
CURRICULUM VITAE

RISA J. ROBINSON, PROFESSOR AND DEPARTMENT HEAD

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EDUCATION

1999 PH.D. MECHANICAL ENGINEERING

State University of New York at Buffalo, Buffalo, NY

Specialization: Computational Fluid Dynamics, Aerosol Mechanics, Heat Transfer, Fluid Mechanics

Dissertation: Numerical Modeling of Cigarette Smoke Deposition in the Airways

1995 M.S. IMAGING SCIENCE

Rochester Institute of Technology, Rochester, NY

Specialization: Digital Image Processing and Optics

Thesis: Polarization Modulation and Splicing Techniques for Stress Birefringent Fiber

1989 B.S. MECHANICAL ENGINEERING

Rochester Institute of Technology, Rochester, NY

RESEARCH EXPERTISE

Aerosol mechanics and fluid dynamics, specializing in emissions, respiratory tract deposition and microphysics of particles, computational fluid dynamics, particle image velocimetry, chemical analysis of tobacco product constituents, new technologies to monitor tobacco use behavior, generate replica lung models and design emission systems for aerosol analysis, and in vitro and in vivo mouse exposure, study design for human subjects and clinical trials

ACADEMIC EXPERIENCE, QUALIFICATIONS AND ACCOMPLISHMENTS

MECHANICAL ENGINEERING (ME) DEPT. ROCHESTER INST. OF TECHNOLOGY, ROCHESTER NY

2024-PRESENT DIRECTOR OF MECHANICAL AND INDUSTRIAL PHD PRGRAM

2014-2024 DEPARTMENT HEAD

ME Department Student Success Outcomes

- Increased ME undergraduate headcount from 809 in Fall 2014 to 943 in Fall 2021
- Increased average ME freshman class size from 135 (2014-2019) to 235 (2020-Present)
- On track to achieve the targeted growth to raise the ME headcount to over 1,500 by Fall 2024
- Average ME first year undergraduate persistence rate over 92%
- Steady increase in ME on-time graduation rate to 77%
- Steady increase in ME six year graduate rate to 85%
- Increased ME Masters graduation rate from 71% to 75%

ME Department Research Outcomes

- Improved college level ranking from R3 to R2 university

- Increased external sponsored research expenditures to over \$1.5 Million annually
- Increased the number of NIH awards
- First NSF Career award received by mechanical engineering faculty
- 30% increase in annual number of proposals submitted (2014-2021) compared to preceding 8 years
- 96% increase in annual dollar value of proposals submitted (2014-2021) compared to preceding 8 years
- ME Faculty publications collectively cited over 20,800 times in five years (2017-2021)

ME Department Development Outcomes

- \$300k (2016-2018) inaugural gift from the Gleason Works to support PhD Fellowships
- \$380k (2019-2022) follow-up gift from the Gleason Works to support PhD Fellowships
- \$130k (2015-Present) Southwest Industries to modernize the machine shop plus machine loan agreement

ME Department Leadership and Management Achievements

- Launched PhD in Mechanical & Industrial Engineering, currently 37 students (9 female)
- Launched KIT Japan joint RIT/KIT master's program
- Strong record of increasing diversity; increased gender diversity on the leadership team, increased racial diversity on the staff, and grew the number of faculty while increasing diversity
- Managed department responsibly and strategically to accomplish short- and long-term goals, in alignment with institute strategic plan for growing research, and undergraduate and graduate enrollment
- Balanced annual operating budget over \$6 million (exclusive of sponsored research)
- Oversaw recruitment, retention, and advancement of 39 faculty, including an Associate Dept. Head, Director of the Undergraduate Program, Director of the Graduate Program, Director of the PhD in Mechanical and Industrial Engineering Program, three technical staff, three office staff, and three academic advisors
- Established and maintained culture through annual faculty and staff retreats, visioning, strategic planning and change management
- Increased student hires to 150+ annually as machine shop assistants, teaching assistants, and tutors
- Spearheaded the overhaul of six teaching labs in support of growth, and incremental space for new tenure track faculty and growing research
- Coordinated joint curriculum and faculty affairs with global Dubai campus
- Lead the department through a smooth transition to on-line learning during the pandemic (2019), to hybrid modalities (2021) and back to in-person (2022)

2011-2014 ASSOCIATE DEPARTMENT HEAD

- Ensured smooth quarter to semester transition
- Engaged faculty in workload discussions and lead a culture shift in teaching loads as faculty transition from teaching towards research focused models
- Developed faculty leaders; increased number of women in the leadership pipeline, increased diversity on the department leadership team (2 females, 1 male)
- Developed universal mapping and outcomes assessment tracking process, still used today.

2000-PRESENT FOUNDRY DIRECTOR, RESPIRATORY TECHNOLOGIES LAB

- The Respiratory Technologies Lab (RTL) is a multidisciplinary team of engineers, scientists, psychologists and public health experts committed to the study of inhaled aerosols, aerosol instrumentation, and the impact of aerosols on the consumer.
- RTL staff and students comprise many disciplines, including mechanical, computer, biomedical and industrial engineering, computer science, chemistry, art and design, psychology, toxicology and medicine.

- The RTL team is committed to diversity, equity and inclusion in education and research, and strives to provide a safe and supportive research environment for all students and collaborators.
- **Goal:** RTL research aims to establish a comprehensive framework to describe the joint impact of product characteristics, subjective effects and user behavior on product consumption patterns, abuse liability, addiction and health effects.
- Career long average in excess of \$200k per year for 20+ years
- Primary Investigator on 11 of the 15 Awards, 6 Multi-Institutional Awards
- **100+ publications** including journals, conference papers, invited talks
- **Sponsors:** National Institute of Health National Institute of Drug Abuse, National Institute of Environmental Health and Safety, National Heart, Lung and Blood Institute, Department of Defense- Fort Detrick Medical Center, Food and Drug Administration Center for Tobacco Products, American Cancer Society, Philip Morris External Research Foundation, Ortho Clinical, RTI International

FACULTY RANK ADVANCEMENTS

2012-Present	Professor
2004-2012	Associate Professor
2000-2004	Assistant Professor
1998-2000	Visiting Assistant Professor
1991-1998	Adjunct Professor

TEACHING EXPERIENCE

20 different courses, in-person and on-line, lab and lecture; Mechanical Engineering Lab, Freshmen Seminar, Materials Processing, Statics, Strengths of Materials, Mechanics for Industrial Engineering, Statics and Dynamics for Electrical Engineering, Thermodynamics, Fluid Mechanics, Heat Transfer, Transport Phenomenon, Measurements, Instrumentation and Controls, Strengths of Materials Laboratory, Thermo-Fluids Laboratory, Numerical Methods, Computational Fluid Dynamics, Applications Aerosols in the Respiratory Track, Multidisciplinary Senior Design, Engineering Mechanics Laboratory

STUDENT ADVISING

- **Graduate Research:** Fully funded from external grants; 15 female; most published one or more peer reviewed journal articles, 6 students (3 female, 3 male) went on to pursue a PhD; primary majors were mechanical engineering, but also included students in microsystems engineering, chemistry, computer engineering, biomedical engineering, and medical illustration.
- **Major Graduate Advisor:** Ruddy Castillo (BS/MS, 2001), Eui Shi Kim (MS, 2002), Mike Medlar (BS/MS, 2002), Aner Gal (BS/MS, 2003), Charles Robinson (BS/MS, 2003), Pravir Rai (MS, 2004), Adam Pruyne (BS/MS, 2004), Vinod Kulkarni (MS, 2004), John Diflorio (MS, 2004), Pamela Snyder (BS/MS, 2005), Jackie Russo (BS/MS, 2007), Jessica Oakes (BS/MS, 2008), Michael Norton (BS/MS, 2009), Ted Harding (MS, 2010), Emily Berg (MS, 2010), Jonathan Steffens (BS/MS, 2010), Amit Chainani (MS, 2011), Aziz Alolayan (MS 2016), Karina Roundtree (MS, 2016), Shehan Jayasekera (PhD, 2023), Sami Farajollahi (MEng, 2024), Rawah Azeez (MS, 2024), Camilo Garzon (PhD, Current).
- **Select graduate committees for which significant guidance and/or financial support:** Jessica Weisman (MFA, 2007), Betsy Skrip (MFA, 2008), Valerie Henry (MFA, 2009), Gloria Wink (MS, 2015), Mahagani Thomas (MS, 2021), Emma Sarles (MS, 2019), Emma Sarles (PhD, 2023), Beatrice Myers (PhD, LOA), Qutaiba Saleh (PhD, 2023), Chamodhi Weerasooriya (MS, 2023), Gloria Mbaka (PhD, Current).

- **Undergraduate Research (35 students, 2 current):** Provided \$210k financial support and served as primary mentor for undergraduate students, related research in Respiratory Technologies Lab at RIT. Students presented at various venues including peer reviewed journal articles, conference presentations and RIT's Undergraduate Research Symposium: Ethan Littlefield (UG research, 2023-Current), Caleb Nuss (research Coop, 2024-Current)
- **Undergraduate Multidisciplinary Senior Design (83 Students across 17 Teams):** Provided ~\$100k financial support. Served as primary guide, customer and technical consultant.
- **Undergraduate Academic Advisor (30 to 50 students per year, ongoing):** Provide academic and career guidance for multiple student cohorts from 1st through 5th year. Liaison to institute advisors and advising office, crisis intervention for academic and mental health issues, as needed. As a young faculty member in 2003, I developed an academic advising syllabus, with activities, outcomes and assessments for each year of the 5 year program, which I use today as a guide for faculty.

RESIDENCE LIFE EXPERIENCE

1987-1989 I was promoted to Programming and Leadership Coordinator. In the role of PALCO, I recruited, hired, trained and supervised RA's. I was responsible for developing programs related to student life on campus, and rotated 24 hour duty responding to fire alarms and other emergency calls involving to students in crisis, student mental health calls and other disciplinary and student conduct issues related to residence life.

1986-1988 As an undergraduate student I was hired as a Resident Advisor (RA) in the dormitories, where I was responsible for overseeing a floor of students, providing services such as developing student programs and maintaining a sense of community and enforcing RIT policies.

INDUSTRIAL EXPERIENCE

1990-92 Test Engineer, Xerox Corporation, Corporate Research Group, Rochester, NY
Responsible for test management on wide bodied copiers to determine launch readiness. Supervised a team of 15 technicians and key operators. Designed and ran team building workshops involving the product development and workflow processes for engineering technicians and support staff.

1987-89 Research Engineer, Excite Lab, Xerox Corporation, Corporate Research Group, Rochester, NY
First as a co-op and then a full time engineer, I researched new ideas involving electrostatics and ionography; Product development of laser and color inkjet printers, focusing on the ink supply system, air circulation systems, paper path timing and controls.

1986 3 month Internship (paid co-op), Gould's Pumps Quality Assurance Division

EXTERNAL FUNDING

	Period	Amount	Role *Multi- Institutional	Sponsor	Title
1	2024- 2029	\$3.7 million	*PI (RIT Lead)	National Institute of Drug Abuse, NIH and FDA	R01 – Developing Evidence To Inform Regulatory Policy On Nicotine Content In E-Liquids
2	2020- 2022	\$420,000	PI	National Institute of Drug Abuse, NIH and FDA	R21 - Compensatory Behavior of E-cig Users in Response to Reduced Nicotine E-liquids

3	2019-2021	\$421,000	Co-I	National Institute of Environmental Health and Safety, NIH and FDA	R21- Understanding the Association between Electronic Cigarette Aerosol Emissions, Tobacco Product Characteristics and User Topography Behavior Conditions
4	2016 - 2019	\$449,874	*PI (RIT Lead, multiple PI)	National Heart Lung and Blood Institute, NIH	R01- Topography, Constituents, and Toxicity of Waterpipe Tobacco Smoke under Realistic Conditions
5	2016	\$156,000	*PI (RIT Lead)	RTI International Inc.	RTI Grand Challenge: Leading Research for E-cigarettes and Other ENDS Products (E-cig Flavor Topography)
6	2015-2016	\$123,500	Co-I	National Heart Lung and Blood Institute, NIH	R01 - E-cig Flavor Emissions
7	2015	\$60,000	*PI	NIH, GSU TCORS RTI International Inc.	R01 - Developing Methods for Measuring E-cigarette Consumption
8	2013-2015	\$415,000	*PI (RIT Lead)	National Institute of Drug Abuse, NIH	Nicotine Emissions, Toxicity, and Behavior by Electronic Cigarettes
9	2013-2015	\$165,000	PI	Dept. of Defense, Henry Jackson Foundation, Ft Detrick Medical Labs	Disease Specific Airflow Characterization by Experimental Techniques
10	2008-2010	\$60,000	Co-I	Orthoclinical Diagnostics, Inc	Mixing Diagnostics with Microwell
11	2005-2008	\$720,000	*PI (RIT Lead)	American Cancer Society	Multi-Carcinogen Dosimetry Model for Adolescents: Safer Cigarettes
12	2004-2007	\$245,250	PI	PM External Research Foundation	Diseased Lung Dosimetry Model
13	2003-2005	\$200,000	Co-I	National Science Foundation, CCLI Program	Multidisciplinary MEMS Curriculum for Undergraduate Elec, Mech, Microelectronic Engineer
14	2001-2004	\$400,000	PI	National Science Foundation, CCLI Program	Experience in Undergraduate Education
15	2001-2003	\$135,000	PI	PM External Research Foundation	Carcinogen Specific Dosimetry in the Respiratory Tract

AWARDS AND HONORS

2021 Appointed to the Food and Drug Administration Tobacco Products Scientific Advisory Committee
 Appointed to the Engineering Accreditation Commission of ABET

2017 Trustees Scholarship Award, Rochester Institute of Technology
 2015-18 Excellence in Research Award, RIT Kate Gleason College of Engineering
 2105 Award for Excellence in Student Outcomes Assessment, Rochester Institute of Technology
 2011 Million Dollar Principal Investigator, Rochester Institute of Technology
 2010 American Cancer Society Research Scholar

PROFILES

[NCBI](#)

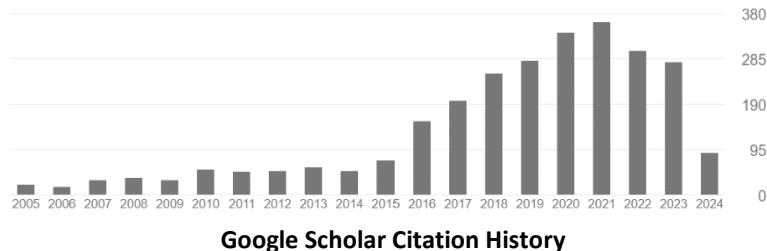
[ORCID](#)

[Google Scholar](#) All Since 2019

Citations 2834 1656

h-index 27

I10 index 40 30



PROFESSIONAL SERVICE

OUTREACH, DIVERSITY, EQUITY AND INCLUSION SERVICE

2018 **Invited Presenter, *Truths and Lies about Vaping, The More You Know Parent Awareness Event*, Penfield Central Schools and Delphi Rise**

2010-11 **Invited Presenter, 4th Grade Class (2010), 1st Grade Class (2011), 5th Grade Class (2011), Victor Central Schools, Victor NY.** Invited to give a talk to enrich learning units on respiratory tract, and careers in engineering

2008 **Mentor, NSF Louis Stokes Alliance for Minority Participation, Upstate Alliance Comp, Boyd (PI), (2008)**
 Mentored students conducting research in my lab.

2005-06 **Co-founder, We're in Motion @ RIT (Summer 2005, 2006)** Created and transformed the "I Built my Computer" program into the foundation of what has since become the nationally recognized **WE@RIT**, Women in Engineering at RIT, now fully funded by RIT and run by full-time staff and student leaders. The scope was broadened with the objective is to build community among students and faculty, build student leadership. Students engaged in numerous design projects, participate in hands-on labs in each of the engineering disciplines, culminating in a design competition and social activities.

2001-05 **Co-founder, I Built my Computer @ RIT (Summer 2001, 2002, 2003, 2004, 2005)** Provided the foundational leadership to stand up this program with the goal to build community among women engineering students. This was a 3-day workshop for freshmen women in an effort to break down barriers and increase the percentage of women in engineering at RIT. Funded by Xerox Corp., Microsoft and Intel. Students experienced hands on engineering activities relating to computers in each department and assembled their own computers.

1999-22 **Sponsor, advise, provide funding for, and supervise** non-traditional students including **deaf and hard of hearing** and **neurodiverse** students

1996-97 **Director, Edison Tech High (Inner City Magnet School) Pre-Engineering Program, Kate Gleason College of Engineering, RIT** The goal was to create a pipeline from high school to engineering for under-represented students. Taught a college course on-site at the high school, mentored high school students. Directed a 3-week summer program where students gained hands on experience in the various engineering disciplines. Program content included industry tours, faculty mentoring, team building and a final design project.

2009 **New York Hall of Science Feature Exhibit**, Betsy Skrip (Graduate Student from Medical Illustration) submitted our basement membrane model to a contest run by ASCI (Art and Science Collaborations, Inc.). The piece was selected and featured in an exhibit in the New York Hall of Science from October 3, 2009 – January 31, 2010, and is now permanently in their online exhibition.

NATIONAL SERVICE

GRANT APPLICATION REVIEW PANELS

2024 NIH Study Section, NIH/FDA Tobacco Regulatory Science, ZRG1 SCIL-E (56) (1/2024)
2021 NIH Study Section, ENDS Basic Mechanisms of Health Effects, R21/R01 ZRG1 CVRS-N (50) (12/2021)
2020 Co-Chair, NIH Study Section, NIH/FDA Tobacco Regulatory Science, R21/R01 2021/01 ZRG1 IFCN-E (56) R (10/2020)
2019 NIH Study Section, ENDS Basic Mechanisms of Health Effects, R21/R01 ZRG1 CVRS-H 50 (3/2019)
2018 NIH Study Section, ENDS Population, Clinical and Applied Prevention, R21/R01 (Clinical Trial Opt) (11/2018)
2018 NIH Study Section, Cardiovascular & Pulmonary Research on E-Cigs R01 ZHL1 CSR-N S1 1 (6/2018)
2017 NIH Study Section NIH/FDA Tobacco Regulatory Science R21/R01/R03 ZRG1 BST-H (90) S (11/2017)
2014 NIH Study Section NIH/FDA Tobacco Regulatory Science K Award ZRG1 BST-N (50) (2/2014)
2013 NIH Study Section NIH/FDA Tobacco Regulatory Science R21/R01/R03 ZRG1 HDM-Q (54) (5/2013)
2013 NIH Study Section NIH Application for Scientific Conferences R13 ZEB1 OSR-C (J2) NIBIB (11/2013)
2004 NSF Review Panel Dept Undergrad Reform (2004)
2003 NSF Review Panel CCLI (2003)

EXPERT PANELS

2022- Member, Tobacco Products Scientific Advisory Committee (TPSAC) to the US Food and Drug Administration (4 year term)
2021 Panelist, External Peer Review of the Multiple-Path Particle Dosimetry (MPPD) Model and Software with Technical Support Documentation and User's Guide (2021 V.1.01) for the Environmental Protection Agency (May 2021)
2018 Panelist, ENDS Measurement Trans-NIH Workshop, National Institute of Health (July 25-26, 2018)
2017 Evaluator, Mock ABET Visit Evaluator
2014 Panelist, Public Hearing and Workshop, US FDA Center for Tobacco Products Department of Health and Human Services, Washington, DC, December 10-11, 2014.
2014 Export Witness, Electronic cigarette patent infringement, Morrison Foerster LLP

ACCREDITATION BOARD FOR ENGINEERING AND TECHNOLOGY (ABET)

2020- Team Chair and Commissioner, Engineering Accreditation Commission (EAC) of ABET (national and internation visits)
2011-17 EAC of ABET Program Evaluator, representing American Society of Mechanical Engineers (ASME)

FELLOWSHIP AND SCHOLARSHIP APPLICATION REVIEW PANELS

2022,23 Ford Fellowship Foundation Review Panel: The National Academy of Science, Engineering and Medicine
2011 Joshua Allyn Engineering Scholarship Selection Committee, Central New York Community Foundation

PROFESSIONAL SOCIETIES

2021- American Society of Mechanical Engineers, ASME Commission on Engineering Accreditation

- Officer, Chair, 2024-
- Officer, Co-chair, 2023-24
- Officer, Secretary, 2022-23
- Co-Chair, Program Evaluator Management Committee, 2022-
- Officer, Member at Large, 2021-22
- Mentor for New ABET Program Evaluators, 2022-

2022- Society For Research On Nicotine and Tobacco, Oral Health Working Group
2021- Society For Research On Nicotine and Tobacco, Toxicology Working Group
2019- Society For Research On Nicotine and Tobacco, Health Effects Working Group

2018- International Society of Aerosols in Medicine (ISAM)
 2018-21 Biomedical Engineering Society, Annual Meeting
 2014-17 Latin American and Caribbean Consortium of Engineering Institutions (LACCIE) Annual Conference
 2013 Annals of Biomedical Engineering (BM-D-13-0048)
 1999-12 American Association for Aerosol Research, Health Effects Working Group (Chair 2003, Vice Chair 2002)

JOURNAL AND BOOK REVIEW

2022-	Associate Editor, International Journal of Environmental Research and Public Health
2021-22	Co-Editor, IJERPH special issue "Joint Effects of Tobacco Use and Product Characteristics on Human Health and the Environment"
2013-14	Editorial Board Member, Rochester Engineering Society
1999-	Peer reviewer for Nicotine and Tobacco Research, Journal of Biomechanics, Regulatory Toxicology and Pharmacology, Annals of Biomedical Engineering, Journal of Inhalation Toxicology, Journal of Aerosol Science and Technology, Journal of Aerosol Science, Addiction, Frontiers in Public Health, International J of Environmental Research and Public Health, PLOS One, McGraw Hill Publishers Text Book Review

UNIVERSITY SERVICE

2024- **Director, Mechanical and Industrial Engineering PhD Program**
 2023-Present **Co-Chair, Middlestates Re-accreditation Committee**
 2023 Member, Professional Leave Committee
 2022-2025 **Chair, Task Force to Transform First Year Freshmen Registration**
 2022 Member, Bookstore of the Future Committee
 2021-23 Engineering Representative, Public Interest Technology University Network (PIT UN)
 2020-21 Member, Covid-19 Fall Academic Planning Committee
 2017 **Panelist**, Provost Tenure-track faculty Workshop
 2016-17 Member, Innovative Learning Center Renovation Task Force with consulting architects
 2016 **Panelist**, NSF Advance Workshop featuring Women Leaders on Campus
 2015-16 Member, New York State Education Department Assessment Task Force, Student Outcomes
 2015-16 Member, Middle States Accreditation Committee, Self-Study and Site Visit Team
 2014-15 Member, Strategic Plan - Student Success Task Force
 2012-13 **Co-Chair**, Academic Portfolio Blueprint Task Force
 2009-10 Member, Research Computing Professional Staff Hiring Committee
 2007 Member, Wiedmann Endowed Professor of Microsystems Engineering Faculty Search Committee
 2006-08 Member, Bausch and Lomb Endowed Chair of Imaging Science Faculty Search Committee
 2006-08 Member, National Technical Institute for the Deaf (NTID) Faculty Search Committee
 2006 Member, Research Compliance Task Force
 2006 Member, Faculty Affairs Committee of Academic Senate
 2002 **Panelist**, Grant Writer's bootcamp for pre-tenured faculty
 2002 Featured Faculty, Interview for Prospective Freshmen High School Recruitment Video

KATE GLEASON COLLEGE OF ENGINEERING SERVICE

2021-Present **Founder**, Path to Promotion for Associate Professors Initiative
 2020-Present **Chair**, Trustees Scholarship Award Nomination Committee
 2014-Present Examiner, PhD Program Qualifying Exam (~2x annually)
 2014-18 Member, College Curriculum Committee
 2015-2017 Member, Gear Research Lab Steering Committee
 2013-Present Speaker, Order of the Engineering, Annual Induction Ceremony
 2013-Present College Corporate Employer Focus Group Interviewer
 2011-16 Member, College of Engineering Assessment & Accreditation committee
 2007-10 Member, Microsystems Engineering Faculty Search Committee
 2003-04 Faculty Mentor, Park-n-ride new student orientation program for incoming engineering women

MECHANICAL ENGINEERING DEPARTMENT SERVICE

2023-Present	Chair, Graduate Committee Thermo Fluids Subgroup
2017-2022	Chair, Facilities & Resources Committee
2016, 2022	Lead Author, ABET Self Study
2017-2022	Member, Graduate Curriculum Committee
2015-16	Chair, ABET Self Study Committee
2014-22	Presenter, Department Welcome Address to Students
2014-22	Presenter, Accepted Student Open House
2014-16	Faculty to Student Mentor, Summer College & Career High School Student Outreach Program
2012-21	Chair, Curriculum & Assessment Committee (Member 2011)
2010-21	Presenter, Prospective High School & Transfer Student open houses, 3x annually
2011-14	Chair, Engineering Science Core Curriculum Work Group
2011	Member, Bioengineering Option proposal committee
2009-10	Member, Mechanical Engineering PhD Program proposal committee
2006-13	Manager, Summer College & Career High School Student Outreach Program
2006-10	Member, Thermal Fluids Curriculum Work Group
2006-09	Faculty to Faculty Mentor; guide pre-tenured faculty on career development
2005	Member, Master of Science Thermo-fluid curriculum review committee
2004-10	Chair, Faculty Search Committee (Member 2006-08)
2003	Facilitator, Laser/Fluids Laboratory
2002-03	Chair, Freshman Curriculum Committee
1999-05	Faculty Presenter, Summer College & Career High School Student Outreach Program, 2x annually
1999-00	Chair, Thermal Fluids Committee

PUBLISHED WORKS

JOURNAL ARTICLES

1. S. E. Sarles, E.C. Hensel, C. Nuss, J. Terry, **R. J. Robinson**, "Characterization of Mass Distribution in a Biomimetic Aerosol Exposure System", *Inhalation Toxicology*, 2024.
<https://doi.org/10.1080/08958378.2024.2341995>
2. S. E. Sarles, E.C. Hensel, J. Terry, C. Nuss, and **R.J. Robinson**, "Flow Rate and Wall Shear Stress Characterization of a Biomimetic Aerosol Exposure System." *ASME. J Biomech Eng.* April 2024; 146(4): 045001. <https://pubmed.ncbi.nlm.nih.gov/38270928/>, <https://doi.org/10.1115/1.4064549>
3. S. Emma Sarles, Edward C. Hensel, Irfan Rahman, **Risa J. Robinson**, "Clinical Biomarkers to Evaluate Next Generation Inhaled Tobacco Products' Effect in the Oral Cavity: A Narrative Review", *Current Oral Health Reports*, 2024, Volume 11, pp 30-30, <https://doi.org/10.1007/s40496-023-00357-w>
4. T. Muthumalage, E. Sarles, Q. Wang, E. Hensel, T. Hill, I. Rahman, **R. Robinson**, A. Stroup, K. Thongphanh, L.A. Miller. "In Vitro Assessments of ENDS Toxicity in the Respiratory Tract: Are We There Yet?" *Toxicological Sciences, In Review*, 2024.
5. Quataiba M. Saleh, Edward C. Hensel, **Risa J. Robinson**, "Dynamic Power Measurement of Electronic Vaping Products", *IEEE Transactions on Biomedical Engineering, In Review*, 2024.
6. Quataiba M. Saleh, Edward C. Hensel, and **Risa J. Robinson**. "A robust method for quantifying the natural environment topography dynamics of E-cig users" *Pattern Recognition, In Review*, 2024.
7. Shehan Jayasekera, Edward C. Hensel, **Risa J. Robinson**, "Benchtop Characterization of Wearable Respiratory Monitors for Assessing Feasibility of Measuring Lung Volume", *ASME Open Journal of Engineering, ASME Open J. Engineering.*, 2023, Paper No: AOJE-22-1116
<https://doi.org/10.1115/1.4063340>

8. Edward C. Hensel, S. Emma Sarles, Caleb J Nuss, Janessa N Terry, Chamodhi R. Polgampola A. Gary DiFrancesco, Katherine Walton, Nathan C. Eddingsaas, Risa J Robinson, "Effect of Third Party Components on Emissions from a Pod Style Electronic Cigarette", *Toxicological Sciences*, 2023, kfad096, PMID 37724389, <https://pubmed.ncbi.nlm.nih.gov/37725389/>, <https://doi.org/10.1093/toxsci/kfad096>
9. **Risa J. Robinson**, Shehan Jayasekera, A. Gary Difrancesco, S. Emma Sarles, Stephanie Godleski, Edward C. Hensel, "Juul Puff Topography from Real-world Ambulatory Measurement," *Nicotine & Tobacco Research*, *In Revision*, 2022.
10. Edward C Hensel, Nathan C. Eddingsaas, Qutaiba M. Saleh, S. Jayasekera, S. Emma Sarles, A. Gary DiFrancesco, and **Risa J. Robinson**, "Proposed Standard Test Protocols and Outcome Measures for Quantitative Comparison of Emissions from Electronic Nicotine Delivery Systems", *International Journal of Environmental Research and Public Health*, 19(4), 2144; <https://doi.org/10.3390/ijerph19042144>, 2022.
11. Edward C. Hensel, **Risa J. Robinson**, "A proposed cigarette emissions topography protocol reflecting smokers' natural environment use behavior," *PLOS ONE* 17(4): e0266230. <https://doi.org/10.1371/journal.pone.0266230>
12. Edward C. Hensel, Nathan C. Eddingsaas, Qutaiba M. Saleh, Shehan Jayasekera, S. Emma Sarles, Mahagani Thomas, B. T. Myers, Gary DiFrancesco, and **Risa J. Robinson**, "Nominal Operating Envelope of Pod and Pen Style Electronic Cigarettes," *Frontiers in Public Health*, 17 August 2021. <https://doi.org/10.3389/fpubh.2021.705099>
13. Jayasekera, S.; Hensel, E.; **Robinson, R.** Feasibility of Using the Hexoskin Smart Garment for Natural Environment Observation of Respiration Topography. *Int. J. Environ. Res. Public Health* 2021, 18, 7012. <https://doi.org/10.3390/ijerph18137012>
14. Q.M. Saleh, Edward C. Hensel, Nathan C. Eddingsaas, **Risa J. Robinson**, "Effects of Manufacturing Variation in Electronic Cigarette Coil Resistance and Pod Mass on Coil Lifetime and Aerosol Generation," *Int. J. Environ. Res. Public Health*, Jan 2021, <https://doi.org/10.3390/ijerph18084380>.
15. Shehan Jayasekera, Edward Hensel, **Risa Robinson**, "Feasibility Assessment of Wearable Respiratory Monitors for Ambulatory Inhalation Topography", *International Journal of Environmental Research and Public Health*, 18(6), 2990, 14 March 2021. <https://doi.org/10.3390/ijerph18137012>
16. S.E. Sarles, E.C. Hensel, **R.J. Robinson**, "Surveillance of U.S. Corporate Filings Provides a Proactive Approach to Inform Tobacco Regulatory Research Strategy", *Int. J. Environ. Res. Public Health*, 18(6), 3067, 16 March 2021. <https://doi.org/10.3390/ijerph18063067>
17. Saleh, Q.M., Hensel, E.C., **Robinson, R.J.** Method for Quantifying Variation in the Resistance of Electronic Cigarette Coils. *Int. J. Environ. Res. Public Health* 2020, 17, 7779. <https://doi.org/10.3390/ijerph17217779>
18. **Risa J. Robinson**, Shehan Jayasekera, Gary Difrancesco, Edward C. Hensel, Characterization and Validation of Second Generation wPUM™ Topography Monitors, *Nicotine Tob Res.* 2020 Aug 17. <https://doi.org/10.1093/ntr/ntaa153>
19. **Risa J. Robinson**, Emma Sarles, Shehan Jayasekera, Aziz al Olayan, A. Gary Difrancesco, Nathan C. Eddingsaas and Edward C. Hensel, A Comparison between Cigarette Topography from a One-Week Natural Environment Study to FTC/ISO, Health Canada, and Massachusetts Department of Public Health Puff Profile Standards, *Int. J. Environ. Res. Public Health* 2020, 17(10), 3444. <https://doi.org/10.3390/ijerph17103444>
20. Nathan C. Eddingsaas, Edward C. Hensel, Sean O'Dea, Peyton Kuselman, A. Gary DiFrancesco, **Risa J. Robinson**, Effect of user puffing topography on total particulate matter, nicotine, and volatile carbonyl emissions from Narghil waterpipes, *Tob Control* 2020;29:s117–s122. <http://dx.doi.org/10.1136/tobaccocontrol-2019-054966>
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BOOK CHAPTERS

59. **Robinson, R.**, Hensel, E., *Combustible and Electronic Cigarette Usage, Puff Protocols and Topography Standards*. In: Patel, V.B., Preedy, V.R. (eds) *Handbook of Substance Misuse and Addictions*. Springer, Cham. https://doi.org/10.1007/978-3-030-67928-6_47-1, 2022
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61. 3D Reconstruction of an Acinus for Numerical and Experimental Studies, Harding TM, Berg EJ, **Robinson RJ**, in 3D Reconstruction: Methods, Applications and Challenges, Editors: Jim Ashworth and Kenneth Brasher Nova Science Publishers, Inc., Hauppauge, NY, USA, Book Chapter, 2008 Pg 163-202.

INVITED TALKS

62. **Risa Robinson**, Truths and Lies about Vaping, The More You Know Parent Awareness Event, Penfield Central Schools and Delphi Rise, Wednesday, Nov 28, 2018, **INVITED TALK**.
63. **R. J. Robinson**, Understanding the Quantitative Relationship Between E-cigarette Use Behavior and Exposure, International Society for Aerosols in Medicine, 2018 Symposium “Updates and Controversies Related to Inhaled Aerosols May 2018, **INVITED TALK**.
64. **R. Robinson**, Hensel, E, Rahman, I., Pagano, T, Lee Y., What’s Inhaled by Vaping? Dosimetry, Deposition, Distribution, and Topography: Pulmonary Physiological and Clinical Effects, E-Cigarette Vaping: Preclinical and Clinical Pulmonary Health Effects, Sunday, May 15, 2016, American Thoracic Society, International Conference San Diego, Ca 2016. **INVITED TALK**.
65. **R. Robinson T.** Pagano, G. DiFrancesco, K. Roundtree, P. Morabito, S. Smith, E. Hensel, Mechanical Models for Determining Electronic Cigarette Exposure, Electronic Cigarettes and the Public Health: A Public Workshop, US FDA Center for Tobacco Products Department of Health and Human Services, Washington, DC, December 10-11, 2014, **INVITED TALK**.
66. **Robinson, R.J.** and C.P. Yu. Pulmonary Deposition of Cigarette Smoke Particles. Biomedical Engineering Conference. University Park, PA. October 1996. **INVITED TALK**.

CONFERENCE PAPERS

67. **R.J. Robinson**, S. Jayasekera, E.C. Hensel, Concurrent Ambulatory Puff and Respiration Monitoring of Vaping Product Use to Inform Particle Deposition and in vitro Toxicology Studies, SOT 2023 Annual Meeting, Nashville, TN, Mar 19-23, 2023, Abstract 3801/P290, Accepted Poster and Abstract.

68. S.E. Sarles, E.C. Hensel, **R.J. Robinson**, Achieving Physiological Wall Shear Stress During In vitro Inhalation Toxicology Studies, SOT 2023 Annual Meeting, Nashville, TN, Mar 19-23, 2023, Abstract 4439/P311, Accepted Poster and Abstract.

69. E.C. Hensel, N.C. Eddingsaas, C.R.P. Ralalage, S.E. Sarles, A.G. DiFrancesco, **R.J. Robinson**, Effect of Third Party Components on Emissions from a Pod Style Electronic Cigarette, SOT 2023 Annual Meeting, Nashville, TN, Mar 19-23, 2023, Abstract 3174/P289, Accepted Poster and Abstract.

70. C.R.P. Ralalage, E.C. Hensel, **R.J. Robinson**, N.C. Eddingsaas, Effect of E-Liquid Volatilization on Electronic Cigarette Aerosol Composition, ACS Northeast Regional Meeting (NERM), Rochester NY, October 2-5, 2022, Poster Presentation.

71. E. Sarles, E. Hensel, **R. Robinson**, *Preliminary Characterization of a Biomimetic Aerosol Exposure System: Oral Cavity Module*. SRNT 2023 Annual Meeting, San Antonio TX, Mar 2023, Accepted Podium Presentation.

72. **R.J. Robinson**, S. Jayasekera, A.G. DiFrancesco, S.E. Sarles, S. Godleski, Edward C. Hensel, "Juul Puff Topography from Real-world Ambulatory Measurement," SRNT 2023 Annual Meeting, San Antonio TX, Mar 2023, Accepted Poster and Abstract.

73. S. E. Sarles, E.C. Hensel, **R.J. Robinson**, Biomimetic Exposure Modules Improve Accuracy of Particle Deposition in a Machine Puffing System, BMES Annual Meeting, San Antonio TX, October 12-15, 2022, Podium Presentation.

74. S. Jayasekera, E. C. Hensel, **R. J. Robinson**, *Simultaneous Puff and Respiration Topography for Smokers and Hookah in the Natural Environment*, 2021 Tobacco Regulatory Science Meeting, Bethesda, MD, October 2021 Poster and Abstract.

75. E. C. Hensel, N.C. Eddingsaas, Q. M. Saleh, S. Jayasekera, S. E. Sarles, M. Thomas, B.T. Meyers, A. G. DiFrancesco, **R. J. Robinson**, *Nominal Operating Envelope of Pod and Pen Style Electronic Cigarettes*, 2021 Tobacco Regulatory Science Meeting, Bethesda, MD, October 2021 Poster and Abstract.

76. S. Jayasekera, **R.J. Robinson**, E.C. Hensel, *System for Measuring Inhalation Volume from Chest Motion*. SRNT 2021 Annual Meeting, Mar 2021.

77. E.C. Hensel, A.G. DiFrancesco, S. Jaysekera, N.C. Eddingsaas, S.E. Sarles, B.T. Meyers, Q.M. Saleh, **R.J. Robinson**, *Understanding the Association Between Pod-Style Electronic Cigarette Aerosol Emissions and User Topography Behavior*. SRNT 2020 Annual Meeting, New Orleans, LA, Mar 2020.

78. **R.J. Robinson**, S. Jaysekera, N.C. Eddingsaas, S.E. Sarles, B.T. Meyers, Q.M. Saleh, A.G. DiFrancesco, E.C. Hensel, *Characterization and Validation of Generation 2 wPUM™ Topography Monitors*. SRNT 2020 Annual Meeting, New Orleans, LA, Mar 2020.

79. N.C. Eddingsaas, E.C. Hensel, S. O'Dea, P. Kunselman, A.G. DiFrancesco, **R.J. Robinson**, *Effect of Puff Flowrate and Puff Duration on the Emission of Particulate Matter, Nicotine, and Aldehydes from Narghil Waterpipes*, 2019 Tobacco Regulatory Science Meeting, Bethesda, MD, October 2019. Poster and Abstract.

80. Willian H. Bailey, Risa J. Robinson, and Gary Johnson, Modeled deposition of charged particles in the respiratory tract, 2020 Joint Annual Meeting of the BioElectromagnetics Society and the European BioElectromagnetics Association (Extended Abstract available, but conference cancelled due to Covid).

81. **R. J. Robinson**, E.C. Hensel, *Should Low Nicotine Elixils be Considered Low Yield Products*, 2019 Tobacco Regulatory Science Meeting, Bethesda, MD, October 2019. Poster and Abstract.

82. E.C. Hensel, A.A. al Olayan, S. E. Sarles, A.G. DiFrancesco, S. Jayasekera, N.C. Eddingsaas, **R. J. Robinson**, Hookah Topography in the Natural Environment to Inform Behavior-Based Design of Experiments for Emissions Testing, 2019 Tobacco Regulatory Science Meeting, Bethesda, MD, October 2019. Poster and Abstract.

83. B. Meyers, E. Hensel, S. Jayasekera, **R. Robinson**, Characterization of the wPUM™ Generation 3 Topography Monitors. 2019 BMES Annual Meeting Biomedical Engineering Society (BMES), October 2019, Poster and Abstract.

84. **R.J. Robinson**, E.C. Hensel, A New Approach To Assess Yield Delivered To The Mouth Of Ends Users Based On Product Emissions And Natural Environment Topography, Podium Presentaion 3: Symposium 12 Measurement of ENDS Exposure, Society for Research on Nicotine & Tobacco, February 2019, San Francisco, CA.

85. E.C. Hensel, N. C. Eddingsaas, S. O'Dea, A.G. DiFrancesco, **R.J. Robinson**, Framework to report total particulate matter and aldehyde emission characteristics from hookah, Podium Presentaion 4: Symposium 15 Effects of Waterpipe Consituents and Design on Toxicity of Waterpipe Tobacco Smoke and Smoking Behaviors, Society for Research on Nicotine & Tobacco, February 2019, San Francisco, CA.

86. Shehan Jayasekera, Edward Hensel, Jr., **Risa J Robinson**, Feasibility Assessment of Simultaneous Puff and Chest Belt Monitoring to Better Understand Tobacco Product Inhalation Patterns, 2018 BMES Annual Meeting, October 17-20, 2018, Atlanta Georgia.

87. E.C. Hensel, A.A. al Olayan, S. E. Sarles, N.C. Eddingsaas, **R. J. Robinson**, Hookah and Dual-Use Behavior in the Natural Environment, 2018 Tobacco Regulatory Science Meeting, Baltimore, MD, June, 2018. Poster and Abstract.

88. **R.J. Robinson**, S. E. Sarles, B.T. Meyers, N.C. Eddingsaas, S. Jayasekera, E.C. Hensel, Design of the wPUM™ Family of Topography Monitors for Natural Environment Observation Studies of Tobacco Product Use, 2018 Tobacco Regulatory Science Meeting, Baltimore, MD, June, 2018. Poster and Abstract.

89. N.C. Eddingsaas, E.C. Hensel, A.G. Difrancesco, S.M. O'Dea, S. Jayasekera, **R.J. Robinson**, Effect of hookah hose dimensions and material on TPM, nicotine, and aldehydes, 2018 Tobacco Regulatory Science Meeting, Baltimore, MD, June, 2018. Poster and Abstract.

90. **R. J. Robinson**, E.C. Hensel, A. al Olayan, J. Nonnemaker, Y.O. Lee, Effect of e-liquid Product Characteristics on Topography Behavior of e-cig Users in a 2-week Natural Environment Switching Study, SRNT 2018 Annual Meeting, Baltimore, MD, Feb 21-24, 2018. Poster and Abstract.

91. Y.O. Lee, J. Nonnemaker, A. Morgan-Lopez, J. Pepper, E.C. Hensel, R. J. Robinson, Identifying E-cigarette Person and Session Types Using Real-World Puff Topography, SRNT 2018 Annual Meeting, Baltimore, MD, Feb 21-24, 2018. Presentation.

92. E.C. Hensel, **R. J. Robinson**, A. al Olayan, J. Nonnemaker, Y.O. Lee, Analyzing Behavior of e-cig Users in Their Natural Environment Using Continuous Real-Time Plots of Aerosol Consumption, 2018 SRNT Annual Meeting, Baltimore, MD, Feb 21-24, 2018.

93. Cody Cummings, Morgan Bida, A. DiFrancesco, Irfan Rahman, **Risa Robinson**, and Todd Pagano, Comparison of methods for the capture of e-cigarette emissions for the determination of constituents using gas chromatography-mass spectrometry, 253rd National Meeting of the American Chemical Society, San Francisco, CA. April 2-6, 2017.

94. B. Sul, Z. Oppito, Gebalanage Jayasekera, B. Vanger, A. Zeller, M. Morris, K. Ruppert, T. Altes, V. Rakesh, S. Day, **R. Robinson**, J. Reifman, and A. Wallqvist, Computational Assessment of Airflow Sensitivity to Healthy and Diseased Lung Conditions, Biomedical Engr Society Annual Meeting (Abstract ID 661). October 11-14, 2017, Phoenix, AZ.

95. Edward Hensel, **Risa Robinson**, Interdisciplinary Research Methods: Enhancing Professional Skills of Engineering, 15th LACCEI International Multi-Conference for Engineering, Education, and Technology, July 19-21, 2017, Florida Atlantic University, Boca Raton, USA.

96. IK Sundar, J Gerloff, R Freter, ER Sekera, AE Friedman, T Pagano, R Robinson, I Rahman, C73 NEW Mechanisms and Therapies In Copd: Inflammatory Response By Different E-Cigarette Flavoring Chemicals Identified By Gc-Ms In E-Liquids On Human Lung Epithelial Cells And Fibroblasts, American Journal of Respiratory and Critical Care Medicine, Vol 195, 2017.

97. Edward Hensel, **Risa Robinson**, Case Study: A Career Development Program for New Engineering Faculty, 114th LACCEI International Multi-Conference for Engineering, Education, and Technology: "Engineering Innovations for Global Sustainability", 20-22 July 2016, San José, Costa Rica.

98. Youn Ok Lee, **Risa Robinson**, James Nonnemaker, Brian Bradfield, Karina Roundtree, Ed Hensel, Variation in Vaping: Examining Daily ENDS Puff Topography Among Established and Non-established Cigarette Smokers NIH TRSC May meeting, Tuesday, May 17, 2016, Baltimore Md.

99. Lerner C, Rutagarama P, Sundar I, Ossip DJ, McIntosh S, **Robinson R**, Rahman I, Mitochondrial Stress and Inflammation Following Exposure to Electronic Cigarette Aerosols. Paper presented at the 22nd Annual Conference of the Society for Research on Nicotine & Tobacco, March 3-5, 2016, Chicago, IL, USA.

OUTSTANDING TALK AWARD

100. G. Wink, **R.J. Robinson**, A.G. DeFrancesco, S.B. Smith, T.E. Pagano Measuring the emission efficiency and nicotine delivery of electronic cigarettes. 249th ACS National Meeting & Exposition March 22-26, 2015, Denver, CO, USA.

101. **Risa Robinson**, Edward Hensel, "A Process for Assessment of ABET Student Outcomes in a Mechanical Engineering Department" 13th LACCEI Annual International Conference: "Engineering Education Facing the Grand Challenges, What Are We Doing?" July 29-31, 2015, Santo Domingo, Dominican Republic.

102. Edward Hensel, **Risa Robinson**, "Direct Assessment of Student Learning Outcomes by Analysis of Performance Evaluation of Student Employees," Excellence in Engineering to Enhance a Country's Productivity: Twelfth LACCEI Latin American and Caribbean Conference for Engineering and Technology (LACCEI'2014), July 22 - 24, 2014 Guayaquil, Ecuador.

103. Michael J. Schertzer, **Risa Robinson**, Tim Landschoot, Amitabha Ghosh, Alexander Liberson, Edward Hensel Jr., "Effect of office hour participation on student performance," Proceedings of the ASME 2014 International Mechanical Engineering Conference & Exposition (MECE2014), November 14-20, 2014, Montreal, Quebec, CANADA.

104. **Risa Robinson**, Dean Culver, Michael Schertzer, Tim Landschoot, Edward Hensel, Jr., "Understanding the Causes for Low Student Office Hour Attendance," Proceedings of the ASME 2014 International Mechanical Engineering Conference & Exposition (IMECE2014), November 14-20, 2014, Montreal, Quebec, CANADA.

105. Multiscale Modeling of Flow and Transport in Oral Cavity to Understand Taste Dynamics, P. Taherkhani and A. K. Datta, Cornell University, Ithaca, USA and **R. Robinson**, Rochester Institute of Technology, Rochester, USA. 2nd International Conference on Food Oral Processing - Physics, Physiology, and Psychology of Eating 1-5 July 2012, Beaune, France.

106. Berg, E.J. and **R.J. Robinson**, Platform Presentation, Healthy And Emphysemic Alveolar Sac Flow Comparison by Particle Image Velocimetry, 30th Annual American Association for Aerosol Research Conference, Orlando Florida, Oct 3-7, 2011.

107. Varble, N., Phillips, D., **Robinson**, R.J., Illig, K., and A. Chandra, Arteriovenous fistula anastomosis to study the effects of vessel size and pressure gradient on the presence of a thrill. 2011 American Heart Association Conference.

108. Carcamo, N., **R.J. Robinson** and T. Pagano. Analysis of seven polycyclic aromatic hydrocarbons and nicotine in cigarette smoke from an improved smoking machine). 239th American Chemical Society National Meeting, San Francisco, CA. March 21-25, 2010.

109. Carcamo, N., **R.J. Robinson** and T. Pagano. Analysis of four polycyclic aromatic hydrocarbons (PAHs) in cigarette smoke using solid phase extraction and gas chromatography-mass spectrometry (GC-MS). 237th American Chemical Society National Meeting, Salt Lake City, UT. March 22-26, 2009.

110. Berg, E.J., **R.J. Robinson** and M. Oldham. Flow analysis in an expanding acinus model using particle image velocimetry. AAAR 27th Annual Conference, Orlando, Fl. Oct 17-22, 2008.

111. Harding, E.M., **R.J. Robinson** and K. Nazridoust. Flow in expanding alveolar model during unsteady breathing using computational fluid dynamics. AAAR 27th Annual Conference, Orlando, FL. Oct 17-22, 2008.

112. Russo, J. and **R.J. Robinson**. 3D Reconstruction of a Female Lung using the Visible Human Data Set to Predict Cigarette Smoke Particle Deposition. AAAR 26th Annual Conference, Reno, Nevada. Sept. 24-28, 2007.

113. Oakes, J. and **R.J. Robinson**. Prediction of particle deposition in an expanding alveolar model of the lung. AAAR 26th Annual Conference, Reno, Nevada. Sept. 24-28, 2007.

114. **Robinson, R.J.** and J. DiFlorio. Use of different modeling techniques to simulate deposition in asthma. 2006 International Aerosol Conference, St. Paul, Minnesota. Sept. 10-15, 2006.

115. Oldham, M. J. and **R.J. Robinson**. Calculated deposition in growing tracheobronchial airways: Effect of growth rate assumptions. Platform presentation, Frontiers in Aerosol Dosimetry Research Conference. Irvine, California. October 24-25, 2005.

116. Snyder P., **R.J. Robinson**, M.J. Oldham. Platform Presentation, Comparison of Particle Tracking Algorithms in Commercial CFD Packages. AAAR 2005 Annual Conference. Austin, Texas. Oct. 17-21, 2005.

117. Pryune, A., **R.J. Robinson** and M.J. Oldham. Comparison of CFD Predicted Flow field and Particle Deposition with Experimentally Measured Flow field (PIV) and Particle Deposition in a three-generation lung model. AAAR 2004 Annual Conference. Atlanta, Georgia. Oct. 4-8, 2004.

118. Rai, P., **R.J. Robinson**, M.J. Oldham and R. Clinkenbeard. Computational Analysis of a 7 generation tracheobronchial human replica lung cast. 2004 BMES Annual Fall Meeting. Philadelphia, PA. Oct 13-16, 2004.

119. **Robinson, R.J.**, L. Fuller, H. Palmer, M. Frame. Design and Analysis of a Shear Stress Sensor for Microcirculation Investigations. American Society of Mechanical Engineering Fluids Division Summer Conference. Honolulu, Hawaii. July 2003.

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2. E. Crossen and R.J. Robinson, Measuring Nicotine from Electronic Cigarettes, Platform Presentation, Platform Presentation, 19th Annual Undergraduate Research Symposium, Rochester Institute of Technology, Aug. 2009.
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5. Norton, M., Robinson, R. The Effect of Cilia Coordination and Mucus Rheology on Clearance in the Respiratory Tract, Platform Presentation, 17th Annual Undergraduate Research Symposium, Rochester Institute of Technology, Aug. 2008
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