Ender A. Finol

Curriculum Vitae

The University of Texas at San Antonio
Department of Mechanical, Aerospace, and Industrial Engineering
EB 3.04.02, One UTSA Circle
San Antonio, TX 78249
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CITIZENSHIP

Naturalized U.S. citizen.

RESEARCH INTERESTS

Computational and experimental vascular fluid and solid mechanics; design and optimization of intravascular medical devices; medical image analysis.

EDUCATION

CARNEGIE MELLON UNIVERSITY — *Pittsburgh, PA*

Doctor of Philosophy in Mechanical Engineering and Biomedical and Health Engineering, December 2001. Thesis title: "Fluid Mechanics of Pulsatile Blood Flow in Abdominal Aortic Aneurysms".

UNIVERSITY OF MASSACHUSETTS LOWELL — *Lowell, MA*

Master of Science in Mechanical Engineering, June 1997. Project on "Integration of Statistical Methods and Experimentation in Undergraduate Mechanical Engineering Laboratory Courses".

UNIVERSIDAD DE CARABOBO — *Valencia, Venezuela*

Bachelor of Engineering in Mechanical Engineering, April 1994. Five-year Baccalaureate program. Thesis title: "Design of a Bench-top Apparatus for Testing Automotive Radiators".

POSITIONS AND EMPLOYMENT

THE UNIVERSITY OF TEXAS AT SAN ANTONIO — *San Antonio, TX*

Department Chair, Department of Mechanical, Aerospace, and Industrial Engineering (February, 2022 – present).

Zachry Endowed Chair, Department of Mechanical, Aerospace, and Industrial Engineering (September, 2021 – present).

Interim ***Department Chair***, Department of Mechanical, Aerospace, and Industrial Engineering (September, 2021 – February, 2022).

Professor, Department of Mechanical, Aerospace, and Industrial Engineering (September, 2018 – present).
Program Faculty, UTSA/UTHSA Joint Graduate Program in Biomedical Engineering.

Associate Professor, Department of Mechanical Engineering (July, 2016 – August 2018).
Program Faculty, UTSA/UTHSA Joint Graduate Program in Biomedical Engineering.
Faculty Member, Center for Simulation Visualization and Real-Time Computing (SiViRT).

Associate Professor, Department of Biomedical Engineering (August, 2011 – June 2016).
Adjunct Associate Professor, Department of Mechanical Engineering.
Faculty Member, Center for Simulation Visualization and Real-Time Computing (SiViRT).

CARNEGIE MELLON UNIVERSITY *Pittsburgh, PA*

Associate Research Professor, Institute for Complex Engineered Systems (August, 2007 – August, 2011).

Associate Research Professor *(by courtesy)*, Biomedical Engineering Department (December, 2008 – August, 2011).

Associate Research Professor *(by courtesy)*, Department of Mechanical Engineering (May, 2008 – August, 2011).

Research Scientist, Institute for Complex Engineered Systems (August, 2002 – July, 2007).

Assistant Research Professor *(by courtesy)*, Biomedical Engineering Department (January, 2003 – November, 2008).

Research Associate, Institute for Complex Engineered Systems (November, 2001 – July, 2002).

Post-doctoral research in computational biomechanics of endovascular grafts and team leader of an engineering product design group for the conceptual design of an endovascular graft attachment mechanism.

Research Assistant, Department of Mechanical Engineering (June, 1997 – October, 2001).

Doctoral research in computational fluid dynamics and fluid-structure interaction of abdominal aortic aneurysms. Developed numerical method for the calculation of wall shear stress in large arteries.

TEACHING EXPERIENCE

THE UNIVERSITY OF TEXAS AT SAN ANTONIO *San Antonio, TX*

Instructor of record for (instructor rating [IR] in parenthesis):

- Introduction to Biofluid Mechanics (BME 6903A): Spring 2012 (IR: 4.63/5), Spring 2013 (IR: None), Spring 2014 (IR: None), Spring 2015 (IR: 4.91/5), Spring 2016 (IR: None).
- Cardiovascular Bioengineering (BME 6093B): Fall 2012 (IR: None).
- Biomechanics I (BME 2203): Spring 2013 (IR: 2.54/5), Spring 2014 (IR: 4.37/5), Spring 2015 (IR: 4.30/5), Spring 2016 (IR: 4.54/5), Spring 2017 (IR: 4.69/5).
- Biomechanics II: Cardiovascular (BME 3203): Fall 2013 (IR: 4.11/5), Fall 2014 (IR: 4.63/5), Fall 2015 (IR: 4.33/5), Fall 2016 (IR: 4.62/5), Fall 2017 (IR: 4.54/5).
- Experimental Biomechanics (BME 6803): Spring 2016 (IR: 4.60/5), Spring 2017 (IR: 4.88/5).
- Biomedical Engineering Research Seminar (BME 6011): Fall 2014 (IR: 4.05/5), Spring 2015 (IR: 4.24/5), Fall 2015 (IR: 4.00/5), Spring 2016 (IR: 3.74/5).
- Fluid Mechanics (ME 3663): Fall 2017 (IR: 4.57/5), Fall 2019 (IR: 4.41/5), Fall 2020 (IR1: 4.28/5 and IR2: 4.53/5), Spring 2022 (IR: 4.61/5), Spring 2023 (IR: 4.64/5).
- Thermodynamics I (ME 3293): Spring 2018 (IR: 4.58/5), Fall 2018 (IR: 4.86/5), Spring 2019 (IR: 4.72/5), Spring 2020 (IR: None), Spring 2021 (IR: 4.04/5), Spring 2024 (IR: 4.71/5), Spring 2025 (IR: 4.65/5).

CARNEGIE MELLON UNIVERSITY *Pittsburgh, PA*

Co-instructor / Faculty coach for (faculty coach evaluation [FCE] in parenthesis) Engineering Design Projects (39-605 and 39-606), Spring 2002, Spring 2005 (FCE: 4.33/5), Spring 2006 (FCE: 3.23/5), Fall 2006, Spring 2007 (FCE: 3.72/5).

Tutor, Carnegie Mellon Action Project (CMAP), Introduction to Mechanical Engineering, Fluid Mechanics and Thermal Fluids Engineering, Fall 1999 – Spring 2001.

Teaching Assistant, Department of Mechanical Engineering, Thermodynamics I (24-221), Fall 1998.

UNIVERSITY OF PITTSBURGH *Pittsburgh, PA*

Faculty coach, Bioengineering Department, Bioengineering Design 1 (BE-1160) and Bioengineering Design 2 (BE-1161), Fall 2003 – Spring 2005.

UNIVERSITY OF MASSACHUSETTS LOWELL *Lowell, MA*

Adjunct Faculty, Languages Department, Beginning Spanish and Intermediate Spanish I, Fall 1996 and Spring 1997.
Teaching Assistant, Mechanical Engineering Department, Engineering Mechanics I, Spring 1997.
Teaching Assistant, Mechanical Engineering Department, Mechanical Engineering Laboratory I, Fall 1996.

UNIVERSIDAD DE CARABOBO *Valencia, Venezuela*
Teaching Assistant, Mechanical Engineering Department, Turbomachinery (July, 1992 – December, 1993).
Teaching Assistant, Physics Department, Physics Laboratory I (April, 1990 – June, 1992).

INDUSTRY EXPERIENCE

FORD ANDINA (former Ford Motor Company of Venezuela) *Valencia, Venezuela*
Quality Control Engineer, Car Trim & Final Assembly Lines (April, 1994 – September, 1995).
Performed statistical control of processes, verifying quality of final product, conducting road tests, designing quality inspection plans, etc. Supervisor of 11 technicians in the assembly plant.

VENEZUELAN MANUFACTURER OF RADIATORS (IVRA) *Valencia, Venezuela*
Engineering Intern, Radiator Assembly Line (October, 1992 – December, 1993).
Evaluated and designed a bench-top system for flow- and pressure-cycle testing of radiators for motor vehicles.

OTHER

- Consultant or expert witness for: Medtronic, Inc. (Minneapolis, MN); Nellix Endovascular, Inc. (Palo Alto, CA); Lumen Biomedical, Inc. (Maple Grove, MN); W.L. Gore & Associates, Inc. (Flagstaff, AZ); Rothwell, Figg, Ernst & Manbeck (Washington, DC); RapidPulse, Inc. (Miami, FL).
- Co-founder and Member of the Board of Directors for NeuroInterventions, Inc. (2007-2010), a Pittsburgh-based company which designs and manufactures advanced catheter systems used to find, enclose, and extract thrombus ("blood clots") in a wide range of cerebral blood vessels, thereby increasing chances of survival and minimizing disability.

RESEARCH SUPPORT

Active:

- "A Nonlinear Membrane Based Analysis for Estimating the Rupture Potential of Abdominal Aortic Aneurysms", *National Institutes of Health*, No. 1R01HL159300-01 (NHLBI), PI: **Finol**; Sep. 2021 – Aug. 2027 (includes two years of no-cost extension); $1,961,656.

Extramural Completed (Total: $5,063,511):

- "Geometric Surrogates for Clinical Management of Abdominal Aortic Aneurysms", *National Institutes of Health*, No. 1R01HL121293-01 (NHLBI), PI: **Finol**; Apr. 2015 – Mar. 2021 (includes two years of no-cost extension); $1,787,060.
- "Mechanistic Justification for Pentagalloyl Glucose Mediated AAA Suppression", *American Heart Association* – Collaborative Sciences Award, No. 16CSA28480006, MPI: **Finol**, Simionescu and Muluk; Jul. 2016 – June 2020 (includes 1 year of no-cost extension); $750,000.
- "Clinical Management of Abdominal Aortic Aneurysms using Patient-Specific Tissue Mechanics", *American Heart Association* – Pre-doctoral Fellowship, No. 15PRE25700288, PI: Thirugnanasambandam, Sponsor: **Finol**; Jul. 2015 – Jun. 2017; $52,000.
- "Geometric, Hemodynamic, and Biomechanical Metrics in Cardiopulmonary Remodeling", *American Heart Association* – Grant-in-Aid, No. 14GRNT19020017, PI: **Finol**; Jan. 2014 – Dec. 2016; $140,000.
- "Mechanical Testing of Amphiphilic Biomaterials", *National Science Foundation* – SBIR Phase II, No. IIP-1228399, PI: Salamone, Aug. 2012 – Jul. 2014; **Finol**'s project total: $17,602; award total: $467,234.

- "The Role of Inflammatory Biomarkers and Wall Mechanics in High-Risk AAA", *Burroughs Wellcome Fund* – Collaborative Research Travel Grant, No. 1012763, PI: **Finol**; Jun. 2013 – Aug. 2014; $8,000.
- "Computational Fluid Dynamics Modeling of the Diseased Pulmonary Vasculature", PI: **Finol**; *University of Pittsburgh*, No. 26530119, Jun. 2011 – May 2014; $127,029.
- "Vascular Subphenotypes of Lung Disease", PI: Gladwin; *National Institutes of Health – Translational Programs in Lung Diseases (P01)*, No. P01HL103455 (NHLBI), Jun. 2011 – Apr. 2013; **Finol**'s project total: $60,056; award total: $2,556,023/year.
- "A Fluid-Structure Interaction Method for Patient-Specific Cardiovascular Modeling", PI: **Finol**; *National Institutes of Health – Exploratory Innovations in Biomedical Computational Science and Technology*, No. 1R21EB008804-01, with supplements S1 and S2 (NIBIB), May 2009 – Jun. 2012; $751,673.
- "A Novel Thrombolytic Delivery System for the Treatment of Ischemic Stroke", Sponsor: **Finol**; *American Heart Association* – GRA Postdoctoral Fellowship for Gail Siewiorek, Jul. 2010 – Jun. 2012; $87,000.
- "In Vivo Assessment of AAA Biomechanics with Dynamic Wall Properties", PI: **Finol**; *National Institutes of Health – Academic Research Enhancement Award*, No. 1R15HL087268-01 (NHLBI), May 2008 – Apr. 2012; $216,331.
- "Bioengineering Studies of Abdominal Aortic Aneurysm Fluid and Wall Dynamics", PI: **Finol**; *National Institutes of Health – Exploratory/Developmental Bioengineering Research Grants*, No. 1R21EB007651-01 (NIBIB), Mar. 2008 – Feb. 2011; $385,812.
- "Multi-scale Modeling of Thrombosis in Artificial Circulation", PI: Antaki; *National Institutes of Health – Bioengineering Research Grants*, No. 1R01HL089456-01 (NHLBI), Feb. 2009 – Jan. 2014; **Finol**'s project total: $102,008; award total: $2,727,360.
- "Numerical Modeling for the Design and Optimization of a Cell Therapy System for Cardiovascular and Neurodegenerative Disease", PI: **Finol**, *Corporate Innovations, Medrad Inc.*, May 2007 – Feb. 2008, $79,944.
- "Fluid-Structure Interaction Modeling of Blood Clots in Arteriovenous Grafts", PI: **Finol**; *Corporate Innovations, Medrad Inc.*, Jan. 2007 – Dec. 2007, $50,072.
- "Computational and Experimental Optimization of a Novel Thrombectomy Device for AV-Graft Declotting", PI: **Finol**; *Corporate Innovations, Medrad Inc.*, Jan. 2007 – Dec. 2007, $118,708.
- "Computational Simulation and Design Optimization of Interventional Catheters", PI: **Finol**; *Medrad Innovations, Medrad Inc.*, Jan. 2006 – Dec. 2006, $98,318.
- "Smoking as a Risk Factor: A Methodology for Assessing the Rupture Potential of Native Abdominal Aortic Aneurysms", PI: Przybycien; *The Commonwealth of Pennsylvania's Department of Health – Health Research Formula Fund Award*, Jan. 2005 – Dec. 2006; **Finol**'s project total: $131,760; total award: $822,602.
- "Prevention of Stroke in Carotid Artery Stenting: A Design Optimization Approach", PI: **Finol**; *The Samuel and Emma Winters Foundation*, Jul. 2005 – Sep. 2006; $11,000.
- "Fluid Mechanics-Based Design Optimization of the Guidant Corporation RX Accunet® Distal Protection Device", PI: **Finol**; *Guidant Endovascular Solutions, Guidant Corporation*, May 2005 – Dec. 2005, $70,000.
- "Numerical Simulations of Blood Flow in AV Grafts", PI: **Finol**; *Argonne National Laboratory*, Jul. 2003 – Apr. 2004; $44,740.

<u>Intramural Completed (Total: $1,543,402)</u>:

- The University of Texas System Board of Regents - Science and Technology Acquisition and Retention (STARS) program, No. 3690682031, PI: **Finol**, Sep. 2011 – Jan. 2015; $500,000.
- The University of Texas at San Antonio – Department of Biomedical Engineering (start-up funds), No. N/A, PI: **Finol**, Sep. 2011 – Aug. 2016; $250,000.
- Fourteen completed awards, PI: **Finol**, *Pennsylvania Infrastructure Technology Alliance – The Commonwealth of Pennsylvania's Department of Community and Economic Development*, Jan. 2002 – May 2011; completed awards total: $735,434.
- "Endovascular Graft Design for Repair of Abdominal Aortic Aneurysms", PI: **Finol**; *Philip and Marsha Dowd Engineering Seed Fund for Graduate Student Fellowships*, Sep. 2004 – Aug. 2005; $48,600.
- "Computational Modeling of Blood flow in Abdominal Aortic Aneurysms and Endovascular Grafts", PI: **Finol**, *Berkman Faculty Development Fund*, Jun. 2003 – Dec. 2003; $9,368.

PUBLICATIONS

Archival Papers Critically Reviewed Before Publication (* denotes supervised trainee):

1. Thirugnanasambandam, M.*, Restrepo, J.C.*, Rengarajan, B.*, Canchi, T.*, Karmonik, C., Avril, S., Kung, E., and **Finol, E.A.**, "*In-vitro* validation and *in-vivo* assessment of abdominal aortic aneurysm wall stress using nonlinear elastic membrane analysis," *Computer Methods in Applied Mechanics and Engineering*, in preparation.
2. Restrepo, J.C.*, Mitra, P.*, Park, H.*, Baek, S., De Oliveira, V., Muluk, S.C., Eskandari, M.K., Kashyap, V.S., and **Finol, E.A.**, "On the association of biomechanics and geometry in growth assessment of abdominal aortic aneurysms under surveillance," *Scientific Reports*, submitted.
3. Roby, M.*, Sakib, A.N., Zhang, Z, Muluk, S.C., Eskandari, and **Finol, E.A.**, "Automatic explainable segmentation of abdominal aortic aneurysm from computed tomography angiography," *IEEE Access* submitted.
4. Roby, M.*, Restrepo, J.C.*, Shan, D.K., Muluk, S.C., Eskandari, M.K., Kashyap, V.S., and **Finol, E.A.**, "An integrated framework for automated image segmentation and personalized wall stress estimation of abdominal aortic aneurysms," *Scientific Reports*, submitted.
5. Roby, M.*, Restrepo, J.C.*, Park, H.*, Muluk, S.C., Eskandari, M.K., Baek, S., and **Finol, E.A.**, 2025, "Automatic segmentation of abdominal aortic aneurysm from computed tomography angiography using a patch-based dilated U-Net model," *IEEE Access*, Vol. 13, pp. 24544-24554. https://doi.org/10.1109/ACCESS.2025.3533417.
6. Reyna, V.*, Fathesami, N.*, Wu, W.*, Muluk, S.C., De Oliveira, V., and **Finol, E.A.**, 2025, "On the relative effects of wall and intraluminal thrombus constitutive material properties in abdominal aortic aneurysm wall stress," *Cardiovascular Engineering and Technology*, Vol. 16, No. 1, pp. 66-78. https://doi.org/10.1007/s13239-024-00757-8.
7. Berman, A.G., Romary, D.J., Kerr, K.E., Gorazd, N.E., Wigand, M.M., Patnaik, S.S.*, **Finol, E.A.**, Cox, A.D., and Goergen, C.J., 2022, "Experimental aortic aneurysm severity and growth depend on topical elastase concentration and lysyl oxidase inhibition," *Scientific Reports*, Vol. 12, Article No. 99. https://doi.org/10.1038/s41598-021-04089-8.
8. Pillalamarri, N.R.*, Piskin, S.*, Patnaik, S.S.*, Murali, S., and **Finol, E.A.**, 2021, "Patient-specific computational analysis of hemodynamics in adult pulmonary hypertension," *Annals of Biomedical Engineering*, Vol. 49, No. 12, pp. 3465–3480. https://doi.org/10.1007/s10439-021-02884-y.
9. Rengarajan, B.*, Patnaik, S.S.*, and **Finol, E.A.**, 2021, "A predictive analysis of wall stress in abdominal aortic aneurysms using a neural network model," *Journal of Biomechanical Engineering*, Vol. 143, No. 12, Article No. 121004. https://doi.org/10.1115/1.4051905.
10. Arnold, F.*, Muzzio, N., Patnaik, S.S.*, **Finol, E.A.**, and Romero, G., 2021, "Pentagalloyl glucose-laden poly(lactide-co-glycolide) nanoparticles for the biomechanical extracellular matrix stabilization of an in vitro abdominal aortic aneurysm model," *ACS Applied Materials & Interfaces*, Vol. 13, No. 22, pp. 25771-25782. https://doi.org/10.1021/acsami.1c05344.
11. Bordones-Crom, A.*, Patnaik, S.S.*, Menon, P.G., Murali, S., and **Finol, E.A.**, 2021, "Morphological analysis of the right ventricular endocardial wall in pulmonary hypertension," *Journal of Biomechanical Engineering*, Vol. 143, No. 7, Article No. 074504. https://doi.org/10.1115/1.4050457.
12. Amigo, N.*, Valencia, A., Wu, W.*, Patnaik, S.*, **Finol, E.**, 2021, "Cerebral aneurysm rupture risk assessment using statistical methods and machine learning classifiers," *Journal of Engineering in Medicine*, Vol. 235, No. 6, pp. 665-662. https://doi.org/10.1177/09544119211000477.
13. Thirugnanasambandam, M.*, Canchi, T.*, Piskin, S.*, Karmonik, C., Kung, E., Menon, P.G., Avril, S., and **Finol, E.A.**, 2021, "Design, development and temporal evaluation of an MRI-compatible in-vitro circulation model using a compliant AAA phantom," *Journal of Biomechanical Engineering*, Vol. 143, No. 5, Article No. 051004. https://doi.org/10.1115/1.4049894.
14. Sharzehee, M., Seddighi, Y., Sprague, E.A., **Finol, E.A.**, and Han, H.-C., 2021, "A hemodynamic comparison of myocardial bridging and coronary atherosclerotic stenosis: a computational model with experimental

evaluation," *Journal of Biomechanical Engineering*, Vol. 143, No 3, Article No. 031013. https://doi.org/10.1115/1.4049221.

15. Anderson, J.L., Niedert, E.E., Patnaik, S.S.*, Tang, R., Holloway, R.L., Osteguin, V.*, **Finol, E.A.**, and Goergen, C.J., 2021, "Animal model dependent response to pentagalloyl glucose in murine abdominal aortic injury," *Journal of Clinical Medicine*, Vol. 10, No. 2, Article No. 219. https://doi.org/10.3390/jcm10020219.
16. Pillalamarri, N.R.*, Patnaik, S.S.*, Piskin, S.*, Gueldner, P.*, and **Finol, E.A.**, 2021, "Ex vivo regional mechanical characterization of porcine pulmonary arteries," *Experimental Mechanics*, Vol. 61, No. 1, pp. 285–303. https://doi. org/10.1007/s11340-020-00678-2.
17. Canchi, T.*, Patnaik, S.S.*, Nguyen, H.N., Ng, E.Y.K., Narayanan, S., Muluk, S.C., De Oliveira, V., and **Finol, E.A.**, 2020, "A comparative study of biomechanical and geometrical attributes of abdominal aortic aneurysms in the Asian and Caucasian populations," *Journal of Biomechanical Engineering*, Vol. 142, No. 6, Article No. 061003 {10 pages}. https://doi.org/10.1115/1.4045268.
18. Acosta, C., Bhalla, A., Guo, R., Yanes, D., **Finol, E.A.**, and Frank, J. 2020, "Numerical and experimental study of the glass-transition temperature of a non-Newtonian fluid in a dynamic scraped surface heat exchanger," *International Journal of Heat and Mass Transfer*, Vol. 152, No. 5, Article No. 119525 {8 pages}. https://doi.org/10.1016/j.ijheatmasstransfer.2020.119525.
19. Rengarajan, B.*, Wu, W.*, Wiedner, C., Ko, D., Muluk, S.C., Eskandari, M.K., Menon, P.G., and **Finol, E.A.**, 2020, "A comparative classification analysis of abdominal aortic aneurysms by machine learning methods," *Annals of Biomedical Engineering*, Vol. 48, No. 4, pp. 1419–1429. https://doi.org/10.1007/s10439-020-02461-9. {cover illustration for the April issue of *Annals of Biomedical Engineering*}
20. Piskin, S.*, Patnaik, S.S.*, Han, D., Bordones, A.*, Murali, S., and **Finol, E.A.**, 2020, "A canonical correlation analysis of the relationship between clinical attributes and patient-specific hemodynamic indices in adult pulmonary hypertension," *Medical Engineering and Physics*, Vol. 77, pp. 1-9. https://doi.org/10.1016/j.medengphy.2020.01.006.
21. Berg, P., Voß, S., Saalfeld, S., Janiga, G., Bergersen, A.W., Valen-Sendstad, K., Bruening, J., Goubergrits, L., Spuler, A., Chiu, T.L., Tsang, A.C.O., Chung, B.J., Copelli, G., Csippa, B., Paál, G., Závodszky, G., Detmer, F.J., Chung, B.J., Cebral, J.R., Fujimura, S., Takao, H., Karmonik, C., Elias, S., Cancelliere, N.M., Najafi, M., Steinman, D.A., Pereira, V.M., Piskin, S.*, **Finol, E.A.**, Pravdivtseva, M., Velvaluri, P., Rajabzadeh-Oghaz, H., Paliwal, N., Meng, H., Seshadhri, S., Venguru, S., Shojima, M., Sindeev, S., Frolov, S., Qian, Y., Wu, Y.A., Carlson, K.D., Kallmes, D.F., Dragomir-Daescu, D., Beuing, O., 2019, "Multiple Aneurysms AnaTomy CHallenge 2018 (MATCH) – phase II: rupture risk assessment," *International Journal of Computer Assisted Radiology and Surgery*, Vol. 14, No. 10, pp. 1795–1804. https://doi.org/10.1007/s11548-019-01986-2.
22. Fatemifar, F., Feldman, M.D., Clarke, G.D., **Finol, E.A.**, Han, H.-C., 2019, "Computational modeling of human left ventricle to assess the effects of trabeculae carneae on the diastolic and systolic functions," *Journal of Biomechanical Engineering*, Vol. 141, No. 9, Article No. 091014 {10 pages}. https://doi.org/10.1115/1.4043831.
23. Patnaik, S.S.*, Piskin, S.*, Pillalamarri, N.R.*, Romero, G., Escobar, G.P., Sprague, E., **Finol, E.A.**, 2019, "Biomechanical restoration potential of pentagalloyl glucose after arterial extracellular matrix degeneration," *Bioengineering*, Vol. 6, No. 3, Article No. 58 {18 pages}. https://doi.org/10.3390/bioengineering6030058. {cover illustration for Special Issue *Advances in Biological Tissue Biomechanics*}
24. Wu, W.*, Rengarajan, B.*, Thirugnanasambandam, M.*, Parikh, S.A.*, Gomez, R.*, De Oliveira, V., Muluk, S.C., and **Finol, E.A.**, 2019, "Wall stress and geometry measures in electively repaired abdominal aortic aneurysms," *Annals of Biomedical Engineering*, Vol. 47, No. 7, pp. 1611–1625. https://doi.org/10.1007/s10439-019-02261-w.
25. Kong, F., Kheyfets, V.*, **Finol, E.**, and Cai, X.-C., 2019, "Simulation of unsteady blood flows in a patient-specific compliant pulmonary artery with a highly parallel monolithically coupled fluid-structure interaction algorithm," *International Journal of Numerical Methods in Biomedical Engineering*, Vol. 35, Article No. e3208 {24 pages}. https://doi.org/10.1002/cnm.3208.

26. Patnaik, S.S.*, Simionescu, D.T., Goergen, C.J., Hoyt, K., Sirsi, S., and **Finol, E.A.**, 2019, "Pentagalloyl glucose and its functional role in vascular health: biomechanics and drug-delivery characteristics," *Annals of Biomedical Engineering*, Vol. 47, No. 1, pp. 39-59. https://doi.org/10.1007/s10439-018-02145-5.
27. Berg, P., Voß, S., Saalfeld, S., Janiga, G., Bergersen, A.W., Valen-Sendstad, K., Bruening, J., Goubergrits, L., Spuler, A., Cancelliere, N.M., Steinman, D.A., Pereira, V.M., Chiu, T.L., Tsang, A.C.O., Chung, B.J., Cebral, J.R., Cito, S., Pallarès, J., Copelli, G., Csippa, B., Paál, G., Fujimura, S., Takao, H., Hodis, S., Hille, G., Karmonik, C., Elias, S., Kellermann, K., Khan, M.O., Marsden, A.L., Morales, H.G., Piskin, S.*, **Finol, E.A.**, Pravdivtseva, M., Rajabzadeh-Oghaz, H., Paliwal, N., Meng, H., Seshadhri, S., Howard, M., Shojima, M., Sugiyama, S.I., Niizuma, K., Sindeev, S., Frolov, S., Wagner, T., Brawanski, A., Qian, Y., Wu, Y.A., Carlson, K.D., Dragomir-Daescu, D., and Beuing, O., 2018, "Multiple Aneurysms AnaTomy CHallenge 2018 (MATCH) – Phase I: Segmentation," *Cardiovascular Engineering and Technology*, Vol. 9, No. 4, pp. 565-581. https://doi.org/10.1007/s13239-018-00376-0.
28. Parikh, S.A.*, Gomez, R.*, Thirugnanasambandam, M.*, Chauhan, S.S.*, De Oliveira, V., Muluk, S.C., Eskandari, M.K., and **Finol, E.A.**, 2018, "Decision tree based classification of abdominal aortic aneurysms using geometry quantification measures," *Annals of Biomedical Engineering*, Vol. 46, No. 12, pp. 2135–2147. https://doi.org/10.1007/s10439-018-02116-w.
29. Canchi, T.*, Ng, E.Y.K., Narayanan, S., and **Finol, E.A.**, 2018, "On the assessment of abdominal aortic aneurysm rupture risk in the Asian population based on geometric attributes," *Journal of Engineering in Medicine*, Vol. 232, No. 9, pp. 922-929. https://doi.org/10.1177/0954411918794724.
30. Urrutia, J.*, Roy, A., Antón, R., Raut, S.S.*, Muluk, S.C., and **Finol, E.A.**, 2018, "Geometric surrogates of abdominal aortic aneurysm wall mechanics", *Medical Engineering and Physics*, Vol. 59, pp. 43-49. https://doi.org/10.1016/j.medengphy.2018.06.007.
31. Bordones, A.D.*, Leroux, M.*, Kheyfets, V.O.*, Wu, Y.-A., Chen, C.-Y., and **Finol, E.A.**, 2018, "Computational fluid dynamics modeling of the human pulmonary arteries with experimental validation," *Annals of Biomedical Engineering*, Vol. 46, No. 9, pp. 1309-1324. https://doi.org/10.1007/s10439-018-2047-1.
32. Thirugnanasambandam, M.*, Simionescu, D., Escobar, P.G., Sprague, E., Goins, B., Clarke, G.D., Han, H.-C., Amezcua, K.H.*, Adeyinka, O.R.*, Goergen, C.J., and **Finol, E.A.**, 2018, "The effect of pentagalloyl glucose on the wall mechanics and inflammatory activity of rat abdominal aortic aneurysms," *Journal of Biomechanical Engineering*, Vol. 140, No. 8, Article No. 084502 {9 pages}. https://doi.org/10.1115/1.4040398.
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SEMINARS AND CONFERENCE PRESENTATIONS

Invited Seminars and Talks:

1. "On The Relative Effects of Wall and Intraluminal Thrombus Constitutive Material Properties in Estimating Abdominal Aortic Aneurysm Wall Stress", *Virginia Commonwealth University*, Department of Mechanical and Nuclear Engineering Seminar Series, Richmond, VA, October 27, 2023.
2. "Abdominal Aortic Aneurysm Risk Assessment: Biomechanics or Geometry-based Criterion?", *University of Toronto*, Department of Mechanical and Industrial Engineering Distinguished Seminar Series, Toronto, Canada, October 20, 2017.
3. "The Effect of Pentagalloyl Glucose on the Wall Mechanics and Inflammatory Activity of Rat Abdominal Aortic Aneurysms?", *University of Toronto*, Toronto General Hospital Vascular Surgery Seminar, Toronto, Canada, October 20, 2017.
4. "Abdominal Aortic Aneurysm Risk Assessment: Biomechanics or Geometry-based Criterion?", *University of Texas at Austin*, Spring 2017 ICES CCS Seminar Series, Austin, TX, March 28, 2017.
5. "Abdominal Aortic Aneurysm Risk Assessment: Biomechanics or Geometry-based Criterion?", *Southwest Research Institute*, Engineering Dynamics Seminar Series, San Antonio, TX, February 22, 2017.
6. "Abdominal Aortic Aneurysm Risk Assessment in the Clinic: Wall Stress or Geometry Characterization?", *University of Massachusetts Amherst*, Department of Mechanical and Industrial Engineering Research Seminar, Amherst, MA, April 20, 2016.
7. "Non-invasive Abdominal Aortic Aneurysm Modeling: Biomechanics and Geometry Quantification", *University of Texas at Dallas*, Department of Mechanical Engineering Research Seminar, Richardson, TX, February 29, 2016.
8. "Wall Mechanics and Geometry Quantification of Abdominal Aortic Aneurysms", *Penn State University*, Department of Biomedical Engineering Research Seminar, University Park, PA, February 11, 2016.
9. "Aneurysm Rupture Risk Assessment: Geometric Surrogates of Aneurysm Wall Mechanics", *University of Alabama at Birmingham*, Department of Biomedical Engineering Research Seminar, Birmingham, AL, November 20, 2015.
10. "Aneurysm Rupture Risk Assessment in the Clinic: Wall Stress or Geometric Characterization?", *Texas A&M University*, Department of Biomedical Engineering Seminar, College Station, TX, July 23, 2013.
11. "Biomechanical Analysis of Abdominal Aortic Aneurysms: Material Properties and Wall Thickness", *University of California San Diego*, Penner Biomechanics Seminars, Department of Mechanical and Aerospace Engineering, San Diego, CA, April 10, 2013.
12. "Biomechanical Assessment of Abdominal Aortic Aneurysms: Toward Individual Rupture Risk Prediction", *Lehigh University*, Seminars in Engineering Science, Department of Mechanical Engineering and Mechanics, Bethlehem, PA, February 21, 2013.
13. "Patient-Specific 3D Reconstruction and Computational Analysis of Vasculatures – an Application to Abdominal Aortic Aneurysm", *2012 San Antonio Simulation and Visualization Symposium*, San Antonio, TX, November 13, 2012.

14. "An Approach to Abdominal Aortic Aneurysm Rupture Risk Assessment with Translational Potential", *The University of Texas at San Antonio / University of Texas Health Science Center at San Antonio*, Joint Graduate Program in Biomedical Engineering Seminar, San Antonio, TX, February 22, 2012.
15. "A Mechanics and Geometric Modeling Approach to Abdominal Aortic Aneurysm Rupture Risk Assessment", *Clínica Universidad de Navarra*, Cardiology Department Seminar, Pamplona, Spain, November 8, 2011.
16. "A Mechanics and Geometric Modeling Approach to Abdominal Aortic Aneurysm Rupture Risk Assessment", *Universidad de Navarra*, School of Engineering Seminar, San Sebastian, Spain, November 7, 2011.
17. "Fluid-structure Interaction Modeling of Abdominal Aortic Aneurysms", *Universidad de Navarra*, School of Engineering Seminar, San Sebastian, Spain, November 7, 2011.
18. "Computational Algorithm for Derivation of Unstressed Vascular Geometry from CT Image Based Models", *Universidad de Navarra*, School of Engineering Seminar, San Sebastian, Spain, November 7, 2011.
19. "Abdominal Aortic Aneurysm Risk Assessment: is it Geometry or Mechanics?", *2011 NHLBI World Conference on Mathematical Modeling and Computer Simulation in Cardiovascular & Cardiopulmonary Dynamics*, College of William & Mary, Williamsburg, VA, June 1, 2011.
20. "Multi-Objective Optimization of a Novel Catheter Design for Rheolytic Thrombectomy", *Design of Medical Devices Conference*, University of Minnesota, Minneapolis, MN, April 14, 2011.
21. "A Mechanics and Geometric Modeling Approach to Abdominal Aortic Aneurysm Rupture Risk Assessment", *Iowa State University*, Department of Mechanical Engineering Seminar, Ames, IA, April 1, 2011.
22. "A Translational Approach to Abdominal Aortic Aneurysm Rupture Risk Assessment", *University of Colorado Denver*, Department of Bioengineering Seminar, Denver, CO, March 28, 2011.
23. "Abdominal Aortic Aneurysm Rupture Risk: Geometry and Mechanics", *The University of Texas at San Antonio*, Department of Biomedical Engineering Seminar, San Antonio, TX, March 10, 2011.
24. "Toward an Individualized Assessment of Abdominal Aortic Aneurysm Rupture Risk", *The Ohio State University*, Department of Biomedical Engineering Seminar, Columbus, OH, March 1, 2011.
25. "Risk Assessment of Abdominal Aortic Aneurysms – an Engineer's Perspective", *Allegheny General Hospital*, The Gerald McGinnis Cardiovascular Institute Research Seminar, Pittsburgh, PA, December 7, 2010.
26. "Computational Modeling of Abdominal Aortic Aneurysms", *Vanderbilt University*, Department of Mechanical Engineering Graduate Seminar Series, Nashville, TN, November 29, 2010.
27. "Biomechanics and Geometric Modeling of Abdominal Aortic Aneurysms", *Clemson University*, Department of Bioengineering Graduate Seminar Series, Clemson, SC, March 30, 2010.
28. "Image-Based Modeling of Abdominal Aortic Aneurysms", *University of Pittsburgh*, Department of Biomedical Informatics Colloquium, Pittsburgh, PA, January 22, 2010.
29. "Towards an Individualized Assessment of AAA Biomechanics", *Carnegie Mellon University*, First Annual Biomechanics Day, Pittsburgh, PA, September 22, 2009.
30. "The Role of Mechanics in the Management of Abdominal Aortic Aneurysms", *University of Wisconsin Milwaukee*, Mechanical Engineering Department Seminars, Milwaukee, WI, February 26, 2009.
31. "Biomechanics of Abdominal Aortic Aneurysms", *Carnegie Mellon University*, Biomedical Engineering Department Faculty Seminar Series, Pittsburgh, PA, February 16, 2009.
32. "Abdominal Aortic Aneurysms: Mechanics and Geometry Assessment", *Colorado State University*, Department of Mechanical Engineering and School of Biomedical Engineering Seminar Series, Ft. Collins, CO, February 12, 2009.
33. "Biomechanics Modeling of Vascular Disease", *The Catholic University of America*, Department of Biomedical Engineering, Washington, DC, August 6, 2008.
34. "Vascular Biomechanics Applications: Modeling of Abdominal Aortic Aneurysms", *University of North Carolina*, UNC/NCSU Joint Department of Biomedical Engineering Seminar, Chapel Hill, NC, April 29, 2008.

35. "Numerical Modeling Applications in Medicine: Biomechanics of Aneurysms", *Universidad de Santiago de Chile*, Department of Mechanical Engineering Seminar, Santiago, Chile, March 13, 2008.
36. "Multiphysics Simulations in Medicine: Applications to the Biomechanics of Aneurysms", *Universidad de Chile*, Department of Mechanical Engineering Seminar, Santiago, Chile, March 12, 2008.
37. "Vascular Biomechanics Modeling: An Application to Abdominal Aortic Aneurysms", *Virginia Commonwealth University*, Department of Biomedical Engineering Seminar, Richmond, VA, February 28, 2008.
38. "Biomechanics Modeling of Abdominal Aortic Aneurysms", *Lehigh University*, Department of Mechanical Engineering and Mechanics: Seminars in Engineering Science, Bethlehem, PA, November 2, 2007.
39. "Finite Element Analysis vs. Fluid-Structure Interaction Modeling of AAAs", *Stent Summit III*, Cleveland Clinic, Cleveland, OH, August 25, 2006.
40. "On the Computational Modeling of Abdominal Aortic Aneurysms", *Cleveland Clinic*, The Lerner Research Institute, Cleveland, OH, August 14, 2006.
41. "Computational Biomechanics of Patient-Based Abdominal Aortic Aneurysm Models", *University of Central Florida*, Department of Engineering Technology Seminar, Orlando, FL, June 20, 2006.
42. "Compliant Biomechanics of Aortic Aneurysms", *Rensselaer Polytechnic Institute*, Department of Biomedical Engineering Seminar Series, Troy, NY, March 29, 2006.
43. "Computational Modeling of Abdominal Aortic Aneurysms", *University of Pittsburgh*, Department of Mechanical Engineering Graduate Seminar Series, Pittsburgh, PA, November 18, 2005.
44. "Fluid-structure Interaction and Structural Analyses of an Aneurysm Model", *Argonne National Laboratory*, Mathematics and Computer Science Division, Argonne, IL, July 9, 2003.
45. "Hemodynamics of Abdominal Aortic Aneurysms and Endovascular Grafts", *Carnegie Mellon University*, Institute for Complex Engineered Systems Seminar Series, Pittsburgh, PA, July 12, 2002.
46. "Blood Flow in Abdominal Aortic Aneurysms", *Carnegie Mellon University*, Department of Mechanical Engineering Graduate Seminar Series, Pittsburgh, PA, November 16, 2001.

Conference Podium Presentations (as presenting author):

1. "Classification of abdominal aortic aneurysms based on geometry quantification measures," *2017 Summer Biomechanics, Bioengineering, and Biotransport Conference*, Tucson, AZ, June 24, 2017.
2. "Translation of AAA rupture risk assessment: wall mechanics and geometric quantification," *2014 Biomedical Engineering Society Annual Fall Meeting*, San Antonio, TX, October 25, 2014.
3. "Translational potential of abdominal aortic aneurysm rupture risk assessment: wall mechanics and geometric assessment," *2014 World Congress of Biomechanics*, Boston, MA, July 8, 2014.
4. "Estimation of patient-specific 3D in vivo abdominal aortic aneurysm strain," *2013 Summer Bioengineering Conference*, Sunriver, OR, June 29, 2013.
5. "AAA rupture risk assessment in the clinic: wall stress or geometric characterization?," *2013 Summer Bioengineering Conference*, Sunriver, OR, June 26, 2013.
6. "MRI-based inflow boundary conditions for patient specific fluid structure interaction modeling of abdominal aortic aneurysms," *2012 Summer Bioengineering Conference*, Fajardo, PR, June 21, 2012.
7. "Toward improved prediction of AAA rupture risk: implementation of geometric quantification measures rather than maximum diameter alone," *2012 Annual Vascular Meeting*, Society of Vascular Surgery, National Harbor, MD, June 9, 2012.
8. "Multi-objective optimization of a novel catheter design for rheolytic thrombectomy," *2009 Biomedical Engineering Society Annual Fall Meeting*, Pittsburgh, PA, October 8, 2009.
9. "Permeability and porosity of embolic protection filters: an experimental study," *2008 Summer Bioengineering Conference*, Marco Island, FL, June 27, 2008.
10. "A new anisotropic constitutive material model for abdominal aortic aneurysm biomechanics," *2007 Biomedical Engineering Society Annual Fall Meeting*, Los Angeles, CA, September 27, 2007.
11. "The effect of embolic protection filters on distal embolization and slow flow condition in carotid artery stenting," *2007 Summer Bioengineering Conference*, Keystone, CO, June 24, 2007.

12. "Fully coupled vs. partially coupled fluid-structure interaction methods for patient-specific abdominal aortic aneurysm biomechanics," *2007 Summer Bioengineering Conference*, Keystone, CO, June 23, 2007.
13. "Compliant biomechanics of abdominal aortic aneurysms: a fluid-structure interaction study," *Fourth M.I.T. Conference on Computational Fluid and Solid Mechanics*, Cambridge, MA, June 13, 2007.
14. "Fluid mechanics characterization of a native vs stented giant intracranial aneurysm," *2007 Society for Experimental Mechanics Annual Conference & Exposition*, Springfield, MA, June 5, 2007.
15. "Biomechanics of abdominal aortic aneurysms: flow-induced wall stress distribution," *International Conference on Computational & Experimental Engineering and Sciences – ICCES'07*, Miami, FL, January 6, 2007.
16. "Experimental and computational flow modeling of cerebral protection devices for carotid artery stenting," *Fifth World Congress of Biomechanics*, Munich, Germany, July 31, 2006.
17. "Transient blood flow – wall interaction in abdominal aortic aneurysms," *Fifth World Congress of Biomechanics*, Munich, Germany, July 31, 2006.
18. "Performance assessment of a cerebral protection device by in vitro testing and computational fluid dynamics," *2006 Summer Bioengineering Conference*, Amelia Island, FL, June 25, 2006.
19. "On the effectiveness of distal protection devices in carotid artery stenting," *2005 Summer Bioengineering Conference*, Vail, CO, June 25, 2005.
20. "Computational fluid dynamics and solid mechanics analyses of a patient-specific AAA pre- and post-EVAR," *2004 International Mechanical Engineering Congress*, Anaheim, CA, November 19, 2004.
21. "Fluid-structure interaction and structural analyses of an aneurysm model," *2003 Summer Bioengineering Conference*, Key Biscayne, FL, June 26, 2003.
22. "Flow-induced wall pressure under average resting hemodynamic conditions for patient-specific abdominal aortic aneurysms," *International Mechanical Engineering Congress and Exposition – IMECE 2002*, New Orleans, LA, November 22, 2002.
23. "Biomechanics of patient specific abdominal aortic aneurysms: Computational analysis of fluid flow," *Twenty-eighth Annual IEEE Northeast Bioengineering Conference*, Philadelphia, PA, April 20, 2002.
24. "Secondary flow and wall shear stress in three-dimensional steady flow AAA hemodynamics," *International Mechanical Engineering Congress and Exposition – IMECE 2001*, Ph.D. Student Paper Competition Finalist, New York, NY, November 12, 2001.
25. "Pressure and wall shear stress distribution in abdominal aortic aneurysms: Patient-specific modeling," *Fifth International Symposium on Computer Methods in Biomechanics and Biomedical Engineering*, Rome, Italy, November 2, 2001.
26. "On the calculation of fluid shear stresses at the wall of dilated large arteries: Part II - application to 3D computational models," *International Mechanical Engineering Congress and Exposition – IMECE 2000*, Ph.D. Student Paper Competition Finalist, Orlando, FL, November 9, 2000.
27. "On the calculation of fluid shear stresses at the wall of dilated large arteries: Part I - application to 2D axisymmetric computational models," *International Mechanical Engineering Congress and Exposition – IMECE 2000*, Orlando, FL, November 9, 2000.
28. "Procedure for calculating fluid shear stresses at the wall of dilated large arteries: application to 2D axisymmetric and 3D computational models," *Biomedical Engineering Society Annual Fall Meeting – BMES 2000*, Seattle WA, October 13, 2000.
29. "Momentum transfer in abdominal aortic aneurysms: The effect of aneurysm size in steady flow hemodynamics," *Thirty-fourth National Heat Transfer Conference – NHTC 2000*, American Society of Mechanical Engineers, Pittsburgh, PA, August 21, 2000.

Guest Lectures:

1. "Case Studies on Aortic Aneurysms", University of Texas at San Antonio, Guest lecturer for the Biomedical Engineering Program's *Tissue Mechanics* course, San Antonio, TX, April 14, 2016.
2. "Case Study VI: Aneurysms (AAAs)", University of Texas at San Antonio, Guest lecturer for the Biomedical Engineering Program's *Tissue Mechanics* course, San Antonio, TX, April 10, 2014.

3. "Introduction to Pulmonary Fluid Mechanics", University of Texas at San Antonio, Guest lecturer for the Biomedical Engineering Program's *Tissue Mechanics* course, San Antonio, TX, April 8, 2014.
4. "Introduction to Physiological Flows", University of Texas at San Antonio, Guest lecturer for the Mechanical Engineering Program's *Fluid Dynamics in Natural Systems* course, San Antonio, TX, March 31, 2014.
5. "Applications: hemodynamics", Lehigh University, Guest lecturer for the Bioengineering Program's *Biological Fluid Mechanics* course, Bethlehem, PA, February 22, 2013.
6. "Biomechanics of Abdominal Aortic Aneurysms", Carnegie Mellon University, Guest lecturer for the Biomedical Engineering Department's *Introduction to Biomechanics* course, Pittsburgh, PA, November 3, 2009.
7. "The Role of Material Properties in Aneurysm Disease and Cardiovascular Devices", Colorado State University, School of Biomedical Engineering's *The Structure and Function of Biomaterials* course, Fort Collins, CO, February 13, 2009.
8. "Modeling of Abdominal Aortic Aneurysms: a Biofluid Mechanics Application", Carnegie Mellon University, Guest lecturer for the Biomedical Engineering Department's *Biofluid Mechanics* course, Pittsburgh, PA, November 25, 2008.
9. "Biofluid Mechanics in Vascular Disease: Modeling of Abdominal Aortic Aneurysms", Carnegie Mellon University, Guest lecturer for the Biomedical Engineering Department's *Special Topics: Biofluid Mechanics* course, Pittsburgh, PA, March 25, 2008.
10. "Computational Bio-Modeling Applications: Biomechanics of Abdominal Aortic Aneurysms", Carnegie Mellon University, Guest lecturer for the Department of Mechanical Engineering's *Computational Bio-Modeling and Visualization* course, Pittsburgh, PA, March 18, 2008.

Others (presenting author underlined; * denotes supervised trainee):

1. Restrepo, J.C.*, Muluk, S.C., Eskandari, M.K., and **Finol, E.A.**, 2025, "A comparative analysis of abdominal aortic aneurysm classification outcomes using ensemble tree models," *2025 Summer Bioengineering Conference*, Santa Ana Pueblo, NM, June 24 {poster}.
2. Carvajal, J.*, Restrepo, J.C.*, Muluk, S.C., Eskandari, M.K., and **Finol, E.A.**, 2025, "Classification of abdominal aortic aneurysms using graph neural networks," *2025 Summer Bioengineering Conference*, Santa Ana Pueblo, NM, June 24 {poster}.
3. Mitra, P.*, Muluk, S.C., Eskandari, M.K., Baek, S., and **Finol, E.A.**, 2025, "Patient-specific intraluminal thrombus formation potential and hemodynamics modeling of abdominal aortic aneurysm growth," *2025 Summer Bioengineering Conference*, Santa Ana Pueblo, NM, June 25 {oral}.
4. Restrepo, J.C.*, Muluk, S.C., Eskandari, M.K., and **Finol, E.A.**, 2024, "Abdominal aortic aneurysm rupture risk classification aided by random forest using biomechanical, morphological, and clinical surrogates," *2024 INFORMS (Institute for Operations Research and the Management Sciences) Annual Meeting*, Seattle, WA, October 21, 2024 {oral}.
5. Roby, M.*, Restrepo, J.C.*, Park, H.*, Muluk, S.C., Eskandari, M.K., and **Finol, E.A.**, 2024, "Automatic segmentation of abdominal aortic aneurysm from computed tomography angiography using a patch-based dilated U-Net model," *2024 Summer Biomechanics, Bioengineering and Biotransport Conference*, Lake Geneva, WI, June 12, 2024 {poster}.
6. Restrepo-Perez, J.C.*, Roby, M.*, Mitra, P.*, Muluk, S.C., Eskandari, M.K., and **Finol, E.A.**, 2024, "A random forest classification method to estimate rupture risk of abdominal aortic aneurysms based on biomechanical and geometric surrogates," *2024 Summer Biomechanics, Bioengineering and Biotransport Conference*, abstract No. SB^{3}C2023-330, Lake Geneva, WI, June 12, 2024 {poster}.
7. Restrepo, J.C.*, Mitra, P.*, Muluk, S.C., Eskandari, M.K., and **Finol, E.A.**, 2023, "On the association of rupture potential index with abdominal aortic aneurysm geometric measures in patients under surveillance," *2023 Summer Biomechanics, Bioengineering and Biotransport Conference*, Vail, CO, June 5, 2023 {poster}.

8. Mitra, P.*, Restrepo, J.C.*, Muluk, S.C., Eskandari, M.K., and **Finol, E.A.**, 2023, "Predictive growth analysis of abdominal aortic aneurysms under surveillance using geometric measure," *2023 Summer Biomechanics, Bioengineering and Biotransport Conference*, Vail, CO, June 5, 2023 {poster}.
9. Rengarajan, B.*, Patnaik, S.*, and **Finol, E.A.**, 2020, "A predictive analysis of wall stress in abdominal aortic aneurysms using a neural network," *2020 Summer Biomechanics, Bioengineering and Biotransport Conference*, abstract SB^{3}C2020-215, Virtual Meeting, June 18, 2020 {oral}. **{Finalist for PhD Student Paper Competition}**
10. Gueldner, P.*, Patnaik, S.S.*, Piskin, S.*, Thirugnanasambandam, M.*, Muluk, S.C., and **Finol, E.A.**, 2020, "Computational fluid dynamics and histological analysis of intraluminal thrombus," *2020 Summer Biomechanics, Bioengineering and Biotransport Conference*, Virtual Meeting, June 19, 2020 {oral}. **{Finalist for BS Student Competition}**
11. Yanoviak, E.*, Rengarajan, B.*, Wu, W., Thirugnanasambandam, M.*, De Oliveira, V., Muluk, S.C., and **Finol, E.A.**, 2020, "On the derivation of geometric surrogates of abdominal aortic aneurysm wall stress," *2020 Summer Biomechanics, Bioengineering and Biotransport Conference*, Virtual Meeting, June 19, 2020 {oral}. **{Finalist for BS Student Competition}**
12. Osteguin, V.*, Patnaik, S.S.*, Berman, A.G., Goergen, C.J., and **Finol, E.A.**, 2019, "On the use of pentagalloyl glucose for mechanistic suppression of abdominal aortic aneurysm," *2019 Summer Biomechanics, Bioengineering and Biotransport Conference*, Seven Springs, PA, June 26, 2019 {poster}. **{Finalist for BS Student Poster Competition}**
13. Patnaik, S.S.*, Pillalamarri, N.R.*, Piskin, S.*, Thirugnanasambandam, M.*, Osteguin, V.*, Escobar, G.P., Sprague, E., and **Finol, E.A.**, 2019, "Biomechanical restoration potential of pentagalloyl glucose after arterial extracellular matrix damage," *2019 Summer Biomechanics, Bioengineering and Biotransport Conference*, Seven Springs, PA, June 27, 2019 {poster}.
14. Patnaik, S.S.*, Osteguin, V.*, Rogers, T., Vishwanath, R., Goergen, C.J., Simionescu, D.T., Romero, G., and **Finol, E.A.**, 2019, "Interaction of pentagalloyl glucose with the microenvironment of macrophages," *2019 Summer Biomechanics, Bioengineering and Biotransport Conference*, Seven Springs, PA, June 26, 2019 {poster}.
15. Pillalamarri, N.R.*, Piskin, S.*, and **Finol, E.A.**, 2019, "Developing a scalable open-source solver to simulate hemodynamics in the human pulmonary vasculature," *2019 Summer Biomechanics, Bioengineering and Biotransport Conference*, Seven Springs, PA, June 26, 2019 {poster}.
16. Pillalamarri, N.R.*, Piskin, S.*, Patnaik, S.S.*, Bordones, A.D.*, Kheyfets, V.O.*, and **Finol, E.A.**, 2019, "In-silico characterization of patient-specific pulmonary hypertension hemodynamics," *2019 Summer Biomechanics, Bioengineering and Biotransport Conference*, Seven Springs, PA, June 26, 2019 {poster}.
17. Gueldner, P.*, Patnaik, S.S.*, Piskin, S.*, Thirugnanasambandam, M.*, Muluk, S.C., and **Finol, E.A.**, 2019, "Microstructural characterization of intraluminal thrombus in abdominal aortic aneurysms," *2019 Summer Biomechanics, Bioengineering and Biotransport Conference*, Seven Springs, PA, June 26, 2019 {poster}.
18. Hall, D., Patnaik, S.S.*, **Finol, E.A.**, Romero-Uribe, G., 2019, "Optimization of topographical and mechanical properties of peg-da based hydrogels for promoting neurodegeneration," *2019 Summer Biomechanics, Bioengineering and Biotransport Conference*, Seven Springs, PA, June 26, 2019 {poster}.
19. Piskin, S.*, Patnaik, S.S.*, Guerrero, M.*, Escobar, G.P., Sprague, E.A., and **Finol, E.A.**, "Biomechanical changes in the porcine abdominal aorta after treatment with pentagalloyl glucose," *2018 World Congress of Biomechanics*, Dublin, Ireland, July 12, 2018 (poster).
20. Canchi, T.*, Nguyen, H.N.*, Wu, W.*, Patnaik, S.S.*, Ng, E.Y.K., Narayanan, S., and **Finol, E.A.**, "On the role of morphological measures in abdominal aortic aneurysm rupture risk assessment for the Asian and Caucasian patient populations," *2018 World Congress of Biomechanics*, Dublin, Ireland, July 11, 2018 (poster).
21. Wu, W.*, Rengarajan, B.*, Thirugnanasambandam, M.*, Gomez, R.*, Parikh, S.*, and **Finol, E.A.**, "On geometric and biomechanical measures for rupture risk assessment of abdominal aortic aneurysms: a classification analysis," *2018 World Congress of Biomechanics*, Dublin, Ireland, July 9, 2018 (poster).
22. Patnaik, S.S.*, Davis, C.M., Guerrero, M.*, Thirugnanasambandam, M.*, Lau, A.M., and **Finol, E.A.**, "Biomechanical changes in rodent abdominal aorta due to high energy particle radiation," *2018 NASA Human Research Program Investigators' Workshop*, Galveston, TX, January 24, 2018 (poster).

23. Wu, W.*, Ariza, M., Malve, M., **Finol, E.A.**, Calvo, B., and Rodriguez, J.F., "Fluid-structure interaction of the non-contact tonomotery test," *2017 Summer Biomechanics, Bioengineering and Biotransport Conference*, Tucson, AZ, June 22, 2017 (poster).
24. Canchi, T.*, Nguyen, H.*, Patnaik, S.S.*, Ng, E.K.G., Srinivasan, D.K., Narayanan, S., and **Finol, E.A.**, "A comparison of morphological parameters in Asian and Caucasian abdominal aortic aneurysm patients using biomechanical and machine learning methods," *2017 Summer Biomechanics, Bioengineering and Biotransport Conference*, Tucson, AZ, June 22, 2017 (poster).
25. Parikh, S.A.*, Teasley, A.*, Thirugnanasambandam, M.*, De Oliveira, V., Muluk, S.C., and **Finol, E.A.**, "Geometric modeling of abdominal aortic aneurysms under surveillance: a retrospective study," *2017 Summer Biomechanics, Bioengineering and Biotransport Conference*, Tucson, AZ, June 22, 2017 (poster). **{Third Place for MS Student Poster Competition}**
26. Amezcua, K.-L.H.*, Patnaik, S.S.*, Thirugnanasambandam, M.*, Reilly, M., and **Finol, E.A.**, "Assessment of material properties of thin film wound-treatment polymers," *2017 Summer Biomechanics, Bioengineering and Biotransport Conference*, Tucson, AZ, June 22, 2017 (poster).
27. Mahipat, A.*, Thirugnanasambandam, M.*, Patnaik, S.S.*, Vazquez, R., and **Finol, E.A.**, "Ex-vivo biomechanical characterization of arteriovenous fistulas," *2017 Summer Biomechanics, Bioengineering and Biotransport Conference*, Tucson, AZ, June 22, 2017 (poster).
28. Canchi, T.*, Patnaik, S.S.*, Ng, E.K.G., Kumar, S.D., Narayanan, S., and **Finol, E.A.**, "On the relative effectiveness of machine learning and statistical methods in predicting abdominal aortic aneurysm rupture in the Asian population," *2017 Arteriosclerosis, Thrombosis and Vascular Biology | Peripheral Vascular Disease Scientific Sessions*, Presentation No. 485, Minneapolis, MN, May 6, 2017 (poster).
29. Bordones, A.*, Leroux, M.*, Kheyfets, V.O.*, and **Finol, E.A.**, "Computational fluid flow modeling of a pulmonary vascular phantom with experimental validation," *2016 Summer Biomechanics, Bioengineering and Biotransport Conference*, National Harbor, MD, June 30, 2016 (poster).
30. Bordones, A.*, Kheyfets, V.O.*, and **Finol, E.A.**, "The relationship of wall shear stress with clinically relevant metrics in pulmonary arterial hypertension," *2015 Summer Biomechanics, Bioengineering and Biotransport Conference*, Snowbird Resort, UT, June 18, 2015 (poster).
31. Leroux, M.*, Kheyfets, V.O.*, and **Finol, E.A.**, "Experimental validation of CFD simulations of a patient-specific pulmonary vascular model using stereoscopic particle image velocimetry," *2014 Biomedical Engineering Society Annual Fall Meeting*, San Antonio, TX, October 24, 2014 (poster).
32. Thirugnanasambandam, M.* and **Finol, E.A**., "Survival analysis for estimating abdominal aortic aneurysm rupture," *2014 Biomedical Engineering Society Annual Fall Meeting*, San Antonio, TX, October 24, 2014 (poster).
33. Thornton, R.*, Kheyfets, V.O.*, and **Finol, E.A.**, "Pull-off stress evaluation of commercially available wound-treatment polymers," *2014 Biomedical Engineering Society Annual Fall Meeting*, San Antonio, TX, October 24, 2014 (poster).
34. Vimalatharmaiyah, G.*, Chandra, S.C.*, Rodriguez, J.F., and **Finol, E.A.**, "Experimental validation of an algorithm for the zero pressure geometry derivation of blood vessels," *2014 Biomedical Engineering Society Annual Fall Meeting*, San Antonio, TX, October 24, 2014 (poster).
35. Thirugnanasambandam, M.*, Simionescu, D., Sprague, E., Voorhees, A., Han, H., and **Finol, E.A.**, "Regional variation of the mechanical properties of murine aorta," *2014 World Congress of Biomechanics*, Boston, MA, July 8, 2014 (poster).
36. O'Dell, W.G., Govindarajan, S.T., Salgia, A., Hegde, S., Prabhakaran, S., **Finol, E.A.**, White, R.J., "Method for traversing and labeling complex vascular tree structures from 3D medical images: description, validation, and application," *2014 SPIE Medical Imaging Conference,* San Diego, CA, February 17, 2014 (poster).
37. Thornton, R.*, Kheyfets, V.O.*, and **Finol, E.A.**, 2013, "Pull-off stress assessment on commercially available polymers intended for wound treatment," *2013 Biomedical Engineering Society Annual Fall Meeting*, Seattle, WA, September 26, 2013 (poster).

38. Chandra, S.*, Vimalatharmaiyah, R.*, Seong, J., Lieber, B.B., Rodriguez, J.F., and **Finol, E.A.**, 2013, "Experimental validation of a computational algorithm for the zero pressure geometry derivation of blood vessels," *2013 Summer Bioengineering Conference*, Sunriver, OR, June 28, 2013 (poster).
39. Satriano, A., Rivolo, S., **Finol, E.A.**, and Di Martino, E.S., 2013, "A feature-based morphing methodology for in-vivo strain assessment in biological structures," *2013 Summer Bioengineering Conference*, Sunriver, OR, June 28, 2013 (poster).
40. Raut, S.S.*, Chandra, S.*, Shum, J.*, Liu, P.*, Di Martino, E.S., Doehring, T.C., Jana, A., and **Finol, E.A.**, "A comprehensive tool for patient-specific AAA geometry and biomechanics assessment," *2012 Summer Bioengineering Conference*, Fajardo, PR, June 22, 2012 (poster).
41. Shum, J.*, Muluk, S.C., Doyle, A.J., Chandra, A., Eskandari, M.K., and **Finol, E.A.**, "Toward improved prediction of AAA rupture risk: implementation of geometric quantification measures compared to maximum diameter alone," *2012 Summer Bioengineering Conference*, Fajardo, PR, June 22, 2012 (poster).
42. Shum, J.*, Muluk, S.C., Doyle, A.J., Chandra, A., Eskandari, M.K., Azizzadeh, A., and **Finol, E.A.**, "Toward improved prediction of AAA rupture risk: implementation of geometric quantification measures rather than maximum diameter alone," *2012 Annual Vascular Meeting*, Society of Vascular Surgery, National Harbor, MD, June 8, 2012 **(Finalist for the SVS Poster Competition)**
43. Loghmanpour, N.A.*, Siewiorek, G.M.*, Wannamaker, K.M., Wholey, M.H., Chaer, R., Muluk, S.C., and **Finol, E.A.**, "Impact of distal protection filter design in 30-day outcomes of carotid artery stenting," *2012 Annual Vascular Meeting*, Society of Vascular Surgery, National Harbor, MD, June 8, 2012 (poster).
44. Shum, J.*, Di Martino, E.S., Muluk, S.C., and **Finol, E.A.**, "Decision tree models for the assessment of aortic aneurysm rupture risk," *2011 Biomedical Engineering Society Annual Fall Meeting*, Hartford, CT, October 14, 2011 (poster).
45. Siewiorek, G.M.*, Barone, W.F., Abramowitch, S.D., and **Finol, E.A.**, "Mechanical characterization of thrombus from acute ischemic stroke," *2011 Biomedical Engineering Society Annual Fall Meeting*, Hartford, CT, October 14, 2011 (poster).
46. Zhang, H.* and **Finol, E.A.**, 2011, "Strong features built from Haar like features for abdominal aortic aneurysm centerline detection," *2011 Biomedical Engineering Society Annual Fall Meeting*, Hartford, CT, October 13, 2011 (poster).
47. Raut, S.*, Liu, P.*, Jana, A., and **Finol, E.A.**, "Aortic wall mechanics: a geometry-driven problem," *2011 Summer Bioengineering Conference*, Farmington, PA, June 23, 2011 (poster).
48. Zhang, H.*, Zhong, H., and **Finol, E.A.**, "A content-based 3D shape retrieval system for abdominal aortic aneurysm rupture risk prediction," *The Eighth IEEE International Symposium on Biomedical Imaging (ISBI 2011)*, Chicago, IL, March 31, 2011 (poster).
49. Shum, J.*, Martufi, G.*, Di Martino, E.S., Washington, C.B.*, Grisafi, J., Muluk, S.C., and **Finol, E.A.**, "Differentiation of abdominal aortic aneurysm geometry: a tool for rupture risk assessment," *12th Biennial Meeting of the International Society for Applied Cardiovascular Biology (ISACB)*, Cambridge, MA, September 23, 2010 (poster).
50. Siewiorek, G.M.* and **Finol, E.A.**, "Experimental and computational evaluation of embolic protection," *2010 Summer Bioengineering Conference*, Naples, FL, June 17, 2010 (poster).
51. Shum, J.*, Martufi, G.*, Di Martino, E.S., Washington, C.B.*, Grisafi, J., Muluk, S.C., and **Finol, E.A.**, "Quantitative shape assessment of abdominal aortic aneurysms," *The 5th Annual Biomedical Engineering & Biotechnology Research Symposium*, Carnegie Mellon University, Pittsburgh, PA, April 29, 2010 (**1st Place poster**).
52. Shum, J.*, Martufi, G.*, Di Martino, E.S., Washington, C.B.*, Grisafi, J., Muluk, S.C., and **Finol, E.A.**, "Quantitative shape assessment of electively repaired abdominal aortic aneurysms," *Sixth Annual Bioimaging Day*, Carnegie Mellon University, Pittsburgh, PA, February 18, 2010 (poster).
53. Siewiorek, G.M.*, Winston, B., Wholey, M.H., and **Finol, E.A.**, "Patient outcome following carotid artery stenting: plaque differentiation using intravascular ultrasound," *2010 American Heart Association Research Fellows Day*, Pittsburgh, PA, February 12, 2010 (poster – **3rd Place, Clinical Science** [includes posters and oral presentations])

54. Chandra, S.*, Jana, A., and **Finol, E.A.**, "Individual anisotropic FSI modeling of aortic aneurysms: phase-contrast and dynamic MRI validation," *2009 Biomedical Engineering Society Annual Fall Meeting*, Pittsburgh, PA, October 9, 2009 (poster).
55. Raut, S.S.*, Chandra, S.*, Jana, A., Muluk, S., and **Finol, E.A.**, "The effect of local infrarenal flow conditions on intra-aneurysmal flow dynamics," *2009 Biomedical Engineering Society Annual Fall Meeting*, Pittsburgh, PA, October 9, 2009 (poster).
56. Xu, A.*, Chatnuntawech, I.*, Liao, B.*, Shum, J.*, and **Finol, E.A.**, "Geometry quantification of electively repaired abdominal aortic aneurysms," *2009 Biomedical Engineering Society Annual Fall Meeting*, Pittsburgh, PA, October 8, 2009 (poster).
57. Chatnuntawech, I.*, Xu, A.*, Shum, J.*, and **Finol, E.A.**, "Automatic surface mesh generation, refinement, and smoothing of human abdominal aortic aneurysms," *2009 Biomedical Engineering Society Annual Fall Meeting*, Pittsburgh, PA, October 8, 2009 (poster).
58. Shum, J.*, Martufi, G.*, Di Martino, E.S., Grisafi, J., Muluk, S.C., and **Finol, E.A.**, "Challenging the maximum diameter criterion: Quantitative assessment of abdominal aortic aneurysm shape and rupture potential," *Eastern Vascular Society's 23rd Annual Meeting*, Philadelphia, PA, September 24, 2009 (**1st Place poster**).
59. Chung, C.-S.*, Cornejo, S.L.*, Huo, M.*, and **Finol, E.A.**, "A new concept in design of rheolytic thrombectomy devices: the Coanda Effect," *2009 Summer Bioengineering Conference*, Lake Tahoe, CA, June 18, 2009 (poster).
60. Shum, J.*, Martufi, G.*, Di Martino, E.S., Grisafi, J., Muluk, S.C., and **Finol, E.A.**, "Quantitative assessment of abdominal aortic aneurysm shape and rupture potential," *Frontiers of Biomedical Imaging Science*, Vanderbilt University, Nashville, TN, June 3, 2009 (**Finalist poster**).
61. Shum, J.* and **Finol, E.A.**, "Challenging the maximum diameter criterion: Quantitative assessment of abdominal aortic aneurysm shape and rupture potential," *Fifth Annual Bioimaging Day*, Carnegie Mellon University, Pittsburgh, PA, February 18, 2009 (poster).
62. Siewiorek, G.M.* and **Finol, E.A.**, "Experimental and computational modeling of permeability of embolic protection filters," *2008 Biomedical Engineering Society Annual Fall Meeting*, St. Louis, MS, October 2, 2008 (poster).
63. Cornejo, S.L.*, Rodriguez, J.F., Valencia, A.A., Guzman, A.M., and **Finol, E.A.**, "Flow-induced wall mechanics of patient-specific aneurysmal cerebral arteries: nonlinear isotropic vs. anisotropic wall stress," *2008 Summer Bioengineering Conference*, Marco Island, FL, June 27, 2008 (poster).
64. Martufi, G.*, Rodriguez, J.F., and **Finol, E.A.**, "Anisotropic wall mechanics of abdominal aortic aneurysms," *2008 Summer Bioengineering Conference*, Marco Island, FL, June 26, 2008 (poster).
65. Hazer, D.*, **Finol, E.A.**, Richter, D.M., and Dillmann, R., "Patient-Specific computational modeling of aortic aneurysm diseases," *The 3rd Annual Biomedical Engineering & Biotechnology Research Symposium*, Carnegie Mellon University, Pittsburgh, PA, April 25, 2008 (poster).
66. Shum, J.* and **Finol, E.A.**, "Semi-automatic wall thickness detection and quantification in in-vivo CT images of abdominal aortic aneurysms," *The 3rd Annual Biomedical Engineering & Biotechnology Research Symposium*, Carnegie Mellon University, Pittsburgh, PA, April 25, 2008 (poster).
67. Chung, C.-S.* and **Finol, E.A.**, "A New Concept in Design of Rheolytic Thrombectomy Devices: The Coanda Effect," *The 3rd Annual Biomedical Engineering & Biotechnology Research Symposium*, Carnegie Mellon University, Pittsburgh, PA, April 25, 2008 (poster).
68. Huo, M.*, **Finol, E.A.**, and Lim, J., "Computational fluid dynamics design and optimization of a catheter-based saline delivery system for dissolving and removing blood clots," *Meeting of the Minds*, Carnegie Mellon University, Pittsburgh, PA, May 9, 2007 (poster).
69. Goldhammer, A.*, **Finol, E.A.**, and DiMartino, E.S., "Segmentation of contrasted CT abdominal images to identify wall thickness for abdominal aortic aneurysms," *The 2nd Annual Biomedical Engineering & Biotechnology Research Symposium*, Carnegie Mellon University, Pittsburgh, PA, April 20, 2007 (poster).
70. Scotti, C.M.*, Vorp, D.A., and **Finol, E.A.**, "Coupled and decoupled fluid and solid dynamics in abdominal aortic aneurysm biomechanics," *2006 Summer Bioengineering Conference*, Amelia Island, FL, June 22, 2006 (poster).

71. Dong, M.*, Marini, J.*, Lim, J., and **Finol, E.A.**, "Computational fluid dynamics analysis of a novel interventional catheter," *Meeting of the Minds*, Carnegie Mellon University, Pittsburgh, PA, May 10, 2006 (poster).
72. Patel, G.*, Acker, L., Goldman, D.*, **Finol, E.A.**, and DiMartino, E.S., "Problem oriented methodology for the segmentation of aortic structures," *Meeting of the Minds*, Carnegie Mellon University, Pittsburgh, PA, May 10, 2006 (poster).
73. Anderson, A.*, Scotti, C.M.*, and **Finol, E.A.**, "Computational solid stress analysis of abdominal aortic aneurysms," *Meeting of the Minds*, Carnegie Mellon University, Pittsburgh, PA, May 10, 2006 (poster).
74. DiMartino, E.S., Patel, G.*, and **Finol, E.A.**, "Biomedical image processing - problem oriented methodology," *2nd Annual Bioimaging Day*, Carnegie Mellon University, Pittsburgh, PA, April 12, 2006 (poster).
75. Gaspard, S.*, Wholey, M.H., and **Finol, E.A.**, "Design of a novel distal protection filter for carotid artery stenting and an in vitro protocol for the evaluation of cerebral protection devices," *32nd Annual NSBE National Convention*, Pittsburgh, PA, March 29 – April 2, 2006 (poster).
76. Scotti, C.M.*, Anderson, A.*, and **Finol, E.A.**, "Endovascular graft biomechanics within abdominal aortic aneurysms," *ICES-PITA Open House Poster Session*, Carnegie Mellon University, Pittsburgh, PA, November 2-3, 2005 (poster).
77. **Finol, E.A.**, Gaspard, S.*, and Wholey, M.H., "In vitro performance assessment of cerebral protection devices in carotid artery stenting," *Transcatheter Cardiovascular Therapeutics – TCT 2005*, Washington, DC, October 18, 2005 (poster).
78. Goldman, D.H.*, Lum, S., Scotti, C.M.*, **Finol, E.A.**, and DiMartino, E.S., "An intensity-based 3D reconstruction protocol for cardiovascular structures," *2005 Summer Bioengineering Conference*, Vail, CO, June 22-26, 2005 (poster).
79. Scotti, C.M.*, LeDuc, P.R., and **Finol, E.A.**, "A multi-scale biomechanics modeling methodology for understanding mechanical influences in vascular disease," *The Second USNCB Symposium on Frontiers in Biomechanics*, United States National Committee on Biomechanics, Vail, CO, June 20-21, 2005 (poster).
80. Scotti, C.M.*, Azemi, E.*, Gray, H.D.*, Miner, E.P.*, Wholey, M.H., and **Finol, E.A.**, "Efficiency of cerebral protection devices for carotid angioplasty and stenting," *ICES-PITA Open House Poster Session*, Carnegie Mellon University, Pittsburgh, PA, November 3-4, 2004 (poster).
81. Goldman, D.H.*, **Finol, E.A.**, and Amon, C.H., "MATLAB-based 3D reconstruction of blood vessels from computed tomography scans," *ICES-PITA Open House Poster Session*, Carnegie Mellon University, Pittsburgh, PA, November 3-4, 2004 (poster).
82. Scotti, C.M.*, Azemi, E.*, Gray, H.D.*, Miner, E.P.*, Wholey, M.H., and **Finol, E.A.**, "Efficiency of cerebral protection devices for carotid angioplasty and stenting," *Biomedical Engineering Society Annual Fall Meeting – BMES 2004*, Philadelphia, PA, October 13-16, 2004 (poster).
83. Goldman, D.H.*, **Finol, E.A.**, and Amon, C.H., "MATLAB-based 3D reconstruction of blood vessels from computed tomography scans," *Biomedical Engineering Society Annual Fall Meeting – BMES 2004*, National Science Foundation REU Poster Session, Philadelphia, PA, October 13-16, 2004 (poster).
84. Siewiorek, G.*, **Finol, E.A.**, and Scotti, C.M.*, "Computational fluid dynamics of embolic protection filters", *Summer Undergraduate Research Experience (SURE)*, ICES/PITA 2004 Summer Internship Program, Pittsburgh, PA, August 4, 2004 (poster).
85. Udowenko, M.*, **Finol, E.A.**, and Scotti, C.M.*, "Fluid-structure interaction simulation of arterial flows", *Summer Undergraduate Research Experience (SURE)*, ICES/PITA 2004 Summer Internship Program, Pittsburgh, PA, August 4, 2004 (poster).
86. Scotti, C.M.*, **Finol, E.A.**, Amon, C.H., and Di Martino, E.S., "Computational fluid and solid mechanics of patient-specific AAAs", *MERITS of Pittsburgh Exposition*, Carnegie Mellon University, Pittsburgh, PA, January 16-17, 2004 (poster).
87. Scotti, C.M.*, **Finol, E.A.**, Amon, C.H., and Di Martino, E.S., "Computational fluid and solid mechanics of patient-specific AAAs", *ICES-PITA Open House Poster Session*, Carnegie Mellon University, Pittsburgh, PA, October 29-30, 2003 (poster).

88. Benedict, A.*, **Finol, E.A.**, Di Martino, E.S., and Bohra, A., "3-D reconstruction of patient-specific aaas from computed tomography scans", *Summer Undergraduate Research Experience (SURE) Symposium*, ICES/PITA 2003 Summer Internship Program, Pittsburgh, PA, July 30, 2003 (poster).
89. Scotti, C.M.*, **Finol, E.A.**, Marra, K.G., and Amon, C.H., "Tissue Engineering and Computational Fluid Dynamics Modeling in Endovascular Grafting Applications", *Engineering Tissue Growth International Conference and Exposition – ETG 2003*, Pittsburgh, PA, March 18-20, 2003 (poster).
90. Amon, C.H., Marra, K.G., **Finol, E.A.**, and Vorp, D.A., "Tissue-engineered attachment device for endoluminal grafting", *ICES-PITA Open House Poster Session*, Carnegie Mellon University, Pittsburgh, PA, October 16-17, 2002 (poster).
91. Amon, C.H., Marra, K.G., **Finol, E.A.**, and Vorp, D.A., "Novel tissue-engineered attachment mechanism for endovascular grafts", *Biomedical Engineering Department Symposium*, Carnegie Mellon University, Pittsburgh, PA, September 17, 2002 (poster).
92. **Finol, E.A.**, Amon, C.H., and Vorp, D.A., "Assessment of rupture potential of abdominal aortic aneurysms by computational modeling and simulation", *Pennsylvania Infrastructure Technology Alliance Symposium*, Lehigh University, Bethlehem, PA, March 25-26, 2002 (poster).
93. Kennedy, A.L., Amon, C.H., Vorp, D.A., and **Finol, E.A.**, "Hemodynamics of abdominal aortic aneurysms", *Graduate Student Conference and Bennett Poster Competition*, Department of Mechanical Engineering, Carnegie Mellon University, Pittsburgh, PA, April 20, 2001 (**1st Place poster**).
94. **Finol, E.A.** and Amon, C.H., "Hemodynamics of abdominal aortic aneurysms", *Graduate Student Conference and Bennett Poster Competition*, Department of Mechanical Engineering, Carnegie Mellon University, Pittsburgh, PA, April 14, 2000 (**1st Place poster**).

MENTORING AND STUDENT ADVISEMENT

Research Faculty:

- 11/12 – 01/13 Santanu Chandra (Ph.D., Mechanical Engineering at the University of Akron, December 2007), "FSI Modeling of AAA". Start-up funding support.
  2013 – 2022: Lead Research Development Engineer, Senior Research Engineer/CAE Analyst, and Research Engineer/CAE Analyst at MED Institute, Cook Medical, West Lafayette, IN.
  2022 – Present: Principal Research Development Engineer at Medtronic, San Francisco, CA.

Post-doctoral Fellows:

- 01/23 – Merjulah Roby (Ph.D., Computer Science at CHRIST University, September 2020), "Deep Learning Strategies for Automated Segmentation of Abdominal Computed Tomography Images". UTSA and NIH R01 support.
- 10/21 – 10/22 Balaji Rengarajan (Ph.D., Mechanical Engineering at University of Texas at San Antonio, August 2021), "A Nonlinear Membrane Based Analysis for Estimating the Rupture Potential of Abdominal Aortic Aneurysms". NIH R01 support.
  2022 – Present: Subject Matter Expert at Molex, Rochester Hills, MI.
- 09/16 – 07/20 Sourav Patnaik (Ph.D., Biomedical Engineering at Mississippi State University, May 2015), "Mechanistic Justification for Pentagalloyl Glucose Mediated AAA Suppression". AHA Collaborative Sciences Award and NIH R01 support. Biomedical Engineering Lecturer I (Spring 2018).
  2020 – 2022: Research Associate at University of Texas at Dallas, Richardson, TX.
  2022 – Present: Sr. Biomedical Engineering Specialist at University of Texas Southwestern Medical Center, Dallas, TX.
- 09/18 – 09/19 Senol Piskin (Ph.D., Computational Science and Engineering, Istanbul Technical University, Turkey, May 2013), "Blood Flow Dynamics and Pulmonary Tissue Mechanics in Pulmonary Hypertension". NIH R01 support. Biomedical Engineering Lecturer I (Fall 2018).

2019 – Present: Assistant Professor at Istinye University, Istanbul, Turkey.

- 12/16 – 01/19 Wei Wu (Ph.D., Materials Science and Engineering at Dalian University of Technology (China), January 2008), "Geometric Surrogates for Clinical Management of Abdominal Aortic Aneurysms". NIH R01 support.
  2019 – 2022: Instructor at University of Nebraska Medical Center, Omaha, NE.
  2022 – Present: Assistant Professor at University of Miami, Coral Gables, FL.
- 09/11 – 08/13 Vitaly Kheyfets (Ph.D., Mechanical Engineering at University of Kansas, August 2011), "Vascular Subphenotypes of Lung Disease". NIH P01, University of Pittsburgh, and Rochal Industries LLC support.
  2013 – 2014: Post-doctoral Fellow at University of Colorado Denver, Aurora, CO.
  2014 – 2019: Assistant Research Professor at University of Colorado Denver, Aurora, CO.
  2019 – 2022: Assistant Professor at University of Colorado Denver, Aurora, CO.
  2022 – Present: Associate Professor at University of Colorado Denver, Aurora, CO.
- 01/12 – 05/12 Ali Almuntashri (Ph.D., Electrical & Computer Engineering at University of Texas at San Antonio, December 2011), "Medical Image Analysis of Abdominal Aortic Aneurysms". Start-up funding support.
  2012 – Present: Director of Innovation & Technology Transfer Management Office; Associate Research Scientist at National Guards Medical Research Center, Saudi Arabia.
- 07/10 – 10/11 Gail Siewiorek (Ph.D., Biomedical Engineering at Carnegie Mellon University, May 2010), "A Novel Thrombolytic Delivery System for the Treatment of Ischemic Stroke". AHA Post-doctoral Fellow.
  2011 – 2014: Senior Product Development Engineer, Becton, Dickinson and Company, Bedford, MA.
  2014 – 2016: Staff Biomedical Engineer, Becton, Dickinson and Company, Bedford, MA.
  2016 – 2019: R&D Core Team Member & Infusion Set Leader, Becton, Dickinson and Company, Bedford, MA.
  2019 – Present: Senior Program Project Manager at Fresenius Medical Care North America, Waltham, MA.
- 10/09 – 09/11 Hong Zhang (Ph.D., Biomedical Engineering at Rutgers University, July 2009), "Assessment of MRI-based Abdominal Aortic Aneurysm Wall Strain". NIH R21/S2 support.
  2011 – 2013: Post-doctoral Fellow at Carnegie Mellon University, Pittsburgh, PA.
  2013 – 2016: Research Scientist at Georgia Regents University, Augusta, GA.
  2016 – 2019: Medical Physicist Resident at Indiana University - Purdue University Indianapolis, Indianapolis, IN.
  2019 – Present: Medical Physicist at Reading Health System, Reading, PA.
- 07/09 – 06/11 Christopher Washington (M.D., Medicine at the University of Pittsburgh, April 2006), "Biomechanics Modeling of Abdominal Aortic Aneurysms". NIH R21/S1 support.
  2011 – 2016: Vascular Surgery Fellow at University of Pittsburgh Medical Center, Pittsburgh, PA.
  2016 – 2018: Physician at Allegheny General Hospital, Pittsburgh, PA.
  2018 – Present: Vascular Surgeon at Kaiser Permanente Franklin Medical Offices, Denver, CO.
- 11/08 – 10/10 Santanu Chandra (Ph.D., Mechanical Engineering at the University of Akron, December 2007), "Bioengineering Studies of Abdominal Aortic Aneurysm Fluid and Wall Dynamics". NIH R21 support.
  2010 – 2012: Post-doctoral Fellow at University of Notre Dame, South Bend, IN.
  2012 – 2013: Assistant Research Professor at University of Texas at San Antonio, San Antonio, TX.

2013 – 2022: Lead Research Development Engineer, Senior Research Engineer/CAE Analyst, and Research Engineer/CAE Analyst at MED Institute, Cook Medical, West Lafayette, IN.
2022 – Present: Principal Research Development Engineer at Medtronic, San Francisco, CA.

Doctoral Research Assistants:

- 08/24 – Simon Rios (Ph.D., Mechanical Engineering, May 2028 expected), TBN. Zachry Endowment support.
- 08/24 – Julian Carvajal (Ph.D., Mechanical Engineering, August 2026 expected), TBN. Zachry Endowment, NIH R01, and GTA support.
- 08/22 – Juan Restrepo (Ph.D., Mechanical Engineering, August 2026 expected), TBN. NIH R01 support.
- 08/22 – Pratik Mitra (Ph.D., Mechanical Engineering, August 2026 expected), TBN. NIH R01 support.
- 08/17 – 08/21 Balaji Rengarajan (Ph.D., Mechanical Engineering, August 2021), "On the Use of Machine Learning to Predict Rupture Potential Index for Abdominal Aortic Aneurysms". UTSA Graduate Presidential Distinguished Research Fellowship (2017-2021) and NIH R01 support.
- 05/18 – 08/20 Venkata Pavan Pillalamarri Narasimha Rao (Ph.D., Mechanical Engineering, August 2020), "Patient-specific Fluid and Solid Mechanics Modeling of Pulmonary Hypertension". NIH R01 support and 2019-2020 UTSA Distinguished Research Fellow.
  2020: Post-doctoral Fellow at University of Nebraska Medical Center, Omaha, NE.
  2020 – Present: Computational Engineer at United Therapeutics Corp., Silver Springs, MD.
- 08/13 – 05/20 Alifer Bordones (Ph.D., Biomedical Engineering, May 2020), "Right Ventricular Remodeling and Risk Stratification Assessment in Patients with Pulmonary Hypertension". Start-up funding, NIH R01, and American Heart Association Grant-in-Aid support.
  2021 – Present: Senior Lecturer at UTSA, San Antonio, TX.
  2024 – Present: Assistant Professor of Instruction at UTSA, San Antonio, TX.
- 08/12 – 05/18 Mirunalini Thirugnanasambandam (Ph.D., Biomedical Engineering, May 2018), "Clinical Management of Abdominal Aortic Aneurysms using Patient-specific Tissue Mechanics". Valero Research Scholar. Start-up funding and NIH R01 support. American Heart Association pre-doctoral fellow (2015-2017).
  2019 – 2020: Post-doctoral Fellow at University of Bern, Switzerland.
  2020 – Present: Post-doctoral Fellow at Eindhoven University of Technology, Eindhoven, Netherlands.
- 08/08 – 08/12 Samarth Raut (Ph.D., Mechanical Engineering, August 2012), "Patient-Specific 3D Vascular Reconstruction and Computational Assessment of Biomechanics – an Application to Abdominal Aortic Aneurysm". Dean's Fellow. John and Claire Bertucci Graduate Fellow. NIH R15 and R21 support.
  2012 – 2015: Post-doctoral Fellow at University of Texas at Austin, Austin, TX.
  2015 – 2019: Senior Chief Engineer at Samsung R&D Institute, Bangalore, India.
  2019 – Present: Assistant Professor at Indian Institute of Technology, Dharwad, India.
- 08/07 – 09/11 Judy Shum (Ph.D., Biomedical Engineering, August 2011), "Risk Assessment of Abdominal Aortic Aneurysms by Geometry Quantification Measures". Gates Millennium Fellow. John and Claire Bertucci Graduate Fellow. Northrup Grumman Fellow.
  2011 – 2012: Application Engineer at Mathworks Inc., Natick, MA.
  2012 – 2020: Senior Quality Engineer for Image Processing Team at Mathworks Inc., Natick, MA.
  2020 – Present: Quality Engineering Manager at Mathworks Inc., Natick, MA.

- 08/05 – 05/10 Gail Siewiorek (Ph.D., Biomedical Engineering, May 2010), "Clinical Outcome of Endovascular Treatment of Carotid Artery Occlusive Disease". NIH T32 Trainee. AHA Pre-doctoral Fellow (declined due to overlap with NIH T32 support). John and Claire Bertucci Graduate Fellow.
  2010 – 2011: Post-Doctoral Research Associate at Carnegie Mellon University, Pittsburgh, PA.
  2011 – 2014: Senior Product Development Engineer, Becton, Dickinson and Company, Bedford, MA.
  2014 – 2016: Staff Biomedical Engineer, Becton, Dickinson and Company, Bedford, MA.
  2016 – 2019: R&D Core Team Member & Infusion Set Leader, Becton, Dickinson and Company, Bedford, MA.
  2019 – Present: Senior Program Project Manager at Fresenius Medical Care North America, Waltham, MA.
- 06/04 – 09/07 Christine Scotti (Ph.D., Biomedical Engineering, December 2007), "In Vitro and In Vivo Dynamics of Abdominal Aortic Aneurysms: A Fluid-Structure Interaction Study". Dowd-ICES Graduate Fellow and PA Dept. of Health support.
  2007 – 2017: CFD Technology Leader at W.L. Gore & Associates, Inc., Flagstaff, AZ.
  2017 – Present: CFD Technical Expert at W.L. Gore & Associates, Inc., Elkton, MD.

<u>Master's Graduate Research Assistants</u>:

- 01/22 – 05/23 Vivian Reyna (M.S., Mechanical Engineering, May 2023), A Finite Element Modeling Study of Abdominal Aortic Aneurysm Biomechanics Based on the Relative Effects of Wall and Intraluminal Thrombus Constitutive Material Properties. Zachry Endowment and Graduate Teaching Assistantship support.
  2023: Research Assistant I at UTSA, San Antonio, TX.
  2023 – Present: Research Engineer at Biodynamics Research Corp., San Antonio, TX.
- 06/19 – 08/21 Niusha Fathesami (M.S., Biomedical Engineering, August 2021), "The Effect of Intraluminal Thrombus on Abdominal Aortic Aneurysm Wall Stress using Nonlinear Elastic Membrane Analysis". Self-supported.
  2021 – Present: Product Development Engineer at Implant Direct, Thousand Oaks, CA.
- 01/18 – 05/21 Miguel Guerrero (M.S., Biomedical Engineering, May 2021), "MABITEM: a murine aorta biaxial testing machine". UTSA Biomedical Engineering Graduate Teaching Assistantship, Mechanical Engineering Grader, and AHA Collaborative Sciences Award support.
  2019 – Present: Manufacturing Process Engineer at ClearCorrect, Round Rock, TX.
- 08/18 – 08/20 Frances Arnold (M.S., Biomedical Engineering, August 2020), "Investigation on the Molecular and Biomechanical Interactions of Pentagalloyl Glucose on Mouse C2C12 Myoblast Cells". Biological Sciences Teaching Assistantship and AHA Collaborative Sciences Award support.
  2020 – Present: Biomedical Engineer at Albany Stratton VA Medical Center, Albany, NY.
- 05/16 – 12/19 Reginald Vaughn, Jr. (M.S., Biomedical Engineering, December 2019), "On the Quantification of Wall Stress in Patient-Specific AAA Models". Self-supported.
- 08/15 – 05/17 Shalin Parikh (M.S., Biomedical Engineering, May 2017), "Classification of Abdominal Aortic Aneurysms based on Geometry Quantification Measures". UTSA Biology Teaching Assistant and self-supported.
  2017 – 2018: Development Engineer at Zimmer Biomet, Warsaw, IN.
  2018 – 2020: Regulatory Affairs Associate at Human Bio Science, Gaithersburg, MD.
  2021 – Present: Regulatory Affairs Specialist at Medtronic, Danvers, MA.
- 08/15 – 05/17 Lawson Ishalaiye (M.S., Biomedical Engineering, May 2017), Non-thesis option. Self-supported.

- 05/15 – 12/16 Sathyajeeth Chauhan (M.S., Biomedical Engineering, December 2016), "Geometric Surrogates of Wall Stress in Emergently Repaired Abdominal Aortic Aneurysms". UTSA Biology and Biomedical Engineering Graduate Teaching Assistant, and self-supported.
  2017 – Present: Development Engineer at Zimmer Biomet, Warsaw, IN.
- 01/14 – 12/15 Aman Mahipat (M.S., Biomedical Engineering, December 2015), "Ex-Vivo Biomechanical Characterization of Arteriovenous Fistulas". UTSA Biology Teaching Assistant and self-supported.
  2016: Quality Engineer at SA Scientific, Ltd., San Antonio, TX.
  2016 – 2017: Quality & Validation Engineer at Rockline Industries, Sheboygan, WI.
  2017 – Present: Validation Engineer at Omega Plastics Inc., Clinton Township, MI.
- 08/13 – 08/15 Ernest Anoma (M.S., Biomedical Engineering, December 2015), Non-thesis option. Self-supported.
- 06/15 – 12/15 Carlos Gutierrez (M.S., Biomedical Engineering, August 2015), Non-thesis option. Self-supported.
  2015 – 2017: Research Assistant Level II at University of Texas Health Science Center at Houston, Houston, TX.
  2017 – Present: Data Analyst at Nathan Kline Institute, New York, NY.
- 08/13 – 05/15 Rita Oluwaseun (M.S., Biomedical Engineering, May 2015), Non-thesis option. Self-supported.
  2015 – 2016: Clinical Research Associate at Medpace, Irving, TX.
  2016 – 2017: System Integration Specialist at Abbott Laboratories, Dallas, TX.
  2017 – Present: Engineer at Abbott Laboratories, Dallas, TX.
- 08/12 – 12/14 Matthew Leroux (M.S., Biomedical Engineering, December 2014), "Experimental Validation of CFD Simulations of a Patient-Specific Pulmonary Vascular Model Using Particle Image Velocimetry". UTSA Biomedical Engineering Graduate Teaching Assistant and self-supported.
  2015 – Present: Associate Scientist I at Alcon, Fort Worth, TX.
- 08/11 – 12/14 Gnanaruban Vimalatharmaiyah (M.S., Biomedical Engineering, December 2014), "On the Use of Clinical Imaging in Patient Specific Abdominal Aortic Aneurysm Hemodynamics and Wall Mechanics". UTSA Biomedical Engineering Graduate Teaching Assistant and self-supported.
  2015 – 2017: Lecturer, University of Peradeniya (Sri Lanka).
  2017 – Present: Ph.D. Student at University of California Davis, Davis, CA.
- 01/11 – 05/12 Junjun Zhu (M.S., Mechanical Engineering, May 2012), "Geometric Modeling and Wall Mechanics of Abdominal Aortic Aneurysms". Self-supported.
  2012 – 2017: Ph.D. Student at University of Pittsburgh, Pittsburgh, PA.
  2018 – Present: Research Associate, University of Virginia, Charlottesville, VA.
- 08/10 – 05/12 Kibaek Lee (M.S., Mechanical Engineering, May 2012), "Surface Curvature as a Classifier of Abdominal Aortic Aneurysms: a Comparative Analysis". Self-supported.
  2012 – 2019: Ph.D. Student at University of Illinois at Urbana-Champaign, Urbana, IL.
  2019 – Present: Postdoctoral Research Associate at University of Florida, Gainesville, FL.
- 08/10 – 12/11 Natasha Loghmanpour (M.S., Biomedical Engineering, December 2011), "Assessing the Impact of Distal Protection Filter Design on 30-Day Outcomes of Carotid Artery Stenting Procedures". Self-supported.
  2012 – 2015: Ph.D. Student at Carnegie Mellon University, Pittsburgh, PA.
  2015 – 2016: Clinical Engineer II at St. Jude Medical, Sylmar, CA.
  2017 – Present: Clinical Engineer II at Abbott Laboratories, Sylmar, CA.
- 08/09 – 05/11 Abhay Ramachandra (M.S., Mechanical Engineering, May 2011), "The Effect of Outflow Boundary Conditions in the Hemodynamics of Human Pulmonary Arteries". Self-supported.

2011 – 2016: Ph.D. Student at University of California San Diego, San Diego, CA.
2017 – Present: Post-doctoral Research Fellow at Yale University, New Haven, CT.

- 08/08 – 08/10 Peng Liu (M.S., Biomedical Engineering, August 2010), "A Volume Meshing Strategy for Patient Specific Abdominal Aortic Aneurysms". Pennsylvania Infrastructure Technology Alliance support.
  2010 – 2012: Design Engineer at Rex Medical, Conshohocken, PA.
  2013 – 2016: Senior Design Engineer at Cryofocus Medtech, Shangai, China.
  2016 – Present: Project Manager at Cryofocus Medtech, Shangai, China.
- 08/07 – 05/09 Cheng-Shiu Chung (M.S., Biomedical Engineering, May 2009), "Design Optimization of a Novel Catheter for Rheolytic Thrombectomy". Self-supported.
  2009 – 2015: Ph.D. student at University of Pittsburgh, Pittsburgh, PA.
  2016 – Present: Research Associate at University of Pittsburgh.
- 08/04 – 12/05 Sanna Gaspard (M.S., Biomedical Engineering, May 2006), "The Design of a Novel Distal Protection Filter and In-Vitro Bench Top Model for the Evaluation of Distal Protection Devices for Carotid Artery Stenting". Biomedical Engineering Department support.
  2006 – 2011: Ph.D. Student at Carnegie Mellon University, Pittsburgh, PA.
  2011 – Present: CEO at Rubitection, Pittsburgh, PA.
- 08/02 – 05/04 Christine Scotti (M.S., Biomedical Engineering, May 2004), "Computational Modeling of Patient-Specific AAAs: A Comparison of Pre- and Post-Operative Flow Hemodynamics and Wall Mechanics", jointly supervised with C.H. Amon. Self-supported.
  2004 – 2007: Ph.D. Student at Carnegie Mellon University, Pittsburgh, PA.
  2007 – 2017: CFD Technology Leader at W.L. Gore & Associates, Inc., Flagstaff, AZ.
  2017 – Present: CFD Technical Expert at W.L. Gore & Associates, Inc., Elkton, MD.
- 08/02 – 12/03 Jorge Jiménez (M.S., Mechanical Engineering, December 2003), "Fluid-Structure Interaction in Pipe Flows", jointly supervised with C.H. Amon. Self-supported.
  2004 – 2007: Ph.D. Student at Carnegie Mellon University, Pittsburgh, PA.
  2007 – 2008: Post-doctoral researcher at Carnegie Mellon University, Pittsburgh, PA.
  2009 – 2011: Post-doctoral researcher at UMASS Dartmouth, Dartmouth, MA.
  2011– 2016: Product Development Engineer at Cook Medical, Bloomington, IN.
  2016 – Present: Engineering Team Leader at Cook Medical, Bloomington, IN.

<u>The University of Texas at San Antonio Graduate Committees</u>:

- Rakib Hasan (Ph.D., Mechanical Engineering, August 2026 expected, Robert L. Hood, Advisor)
- Yasamin Seddighi (Ph.D., Mechanical Engineering, May 2025, Hai-Chao Han, Advisor)
- Saketh Ram Peri (Ph.D., Biomedical Engineering, August 2024, Robert L. Hood, Advisor)
- Adnan Shahriar (Ph.D., Mechanical Engineering, December 2023, Arturo Montoya, Advisor)
- Daniel Portillo (Ph.D., Mechanical Engineering, May 2022, Robert L. Hood, Advisor)
- Forhad Akhter (Ph.D., Mechanical Engineering, December 2021, Robert L. Hood, Advisor)
- Carlos Acosta (Ph.D., Electrical Engineering, August 2020, Ruyan Liu, Advisor)
- Santiago Manrique-Bedoya (Ph.D., Mechanical Engineering, May 2020, Yusheng Feng, Advisor)
- Mohammad Ali Sharzehee (Ph.D., Mechanical Engineering, May 2020, Hai-Chao Han, Advisor)
- Jitin Samuel (Ph.D., Mechanical Engineering, December 2018, Xiaodu Wang, Advisor)
- David Wagner (Ph.D., Mechanical Engineering, August 2018, Harry Millwater, Advisor)
- Fatemeh Fatemifar (Ph.D., Mechanical Engineering, May 2018, Hai-Chao Han, Advisor)
- Sadaf Putschi (M.S., Biomedical Engineering, May 2017, Liang Tang, Advisor)
- Prajeeda Nair (Ph.D., Biomedical Engineering, May 2017, Liang Tang, Advisor)
- Nelson Torres (Ph.D., Biomedical Engineering, May 2017, Kai Leung, Advisor)
- Luis Rodriguez (M.S., Biomedical Engineering, December 2016, Jean Jiang, Advisor)
- Mohammad Rahman (Ph.D., Mechanical Engineering, May 2016, Yusheng Feng, Advisor)
- Aida Nasirian (M.S., Biomedical Engineering, December 2015, Hai-Chao Han, Advisor)
- Mohammad Mottahedi (M.S., Mechanical Engineering, December 2015, Hai-Chao Han, Advisor)

- Makawat Jangjai (M.S., Biomedical Engineering, August 2015, Matthew Reilly, Advisor)
- Robert Wilkes (Ph.D., Biomedical Engineering, December 2014, Matthew Reilly, Advisor)
- Richard Watson (M.S., Biomedical Engineering, December 2014, Matthew Reilly, Advisor)
- Carlos Moreno (M.S., Mechanical Engineering, December 2014, Kiran Bhaganagar, Advisor)
- Daniel Sherwood (M.S., Biomedical Engineering, May 2014, Matthew Reilly, Advisor)
- Andrew Nordquist (M.S., Biomedical Engineering, December 2013, Yusheng Feng, Advisor)
- Andrew Wharmby (Ph.D., Biomedical Engineering, May 2013, Ronald Bagley, Advisor)
- Justin Moreno (M.S., Biomedical Engineering, August 2012, Hai-Chao Han, Advisor)

Carnegie Mellon University Graduate Committees:

- Richard Taylor (M.S., Biomedical Engineering, May 2011, Kris Dahl, Advisor)
- Matthew Oberdier (Ph.D., Biomedical Engineering, December 2011, James Antaki, Advisor)
- Onur Dur (Ph.D., Biomedical Engineering, May 2011, Kerem Pekkan, Advisor)
- Sam Hund (Ph.D., Biomedical Engineering, September 2010, James Antaki, Advisor)
- Rui Zhao (Ph.D., Biomedical Engineering, August 2008, James Antaki, Advisor)
- Arielle Drummond (Ph.D., Biomedical Engineering, December 2008, James Antaki, Advisor)
- Michelle Gasbarro (M.S., Biomedical Engineering, May 2006, Elena Di Martino, Advisor)

Universidad Simón Bolívar (Venezuela) Graduate Committees:

- Elver Perez (M.S., Mechanical Engineering, December 2012, Luis Rojas, Advisor)

Universidad de Chile (Chile) Graduate Committees:

- Nicolas Amigo (Ph.D., Mechanical Engineering, December 2018, Alvaro Valencia, Advisor)

Visiting Faculty and Scholars:

- 01/24 – 08/24 Simon Rios, B.S. (Research Intern), "Finite Element Modeling of Abdominal Aortic Aneurysms".
- 02/17 – 08/18 Senol Piskin, Ph.D. (Research Associate at Koc University, Turkey), "Computational Fluid Dynamics Simulations of Blood Flow in Pulmonary Hypertension".
- 09/17 – 12/17 Nicolas Amigo (Ph.D. Candidate at Universidad de Chile, Chile), "Caracterización Morfológica y Estudio de la Hemodinámica de Aneurismas Cerebrales Humanos Mediante Simulaciones Computacionales".
- 01/16 – 12/16 Tejas Canchi (Ph.D. Candidate at Nanyang Technological University, Singapore), "Experimental Studies and Computational Validation of the use of Realistic Boundary Conditions to Estimate Rupture Risk in Abdominal Aortic Aneurysms".
- 01/14 – 07/14 Sergio Ruiz (Ph.D. Candidate at Universidad de Navarra, Spain), "Finite Element Modeling of Abdominal Aortic Aneurysm Phantoms".
- 08/12 – 08/13 Sirajul Salekin (Ph.D. Student at UTSA, Electrical & Computer Engineering), "Medical Image Segmentation of Contrast-Enhanced Chest CT Scans". Jointly supervised with Sos Agaian. UTSA SiViRT support.
- 10/11 – 03/12 Jesus Urrutia (M.S. Student at Universidad de Navarra, Spain), "Isotropic Finite Element Analysis of Abdominal Aortic Aneurysms".
- 05/11 – 07/11 Jorge Aramburu (Ph.D. Student at Universidad de Navarra, Spain), "Development of User Subroutines for Computational Flow Modeling of Blood Vessels".
- 07/10 – 12/10 Raul Anton, Ph.D. (Faculty at Universidad de Navarra, Spain), "PIV Validation of CFD Modeling of Abdominal Aortic Aneurysms".
- 08/09 – 09/09 Jose Rodriguez, Ph.D. (Faculty at Universidad de Zaragoza, Spain), "Material Anisotropy and Zero-Pressure Geometry Modeling of Abdominal Aortic Aneurysms".
- 10/08 – 12/08 Mauro Malve (Ph.D. Candidate at Universidad de Zaragoza, Spain), "Impedance-based Boundary Conditions for Abdominal Aortic Aneurysms".

- 02/08 – 08/08 Dilana Hazer (Ph.D. Candidate at University of Karlsruhe and University Hospital Heidelberg, Germany), "Development of a Functional Evaluation Method for Determination of Pressure and Shear Stress in Aortic Pathology".
- 05/07 – 02/08 Claudio Larenas (M.S. Student at Universidad de Santiago de Chile, Chile), "Design and Optimization of an Injection System for Stem Cell Therapy".
- 10/06 – 12/07 Giampaolo Martufi (M.S. Student at Universita di Tor Vergata, Italy), "Geometric Characterization of Abdominal Aortic Aneurysms for Risk of Rupture Assessment".
- 05/06 – 12/07 Sergio Cornejo (M.S. Student at Universidad de Santiago de Chile, Chile), "Fluid-Structure Interaction of Cerebral Aneurysms".
- 07/07 – 10/07 Jose Rodriguez, Ph.D. (Faculty at Universidad de Zaragoza, Spain), "Anisotropic Modeling of Abdominal Aortic Aneurysm Mechanics".

Undergraduate Research Assistants:

- 01/25 – Archer French (B.S., Mechanical Engineering, May 2026 expected), "CFD blood flow modeling of abdominal aortic aneurysms".
- 06/25 – Maria Bolaños (B.S., Mechanical Engineering, May 2026 expected), "Automated segmentation of CTA images of abdominal aortic aneurysms".
- 06/25 – Aron San Mattel (B.S., Mechanical Engineering, May 2028 expected), "ECG-gated MRI segmentation of abdominal aortic aneurysms".
- 06/24 – 12/24 Brandon Manz (B.S., Mechanical Engineering, December 2025 expected), "Nonlinear elastic membrane analysis of abdominal aortic aneurysms".
- 06/24 – 08/24 Benjamin Turner (B.S., Mechanical Engineering, December 2025 expected), "Computational fluid dynamics modeling of abdominal aortic aneurysms".
- 01/23 – 05/24 Jacqueline Avila (B.S., Biomedical Engineering, May 2024), "On the significance of patient-specific systolic pressure for the calculation of rupture potential index of abdominal aortic aneurysms".
- 08/23 – 12/23 Haehwan Park (B.S., Mechanical Engineering, December 2023), "Image-based geometric and biomechanical modeling of abdominal aortic aneurysms".
- 07/23 – 08/23 Jonathan Day (B.S., Mechanical Engineering, December 2023), "Semi-automated segmentation of contrast-enhanced computed tomography images of abdominal aortic aneurysms".
- 08/19 – 06/20 Emma Yanoviak (B.S., Mechanical Engineering, May 2022), "On the Derivation of Geometric Surrogates of Abdominal Aortic Aneurysm Wall Stress".
- 11/17 – 05/20 Pete Gueldner (B.S., Biomedical Engineering, May 2020), "Morphological Analysis of Intraluminal Thrombus in Abdominal Aortic Aneurysms Patients". Honors College Highest Honors program. UTSA CoE Dean's scholar. UTSA CoE NSF Dean's scholar.
- 01/18 – 12/19 Vangelina Osteguin (B.S., Biomedical Engineering, May 2019), "Pressure-inflation Testing of Murine Abdominal Aortas". UTSA CoE Dean's scholar.
- 06/18 – 05/19 Toral Khajanchi (B.S., Biomedical Engineering, May 2019), "Geometric Quantification of Human Pulmonary Arteries in Adult Pulmonary Hypertension".
- 01/18 – 12/18 Gary Hernandez (B.S., Mechanical Engineering, May 2020), "Geometric Analysis of Human Pulmonary Arteries in Adult Pulmonary Hypertension".
- 06/18 – 12/18 Monique Lopez (B.S., Mechanical Engineering, May 2019), "A Zero-Pressure Algorithm for Deriving the Unstressed Geometry of Abdominal Aortic Aneurysms".
- 06/16 – 12/17 Raymond Gomez (B.S., Mechanical Engineering, December 2019), "A Comparative Analysis of Geometry and Wall Mechanics in Unruptured Abdominal Aortic Aneurysms". UTSA CoE Dean's scholar.
- 05/16 – 08/17 Hong Nguyen (B.S., Biomedical Engineering, May 2017), "A Comparative Analysis of Geometry and Wall Mechanics in Electively Repaired Abdominal Aortic Aneurysms". UTSA CoE HPC scholar. Honors College Highest Honors program.

- 06/16 – 12/16 Aura Teasley (B.S., Biomedical Engineering, expected May 2018), "Geometric and Finite Element Analysis of Abdominal Aortic Aneurysms under Surveillance".
- 08/13 – 12/16 Krysta Amezcua (B.S., Biomedical Engineering, December 2016), "Biomechanical Assessment of Wound-Treatment Polymers". UTSA MRBS/MARC program. Honors College Highest Honors program.
- 06/15 – 05/16 Tyler Daniels (B.S., Biomedical Engineering, May 2016), "Geometric and Finite Element Analysis of Unruptured Abdominal Aortic Aneurysms".
- 01/16 – 05/16 Andre Cleaver (B.S., Biomedical Engineering, May 2016), "Inverse Finite Element Analysis of Compressed Mouse Lenses for Mechanical Insights into Presbyopia". UTSA MRBS/RISE program. Honors College Highest Honors program.
- 01/15 – 12/15 Xabier Basanez (B.S., Biomedical Engineering, December 2015), "Non-Destructive Pressure-Inflation of an Abdominal Aortic Aneurysm Silicone Phantom: A Feasibility Study". Honors College Highest Honors program.
- 01/13 – 11/14 Rita Thornton (B.S., Biomedical Engineering, May 2015), "Tensile Testing of Amphiphilic Biomaterials". UTSA MRBS/MARC program.
- 03/13 – 10/13 Daniel Evans (B.S., Mechanical Engineering, May 2015), "Computational Hemodynamics in the Pulmonary Vasculature". UTSA SiViRT program.
- 05/12 – 05/13 Lourdes Rios (B.S., Biological Sciences, December 2016), "CFD Modeling of the Pulmonary Vasculature".
- 07/12 – 12/12 Brenda Marchand (B.S., Biomedical Engineering, May 2015), "Mechanical Testing of Amphiphilic Biomaterials". UTSA MRBS/RISE program.
- 01/11 – 05/11 Dennis Ou (B.S., MechE/BME, May 2013), "Medical Image Analysis of Abdominal Aortic Aneurysms".
- 08/10 – 12/10 Allen Chen (B.S., MechE/BME, May 2012), "CT Image Segmentation and Volume Meshing of Abdominal Aortic Aneurysms".
- 05/10 – 08/10 Kyle Andrews (B.S., MechE/BME, May 2012), "Medical Image Segmentation and Shape Modeling of Abdominal Aortic Aneurysms".
- 02/10 – 05/10 Kelly Collier (B.S., MSE/BME, May 2011), "Medical Image Analysis of Ruptured Abdominal Aortic Aneurysms".
- 05/09 – 05/10 Amber Xu (B.S., ECE/BME, May 2011), "Automatic Surface Mesh Generation and Refinement of Abdominal Aortic Aneurysms".
- 05/09 – 12/09 Itthi Chatnuntawech (B.S., ECE/BME, May 2011), "Surface and Centerline Smoothing of Abdominal Aortic Aneurysms".
- 07/09 – 08/09 Bridget Liao (B.S., ECE, May 2011), "CT Image Segmentation and Geometry Quantification of Abdominal Aortic Aneurysms".
- 05/08 – 12/08 Julie Ng (B.S., MechE/BME, May 2010), "CT Image Segmentation and Wall Thickness Estimation of Abdominal Aortic Aneurysms".
- 05/06 – 05/08 Adam Goldhammer (B.S., ECE/BME, May 2008), "Wall Thickness Detection and Validation of Blood Vessels from Computed Tomography Scans and Magnetic Resonance Images". Jointly supervised with E.S. Di Martino.
- 08/06 – 05/07 Olabanji Adebayo (B.S., MechE, May 2007), "Computational Fluid Dynamics Modeling of the DualNet Embolic Protection Filter".
- 05/06 – 05/07 Ming Huo (B.S., MechE, May 2007), "Computational Design Optimization of a Novel Thrombectomy Device". Mechanical Engineering 2006-2007 Senior Honors Research Program.
- 05/06 – 12/06 Mark Rockwell (B.S., MechE, May 2007), "Computational Fluid Dynamics Modeling of Distal Protection Devices". Mechanical Engineering 2006-2007 Senior Honors Research Program.
- 06/06 – 09/06 Gabriel Parisi (B.S., MechE, Stanford University, June 2009), "Image-based Patient-Specific Modeling of Abdominal Aortic Aneurysms".

- 05/06 – 08/06 Liam Bucci (B.S., MechE, May 2007), "3D Reconstruction and Validation of Blood Vessels from Medical Images". Jointly supervised with E.S. DiMartino.
- 05/06 – 08/06 Kathleen Thompson (B.S., ChemE/BME, May 2007), "Experimental Performance Assessment of Distal Protection Devices".
- 05/06 – 08/06 Brian Shyu (B.S., MechE/BME, expected May 2008), "Finite Element Analysis of Abdominal Aortic Aneurysms: Ruptured/Emergent Repair".
- 05/06 – 08/06 Martin Marinack (B.S., MechE/BME, expected May 2008), "Finite Element Analysis of Abdominal Aortic Aneurysms: Elective Repair".
- 01/06 – 08/06 Justin Marini (B.S., MechE, May 2006), "Computational Simulation and Design Optimization of Interventional Catheters".
- 08/05 – 05/06 Ming Dong (B.S., MechE/BME, May 2006), "Computational Fluid Dynamics Analysis of Novel, Interventional Catheters"; Carnegie Institute of Technology 2005-2006 Senior Honors Research Program.
- 05/05 – 05/06 Aric Anderson (B.S., ChemE/BME, May 2006), "Finite Element Analysis and Computational Fluid Dynamics of AAAs"; Carnegie Institute of Technology 2005-2006 Senior Honors Research Program.
- 08/05 – 12/05 Jessica Heasley (B.S., MechE, May 2006), "Computational Fluid Dynamics Analysis of Novel, Interventional Catheters".
- 05/05 – 12/05 Gopal Patel (B.S., ECE/BME/CS, May 2007), "MATLAB-based 3D Reconstruction of Blood Vessels from Computed Tomography Scans and Magnetic Resonance Images". Jointly supervised with E.S. DiMartino.
- 05/05 – 12/05 Maria Poon (B.S., MechE/BME, May 2006), "Fluid Mechanics-Based Design Optimization of the Guidant Corporation RX Accunet® Distal Protection Device".
- 05/05 – 09/05 Gabriel Parisi (Central Catholic High School, June 2005), "Fluid Mechanics-Based Design Optimization of the Scion Cardiovascular Sci-Pro® Distal Protection Device".
- 01/04 – 07/05 Daniel Goldman (B.S., MechE/BME, May 2005), "MATLAB-based 3D Reconstruction of Blood Vessels from Computed Tomography Scans". Jointly supervised with E.S. DiMartino.
- 08/02 – 05/05 Alexander Shkolnik (B.S., Math, May 2005), "Finite Element Analysis and Fluid-Structure Interaction Modeling using Adina".
- 08/04 – 05/05 Stephanie Lum (B.S., MechE, May 2005), "MATLAB Graphical User Interface (GUI) Development for Medical Image Processing Software"; Mechanical Engineering 2004-2005 Senior Honors Research Program.
- 08/04 – 12/04 Christina Yu (B.S., ECE, December 2004), "Application of Signaling Filters for CT Scan Image Segmentation and Thresholding using Matlab".
- 08/04 – 12/04 Anita Shukla (B.S., ChemE/BME, May 2006), "CFD Adaptive Mesh Refinement using Gambit".
- 08/03 – 12/04 Siddharth Viswanathan (B.S., MechE/BME, May 2006), "Hexahedral Mesh Generation for Finite Element Analysis and Computational Fluid Dynamics using TrueGrid".
- 06/04 – 08/04 Gail Siewiorek (B.S., BME, Washington University in St. Louis, May 2005), "Computational Fluid Dynamics of Embolic Protection Filters", Summer Undergraduate Research Experience (SURE) - ICES/PITA 2004 Summer Internship Program.
- 06/04 – 08/04 Marina Udowenko, (B.S., BME, University of Pittsburgh, December 2004), "Fluid-structure Interaction Simulation of Arterial Flows", Summer Undergraduate Research Experience (SURE) - ICES/PITA 2004 Summer Internship Program.
- 08/03 – 05/04 James Wolfe (B.S., MechE, May 2004), "Computational Solid Mechanics of Endovascular Grafts (EVGs) and Abdominal Aortic Aneurysms (AAAs) with Rapid Prototyping"; Mechanical Engineering 2003-2004 Senior Honors Research Program.
- 08/03 – 12/03 Calvin Tong (B.S., MechE, May 2005), "Finite Element Mesh Generation using Gambit".

- 05/03 – 08/03 Aaron Benedict (B.S., MechE, Gannon University, May 2004), "3-D Reconstruction of Patient-Specific AAAs from Computed Tomography Scans"; Summer Undergraduate Research Experience (SURE) - ICES/PITA 2003 Summer Internship Program.
- 08/02 – 05/03 Daniel Apone (B.S., MechE, May 2003), "Solid Modeling and Mesh Generation of Endovascular Grafts and Abdominal Aortic Aneurysms using Gambit".
- 05/02 – 08/02 Rahul Chipalkatty (B.S., MechE, May 2004), "Solid Modeling of Endovascular Grafts and Patient-Specific Abdominal Aortic Aneurysms using Pro-Engineer".

Faculty Mentoring of Student Design Teams:

- 08/20 – 05/21 Andres Leon, Maribel Torre, Derrick Castaneda, Trey Robertson (B.S., ME, May 2021) Mechanical Engineering Senior Design I and II (ME 4812 and ME 4813), "Leak Detection Project for Champion AC".
- 08/15 – 05/16 Natalie Casso, Ilse Valencia, Farheen Hussain, Ngoc Mayout (B.S., BME, May 2016), Biomedical Engineering Senior Design I and II (BME 4903 and BME 4913), "Blood Filtration Device for Treatment of Deep Vein Thrombosis".
- 08/14 – 05/15 Melisa Alanis, Diana Castillo, Rebekah Rodriguez, Leah Muse (B.S., BME, May 2015), Biomedical Engineering Senior Design I and II (BME 4903 and BME 4913), "Device for in Vivo Mechanical Characterization of Blood Clots". 1st Place in the Biomedical Engineering Senior Design Competition.
- 08/13 – 05/14 Ivana Quintanilla, Andrew Casterlin, Derek Kohlenberg, Emmanuel Manuel (B.S., MechE, May 2014), Mechanical Engineering Senior Design (ME 4812), "Design of an Endovascular Device for Cerebral Aneurysm Repair". 1st Place in the Mechanical Engineering Senior Design Competition and 2nd Place in the UTSA Center for Innovation and Technology Entrepreneurship (CITE) $100K Student Technology Venture Competition.
- 01/07 – 05/07 Hong Liew (B.S., ECE, May 2008), Jonathan Brown (B.S., MechE, May 2008), Rohan Kilachand (B.S., ChemE, May 2008), Michael Franzonello (M.S., CEE, May 2007), Engineering Design Projects course (39-606), "Design of a CT Contrast Warmer".
- 08/06 – 12/06 Steven Blair (B.S., MechE, May 2008), Kyle Holland (B.S., MechE, May 2008), Adam Sbeglia (B.S., MechE, May 2008), Gaurav Joshi (B.S., CEE, May 2008), Charles Patterson (B.S., Des, May 2008), Engineering Design Projects course (39-605), "Design of an FDG Vial Insertion Device".
- 01/06 – 05/06 Heegyung Chung (B.S., ECE, May 2006), Charles Cole (B.S., ECE, May 2007), Olabanji Adebayo (B.S., MechE, May 2007), Maria Montero (M.S., CEE, May 2006), Sai Venkateswaran (Ph.D., MSE, May 2007), Aesel Chang (B.S., Des, May 2007), Engineering Design Projects course (39-606), "Endovascular Device Design for Clot Entrapment and Removal in Stroke Management".
- 01/05 – 05/05 Shirlene Lim (B.S., ECE/BME, May 2005), Stephen Mangiat (B.S., ECE, May 2005), Kristopher Borer (B.S., MechE, May 2006), Anthony Colaizzo (B.A., BA, May 2005), Engineering Design Projects course (39-606), "Redesign of the Sci-Pro® Filter for Carotid Artery Stenting".
- 08/04 – 04/05 Sandeep Devabhakthuni (B.S., BME, University of Pittsburgh, April 2005), Chenara Johnson (B.S., BME, University of Pittsburgh, April 2005), Daphne Kontos (B.S., BME, University of Pittsburgh, April 2005), Perry Tiberio (B.S., BME, University of Pittsburgh, April 2005), Bioengineering Design 1 & 2 courses (BE-1160 & BE-1161), "Design of a Distal Protection Filter for Carotid Artery Stenting".
- 08/03 – 04/04 Erdrin Azemi (B.S., BME, University of Pittsburgh, April 2004), Heather Gray (B.S., BME, University of Pittsburgh, December 2004), Emily Miner (B.S., BME, University of Pittsburgh, April 2004), Bioengineering Design 1 & 2 courses (BE-1160 & BE-1161), "Comparison and Redesign of Distal Protection Filters for Angioplasty Stenting Procedures".

- 01/02 – 05/02 Aliya Omer (B.S., BME/MSE, May 2002), Amy Graveline (B.S., BME/ECE, May 2002), James Leung (B.S., BME/ChemE, May 2002), Kathleen Yoder (B.S., BME/MSE, May 2002), Matthew Bender (B.S., BME/MSE, May 2003), Hsu-Feng Ko (B.S., BME/ChemE, May 2002), Engineering Design Projects course (39-606), "Design of an Endovascular Graft for Abdominal Aortic Aneurysms". Jointly supervised with C.H. Amon.

PROFESSIONAL ASSOCIATIONS AND SERVICE

- Membership and Activities in Honorary Fraternities, Professional Societies:
  - American Institute of Medical and Biological Engineering, **Fellow, 2025 – Present**
  - American Heart Association (AHA), Professional Member, 2012 – 2019; **Fellow, 2019 – Present**
  - Biomedical Engineering Society (BMES), Student Member, 1996 – 2002; Member, 2002 – 2025; **Fellow, 2025 – Present**
  - American Society of Mechanical Engineers (ASME), Student Member, 1996 – 2002; Member, 2002 – 2020; **Fellow, 2020 – Present**
    - Bioengineering Division Fluid Mechanics Technical Committee, Member, 2004 – Present
    - Bioengineering Division Solid Mechanics Technical Committee, Member, 2007 – Present
    - Bioengineering Division Cell and Tissue Engineering Technical Committee, Member, 2007 – 2010
  - The New York Academy of Sciences (NYAS), 2007 – 2009
  - Society of Experimental Mechanics (SEM), 2007
  - International Society of Biomechanics (ISB), 2007
  - Sigma Xi, The Scientific Research Society (ΣΨ), Member, 2000 – 2009
- Government Committees, Civic Appointments, Board Memberships:
  - Research grant proposal reviewer for:
    - Dutch Research Council (NWO), Netherlands (ad hoc reviewer) – 2025
    - National Institutes of Health, Member Reviewer Conflict (D2) study section, ad hoc reviewer – 2024
    - National Institutes of Health, Atherosclerosis and Vascular Inflammation (AVI) study section, ad hoc reviewer – 2021
    - British Heart Foundation, United Kingdom (ad hoc reviewer) – 2018
    - National Institutes of Health, NIBIB Special Emphasis Panel (NIBIB K Award – R13 Review Meeting), ad hoc reviewer – 2018
    - American Heart Association, Collaborative Science Research Award Committee (ad hoc reviewer) – Fall 2016, Fall 2017, Fall 2018
    - Medical Research Council, United Kingdom (ad hoc reviewer) – 2017
    - National Institutes of Health, NHLBI Special Emphasis Panel (Topic 90: Devices to Close Ductus Arteriosus in Premature Infants), ad hoc reviewer – 2016
    - National Institutes of Health, NIBIB Special Emphasis Panel (NIBIB Quantum Program: Technological Innovation to Solve a Major Medical or Public Health Challenge (U01)), ad hoc reviewer – 2016
    - National Institutes of Health, Center for Scientific Review Special Emphasis Panel (SBIR/STTR), ad hoc reviewer – 2015
    - National Institutes of Health, NHLBI Special Emphasis Panel (Topic 90: Devices to Close Ductus Arteriosus in Premature Infants), ad hoc reviewer – 2015
    - National Institutes of Health, Center for Scientific Review Panel - Physiology and Pathobiology of Cardiovascular and Respiratory Systems study section, ad hoc reviewer – 2014

        - National Institutes of Health, Center for Scientific Review Special Emphasis Panel - Member Conflict: Surgical Sciences and Bioengineering, ad hoc reviewer – 2013
        - National Institutes of Health, Bioengineering, Technology and Surgical Sciences study section, ad hoc reviewer – 2013
        - National Institutes of Health, Vascular Interventions/Innovations and Therapeutic Advances (VITA) special emphasis panel, ad hoc reviewer – 2012
        - National Institutes of Health, Bioengineering, Technology and Surgical Sciences study section, ad hoc reviewer – 2012
        - National Institutes of Health, Center for Multiscale Simulations in the Human Circulation review panel, ad hoc reviewer – 2012
        - American Heart Association, Bioengineering BSC2 and Clinical Committees, Innovation Research Award Committee (ad hoc reviewer) – Spring and Fall 2010, Spring and Fall 2011, Spring 2014
        - National Institutes of Health, SAT/BTSS Member Conflict study section (ad hoc reviewer) – 2010
        - National Institutes of Health, Modeling and Analysis of Biological Systems study section (ad hoc reviewer) – 2009
        - National Institutes of Health, NHLBI Research and Research Infrastructure "Grand Opportunities" review panel (ad hoc reviewer) – 2009
        - National Institutes of Health, Challenge Grants in Health and Science Research panel (ad hoc reviewer) – 2009
        - Italian Ministry of Health and National Institutes of Health Center for Scientific Review (ad hoc reviewer) – 2009, 2010
        - Scottish Government Health Directorate (ad hoc reviewer) – 2009
        - The Wellcome Trust, England (ad hoc reviewer) – 2007
        - Chilean National Commission for Science and Technology Research, Chile (ad hoc reviewer) – 2006
        - Health Research Board, Ireland (ad hoc reviewer), 2004 – 2006, 2010
    - Associate Editor, Annals of Biomedical Engineering, 2013 – Present
    - Associate Editor, Journal of Biomechanical Engineering, 2011 – 2017
    - Member, Editorial Board of Annals of Vascular Surgery, 2013 – 2019
    - Member, Editorial Board of Journal of Endovascular Therapy, 2009 – 2016
    - Appointed Representative of the ASME Bioengineering Division, ASME Basic Engineering Group Operating Board, 2010 – 2014
    - Guest member of the Executive Committee of the ASME Bioengineering Division, 2012 – 2014
    - Leader of Cardiovascular Tissue Mechanics Theme in the ASME Bioengineering Division Solid Mechanics Technical Committee, 2018 – 2020
- Editorial Roles in Publications, Major Activities in Professional Meetings:
    - Guest Editor for the Annals of Biomedical Engineering Special Issue on "Vascular Biofluids and Biomechanics" (July, 2013)
    - Journal reviewer for:
        - Journal of Engineering in Medicine
        - International Journal of Molecular Sciences
        - Cardiovascular Engineering and Technology
        - IEEE Transactions on Biomedical Engineering
        - Biorheology
        - ASME Journal of Biomechanical Engineering
        - Flow, Turbulence and Combustion
        - ASME Journal of Heat Transfer

- ASME Journal of Medical Devices
- Journal of Biomechanics
- Journal of Fluids and Structures
- Medical Engineering and Physics
- Biomedical Engineering Online
- Computers and Structures
- Annals of Biomedical Engineering
- Medical and Biological Engineering & Computing
- Computer Methods and Programs in Biomedicine
- Journal of the Royal Society Interface
- Computers in Biology and Medicine
- SN Applied Sciences
- Experimental Mechanics

- Technical Meeting Chair/Co-Chair/Organizer and Scientific Workshops/Meetings:
  - *2025 Summer Bioengineering Conference*, Vascular Biomechanics I session (Co-Chair), Santa Ana Pueblo, NM, June 22-25, 2025.
  - *2021 Summer Biomechanics, Bioengineering and Biotransport Conference*, Emerging Topics in Cardiovascular Mechanics session (Co-Chair), Virtual Meeting, June 14-18, 2021.
  - *2017 American Heart Association Research Leaders Academy* (Invited Participant), Denver, CO, September 17-19, 2017.
  - *2017 Summer Biomechanics, Bioengineering and Biotransport Conference*, Aneurysm Mechanics session (Chair) and Cardiovascular Devices session (Co-Chair), Tucson, AZ, June 21-24, 2017.
  - *2016 Summer Biomechanics, Bioengineering and Biotransport Conference*, Aneurysm Biomechanics session (Chair), National Harbor, MD, June 29 – July 2, 2016.
  - *2015 Summer Biomechanics, Bioengineering and Biotransport Conference*, Cerebral and Aortic Aneurysms session (Chair), Snowbird Resort, UT, June 17-20, 2015.
  - *Seventh World Congress of Biomechanics*, Aortic Aneurysm Symposium (Organizer and Chair), Pulmonary Hypertension session (Organizer and Chair), ASME PhD Student Paper Competition Cardiovascular session (Chair), Boston, MA, July 6-11, 2014.
  - *2013 Summer Bioengineering Conference*, Computational Biofluid Dynamics session (Chair), Sunriver, OR, June 26-29, 2013.
  - *2012 Summer Bioengineering Conference*, Abdominal Aortic Aneurysm session (Chair), Fajardo, PR, June 20-23, 2012.
  - *2011 Summer Bioengineering Conference*, Abdominal Aortic Aneurysm session (Organizer), Cerebral Aneurysm session (Organizer), Farmington, PA, June 22-25, 2011.
  - *2010 Summer Bioengineering Conference*, Student Paper Competition (Chair), Abdominal Aortic Aneurysm session (Organizer), Cerebral Aneurysm session (Chair), Ph.D. Student Paper Competition: Biofluids and Biotransport Engineering session (Chair), Naples, FL, June 16-20, 2010.
  - *2009 Summer Bioengineering Conference*, Ph.D. Student Paper Competition (Co-Chair and Organizer), Aortic Aneurysm Mechanics session (Organizer), Lake Tahoe, CA, June 17-21, 2009.
  - *2008 Summer Bioengineering Conference*, M.S. Student Paper Competition (Co-Chair and Organizer), Cerebral Aneurysms session (Chair), Ph.D. Student Paper Competition III: Biofluids and Imaging session (Chair), Marco Island, FL, June 25-29, 2008.
  - *2007 Summer Bioengineering Conference*, FSI in Arterial Disease session (Chair), B.S. Student Paper Competition (Co-Chair and Organizer), Keystone, CO, June 20-24, 2007.
  - *Fifth World Congress of Biomechanics*, Aneurysms session (Co-Chair and Organizer), AAAs and Stent-Grafts session (Co-Chair and Organizer), Endovascular Aneurysm Repair session (Co-Chair and Organizer), Munich, Germany, July 31 – August 4, 2006.
  - *2006 Summer Bioengineering Conference*, Cardiovascular Fluid Mechanics session (Co-Chair), Aneurysm - I session (Co-Chair), Ph.D. Student Paper Competition III: Biofluids and Imaging

session (Co-Chair), M.S. Student Paper Competition – poster session (judge), Ph.D. Student Paper Competition – poster session (judge), Amelia Island, FL, June 21-25, 2006.

- Service on CMU Committees:
  - Serving member on Carnegie Mellon's University Committee on Discipline (UDC), 2007 – 2011.
  - Serving member on Carnegie Mellon's Academic Review Board (ARB), 2007 – 2011.
- Service on UTSA Committees:
  - Department level committees
    - Serving member of the Mechanical Engineering Departmental Faculty Review Advisory Committee (DFRAC), 2016 – 2021.
    - Mechanical Engineering Graduate Studies Committee, serving member (2016 – 2017), Chair (2017 – 2021).
    - Chair of the Joint Graduate Program in Biomedical Engineering PhD Qualifying Examination Committee, 2012 – 2016.
    - Chair of the Joint Graduate Program in Biomedical Engineering Graduate Review Committee, 2012 – 2016.
    - Chair of the ABET Accreditation Committee for Biomedical Engineering, 2013 – 2016.
    - Serving member of the Joint Graduate Program in Biomedical Engineering Recruitment Committee, 2014 – 2016.
    - Chair of the Department of Biomedical Engineering Faculty Search Committee, 2013 – 2014.
  - College level committees
    - Chair of the School of Architecture and Urban Planning Director Search Committee, 2024 – 2025.
    - Serving member on the Human Performance Initiative Recruitment Committee, 2022 – 2023.
    - Serving member on the Human Performance Cluster Recruitment Committee, 2021 – 2022.
    - Serving member on the Department of Mechanical Engineering Chair Recruitment Committee, 2020 – 2021.
    - Mechanical Engineering serving member of the College Faculty Review Advisory Committee (CFRAC), 2016 – 2017, 2019 - 2021.
    - Serving member on the Whitacre Chair Recruitment Committee, 2019 – 2020.
    - College Awards Nomination Committee (CANC), serving member (2017 – 2018), Chair (2018 – 2019).
    - Serving member on the College of Engineering Misconduct in Research or in Other Scholarly Activities Faculty Panel, 2015 – 2016.
    - Serving member on the College Administration Committee, 2015 – 2016. Committee Chair: Mehdi Shadaram, Ph.D.
    - Serving member on the College of Engineering Faculty Development Leave Committee, 2013 – 2015. Committee Chair: Ram Krishnan, Ph.D.
    - Serving member on the Department of Electrical and Computer Engineering Scholarship Committee, 2013. Committee Chair: Brian Kelley, Ph.D.
    - Serving member on the College of Engineering Academic Policy and Curriculum Committee, 2012 – 2014. Committee Chair: Lars Hansen, Ph.D.
    - Serving member on the College of Engineering Increasing Retention and Graduation Rates Task Force, 2012. Committee Chair: Heather Shipley, Ph.D.
  - University level committees
    - Serving member on The University of Texas at San Antonio University Scholarship Committee, 2018 – 2021. Committee Chair: Kristi Meyer, Ph.D.
    - Serving member on The University of Texas at San Antonio Quantitative Literacy Program Standing Committee, 2015 – 2016. Committee Chair: Rajendra Boppana, Ph.D.
    - Serving member on The University of Texas at San Antonio Committee on Conflict of Interest, 2011 – 2015. Committee Chair: Michelle (Mickey) Stevenson, Ph.D.

- Serving member on The University of Texas at San Antonio Graduate Council, 2012 – 2014. Committee Chair: Elaine Sanders, Ph.D.

PATENTS AND DISCLOSURES

1. Roby, M., **Finol, E.A.**, "Advanced Deep Learning Segmentation Techniques for Abdominal Aortic Aneurysm Using Computed Tomography Angiography Scans", disclosure filed on 07/11/2024.
2. **Finol, E.A.**, Patnaik, S.S., Osteguin, V., Piskin, S., Akhter, F., Hood, R.L., "An endovascular device for drug delivery to large blood vessels", disclosure filed on 11/27/2019.
3. Alanis, M., Castillo, D., Muse, L., Rodriguez, R., and **Finol, E.A.**, "Intravascular Device for the Mechanical Characterization of Blood Clots In Vivo", disclosure filed on 01/27/2015.
4. Levin, P., Uram, M., Trombley, F., Trocki, M., and **Finol, E.A.**, "A System for Providing Cellular Therapies", disclosure filed on 08/10/2009.
5. **Finol, E.A.**, "Entrapment and Retrieval Device for Blood Clots and Thrombi", disclosure filed on 11/12/2007.
6. **Finol, E.A.**, Wechsler, L.R., Wholey, M.H., and Jovin, T.G., "Entrapment and Retrieval Device and Method of Using The Same", Provisional Patent Application No. US 60/997,137 filed on 10/01/2007.
7. Gaspard, S., Borer, K., Lim, S., Mangiat, S., Wholey, M., and **Finol, E.A.**, "System for Distal Cerebral Protection in Carotid Artery Stenting", disclosure filed on 12/19/2005.
8. Vorp, D.A., Marra, K.G., Amon, C.H., **Finol, E.A.**, Ko, K., Bender, M., Omer, A., Graveline, A., Yoder, K., and Leung, J. "Tissue-Engineered Attachment Mechanism for Endovascular Grafts used for Surgical Repair of Abdominal Aortic Aneurysms", University of Pittsburgh disclosure filed on 12/11/2002.
9. Marra, K.G., Amon, C.H., **Finol, E.A.**, Vorp, D.A., Ko, K., Bender, M., Omer, A., Graveline, A., Yoder, K., and Leung, J. "Tissue-Engineered Attachment Mechanism for Endovascular Grafts used for Surgical Repair of Abdominal Aortic Aneurysms", CMU disclosure filed on 10/04/2002.

HONORS AND AWARDS

- *Zachry Endowed Chair*, 2021 – present.
- *Fellow*, Biomedical Engineering Society, 2025.
- *Fellow*, American Institute of Medical and Biological Engineering, 2025.
- *Fellow*, American Society of Mechanical Engineers, 2020.
- *Fellow*, American Heart Association, 2019.
- *The Amber Award*, University of Texas at San Antonio, 2018.
- *The Amber Award*, University of Texas at San Antonio, 2014.
- *Honorable Mention – Research Paper Award*, "Secondary Flow and Wall Shear Stress in Three-Dimensional Steady Flow AAA Hemodynamics", Bioengineering Division of ASME, 2001 International Mechanical Engineering Congress and R&D Expo.
- *Graduate Conference Funding Award*, Graduate Programs Office, Carnegie Mellon University, 2001.
- *First Prize* – Poster Exhibition at the 2001 Graduate Student Conference and Bennett Poster Competition, Mechanical Engineering Department, Carnegie Mellon University, 2001.
- *Honorable Mention – Research Paper Award*, "On the Calculation of Hemodynamics Shear Stresses at the Wall of Dilated Large Arteries: Part II - Application to 3D Computational Models", Bioengineering Division of ASME, 2000 International Mechanical Engineering Congress and R&D Expo.
- *Graduate Conference Funding Award*, Graduate Programs Office, Carnegie Mellon University, 2000.
- *BMES / Whitaker Foundation Presentation Award*, Annual Meeting of the Biomedical Engineering Society, 2000.
- *First Prize* – Poster Exhibition at the 2000 Graduate Student Conference and Bennett Poster Competition, Mechanical Engineering Department, Carnegie Mellon University, 2000.
- *Tutor of the Year Award*, Carnegie Mellon Action Project (CMAP), Carnegie Mellon University, 1999-2000.
- *Graduate Conference Funding Award*, Graduate School, University of Massachusetts Lowell, 1996.

- *Award for Outstanding Academic Achievement in Mechanical Engineering*, Society of Hispanic Professional Engineers (SHPE), Mechanical Engineering Department, UMASS, 1995-1996.
- Mechanical Engineering Degree: Ranked 1st in Class of 1994 (of size 36), Mechanical Engineering Department, Universidad de Carabobo, 1994.
- *Corpoven Fellowship*, Venezuela Petroleum Company (PDVSA), 1991-1993.
- *Mechanical Engineering Academic Award – 1st Place*, Mechanical Engineering Department, Universidad de Carabobo, 1990-1993.

OUTREACH AND VOLUNTEER ACTIVITIES

- UTSA College of Engineering Marshal – Fall 2019 Commencement.
- UTSA College of Engineering Marshal – Fall 2015 Commencement.
- UTSA College of Engineering Marshal – Spring 2012 Commencement.
- "Moving 4th Into Engineering 2011", organized and participated in ICES workshop for 4th grade students of Pittsburgh Public Schools, Carnegie Mellon University, Pittsburgh, PA, April 2, 2011.
- "Summer Academy for Mathematics and Science (SAMS)", organized two 3-week project activities on rocket engineering for high school students, Carnegie Mellon University, Pittsburgh, PA, June 28-August 6, 2010.
- "Moving 4th Into Engineering 2010", organized and participated in ICES workshop for 4th grade students of Pittsburgh Public Schools, Carnegie Mellon University, Pittsburgh, PA, April 10, 2010.
- "Moving 4th Into Engineering 2009", organized and participated in ICES workshop for 4th grade students of Pittsburgh Public Schools, Carnegie Mellon University, Pittsburgh, PA, April 4, 2009.
- "Moving 4th Into Engineering 2008", organized and participated in ICES workshop for 4th grade students of Pittsburgh Public Schools, Carnegie Mellon University, Pittsburgh, PA, April 5, 2008.
- "Moving 4th Into Engineering 2007", organized and participated in ICES workshop for 4th grade students of Pittsburgh Public Schools, Carnegie Mellon University, Pittsburgh, PA, April 14, 2007.
- "Engineering Your Future 2006: Mechanical Engineering", directed SWE workshop for 8th-9th grade female students and advanced workshop for 10th-11th graders of Pittsburgh Public Schools, Carnegie Mellon University, Pittsburgh, PA, July 13 and July 17, 2006.
- "Engineering Your Future 2005: Mechanical Engineering", directed SWE workshop for 8th-9th grade female students and advanced workshop for 10th-11th graders of Pittsburgh Public Schools, Carnegie Mellon University, Pittsburgh, PA, July 11 and July 19, 2005.
- "Engineering Your Future 2004: Mechanical Engineering", directed SWE workshop for 8th-9th grade female students and advanced workshop for 10th-11th graders of Pittsburgh Public Schools, Carnegie Mellon University, Pittsburgh, PA, July 14 and July 20, 2004.
- "Moving 4th Into Engineering 2004", participated in ICES workshop for 4th grade students of Pittsburgh Public Schools, Carnegie Mellon University, Pittsburgh, PA, April 24, 2004.
- "Engineering Your Future 2003: Mechanical Engineering", directed SWE workshop for 8th-9th grade female students and advanced workshop for 10th-11th graders of Pittsburgh Public Schools, Carnegie Mellon University, Pittsburgh, PA, July 8 and July 23, 2003.
- "Moving 4th Into Engineering 2003", participated in ICES workshop for 4th grade students of Pittsburgh Public Schools, Carnegie Mellon University, Pittsburgh, PA, April 26, 2003.
- "Engineering Your Future 2002: Mechanical Engineering", assisted in SWE workshop for 8th-9th grade female students and advanced workshop for 10th-11th graders of Pittsburgh Public Schools, Carnegie Mellon University, Pittsburgh, PA, July 19, 2002.
- "Moving 4th Into Engineering 2002", participated in ICES workshop for 4th grade students of Pittsburgh Public Schools, Carnegie Mellon University, Pittsburgh, PA, April 27, 2002.
- "Engineering Your Future 2001: Mechanical Engineering", assisted in SWE workshop for 8th-9th grade female students and advanced workshop for 10th-11th graders of Pittsburgh Public Schools, Carnegie Mellon University, Pittsburgh, PA, July 13, 2001.

- "Moving 4th Into Engineering 2001", participated in ICES workshop for 4th grade students of Pittsburgh Public Schools, Carnegie Mellon University, Pittsburgh, PA, April 28, 2001.
- "Engineering Your Future 2000: Mechanical Engineering", assisted in SWE workshop for 8th-9th grade female students and advanced workshop for 10th-11th graders of Pittsburgh Public Schools, Carnegie Mellon University, Pittsburgh, PA, July 14, 2000.
- "Moving 4th Into Engineering 2000", participated in ICES workshop for 4th grade students of Pittsburgh Public Schools, Carnegie Mellon University, Pittsburgh, PA, April 29, 2000.
- "Engineering Your Horizons in Science and Math 2000", lead SWE workshop for 9th-10th grade female students of Pittsburgh Public Schools, Carnegie Mellon University, Pittsburgh, PA, March 25, 2000.
- "Engineering Your Future 1999: Mechanical Engineering", assisted in SWE workshop for 8th-9th grade female students and advanced workshop for 10th-11th graders of Pittsburgh Public Schools, Carnegie Mellon University, Pittsburgh, PA, July 15, 1999.
- "Moving 4th Into Engineering 1999", participated in ICES workshop for 4th grade students of Pittsburgh Public Schools, Carnegie Mellon University, Pittsburgh, PA, April 24, 1999.
- "Engineering Your Future 1998: Mechanical Engineering", assisted in SWE workshop for 8th-9th grade female students and advanced workshop for 10th-11th graders of Pittsburgh Public Schools, Carnegie Mellon University, Pittsburgh, PA, July 23, 1998.

MEDIA ATTENTION AND BIOGRAPHICAL CITATIONS

- Interview, KLRN SciTech Now, Researchers Freezing Aneurysms, October 21, 2016.
- Interview, Spectrum News, New Research Stops Growth of Aneurysms, September 21, 2016.
- Interview, Texas Public Radio, UTSA Lab Developing New Treatment For Aneurysms, September 13, 2016.
- Article, UTSA Today, Award supports UTSA professor's efforts to freeze aneurysms and save lives, August 1, 2016.
- Article, EurekAlert! (American Association for the Advancement of Science), Award supports UTSA professor's efforts to freeze aneurysms and save lives, August 1, 2016.
- Blog "Members in the News", Biomedical Engineering Society, Finol receives NIH grant to study abdominal aortic aneurysms, August 7, 2015.
- Article, UTSA Today, UTSA engineer looks to save lives with $1.8 million NIH grant, June 15, 2015.
- Article, UTSA Innovations Magazine, Saving lives - All in a day's work for Ender Finol, Spring 2015.
- Article, International Science Grid This Week, Using computational models to develop patient-specific treatments, January 16, 2013.
- Article, Pittsburgh Supercomputing Center Projects in Scientific Computing 2012, Modeling Aortic Aneurysms, December 2012.
- Article, Ivanhoe Broadcast News, Predicting Aortic Aneurysms and Science Insider, December 2010.
- Interview, American Institute of Physics, Predicting Aortic Aneurysms, December 1, 2010.
- Interview, Pittsburgh Tribune-Review, CMU studies how to predict aneurysm rupture, June 16, 2008.
- Article, redOrbit Health News, CMU Studies on Aneurysms Find Many Surgeries Unnecessary, June 16, 2008.
- Article, Medical News Today, Researchers at Carnegie Mellon Improve Assessments of Aortic Aneurysms, June 16, 2008.
- Article, EurekAlert! (American Association for the Advancement of Science), Carnegie Mellon researchers improve assessments of aortic aneurysms, June 12, 2008.
- Interview, Pittsburgh Tribune-Review, Newsmaker, June 3, 2008.
- Marquis Who's Who in America, 63rd Edition.
- Manchester Who's Who Among Executives and Professionals in Research and Science, 2005-2006 Honors Edition.
- The Contemporary Who's Who of Professionals, 2004-2005 Edition.
- Empire Who's Who Among Executives and Professionals, 2004-2005 Honors Edition.

- Strathmore's Who's Who, Honored Lifetime Member, 10th Edition.