation. BA Thesis, Ithaca College, 2016.

C. Mahoney. Comparing cesium and fluxgate magnetometer and total field and gradient modes at a range of archaeology sites. BA Thesis, Ithaca College, 2015.

C. Woodward. Archaeogeophysical surveys of washingtonian hall: A revolutionary war era house in endwell, new york. BA Thesis, Ithaca College, 2015.

R. Hallock. Generating electricity from compost using the seebeck effect. BA Thesis, Ithaca College, 2014.

D. Bradac. Locating revolutionary war era unmarked burials with archaeogeophysical surveying, morris county, new jersey. BA Thesis, Ithaca College, 2013.

H. Hill. Acoustics of marimba bars. BA Thesis, Ithaca College, 2013.

J. Wu. Using discourse analysis to understand poincare and einstein's scientific arguments in their 1905 papers on special relativity. BA Thesis, Ithaca College, 2013.

K. Hurley. Archaeogeophysical survey of an 18th century manor house in the mohawk river valley. BA Thesis, Ithaca College, 2011.

C. Ahearn. Sustainably charging batteries with compost. BA Thesis, Ithaca College, 2010.

R. Hanrahan. Gains found in the maryland physics expectation survey for introductory college physics. BA Thesis, Ithaca College, 2009.

C. Howard. The compost thermal heating project: Using thermoelectric modules to charge batteries with a compost pile. BA Thesis, Ithaca College, 2009.

G. DeBeck. Identifying and reducing positional errors in cesium magnetometer surveys. BA Thesis, Ithaca College, 2008.

Invited Talks

Michael Rogers, Ryan Bouricius, Harrison Kesel, Kevin Pomer, and Alex Tuon. Digitally preserving Trim Castle using 3D laser scanning - an update. Trim Public Library, August 2017.

Michael Rogers, Scott Stull, Chidi Anyata, Ryan Bouricius, Harrison Kesel, and Tom Steele. Digitally preserving Trim Castle using 3D laser scanning. Trim Public Library, June 2016.

Michael Rogers. Using cutting-edge technology to visualize an integrated landscape at archaeology and historic preservation sites. Wells College Science Colloquium Series, February 2016.

Jeffrey Leon, Thomas Urban, Perri Gerard-Little, Catherine Kearns, Sturt Manning, Kevin Fischer, and Michael Rogers. A critical evaluation of ground-penetrating radar methodology on the Kalavasos and Maroni Built Environments (KAMBE) Project. American Geophysical Union Fall Meeting, December 2013.

Michael Rogers. Flipping the classroom: aka using student-centered, active-learning approaches m. rogers. project kaleidoscope upstate new york regional network. Project Kaleidoscope Upstate New York Regional Network, October 2013.

Michael Rogers. Landscape scale archaeogeophysics surveys at buried late bronze age cities in Cyprus. Wells College Science Colloquium, November 2011.

Perri Gerard-Little, Michael Rogers, Kevin Hurley, and Kurt Jordan. Understanding the built environment at the Seneca Iroquois White Springs site using large-scale, multi-instrument archaeogeophysical surveys. Society for American Archaeology, March 2011.

Daniel Costura, Michael Rogers, Kevin Hurley, Daniel Bradac, Zachary Mink, and Joyce Wu. Archaeological geophysical surveys at French Azilum. Society of Historical Archaeology Annual Meeting, January 2011.

Michael Rogers. A tale of two magnetometers: Cesium versus fluxgate. University of Bradford, October 2010.

Michael Rogers. Performance-based learning and multidimensional assessment methods. UNY at Oswego Center for Excellence in Learning and Teaching Workshop, August 2009.

Michael Rogers, Luke Keller, Matthew Price, and Julia Kregenow. Teaching general education astronomy using SCALE-UP/Studio Physics models. American Association of Physics Teachers Summer Meeting, August 2009.

Michael Rogers and Allen Wasserman. Energy and entropy: A paradigms in physics approach to thermodynamics. American Association of Physics Teachers Winter Meeting, January 2008.

Michael Rogers. Near surface archaeological geophysics: A review of methods. Cornell University Geology Department Seminar Series, September 2007.

Michael Rogers. Efforts of ic's teacher education / physics education program. The Role of Colleges and Universities in Preparing Future Physics Teachers, LEPP Facility, Cornell University, June 2006.

Michael Rogers and Rebecca Plante. Teaching critical and analytical thinking. Ithaca College Summer Teaching Institute: "Implementing the Ithaca College Mission", May 2006.

Michael Rogers. Applying physics to archaeology using ground-based remote sensing instruments. Dickinson College Physics Department Colloquium, March 2006.

Michael Rogers and Will Crisp. eClassroom innovations at Ithaca College. Education Technology Day at Ithaca College, March 2006.

Michael Rogers. Implementing scale-up at ithaca college. Visualizing the Future of Physics Education: A Wiley Publishing Faculty Network Workshop, October 2005.

Michael Rogers. How to see beneath the soil. 1000 Island Chapter of the New York State Archaeological Association, July 2005.

Michael Rogers. Seeing beneath the soil. Ithaca College Physics Department Physics Café, November 2004.

Michael Rogers. Applying physics to environmental and soils studies. State University of New York at Geneseo Physics Department Colloquium, February 2004.

Michael Rogers and Derrick Hilger. Enhancing science and mathematics in oregon grades K–12. 2001 Oregon Collaboration for the Excellence of Physics Teachers (OCEPT) Showcase, June 2001.

Michael Rogers. Archaeological geophysical surveys of burial mounds in Ireland: A Physicist's perspective. American Association of Physics Teachers, Oregon Section Spring Meeting, March 2000.

Contributed Talks

Michael Rogers, Kat Vlahos, Mike Nulty, and Chris Bowles. Remote sensing for documentation: Recording as a form of preservation from landscape to detail. Saving Places 2021: Preservation in Action, Virtual Conference, Colorado Preservation, Inc., February 2021.

Scott Stull, Michael Twomey, and Michael Rogers. Castle viewscapes in literature and landscapes. Architectural Representation in the Middle Ages Conference, University College, Oxford, April 2017.

Scott Stull and Michael Rogers. Conquest or factionalism: Castle building and the expression of political authority. International Medieval Congress, Leeds, UK, July 2016.

Scott Stull and Michael Rogers. Documenting Trim Castle: 3D laser scanning a key site of Anglo-Norman Ireland. 31st Irish Conference of Medievalists. Maynooth, Ireland, June 2016.

Michael Rogers and Scott Stull. Using archaeogeophysical and 3D laser surveying to visualize an integrated landscape. 80th Annual meeting of the Society for American Archaeology. San Francisco, CA, April 2015.

Michael Rogers and Scott Stull. A multi-method examination of an American Revolutionary War era house fort in New York State's Mohawk Valley. 10th International Conference on Archaeological Prospection, Vienna, Austria, May 2013.

Michael Rogers. Getting students to work together; is it really possible? SUNY at Oswego Center for Excellence in Learning and Teaching Workshop. Oswego, NY, September 2009.

Julia Kregenow, Luke Keller, Michael Rogers, and Darius Ramero. Testing the SCALE-UP approach to introductory astronomy. 212th meeting of the American Astronomical Society. St. Louis. MO, June 2008.

Scott Stull and Michael Rogers. Finding Fort Hardy: remote sensing, subsurface testing, and documentary research combine to identify the boundaries of a French and Indian War Fort. Council for Northeast Historical Archaeology 2007 Annual Conference. Buffalo. NY, October 2007.

Michael Rogers and Luke Keller. Creating a SCALE-UP classroom at Ithaca College. New Faculty Workshop Reunion, Association of American Physics Teachers Workshop. College Park. MD, June 2007.

Michael Rogers. Incorporating sustainability in thermodynamics. Ithaca College May Faculty Institute. Ithaca, NY, May 2007.

Luke Keller and Michael Rogers. Innovative use of SCALE-UP for teaching general education astronomy. American Association of Physics Teachers and Astronomical Astronomical Society Joint Meeting, Seattle, WA, January 2007.

Michael Rogers and Jason Hamilton. Infusing sustainability into higher education. Pre-conference workshop at the annual meeting of the American Conference of Academic Deans in conjunction with the Association of American Colleges and Universities. New Orleans. LO, January 2007.

Scott Stull and Michael Rogers. Fort Hardy and the Field of Grounded Arms. Society for Historic Archaeology Annual Meeting, Williamsburg, VA, January 2007.

Michael Rogers. The 2004 Nobel Prize in Physics: . . . for the discovery of asymptotic freedom in the theory of the strong interaction. Ithaca College Physics Department Seminar Series. Ithaca. NY, September 2005.

Michael Rogers. 'physics?' in cartoons and movies. Ithaca College Physics Department Seminar Series. Ithaca. NY, September 2005.

Michael Rogers. Who Wants to be a Millionaire? forget polling the audience, how about polling your students. Ithaca College Campus-wide Faculty Development Colloquium Series, Ithaca, NY, November 2003.

Research Covered by Popular Media

Nov 02, 2019	Wexford People	Site of Ireland's first Norman stronghold documented in new book	by Simon Bourke
Oct 18, 2019	Wexford Today	Book 'digging the lost town of Carrick'	by Dan Walsh
Jul 10, 2019	RTE One Nationwide	Norman Wexford	by Anne Cassin
May 3, 2019	Curbed	Anchored in the cloud: Lasers, digital backups, and the future of landmark preservation	by Patrick Sisson
Mar 22, 2019	Syracuse Central NY News	Students use laser to scan home of former U.S. President Ulysses S. Grant	by Kira Maddox
Jul 15, 2018	Finger Lakes Times	Modern tools unearth ancient history at Rose Hill	by Susan Clark Porter
Jun 10, 2018	Rome Sentinel	New technology may aid local treasure	by
May 20, 2017	The Post Star	Schuyler House being preserved for digital age	by Adam Colver
Mar 20, 2017	The Ithaca Voice	Ithaca College professor scans Lake Street house for evidence of past	by Kelsey O'Connor
Mar 1, 2017	Orthopedic Product News	Student prints 3D prosthetic hand for $15	by Ithaca College
Aug 9, 2016	The Sentinel	Ithaca Professors conduct laser scan of Bell Tavern	by Joseph Cress
Mar 8, 2016	The Ithaca Voice	Pancakes to prosthetics: 3-D printing the future at Ithaca College	by Michael Smith
2016	LiteRock 97.3 fm	Ithaca College professor, students work to digitize Irish castle	by Ithaca College
Aug 5, 2015	Ithaca Journal	19th Century Tompkins school teaches modern archeology	by Simon Wheeler
Jul 29, 2015	Ithaca Journal	IC helping state historic site with landmark effort	by Associated Press
May 29, 2015	Phys Org	Subsurface structures discovered at prehistoric archaeological site	by Megan Christopher
Jan 16, 2015	Science Daily	President Lincoln's cottage 3D laser-scanned by researchers	by Megan Christopher
Jan 15, 2015	Voice of America	Laser Camera Helps Preserve Historical Buildings	by George Putic
Jan 11, 2015	The Washington Post	At the Lincoln cottage in D.C., 3-D imaging is preserving every bit — and byte — of history	by Steve Hendrix
Jan 9, 2015	Dcist	In Petworth, Lincoln's Cottage Gets Digitally Scanned Into The 21st Century	by Matt Cohen
Spring,2012	American Archaeology	Reexamining the Seneca	by Rachel Dickenson
Fall, 2011	Fuse Magazine	Unearthing the Past	by Kevin Hurley

Jun 1, 2011	Ithaca Times	IC student in Cyprus for collaborative research project	by Rob Montana
Jun 22, 2010	Morris County Daily Record	Geophysics in the Cemetery	by Abbott Koloff
Jun 18, 2010	News 12 New Jersey	College students search for unmarked graves in Rockaway	by News 12 Staff
Feb 16,2009	Phys Org	Physicist Uses Radio Signals to Search Downtown Las Vegas for Signs of Ancient Pit Houses	by Ithaca College
Jan 10, 2009	Las Vegas Review-Journal	Prehistoric Sigs Found at Preserve	by Keith Rogers
May 21, 2007	Tompkins Weekly	Classroom of Tomorrow Arrives at IC	by Larry Klaes
Jun 28, 2006	The Daily Gazette: Saratogal County Local Edition	Technology in use to find the Fort	by Kathy Parker
Apr 24, 2005	Chicago Tribune	Classes strive to be anything but boooring	by Leslie Levine

Courses Taught while at University of Colorado Denver

PHYS 1450	Professional Development Seminar I	Fall-21, 22, 23, 24
PHYS 2811	Modern Physics	Spring-20, 21
PHYS 3450	Professional Development Seminar II	Fall-21, 22, 23, 24
PHYS 3751	Physics Capstone Proposal	Spring-22, 23, 24
PHYS 4450	Professional Development Seminar III	Fall-21, 22, 23, 24
PHYS 4751	Physics Capstone Thesis	Fall-21, 22, 23, 24; Spring-22, 23, 24
PHYS 4990	Advanced Topics In Physics : Quantum Computing	Fall-19
PHYS 2880, 3880, 4880, 5880	Directed Research	Fall & Spring: 19-Present

Courses Taught while at Ithaca College

PHYS 101L	Introduction to Physics Lab	Fall-03
PHYS 101	Introduction to Physics I, Co-Instructor	Fall-09
PHYS 114	Introduction to Experimental Physics	Fall-06, 07, 08, 09, 11, 12, 13, 14
PHYS 114	Professional Physics Seminar I	Fall-15
PHYS 117	Principles of Physics I: Mechanics w/ Lab	Fall-05, 06, 07, 08
PHYS 117	Principles of Physics I: Mechanics w/ Rec.	Fall-03, 04
PHYS 120	Introductory Applied Physics Laboratory	Spring-04, 05, 06, 07, 08, 09, 10, 18
PHYS 214	Professional Physics Seminar II	Fall-15, 16, 18
PHYS 218	Principles of Physics IV: Modern Physics	Spring-12, 13, 14, 15
PHYS 231	"Physics?" in Cartoons and Movies (H&S Intermediate Honors Seminar	Spring-05, 06, 08
PHYS 320	Thermodynamics	Spring-04, 06, 07, 08, 09, 10, 13
PHYS 314	Professional Physics Seminar III	Fall-13, 14, 15
PHYS 340	Linking Physics Learning to Physics Teaching	Fall-12, 13, 14, 15, 16

PHYS 361	Project Design and Prototyping Laboratory	Spring-19
PHYS 398	Senior Thesis Proposal	Spring-12, 13, 14, 17, 19
PHYS 414	Physics and Astronomy Capstone	Fall-14, 15, 16, 17, 18
PHYS 497	Senior Thesis I	Fall-13, 17, 18
PHYS 498	Senior Thesis II	Spring-13, 14, 17, 19
PHYS 451	Advanced Physics Laboratory	Fall-09
PHYS 299, 399, 499	Physics Research	Fall & Spring: 03-19
PHYS 470/570	Selected Topics-Historical Physics from a Modern Perspective	Fall-11
IISP 30000	H&S Honors Junior Seminar	Fall-07
BIO-CHEM-ENVS-PHYS 698	Research for the Science Teacher	Summer-14, 15, 16, 17, 18
PHYS 699	Graduate Physics Research	Summer-18
EDUC 41010/51010	Pedagogies and Practices for the Science Teacher	Fall-14, 15, 16, 17, 18
EDUC 600	Professional Semester in Teaching	Spring-13, 14, 16, 19

Service while at the University of Colorado Denver

Professional Level Service

2020—Present	Zone Councilor, Society of Physics Students Zone 14

University Level Service

2024—Present	Member, Undergraduate Research and Creative Activities Faculty Advisory Committee
2022—Present	Member, Program Viability and Curricular Innovation Working Group
2019—Present	CLAS Liaison, Interfolio Advisory Group
2019—Present	Physics Representative, gtPathways Fac-to-Fac Statewide Transfer Articulation Agreements Group
2022–2023	Member, Badging Working Group
2022–2023	Member, Microcredential Working Group
2020—2021	Co-Chair, Educate for the Future Strategic Planning Vision Team, University of Colorado Denver
2020	Member, Safe Return Initial Planning Team - Scholarly and Creative Activities Working Group

College Level Service

2023–Present	Member, CLAS Bachelor of Applied Science new degree Working Group
2023–Present	Member, CLAS Facility for Advanced Spatial Technology Advisory Committee
2022–Present	Member, CLAS Curriculum Management Working Group
2022–2023	Chair, Facility for Advanced Spatial Technologies Lab Coordinator Search Committee
2022	Member, CLAS Budget Management Working Group
2021	Member, Academic Advisor Search Committee
2019	Member, Decision Support Toolkit CLAS Stakeholders

Department Level Service

2022—Present	Member; Equity, Diversity, and Inclusivity Working Group
2022	Hiring Authority, Laboratory Coordinator II Search
2022	Hiring Authority, Business Service Professional Search
2022	Hiring Authority, Tenure Track Faculty Search
2021	Hiring Authority, Laboratory Coordinator I Search
2020—Present	Advisor, CU Denver Society of Physics Students Chapter
2019—Present	Ex-officio, Instructional Laboratory Committee
2019—Present	Ex-officio, Curriculum Committee

Service while at Ithaca College

Professional Level Service

2014—2019	Society of Physics Students Zone 2 Councilor
2007—2017	Vice-President, Finger Lakes Chapter of the New York State Archaeological Association
2005—2019	Chair 2013-2015, Vice-Chair 2011-2013, Executive Committee Member 2005-Present, New York State Section of the American Physical Society.

College Level Service

2012—2017	Faculty Advisory Committee to the President
2004—2019	Academic Justice, Office of Judicial Affairs
2007—2010	Faculty Trustee on the Ithaca College Board of Trustees

Department Level Service

2013—2019	Science Teacher Program Coordinator
2012—2019	H&S Teacher Education Committee
2015	H&S Dean Search Committee
2004—2010	H&S Faculty Senate (Vice President May 2009-10, Treasurer May 2008-09. Executive Committee member Fall 2006-10)
2004—2010	Center for Natural Sciences Sustainability Group Core Committee member
2004—2010	Environmental Studies & Sciences Program Steering Committee
2004—2006	H&S 50th Anniversary Planning Committee

Professional Development Activities while at the University of Colorado Denver

Fall-21	Search Advocacy Training
Oct-20	College of Liberal Arts and Sciences Department Chairs Budget Training
Jul-20	Interfolio Virtual Summit

Professional Development Activities while at Ithaca College

Mar-16, 17, 18	College Showcase. Educational Technology Day. 3D Visualization using 3D Laser Scanners and 3D Printers. Ithaca College, Ithaca, NY.
Nov-14	Organizer of Association of American Colleges & University Project Kaleidoscope Upstate New York Regional Network workshop Multidisciplinary Sustainability in STEM Education. Ithaca, NY.
Mar-14	Presenter. Educational Technology Day. 3D Visualization using 3D Laser Scanners and 3D Printers. Ithaca College, Ithaca, NY.
Oct-13	Participant and Keynote Speaker. Project Kaleidoscope Upstate New York Regional Network, Alfred, NY.
Nov-09	Organizer of the Biannual Symposium of the New York State Section of the American Physical Society. Topic Physics and Archaeology.
Jun-07	Participant in American Association of Physics Teachers New Faculty Workshop Reunion.
Oct-05	Co-organized a physics-teaching workshop with Wiley publishing. Visualizing the Future of Physics Education A Wiley Publishing Faculty Network Workshop. October 29th, 2005. Ithaca College, Ithaca, NY. This workshop was attended by 25 physics faculty with individuals coming from as far away as Louisiana.
Sep-04	Organizer and Participant in Student Centered Activities for Large Enrollment Undergraduate Physics (SCALE-UP) Implementer's workshop run by Dr. Bob Beichner, North Carolina State University.
Nov-03	Participant in American Association of Physics Teachers New Faculty Workshop.
Jun-03	Participant in Oregon State University's Paradigms in Physics, Energy and Entropy Summer Faculty Workshop.

Research Students Supervised

* Numbers indicate the number of semesters and summers (10-week) students conducted research in my laboratory. A 'T' means that this student is working on / completed a thesis. I've had 133 undergraduate and graduate students as part of my research in the past 20 years. I've had 21 undergraduate students engage in my research laboratory within the past 3 years.

#	Student	Grad Year	Project Title	Sem/ Sum*	Comments
144	Jacob Sharp	2028	Learn how to process data to create 3D images for analysis.	1 / 0	New physics major joining team Spring 2025
143	Sebastian Graham	2028	Learn how to process data to create 3D images for analysis.	1 / 0	New physics major joining team Spring 2025
142	Omar Mendez	2028	Learn how to process data to create 3D images for analysis.	1 / 0	New physics major joining team Spring 2025
141	Lukas Posso	2028	Using Adobe Photoshop to correct lens flares in spherical panoramas prior to phototexturing point cloud data and meshed model creation.	1 / 0	
140	Melane Herrera	2027	Using visual alignment to register point cloud data from Trim Castle, Ireland.	1 / 0	
139	Marilisa Papavasiliou	2025	Testing the use of borescope model two for photogrammetry to obtain higher resolution 3D models of cadavric wrist joint surfaces.	2 / 0 T	
138	Zana Al-Najjar	2025	Testing the use of borescope model one for photogrammetry to obtain higher resolution 3D models of cadavric wrist joint surfaces.	1 / 0	
137	Zach Stedman	2025	Designing, Building, and Testing a Non-Magnetic Cart for Supporting Fluxgate Gradiometers.	1 / 0	
136	Hunter Swartwout	2026	Examining the use of a configurable structured light scanner to obtain higher resolution 3D models of cadavric wrist joint surfaces.	3 / 0 T	
135	Christian Pitel	2027	Registering and creating phototextured 3D models of Irish Castles for display in a Web-based LiDAR viewer	3 / 1 T	
134	Fernando Rameriz	2025	Comparing the Leica P40 to the RTC360 to determine if the RTC360 scanner has sufficient resolution beyond 10 meters.	4 / 1 T	
133	Shi Davis	2025	Understanding University of Colorado Denver physics major 'readiness' and recommendations for improving student success.	5 / 2 T	Co-Author on manuscript in prep. McNair Scholar 2024
132	Franklin Rojas	2025	Creating 3D models of cadaver samples for new elbow surgery technique / Creating 3D models of Irish Castles for Virtual Tourism	5 / 2 T	Co-Author on manuscript in prep. Emerson Collective Fellow 2023 and 2024.
131	Raphael Marquez	2023	Introductory Physics Laboratory Curriculum Development and Evaluation of In-Person+Remote Modes	1 / 0	

130	Max Markgraf	2024	Creating 3D models of cadaver samples for new wrist surgery technique	2 / 0 T	Co-Author on manuscript in prep
129	Mitch Hutchings	2024	Creating 3D models of spinal implants for analyzing use wear versus corrosion	4 / 0	
128	Daisy Wanless	2024	Creating magnetic and electrical field lines in a HoloLens2 : Comparing ground-based and drone-based LiDAR for historic preservation	4 / 2 T	EuRECA Fellow 2022 / Co-Author on manuscript in prep
127	Autumn Bauman	2024	Creating computer code to process magnetometry data	1 / 0	
126	Sarah Anderson	2025	Researching Wind and Solar Energy Production	1 / 0	
125	James Jarka	2022	Analysis of sunspot activity	3 / 0 T	
124	Boushrah Kassir	2024	3D laser scanning and photogrammetry in support of a proposed new orthopedic surgery technique for the wrist	2 / 0 T	
123	Heather Hassan	2024	Visualizing mathematical graphs, plots, and surfaces in augmented reality	1 / 0	
122	Jennifer Lofgren	2022	Literature review of intro physics lab research in context of our curriclum development	1 / 0	
121	Lissa Barru	2024	Education research comparing of In-Person and Remote Modes for introductory physics lab courses	3 / 0 T	
120	Bridgette Spinney	2022	Introductory Physics Laboratory Curriculum Development and Evaluation of In-Person+Remote Modes	2 / 0	
119	Aidan Garcia St. George	2025	Processing magnetometry data from the monastic site at Ferns, Ireland. Determining 3D model creation data collection methods for Wrist Surgery research.	4 / 1 T	
118	Yaya Haidara	2022	Implementing RTK-DGPS with optically pumped magnetometry and ground-penetrating radar	2 / 0	
117	Dan Barry	2022	Testing Rubidium Magnetometer instrument design, and Design, Manufacturing, and Testing of a non-magnetic cart	3 / 1 T	
116	Clayton Ridder	2023	Upwards continuation in magnetometry, and Integration of RTK-DGPS into magnetometry surveying	4 / 1 T	
115	Ahmad Abusabaeen	2021	3D laser scanning as part of orthopedic surgery research	1 / 1	
114	Adrian Lopez	2020	Physics of Alternative Fuel: Comparing Emissions and Energy Density	1 / 0	
113	Keegan Karbach	2020	Education Research: Creating and testing additional learning materials to support remote learning in introductory physics laboratory courses.	2 / 0	
112	Sam Chen	2020	Physics Education Research: Critical Evaluation of Current Environmental and Energy Textbooks and Popular Literature, and Understanding thermodynamics of a ceramic material and Seebeck modules	2 / 0	

	Sam Chen	2025	Creating a Web-based LiDAR viewer for equivalent access and virtual tourism	7 / 3	
111	Michael Demetrescu-Vulcan	2023	Using laser scanning point clouds to create an augmented reality app for accessibility and historic interpretation	1 / 0	
109	Avery LaValle	2021	Using 3D printing to create a campus map to assist visually impaired visitors to campus	1 / 0	
108	Elizabeth Zenteno	2021	Designing and testing a 3D printer filament grinder and extruder to convert otherwise waste filament into usable filament	1 / 0	
107	Kurt Burdick	2020	3D design and printing	3 / 1	Dana Internship 2018
106	Christina Cuzzi	2020	3D laser scanning to assist in the creation of an advanced campus map with a focus on accessibility needs	1 / 0	
105	Alexis Farrington	2020	Creating virtual fly-throughs of 3D laser scanned historic structures and designing an App for augmented reality tours of historic sites	3 / 1	Physics Ford Research Fund 2018
104	Brigid Long	2020	Creating a workflow for moving laser scanning point cloud data into AutoDesk Revit to facilitate the creation of architectural renderings	1 / 0	
103	Mia Manzer	2020	Examining 3D laser scanning and printing in Dentistry	2 / 0	
102	Liam Pfaff	2020	Creating a scanner that scans cylindrical objects	1 / 0	
101	Andrew Polcari	2020	Examining the use of high speed photography to better understand frisbee flight	1 / 0	
100	Samantha Weeks	2020	Developing a WebGL platform using three.js to host laser scanning point cloud data of historic sites on the web	1 / 0	
99	Chidi Anyata	2019	Digitally preserving Trim Castle in Ireland with 3D laser scanning	2 / 1	Physics Ford Research Fund 2016
98	Fedor Efremenko	2019	Charging batteries using Seebeck modules and the high temperatures of a compost pile	2 / 0	
97	Valerie Gugliada	2019	Designing and 3D printing stamps for recreating medieval ceramic tiles	1 / 0	
96	Joshua Hector	2019	Digitally preserving Philipse Manor Hall in Yonkers, NY using 3D laser scanning	1 / 1	Physics Ford Research Fund 2016
96	Stefan Lazarevic	2019	Assembling and testing a DJI Matrice Pro 600 drone in support of historic preservation	1 / 0 T	
95	Paul Moehlenhoff	2019	Design and testing of a wheel chair capable of navigating hiking trails	1 / 0	
94	Jacob O'Brian	2019	Charging batteries using Seebeck modules and the high temperatures of a compost pile	3 / 0	
93	Reynor Lindsay	2019	Explore 3D printing and electronics to create an enhanced prosthetic arm.	1 / 0	

92	Alexander Tuong	2019	3D design and printing of an innovative trailer hitch	2 / 0	Dana Internship 2017
91	James VanDeventer	2019	3D design and printing of a campus map to aid in accessibility for sight impaired students	1 / 0	
90	Kyle Cosentino	2018	3D design and printing	3 / 0 T	
89	Sal Ferrone	2018	Analysis of student responses on the FCI	1 / 0	
88	Harrison Kesel	2018	Converting point cloud of Old Fort Johnson National Historic Landmark to CityEngine model, and digitally preserving Trim Castle in Ireland with 3D laser scanning	1 / 1 T	Dana Internship 2016
87	Kevin Pomer	2018	Converting point cloud of President Lincoln's Cottage National Historic Landmark to CityEngine model	3 / 1 T	Dana Internship 2017
86	Jimmy (Yifan) Tang	2017	3D printing	1 / 0	
85	Ryan Bouricius	2017	3D printing prosthetics, and digitally preserving Trim Castle in Ireland with 3D laser scanning.	5 / 1 T	Physics Ford Research Fund 2016, 2017
84	Ryan Fedora	2017	Creating a 3D online map of the Ithaca College campus	2 / 1 T	2017 Award Winning Presentation at J. J. Academic Symposium
83	Marcell Fischler	2017	Exploring the use of ground-penetrating radar to image buried material on asteroid surfaces.	2 / 0 T	
82	Angelo Niforatos	2017	Design and printing of clamp for modified bicycle lamp, and laser scanning forensic anthropology samples.	3 / 0	
81	Connor Pivan	2017	Creating IC3D products of campus buildings	1 / 0	
80	Tom Steele	2017	Understanding and reducing warping during 3D printing, and digitally preserving Trim Castle in Ireland with 3D laser scanning.	3 / 1 T	Physics Ford Research Fund 2016
79	Duncan Allen	2016	Creating surface models from Leica C-10 3D laser scans	2 / 0	
78	Nathan Antonacci	2016	Investigating Calculus students' ability to use graphs in technical reports.	3 / 1 T	Physics Ford Research Fund 2015
77	Alexandra Astwood	2016	Using the new Leica C-10 3D laser scanner and software to scan the Center for Natural Sciences	2 / 1	Physics Ford Research Fund 2013
76	Kevin Coldren	2016	Creating surface models from Leica C-10 3D laser scans	3 / 2 T	Pre-Noyce Summer Intern 2014
75	Ethan Fletcher	2016	Creating surface models from Leica C-10 3D laser scans	1 / 0	
74	Jeff Hejna	2016	Creating a Java program to automate magnetic data processing	2 / 1 T	Dana Internship 2015

73	A.J. Kenworthy-Rodriquez	2016	Understanding how to use the new Leica C-10 3D laser scanner and software	2 / 0	
72	Devin Larsen	2016	Using Discourse Analysis to Further Understand Einstein's and Poincare's 1905 Papers on Special Relativity	3 / 0 T	
71	David Lesnefsky	2016	Creating a new design of a cylindrical scanner.	2 / 0	
70	Jeff Olson	2016	Analyzing archaeogeophysical data from the Chemung Village Site.	1 / 0	
69	Corinne Steffens	2016	Interfacing GPS to archaeogeophysical instruments.	0 / 1	Physics Ford Research Fund 2014
68	Evan Van de Wall	2016	Understanding how to use the new Leica C-10 3D laser scanner and software, and writing instruction guides.	3 / 2 T	Pre-Noyce Summer Intern 2013, Physics Ford Research Fund 2014
67	Max Weinberg	2016	Designing a starting point calibration mechanism for a non-magnetic switch for triggering magnetic data collection using the wheel of a non-magnetic cart.	1 / 0	
66	Gregory Broslawski	2015	Applications of 3-D Scanning in the Field of Forensic Tracking	2 / 0	
65	Greg Fobes	2015	Building a fluxgate gradiometer	0 / 1 T	Dana Internship 2014
64	Colleen Mahoney	2015	1. Archaeogeophysical Surveys of Late Bronze Age cities in Cyprus 2. Re-processing magnetometer data from the White Springs Village Site	4 / 3 T	NSF Researcher 2012 /Dana Internship 2014
63	Julian Weisner	2015	Creating a new design of a cylindrical scanner.	2 / 0	
62	Charlie Woodward	2015	1. Archaeogeophysical Surveys of Late Bronze Age cities in Cyprus 2. Re-processing magnetometer data from the White Springs Village Site	3 / 1 T	Pre-Noyce Summer Intern 2012
61	Temuri Bokuchava	2014	Final construction of a non-magnetic switch for triggering magnetic data collection using the wheel of a non-magnetic cart.	1 / 0	
60	Rachel Hallock	2014	Generating Energy From Compost Harvesting the Seebeck Effect	0 / 1 T	Dana Internship 2013
59	Matt MacDonald	2014	Examining the difference of using gains of the average and average of the gains when reporting diagnostic exam results	2 / 0	
58	Anthony Ortiz	2014	Exploring parameters of multi-frequency conductivity surveying.	1 / 0	
57	Jeff Porzio	2014	Writing computer code to process magnetic data using upward continuation.	1 / 0	
56	Andrey Stejko	2014	Final design of a cylindrical scanner.	2 / 0	
55	Gary Wan	2014	Final design of a cylindrical scanner.	1 / 0	

54	Cory Wydysh	2014	Designing a battery charger to connect with to Seebeck Module electricity generator.	1 / 1	Dana Internship 2013
53	Danny Bradac	2013, 2014	1. Archaeogeophysical surveys at the White Springs Site, NY, Rockaway Presbyterian Cemetery, NJ, French Azilum Site, PN, Knapp Site, NY, and Late Bronze Age Cities in Cyprus. 2. Analyzing assessment instruments as part of the Multidisciplinary Sustainability Education project.	3 / 4 T	Physics Ford Research Fund 2010, NSF Researcher 2011 and 2012. IC MAT Graduate Student
52	Phil Davidowsky	2013, 2014	1. Designing an Advanced Physics Laboratory to understand gyroscopes 2. Testing a GPS difference correction method for positional errors encountered during magnetic surveys.	3 / 1	IC MAT Graduate Student
51	Caitlin Davis	2013	Analyzing pre-course and post-course surveys from a middle school after school program on physics and roller coasters.	0 / 3	NSF Noyce Scholar 2012, Dana Internship 2011, IC MAT Graduate Student
50	Samantha Epstein	2013	Designing and building a cylindrical scanner.	1 / 0	
49	Zach Matuszach	2013	Archaeogeophysical Surveys of Late Bronze Age cities in Cyprus	0 / 1	Dana Internship 2012
48	Caleb McWhorter	2013	1. Creating a program to analyze magnetic data using upward continuation 2. Creating educational physics simulations using Mathmatica	2 / 0	
47	Zach Mink	2013	Creation and calibration of a non-magnetic switch for triggering magnetic data collection using the wheel of a non-magnetic cart.	5 / 2	Dana Internship 2010, NSF Researcher 2011
46	Spencer Weigold	2013	Compost Thermal Heating: Exploring the use of energy by heating from a compost pile to warm greenhouse soil beds and to generate electricity. Part III: Building a working instrument.	2 / 1	Physics Ford Research Fund 2011
45	Joyce Wu	2013	1. Using discourse analysis to compare Poincare and Einsteins papers on special relativity. 2. Archaeogeophysical surveys at the White Springs Site, NY, Rockaway Presbyterian Cemetery, NJ, French Azilum Site, PN, and the Knapp Site, NY	3 / 1 T	Dana Internship 2010
44	Lindsay Timian	2012	Analysis of student responses on the Maryland Physics Expectation Survey in a computer science course.	1 / 1	IC MAT Graduate Student
43	Ryan Jeffris	2012	Creation and calibration of a non-magnetic switch for triggering magnetic data collection using the wheel of a non-magnetic cart.	1 / 1	Physics Ford Research Fund 2009
42	Jodi Ann Mclean	2012	Exploring methods of measuring hamster wheel use through optical and magnetic methods.	1 / 0	
41	Kevin Harper	2011	Developing specification for a soil resistivity meter.	1 / 0	
40	Michael Frasco	2011	Exploring the use of high frequency GPR to locate turtle eggs	1 / 0	
39	Perri Gerard-Little	2017	Archaeogeophysical surveys at the White Springs Village Site, Geneva, NY	5 / 2	Cornell Anthropology Graduate Student

38	Christoper Hastings	2011	Archaeogeophysical surveys at Late Bronze Age cities in Cyprus.	1 / 1	Physics Ford Research Fund 2008
37	Kevin Hurley	2011	Archaeogeophysical surveys at Late Bronze Age cities in Cyprus, at the White Springs Village Site, Geneva, NY, and a variety of other sites.	7 / 4 T	Physics Ford Research Fund 2008, 09, 10
36	Adam Iaizzi	2011	Exploring the use of high frequency GPR to locate turtle eggs	1 / 0	
35	Katie Kearns	2015	Archaeogeophysical surveys at Late Bronze Age cities in Cyprus.	3 / 2	Cornell Classics Graduate Student
34	Jeff Leon	2016	Archaeogeophysical surveys at Late Bronze Age cities in Cyprus.	6 / 3	Cornell Classics Graduate Student
33	Eilis Monohan	2019	Archaeogeophysical surveys at Late Bronze Age cities in Cyprus.	1 / 1	Cornell Classics Graduate Student
32	Nathan Porter	2011	Site location analysis for the Ithaca College Naked-eye Observatory project, and analysis of student's understanding of the nature of science.	3 / 2	NSF researcher 2009 and 2010
31	Ann Velazquez	2011	Compost Thermal Heating: Exploring the use of energy by heating from a compost pile to warm greenhouse soil beds and to generate electricity.	2 / 0	
30	Caitlin Ahearn	2010	Compost Thermal Heating: Exploring the use of energy by heating from a compost pile to warm greenhouse soil beds and to generate electricity. Part II: Charging Batteries.	3 / 1 T	Dana Internship 2009
29	John Bassage	2010	Designing and Building a cart to carry a ground-penetrating radar antenna and control unit. Building a scanner to scan cylinders.	3 / 1	Physics Ford Research Fund 2007
28	Taylor Boyd	2010	Creation and calibration of a non-magnetic switch for triggering magnetic data collection using the wheel of a non-magnetic cart.	1 / 1	Physics Ford Research Fund 2009
27	Rebecca Grollman	2010	1.Comparing learning gains in an active-learning general education astronomy class to a traditional section of the same class. 2. Examining post-acquisition processing techniques for archaeological geophysics.	6 / 2	NSF Researcher 2008 and 2009
26	Jordan Hyatt	2010	Measuring temperature fluctuations in the science building due to sliding doors using a thermistor array	2 / 0	
25	Charlie Simkin	2010	Archaeogeophysical surveys of an Iron Age Hill Top Fort in Azerbaijan and a Bronze Age Village Site in Cyprus	0 / 1	Physics Ford Research Fund 2008
24	Nina Rogers	2014	Archaeogeophysical surveys at the Levanna Site.	0 / 1	UDenver Anthropology Graduate Student
23	Ryan Myers	2010	Electromagnetically powered piston based engine	1 / 0	
22	Rhea Hanrahan	2009	1. Developing new experiments for Introduction to Physics I and II and examining student learning. 2.Gathering and examining the baseline magnetic data for magnetic studies of the Center for Natural Sciences Alternative Landscape plot.	6 / 2 T	NSF student researcher 2007. Physics Ford Research Fund 2006

21	Colin Howard	2009	Compost Thermal Heating: Exploring the use of energy by heating from a compost pile to warm greenhouse soil beds and to generate electricity.	3 / 1 T	Dana Internship 2007
20	Blaine Laughlin	2009	Measuring temperature fluctuations in the Center for Natural Sciences due to sliding doors using a thermistor array	3 / 0	
19	Justin Sousa	2009	Designing an adjustable, constant speed motor for use in remote sensing error reduction studies.	1 / 0	
18	Kyle Stone	2009	Creation and calibration of a non-magnetic switch for triggering magnetic data collection using the wheel of a non-magnetic cart.	1 / 1	Physics Ford Research Fund 2006
17	Beth Ryan	2016	Archaeogeophysical Research Design for White Springs Native American Village site.	1 / 1	Cornell Anthropology Graduate Student
16	David Baker	2008	Creation and calibration of a non-magnetic rotating platform to enhance studies to understand the role that magnetic properties of rocks have on magnetic surveys.	1 / 0	
15	Nik Batruch	2008	Creation and calibration of a non-magnetic switch for triggering magnetic data collection using the wheel of a non-magnetic cart.	5 / 2	Dana Internships 2007 & 2006
14	George DeBeck V	2008	Creation and calibration of a non-magnetic rotating platform to enhance studies to understand the role that magnetic properties of rocks have on magnetic surveys.	2 / 1 T	Physics Ford Research Fund 2007
13	Maria Gonzalez	2008	Creation and calibration of a non-magnetic rotating platform to enhance studies to understand the role that magnetic properties of rocks have on magnetic surveys.	1 / 0	
12	James Grandner	2008	Comparing learning gains in an active-learning algebra-based introductory physics class to a traditional section of the same class.	2 / 2	MAT in Physics 2008. NSF student 2007
11	Penyo Michev	2008	Investigations of a method to adjust ground-penetrating radar signals to account for the pitch and roll of the radar antenna.	1 / 0	
10	Darius Romero	2008	Creating active learning classroom instruments for general education astronomy	0 / 2	MAT in Physics 2008. NSF student 2007
9	Lia Stelljes	2008	Creation and calibration of a non-magnetic rotating platform to enhance studies to understand the role that magnetic properties of rocks have on magnetic surveys.	1 / 0	
8	Kris Georgiev	2007	Investigations of a method to adjust ground-penetrating radar signals to account for the pitch and roll of the radar antenna. Cesium Magnetometer Studies of the Corey Village Site, Aurora, NY (2005)	1 / 1	Dana Internship 2005
7	Reuben Gergen	2007	Exploring Connections Between Gravity and Electricity & Magnetism	4 / 0	
6	Sanya Levi	2007	Investigating black holes and reconciling modern theories.	1 / 0	
5	Kevin Faehndrich	2006	Cesium Magnetometer Studies of the Gila Encantada Pit House Village Site, NM (2004). Cesium Magnetometer Studies of the Corey Village Site, Aurora, NY (2005)	5 / 2	Physics Ford Research Fund 2004 and 2005

4	Christina Hollister	2006	Creating a sustainable renovation plan for the creation of the new physics classroom during summer 2006.	1 / 0	
3	Greg Shear	2006	Cesium Magnetometer Studies of the Gila Encantada Pit House Village Site, NM	1 / 1	Dana Internship 2004
2	Michael Stark	2006	Investigations of a method to adjust ground-penetrating radar signals to account for the pitch and roll of the radar antenna.	3 / 0	Spring 2006 Ithaca Fund Research Award for $550
1	Dan Varney	2006	Developing machine shop skills, constructing an aluminum, non-ferrous laser alignment tool, and conducting experiments to determine this tool's ability to reduce parallax error during magnetic surveys.	1 / 0	

Student Presentations at the Regional and National Professional Conferences

Daisy Wanless	Interactive Physics Using Augmented Reality. 2022 Physics Congress.	8-Oct-22
Benjamin Ryan Bouricius	Get a Grip: Designing an Opposable Thumb on a 3D Printed Mechanical Prosthetic Hand. 2016 Quadrennial Physics Congress.	5-Nov-16
Harrison Kesel	Comparing Laser Scanners. 2016 Quadrennial Physics Congress.	5-Nov-16
Thomas Steele	Preserving History: Laser Scanning an Irish Castle.	5-Nov-16
Nathan Antonnaci	Figures and First Years: How first-year Calculus I students are incorporating figures into technical reports. National Conference for Undergraduate Research Annual Conference.	16-Apr-20
Danny Bradac	Archaeogeophysical surveys to understand the expression of power through urban planning during the Late Bronze Age in Cyprus. National Conference for Undergraduate Research Annual Conference.	29-Mar-12
Zach Mink	Locating Neolithic features at Ayia Varvara-Asprokremnos in Cyprus using archaeogeophysics. National Conference for Undergraduate Research Annual Conference.	30-Mar-12
Danny Bradac	Archaeogeophysical Surveys to Locate Revolutionary War Era Unmarked Burials at Rockaway Presbyterian Cemetery, NJ. National Conference for Undergraduate Research Annual Conference.	2-Apr-11
Kevin Hurley	Archaeogeophysical Surveys of Late Bronze Age Cities in Cyprus. National Conference for Undergraduate Research Annual Conference.	2-Apr-11
Joyce Wu	Archaeogeophysical Surveys at a 300-year-Old Native American Village Site in Central New York. National Conference for Undergraduate Research Annual Conference.	2-Apr-11
Caitlin Ahearn	Sustainably Charging Batteries Using Compost. National Conference for Undergraduate Research Annual Conference.	15-Apr-10
Sarah Burleson	Student Learning of Specific Physics Content in the "Studio/SCALE-UP" Environment. American Association of Physics Teachers Summer Meeting. Ann Arbor. MI.	27-Aug-09
Rhea Hanrahan	Modification of Laboratory Experiments for use in a New Performance-Based Physics Classroom. Society of Physics Students Zone 2 Meeting. University of Rochester, Rochester. NY.	21-Apr-07
Kevin Faehndrich	Comparison of Archaeological and Magnetic Methods for Identification of Subsurface Housing Structures. Sigma Xi Northeast Symposium. Cornell University. Ithaca, NY.	26-Apr-06
Greg Shear	Reduction of Parallax Error in Cesium Magnetometer Surveys Using Laser Alignment. New York State section of the American Physical Society's biannual symposium. Brooklyn. NY.	15-Oct-04

Kevin Faehndrich	Cesium Magnetometer Surveys at a 1,000-Year-Old Pithouse Village Site in Southwestern, New Mexico. New York State section of the American Physical Society's biannual symposium. Brooklyn. NY.	15-Oct-04

Student Presentations at the University of Colorado Denver Research and Creative Arts Symposium

Melissa Barru	Retention and Persistence of Physics Students at CU Denver from 2013-2023: What is a cohort?	2024
Shi Davis	A Preliminary Study of Attitudes and Beliefs of Physics in Non-Traditional Students	2024
Max Markgraf	Dorsal Vs. Volar wrist surgery technique by surface area visualization	2024
Zach Stedman	Non-Magnetic Cart for Supporting Fluxgate Gradiometers	2024
Daisy Wanless	Comparing Terrestrial-based to Drone-based Laser Scanning for Historic Preservation	2024
Clayton Ridder	Pseudo Gradient Viability in Total Field Magnetometry	2023
Franklin Rojas	3D Laser Scanning Elbow Joint Surfaces to Compare Surgical Techniques	2023
Daisy Wanless	3D Laser Scanning an Entire Denver City Block for Historical Preservation	2023

Student Presentations at the Ithaca College J.J. Whalen Academic Symposium

Harrison Kesel	Can Laser Scanners be used to Historically Preserve Buildings	12-Apr-18
Kevin Pomer	Creating Digital Models of Papier-Mache Ceiling Elements in Philipse Manor Hall	12-Apr-18
Benjamin Ryan Bouricius	Get a Grip: Modification son 3D-Printed Mechanical Prosthetic Hand Design	13-Apr-17
Ryan Fedora	Using Drone-Based Photogrammetry to Supplement Ground-based 3D Laser Scanning for Historic Preservation	13-Apr-17
Marcell Fischler	Ground-Penetrating Radar and Its Applicability in Determining Underground Materials and Subsurface Structures on Asteroid Surfaces	13-Apr-17
Harrison Kesel	Digitally Preserving Trim Castle in Ireland Using 3D Laser Scanning	13-Apr-17
Thomas Steele	Minimizing Warping in 3D-Printed Architecture Models	13-Apr-17
Kevin Coldren	Using 3-D Laser Scanning to Facilitate Space Syntax Analysis to Understand How People Interacted with Historic Buildings	14-Apr-16
Jeff Hejna	Automating Magnetometer Data Processing to Reduce Processing Time and Improve Geophysical Archaeological Survey Results	14-Apr-16
Devin Larsen	Using Discourse Analysis to Further Understand Einstein's and Poincare's 1905 Papers on Special Relativity	14-Apr-16
Evan Van de Wall	Experimentally Determining Precision and Accuracy of 3-D Laser Scanning in Comparison to Traditional Architectural Conservation Methods	14-Apr-16
Gregory Broslawski	Validating the Science of Tracking: Applications of 3-D Scanning in the Field of Forensic Tracking	9-Apr-15
Kevin Coldren	Digitally Preserving History: 3-D Laser Scan of President Lincoln's Cottage in Washington, D.C.	9-Apr-15
Devin Larsen	Using Discourse Analysis to Further Understand Einstein and Poincaré's 1905 Papers on Special Relativity	9-Apr-15
Colleen Mahoney	A Comparison of Magnetometers Used in Archaeogeophysical Survey	9-Apr-15
Evan Van de Wall	3-D Laser Scanning Records Millions of Points...Then What?	9-Apr-15
Charles Woodward	Finding the Original Location of the Post-Revolutionary War Era Washingtonian Hall	9-Apr-15

Rachel Hallock	Using Magnetometry and Ground-Penetrating Radar	10-Apr-14
Daniel Bradac	Archaeogeophysical Surveys to Locate Unmarked Burials at a Revolutionary War Era Cemetery in Rockaway, NY	4-Apr-13
Caitlin Davis	Determining the Impact on Middle School Student Understanding of Physics Through an After School Physics and Roller Coasters Program	4-Apr-13
Heather Hill	Acoustics of Marimba Bars	4-Apr-13
Joyce Wu	Using Discourse Analysis to Understand Poincare and Einstein's Scientific Arguments in their 1905 Papers on Special Relativity	4-Apr-13
Nathan Porter	The Ithaca College Naked-Eye Observatory Project	7-Apr-10
Rebecca Grollman	Archaeological Geophysical Surveys at a 300-year-old Native American Village in the Finger Lakes Region, NY	7-Apr-10
Kevin Hurley	Archaeological Geophysical Surveys at Old Fort Johnson; A Pre-Revolutionary War House Fort near Albany, NY	7-Apr-10
Caitlin Ahearn	Sustainably Charging Batteries Using Compost	7-Apr-10
Colin Howard	The Compost Thermal heating Project – Using the Seebeck Effect to Charge Batteries	8-Apr-09
Chris Hastings	Archaeogeophysical Investigations of a Late Bronze Age City in Cyprus: Methods	8-Apr-09
Kevin Hurley	Archaeogeophysical Investigations of a Late Bronze Age City in Cyprus: Results	8-Apr-09
Rebecca Grollman	Archaeogeophysical Investigations of a 300-Year-Old Native American Village in Central New York	8-Apr-09
Rhea Hanrahan	Understanding Student Expectations in Introductory Physics	8-Apr-09
James Grandner	Comparing Student Performance on Homework, Exams, a Pre-Test, and a Post-Test in an Introductory Physics Course"	8-Apr-08
Rhea Hanrahan	Examining Student Perceptions of a Course Taught in Two Very Different Types of Classrooms	8-Apr-08
Darius Romero	Developing Active-Learning Materials for General Education Astronomy	8-Apr-08
Colin Howard	Compost Thermal Heating: Drawing Energy From a Compost Pile	8-Apr-08
George DeBeck V	Identifying and Reducing Positional Errors in Magnetometer Surveys	8-Apr-08
Rhea Hanrahan	Acquisition of New Equipment and Modification of Laboratory Experiments for us in the New Performance-based Physics Teaching Laboratory	3-Apr-07
Nik Batruch	Construction of a Test Facility to Identify the Source of a Positional Error Encountered During Magnetometer Surveys	3-Apr-07
Kevin Faehndrich	Comparison of Archaeological and Magnetic Methods for Identification of Subsurface Pre-historic Native American House Features	3-Apr-06
Kris Georgiev	Identifying and Reducing Positional Errors Encountered During Ground-based Magnetic Surveys	3-Apr-06
Kevin Faehndrich	Cesium Magnetometer Surveys at a 1,000-Year-Old Pithouse Village Site in Southwestern, New Mexico	6-Apr-05

Professional Societies and Memberships

American Geophysical Union	Aerial Archaeology Research Group
American Physical Society	New York State Archaeology Association
American Association of Physics Teachers	NYS Section of the American Physical Society
American Museum of Natural History	Sigma Pi Sigma Physics Honor Society
Archaeological Institute of America	Sigma Xi Scientific Research Society
Council for Undergraduate Research	Society for American Archaeology
International Society of Archaeological Prospection	Society of Physics Students

Complete List of Honors and Awards

2020-2024	Society of Physics Students University of Colorado Denver Chapter recognized as an outstanding chapter by the National Office for each school year for the years 2020-2024.
2006-2019	Society of Physics Students Ithaca College Chapter recognized as an outstanding chapter by the National Office for each school year for the years 2006-2019.
2017	Society of Physics Students Outstanding Chapter Advisor Award
2014	SUNY Geneseo Excellence in Education Alumni Award
2006	School of H&S Merit Recognition for Outstanding Department
2006	School of H&S Merit Recognition for Outstanding Ground Center for Natural Science Sustainability Group.
2006	Ithaca College Excellence in Teaching Award
2006	Society of Physics Students Ithaca College Chapter recognized as an outstanding chapter by the National Office for the 2004-2005 school year
2005	Induction as a full member of Sigma Xi Scientific Research Society. Ithaca College, NY
2005	Inducted into Ithaca College's Oracle Society as a faculty member.
2003-2004	Department Merit Pay Raise for Excellence in Teaching
2000-2003	US National Science Foundation, GK-12 Teaching Fellowship
2001	Oregon State University's nomination for WAGS/UMI Distinguished Masters Thesis.
2001	Inducted in as an associate member of Sigma Xi Scientific Research Society. Oregon State University, Corvallis, OR.
2001	First Place Oral Presentation (Liberal Arts/Home Economics/Education Category), and Sigma Xi Engineering Poster Award. 2001 Graduate Student Conference. Oregon State University, Corvallis, OR.
2000	Best Oral Presentation and Best Poster Presentation. Liberal Arts/Home Economics/Education Category. 2000 Graduate Student Conference. Oregon State University, Corvallis, OR.
2000	Bioethics Conference Scholarship, "Life Beginnings, Life Endings Ethical Issues". Program for Ethics, Science, and the Environment. Oregon State University, Corvallis.
1999	US Department of Education GAANN Fellowship
1999	First Place Oral Presentation. Social Sciences Category. 1999 Graduate Student Conference. Oregon State University, Corvallis, OR.
1996	New York State Conspicuous Service Award US Army
1988—1991	United States National Defense Service Medal,

United States Army Good Conduct Medal,

United States Army Commendation Medal,

United States Army Achievement Medal (awarded twice),

Letter of Commendation, US Federal Bureau of Investigations,

Letter of Commendation, US Army Fort Drum Security Division

1994 Philip K. Alley Physics Department Service Award, SUNY @ Geneseo, Geneseo, NY

1993 Inducted into Sigma Pi Sigma (the National Physics Honor Society)