Professor

Mechanical Engineering Department Lafayette College • Easton, Pennsylvania (610) 330-5406 • rossmanj@lafayette.edu http://sites.lafayette.edu/rossmanj

EDUCATION

Ph.D. University of California, Berkeley, Applied Physics, 2000

Numerical Simulation of Blood Flow in the Severely Stenotic Carotid Artery Bifurcation. Thesis committee: Stanley A. Berger, mechanical engineering (Chair); Ömer Savaş, mechanical engineering; Alexandre Chorin, mathematics.

B.S. University of California, Berkeley, Mechanical Engineering, 1995 Emphasis in fluid mechanics and heat transfer. Minor in English (creative writing).

EXPERIENCE

Professor of Mechanical Engineering, 2017-present

Associate Professor of Mechanical Engineering, 2012-2017

Assistant Professor of Mechanical Engineering, 2005-2012

Lafayette College • Easton, Pennsylvania

- Department Head, July 2012-July 2017
 Supervised 12 faculty members; managed budget and resources; coordinated ABET assessment process and successful reaccreditation; oversaw curricular reform and created minor program.
- Honored with 2012 Jones Lecture Award for Excellence in Scholarship.
- Honored with 2010 Viscomi Prize for Excellence in Mentoring & Teaching.

Taught biomechanics, thermodynamics, heat transfer, strength of materials, capstone thermo-fluids laboratory for engineering students; Developed and taught two courses for liberal arts students in (1) engineering as a narrative of modern American history and culture; and (2) the art and science of flow visualization. Advised undergraduate research including simulation of physiological flows, development of flow visualization and PIV laboratory, and independent & collaborative design projects, including Grand Challenges.

Assistant Professor of Engineering, 2001-2005

Harvey Mudd College · Claremont, California

Taught continuum mechanics, heat transfer, fluid mechanics, biomechanics, dynamic systems, solid mechanics, engineering laboratory. Advised undergraduate research including design, construction, and operation of subsonic wind tunnel; and numerical simulation of physiological flows.

Mechanical Engineering Instructor, 2000

University of California, Berkeley

Served as sole instructor for undergraduate course in fluid mechanics.

PUBLICATIONS:

Воокѕ

Rossmann, J.S. Dym, C.L., and Bassman, L.C. (2015) *Introduction to Engineering Mechanics: A Continuum Approach*, Second Edition, Taylor & Francis/CRC Press.

Rossmann, J.S. and Dym, C.L. (2008) *Introduction to Engineering Mechanics: A Continuum Approach*, Taylor & Francis/CRC Press.

JOURNAL ARTICLES

Rossmann, J.S. (2016) Engineering design as a liberal art, *International Journal of Engineering Education* 32 (2): 1502-1507.

Rossmann, J.S. and Sanford Bernhardt, Kristen L. (2015) Sociotechnical engineering is one facet of prismatic liberal education, *Engineering Studies* 10.1080/19378629.2015.1062505.

Clark, A.*; **Rossmann, Jenn Stroud**; Katz, I. M.; Martin, A. R.; Caillibotte, G. (2015) Pressure loss coefficients for asymmetric bifurcations of pulmonary airways with predetermined flow distributions, *Journal of Bioengineering and Biomedical Science*, 10.4172/2155-9538.1000148.

Albert, S.*, Balaban, R.S., Neufeld, E., and **Rossmann, J.S.** (2014) Influence of the renal artery ostium flow diverter on hemodynamics and atherogenesis, *Journal of Biomechanics*, 47(7): 1594-602.

Chan, C.M.* and **Rossmann, J.S.** (2012) Badminton shuttlecock aerodynamics: synthesising experiment and theory, *Sports Engineering* **15**: 61-71.

Cummins, M.* and **Rossmann, J.S.** (2010) Hemodynamics of ulcerated plaques: before and after, *Journal of Biomechanical Engineering* **132**(10): 104503.1-8.

Rossmann, J.S. (2010) Elastomechanical behavior of bovine veins, *Journal of the Mechanical Behavior of Biomedical Materials* **3**(2): 210-215.

Fisher, C.* and **Rossmann, J.S.** (2009) Effect of non-Newtonian behavior on hemodynamics of cerebral aneurysms, *Journal of Biomechanical Engineering*, **131**(9): 091004.1-9. **Cover image for journal.**

Rossmann, J.S. and Rau, A.* (2007) An experimental study of Wiffle ball aerodynamics, *American Journal of Physics*, **75**(12): 1099-1105.

Utter, B.* and **Rossmann, J.S.** (2007) Numerical simulation of saccular aneurysm hemodynamics: influence of morphology on rupture risk, *Journal of Biomechanics* **40**(12): 2716-2722.

Lorthois, S., **Rossmann, J. Stroud**, Berger, S.A., Jou, L.D. and Saloner, D. (2005) Numerical simulation of Magnetic Resonance Angiographies of an anatomically realistic stenotic carotid bifurcation, *Annals of Biomedical Engineering*, Vol. 33: 270-283.

Dym, C.L., **Rossmann, J.S.**, and Sheppard, S.D. (2004) Designing engineering education, *International Journal of Engineering Education*, Vol. 20: 470-474.

Stroud, J.S., Berger, S.A., and Saloner, D. (2002) Numerical analysis of flow through a severely stenotic carotid artery bifurcation, *Journal of Biomechanical Engineering*, Vol. 124: 9-20.

Stroud, J.S., Berger, S.A., and Saloner, D. (2000) Influence of stenosis morphology on flow through stenotic vessels: implications for plaque rupture, *Journal of Biomechanics*, Vol. 33: 443-455.

OTHER ARTICLES

Stewart-Gambino, H. and **Rossmann, J. Stroud** (2015) Often asserted, rarely measured: The value of integrating humanities, arts, and STEM learning, Report

^{*} Undergraduate co-author

commissioned by National Academies of Science and Engineering. http://sites.nationalacademies.org/cs/groups/pgasite/documents/webpage/pga 170985.pdf

Rossmann, J.S. (2014) Chocolate and peanut butter, *Inside Higher Ed* online

Rossmann, I.S. (2008) Built to spec: the vaginal speculum as a case study of inadequate design, Ambidextrous 10: 47-49.

Rossmann, J. Stroud (2001) Why do jets leave white trails in the sky? *Scientific* American online, Nov. 19, 2001; reprinted in Scientific American's Ask the Experts, Collins Reference, 2003.

CONFERENCE **PROCEEDINGS**

Rossmann, Jenn Stroud, and Roth, Mary J.S. (2017) A classification system for integrative engineering education, Proceedings of the 125th Annual ASEE Conference & Exposition, Columbus.

Rossmann, Jenn Stroud & Stewart-Gambino, H. (2016) Integration: Defining the value of the "hard to measure"; and Cornerstone Multidisciplinary Design, Union College Symposium on Engineering and Liberal Education, Schenectady, New York

Rossmann, Jenn Stroud; Dym, Clive L; Bassman, Lori C. (2015) Starting with the a-ha: An integrated introduction to solid and fluid mechanics, Proceedings of the 122th Annual ASEE Conference & Exposition, Seattle.

Rossmann, J.S. (2014) An integrated introduction to the mechanics of solids and fluids: Continuum mechanics as the first mechanics course, APS Division of Fluid Dynamics, San Francisco CA, Nov. 23-25, 2014.

Sanford Bernhardt, K.L., Rossmann, J.S., and Cohen, B.R. (2014) Introducing engineering as a socio-technical process, Proc. ASEE Annual Conference, Indianapolis.

Rossmann, J.S., Albert, S.*, and Balaban, R. (2013) Renal hemodynamics: The influence of the renal artery ostium flow diverter, APS Division of Fluid Dynamics, Pittsburgh PA, Nov. 24-26, 2013.

Rossmann, J.S. (2013) Seminar in flow visualization at Lafayette College: Variations on the Hertzberg Effect, APS Division of Fluid Dynamics, Pittsburgh PA, Nov. 24-26, 2013.

Albert, S.*, **Rossmann, J.S.**, and Balaban, R. (2013) Simulation of blood flow in the renal artery: influence of ostium diverter, ASME Summer Bioengineering Conference, Sunriver, Oregon.

Clark, A.* and Rossmann, J.S. (2012) Effect of asymmetric branching on respiratory flow and pressure losses: implications for asthma, ASME Summer Bioengineering Conference Proceedings, Fajardo, Puerto Rico.

Buchan, G.* and Rossmann, J.S. (2011) Quantifying Confidence Envelopes for Efficiency Values in the SR-30 Turbojet Engine, ASME International Mechanical Engineering Congress Proceedings, Denver.

Rossmann, J.S. (2011) Toward improved models for hemodynamics in stenotic vessels: PIV and CFD results including turbulence and compliance, ASME Summer Bioengineering Conference Proceedings, Farmington, Pennsylvania.

Undergraduate co-author

Rossmann, J.S., Sanford Bernhardt, K., and Smith, J.H. (2011) Engineering as a second language, Union College Symposium on Engineering and Liberal Education, Schenectady, New York.

Rossmann, J.S. (2010) Hemodynamics in stenotic vessels: synthesis of CFD and PIV results, APS Division of Fluid Dynamics, Long Beach, California.

Rossmann, J.S. and Skvirsky, K. (2010) You don't need a weatherman to know which way the wind blows, ASEE/IEEE Frontiers in Education, Washington, DC.

Rossmann, J.S. (2010) A continuum approach to introductory biomechanics, ASME Summer Bioengineering Conference Proceedings, Naples, Florida.

Rossmann, J.S. (2010) Engineering America, Union College Symposium on *Engineering and Liberal Education*, Schenectady, New York.

Rossmann, J.S. and Skvirsky, K. (2010) You don't need a weatherman, ASEE Mid-Atlantic Regional Conference, Easton. Best Paper Award.

Guswa, A., Klein, J.D., Krupczak, J., Rossmann, J.S., Baker, I., and Traver, C. (2010) Engineering and Liberal Education, Panel presentation, American Association of Colleges & Universities annual meeting, Washington, D.C.

Stolfi, C.* and Rossmann, J.S. (2009) Biomechanics of glaucoma: parametric study of flow in Schlemm's canal, ASME International Mechanical Engineering Congress Proceedings, Orlando, Florida.

Cummins, M.* and Rossmann, I.S. (2009) Numerical simulation of blood flow in patient-specific carotid bifurcation geometries, ASME International Mechanical Engineering Congress Proceedings, Orlando, Florida.

Rossmann, J.S. and Skvirsky, K. (2009) The art and science of flow visualization, Union College Symposium on Engineering and Liberal Education, Schenectady, New York.

Rossmann, J.S., Dym, C.L., and Bassman, L.C. (2008) An integrated introduction to engineering mechanics: A continuum approach, ASME International Mechanical Engineering Congress Proceedings, Boston.

Rossmann, J.S. and Fisher, C.* (2008) Influence of non-Newtonian models on simulation of aneurysm hemodynamics, ASME Summer Bioengineering Conference Proceedings, Marco Island, Florida.

Rossmann, J.S., Rau, A.C.*, and Utela, B.* (2007) Experimental determination of elastomechanical properties of bovine veins, *Proceedings of the 2nd International* Conference on Mechanics of Biomaterials and Tissues, Elsevier, Kauai, Hawaii.

Utter, B.* and Rossmann, I.S. (2006) Influence of shape on saccular aneurysm hemodynamics and risk of rupture, Proceedings of the IEEE 32nd Annual *Northeast Bioengineering Conference*, Easton, PA: 21-22.

Rossmann, J.S. and Dym, C.L. (2004) Continuum mechanics as the first mechanics course. Proc. 2004 ASEE Annual Conference. Salt Lake City.

Rossmann, J.S., MacVicar, S.*, and Huynh, S.* (2003) Numerical simulation of aneurysm hemodynamics, APS Division of Fluid Dynamics, East Rutherford.

Undergraduate co-author

Jemmott, C.*, Logan, S.*, Utvich, A.*, and **Rossmann, J.S.** (2003) Experimental investigation of the aerodynamic forces on a curveball, *APS Division of Fluid Dynamics*, East Rutherford.

Utvich, A.*, Jemmott, C.*, Logan, S.*, and **Rossmann, J.S.** (2003) Aerodynamics of Wiffle balls, *APS Division of Fluid Dynamics*, East Rutherford.

Hsu, Y.H.*, Stratton, C.M.*, Schauer, J.M.*, Utvich, A.*, and **Rossmann, J.S.** (2003) Design and construction of a new subsonic wind tunnel, *ASME International Mechanical Engineering Congress Proceedings*, Washington, D.C. **First Prize**, Young Engineers Paper Contest.

Berger, S.A., **Stroud, J.S.**, and Rayz, V. (2001) Hemodynamic simulations of flow in normal and stenotic carotid arteries, *ASME Congress Proceedings, Advances in Bioengineering* BED-Vol. 51.

Lorthois, S., **Stroud, J.S.**, Berger, S.A., Jou, L.D. and Saloner, D. (2001) Numerical simulation of time of flight (TOF) magnetic resonance angiographies of severely stenotic carotid artery bifurcations with realistic shapes, *Proc. International Society of Biomechanics, XVIIIth Congress*, Zurich.

Berger, S.A. and **Stroud, J.S.** (2001) Flow in sclerotic carotid arteries, *First MIT Conference on Computational Fluid and Solid Mechanics, Proceedings,* Elsevier.

Jou, L.D., **Stroud, J**., Berger, S.A., Saloner, D. (2000) The effects of injection profiles on carotid contrast-enhanced MRA, *Eighth Scientific Meeting of International Society for Magnetic Resonance in Medicine, Proc.*, Denver.

Berger, S.A. and **Stroud, J.S.** (2000) Flow in stenotic vessels, *APS Division of Fluid Dynamics*, Washington, D.C.

Stroud, J.S. and Berger, S.A. (2000) Numerical simulation of blood flow in the severely stenotic carotid artery bifurcation, *IUTAM 2000*, Chicago.

Berger, S.A. and **Stroud, J.S.** (2000) Flow in the atherosclerotic carotid artery, *ASME Congress Proceedings, Mechanics in Biology,* Casey, J. and Bao, G., Editors, AMD-Vol. 242/BED-Vol. 46: 99-112.

Stroud, J.S. and Berger, S.A. (1999) Numerical simulation of blood flow in the stenotic carotid artery bifurcation, *APS Division of Fluid Dynamics*, New Orleans.

Stroud, J.S. and Berger, S.A. (1998) Simulation of flow in stenosed blood vessels, *APS Division of Fluid Dynamics*, Philadelphia.

Stroud, J.S. and Berger, S.A. (1997) Numerical simulation of blood flow in the mildly stenotic carotid artery bifurcation, *APS Division of Fluid Dynamics*, San Francisco.

Science and the Wolf, Public Books, April 19, 2017.

http://www.publicbooks.org/science-and-the-wolf/

Who Builds Anything in this Country?, Public Books, October 12, 2016.

http://www.publicbooks.org/who-builds-anything-in-this-country/

Westward the Course of Empire Takes Its Way, Public Books, September, 2016.

 $\underline{http://www.publicbooks.org/blog/westward-the-course-of-empire-takes-its-way}$

Prophecy in Future Perfect, Public Books, July, 2016.

http://www.publicbooks.org/blog/prophecy-in-future-perfect

Too Bad About the Trees, Public Books, June, 2016.

http://www.publicbooks.org/blog/too-bad-about-the-trees

The New York Values of City on Fire, Public Books, February 6, 2016.

 $\underline{http://www.publicbooks.org/blog/the-new-york-values-of-city-on-fire}$

Technological Citizenship and the End of the World, Public Books, Jan. 4, 2016.

BOOK REVIEWS

http://www.publicbooks.org/blog/technological-citizenship-at-the-end-of-the-world

Athena's Daughters, Kathleen Kennedy and Frances Early, eds., Women's Studies: An Interdisciplinary Journal, Vol. 33: 341-344 (2004).

Fatal Women of Romanticism, by Adriana Craciun, Women's Studies: An Interdisciplinary Journal, Vol. 32: 1111-1114 (2003).

Time Lord, by Clark Blaise, San Francisco Chronicle, 13 May 2001

The Science of UFOs, by William Alschuler, San Francisco Chronicle, 8 April 2001

SHORT STORIES

"The Disaster Specialist," CHEAP POP, July 2017

"Non-Stick," Literary Orphans, July 2016

"Don't Shake Hands on the Bandstand," Jellyfish Review, July 2016

"The Place You're Supposed to Laugh," Indianola Review, Dec. 2015, Pushcart

Prize Nominee

"Ladies & Gentlemen, the Invincibles" in Tahoma Literary Review, Dec. 2014,

Pushcart Prize Nominee

"Recycling," in Night Train, online September 2014 and print, March 2015

"Oh So High" in dislocate, March 2014, Pushcart Prize Nominee

"I Cover the Rest" in Cobalt Review, December 2011

"All-American" in Failbetter, March 2010, Pushcart Prize Nominee

"Re-think" in Readymade, March 2004

"Geeks" in *The MacGuffin*, July 2003

"How to Be the Bigger Person" in Surgery of Modern Warfare, Feb. 2003

"Cast of Characters" in *Pindeldyboz*, November 2002

"How to Seem Smarter" in Readymade, January 2002

"The Disaster Specialist" in Ashby Ave., Fall 2001

"Near the Highway" in *Red Rock Review*, Winter 2001

"Enjoy Yourself" in *Ibid*, Spring 1999

MEDIA INTEREST

Interviewed regarding aerodynamics of Wiffle ball and baseball for:

- *Popular Science* magazine, April 2014; April 2015
- Wired magazine, March 2011.
- *Morning Call* newspaper, October 10, 2010. Article reprinted in Los Angeles *Times*, October 24, 2010; Washington *Post*, November 21, 2010; and other newspapers.
- Wiffle Ball: The Ultimate Guide, by Michael Hermann, Triumph Books, April, 2010.
- Documentary film *Yard Work*, HMP Films, 2009. Debuted NESN October 25, 2009.

INVITED TALKS

Art and Science of Fluid Mechanics, Mechanical Engineering Seminar, University of Toronto, December 1, 2017.

Often asserted, rarely measured: The value of integrating humanities, arts, and STEM learning, with Hannah Stewart-Gambino, National Academies of Science and Engineering, December 2, 2015.

Modeling cardiovascular flow: atherosclerosis & aneurysm, Mechanical Engineering Seminar, Santa Clara University, March 19, 2012.

Hemodynamics in diseased vessels, Bioengineering Seminar, Pennsylvania State University, November 2, 2011.

Blood flow and baseball: Research in fluid mechanics, The Cooper Union for the Advancement of Science and Art, March 31, 2005.

Engineering and the liberal arts; and Blood flow and baseball, Smith College, Engineering seminars, March 4, 2005.

Science in fiction, Invited Panelist, *Contamination: Sites of Contagion, Transgression and Transformation*, conference hosted by University of Southern California department of English, February 28, 2003.

Keep your eye on the ball: Aerodynamics of sports balls, Stauffer Speaker Series, Harvey Mudd College, June 6, 2002; Claremont Rotary, Oct. 1, 2002.

Numerical and experimental analyses of blood flow in the stenotic carotid bifurcation, Beckman Laser Institute, U.C. Irvine, March 1, 2002.

Numerical simulation of blood flow in stenotic vessels, Stanford University, Biomechanical Engineering Seminar, May 8, 2000.

A numerical approach to the equations of blood flow and MRI, Noetherian Ring, Berkeley, April 24, 1997.

RESEARCH SUPPORT

MRI: Acquisition of laser flow measurement instrumentation for fluid mechanics research, National Science Foundation, August 2010, CBET-1040236, \$193,519. (Co-PI)

Acquisition of PIV system for study of biological flows, National Science Foundation, August 2006, CTS-0618923, \$139,530. (PI)

Acquisition of high-speed camera and instrumentation for flow visualization and measurement, National Science Foundation, August 2003, CTS-0552104, \$126,515. (PI)

Numerical simulation of aneurysm hemodynamics, Keck Quantitative Life Sciences Grant, May 2003, \$9.300, (PI)

Barbara Stokes Dewey endowed Assistant Professorship of Life Sciences, Harvey Mudd College, June 2002-June 2004.

ORGANIZATIONS

Sigma Xi (2000) • Phi Beta Kappa• Tau Beta Pi American Physical Society American Society of Mechanical Engineers American Society for Engineering Education Council on Undergraduate Research

PROFESSIONAL ACTIVITY

Invited panelist, NAE Workshop "Liberal Studies in Engineering," Washington DC, January 2015

Panelist, NSF GSRFP Review, January 2015

Consultant, Hasbro/Nerf projectile design & testing, January 2015-present.

Invited participant, ICERM Workshop "Emerging Challenges for

Cardiovascular Mathematics," Brown University, January 2014.

Panelist, NSF RIGEE Proposal Review, June 20-21, 2013.

Judge, Student Poster Competition, ASME Summer Bioengineering Conference, June 20-23, 2012.

Session Chair, APS Division of Fluid Dynamics, November 21-24, 2010.

Session Organizer, ASME International Mechanical Engineering Congress, November 12-18, 2010.

Judge, Student Poster Competition, ASME Summer Bioengineering Conference, June 16-19, 2010.

Session Organizer and Session Chair, ASME International Mechanical

Engineering Congress, November 13-19, 2009.

Technical Committee member and Session Chair, IEEE Northeast Bioengineering Conference, April 1-2, 2006.

Invited participant, Teaching and Scholarship in the Grand Tradition of Modern Engineering, Princeton University, August 2005.

Panelist, NSF MRI Proposal Review, April 29-30, 2004; May 6, 2005.

Reviewer, SIAM Review, 2004-. Journal of Fluids Research, 2006-. Journal of Biomechanics, 2007-. Experiments in Fluids, 2007-. Experimental Techniques, 2008-, International Journal for Numerical Methods in Biomedical Engineering, 2010-, Journal of Engineering in Medicine, 2010-, Journal of Fluids Engineering, 2010-, Experimental Mechanics, 2010-, Journal of the Royal Society Interface, 2011-, Journal of Sports Engineering, 2014-

NSF New Century Scholars Workshop, Stanford University, August 2002.

COLLEGE SERVICE

Department Head of Mechanical Engineering, 2012-2017

Chair, Governance Committee (2015-2016)

Elected to Governance (2013-present), Faculty Academic Policy (2012-2013), Diversity (2009-2012), and Curriculum and Educational Policy (2006-2009) Committees

Appointed by Provost to Advisory Board for Engineering Studies A.B. Program, 2006-2007 and 2009-2014

Appointed by Provost to Advisory Board for Life Sciences, 2010-2013

Search Committees for Physics (2), Mechanical Engineering (1), Engineering Studies (2), and International Affairs (1) faculty searches; Chaired five (5) ME visitor searches

Search Committee for Vice President for Campus Life and Diversity Chair, Mechanical Engineering Department Committee for Ethics Education Graduate Advisor for Mechanical Engineering undergraduates, 2006-2014 President, Phi Beta Kappa selection committee, 2009-2013

Co-coordinator, Interdisciplinary Seminar Series in the Life Sciences, 2006-2010 Faculty mentor for Marquis Scholars, 2010-2013

Steering committee for Grand Challenges Scholars Program, 2009-present

UNDERGRADUATES MENTORED

Zishen (Gary) Chen	Respiratory biomechanics	Summer 2017	LC
Siping (Spring) You Now at Dartmouth	Respiratory biomechanics	2015-2016	LC
Robert Maber	Respiratory biomechanics	Summer 2015	LC
Scott Albert (ChemE) Now at Johns Hopkins	Renal artery hemodynamics	2012-2013	LC
Kate Yoder	Aerodynamics of the flying gyroscope	2012-2013	LC
Luna Yuan	Solar heating for L9W New Orleans: Joint thesis in Mechanical Engineering and Policy Studies	2011-2012	LC
Taimoor Sohail Now at Australian Natl Univ	Renal artery hemodynamics	January 2012	LC
Peter Sun	Wiffle aerodynamics & renal hemodynamics	Summer 2011	LC
Luna Yuan	Renal artery hemodynamics	2011	LC
Alicia Clark Now at U Washington	Respiratory biomechanics	2010-2011	LC

UNDERGRADUATES MENTORED

(CONT'D)

Greg Buchan	Gas turbine engine investigation	Summer and Fall 2010	LC
Hallie Zeller Now at Brown	PIV in stenotic vessels	Summer 2010	LC
Chak Man Chan	Aerodynamics of badminton shuttlecock	2009-2010	LC
Naomi Itescu Tyler Sossong (Neurosci)	PIV in stenotic vessels (patient-specific stenoses)	2009-2010	LC
Ryan King (CS)	Hemodynamics simulations (wall motion)	Summer 2009 - Present	LC
Ming Hong	PIV in stenotic vessels	Summer 2009 - Present	LC
Megan Cummins (Biology) MD/PhD Mt. Sinai, 2013	Hemodynamics simulations (patient-specific stenoses)	2008-2009	LC
Carolyn Stolfi MS Purdue, 2011	Biomechanics of glaucoma	2007-2009	LC
Andrew Rau MS Penn State, 2010	PIV in stenotic vessels Wiffle ball aerodynamics experiments	2007-2008 Summer 2006	LC
Mary Kate Erdman MD Florida, 2014	Design of ovarian cystectomy device	2007-2008	LC
Emily Egge	Hemodynamics simulations (stents)	2006-2007	LC
Carolyn Fisher MS Columbia, 2008	Hemodynamics simulations (non-Newtonian effects in aneurysms)	Summer 2006, 2006-2007	LC
Brent Utter PhD Michigan, 2010	Hemodynamics simulations (aneurysms)	Summer 2005, 2005-2006	LC
Timothy Nish MS Lehigh	Flow visualization in stenotic vessels	2005-2006	LC
Catherine Herchenroder	Redesign of vaginal speculum	2005-2006	LC
One Kim Ephraim Lansford Josiah Larson Tristan Sharp Jay Wright	Effect of reduced gravity on bubble-slug flow transition Team of undergraduates selected to perform experiments on NASA's KC-135 <i>Vomit Comet</i> ; flight dates July 8-17, 2004.	2003-2004	НМС
Jacob Pinheiro Alex Cohan	Development of undergraduate aerodynamics laboratory	2003-2004	НМС
Ben Utela MS Washington, 2009	Material testing of bovine veins	Summer 2003	НМС
David Greisen(Physics)	Design and feasibility study of novel blood testing instruments	Spring- Fall 2003	НМС
Jocelyn Wong (Chemistry)	Measurement of blood flow through a prosthetic check socket	Summer 2003	НМС
Stephen MacVicar Sophia Huynh	Hemodynamics simulations (aneurysms)	Summer 2003	НМС
Alexis Utvich Colin Jemmott Ph.D. Penn State, 2010 Sheldon Logan	Wind tunnel experiments: flow over rotating spheres	Summer 2003	НМС
Ph.D. UCSC, 2014	Excellent Presentation Award , Sigma Xi Student Research Conference, 2003.		
Erin Koos Ph.D. Caltech, 2009	Instrumentation of wind tunnel	Spring 2003	НМС
Judy Hsu Ph.D. Stanford, 2009 Christina Stratton Justin Schauer MS Stanford, 2009	Design and construction of subsonic wind tunnel	Summer 2002	НМС