

Curriculum Vitae

AJIT PRITHIVIRAJ YOGANATHAN

Wallace H. Coulter Distinguished Faculty Chair & Regents' Professor
Associate Chair for Translational Research

WORK

Cardiovascular Fluid Mechanics Lab
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DOB: December 6, 1951

CITIZEN: United States

EDUCATION

- Ph.D., Chemical Engineering, June 1978
California Institute of Technology, Pasadena, CA
Thesis Topic: *Cardiovascular Transport Phenomena*
Thesis Advisor: Dr. William H. Corcoran
- B.Sc. (Hons.) First Class, Chemical Engineering, 1973
University College, University of London, England

POSITIONS & EMPLOYMENT

- 2009-present Director, Center for Innovative Cardiovascular Technologies, Georgia Institute of Technology
- 2004-present Wallace H. Coulter Distinguished Faculty Chair, Georgia Institute of Technology
- 1998-present Associate Chair, Wallace H. Coulter School of Biomedical Engineering, Georgia Institute of Technology & Emory University (second & founding faculty member of the School of Biomedical Engineering)
- 1998-present Regents' Professor, Biomedical Engineering, Georgia Institute of Technology
- 1997-2008 Deputy Director, Georgia Tech Emory Center for Living Tissues (National Science Foundation funded Engineering Research Center)
- 1995-2008 Associate Director, Institute for Bionengineering & Bioscience, Georgia Institute of Technology
- 1996-2004 Director, Bioengineering Center, Georgia Institute of Technology
- 1994-1998 Regents' Professor, Chemical Engineering, Georgia Institute of Technology
- 1992-2004 Co-Director, Emory/GT Bioengineering Technology Center, Georgia Institute of Technology

1991-2004	Director, Interdisciplinary Bioengineering Graduate Program, Georgia Institute of Technology
1989-1995	Co-Director, Bioengineering Center, Georgia Institute of Technology Georgia Institute of Technology
1989-present	Professor, Mechanical Engineering, Georgia Institute of Technology
1988-present	Professor, Chemical Engineering, Georgia Institute of Technology
9/85-9/97	Adjunct Associate Professor, University of Alabama School of Medicine, Medicine (Cardiology)
7/84-12/88	Chairman, Bioengineering Committee, Georgia Institute of Technology
7/83-6/88	Associate Professor, Chemical Engineering, Georgia Institute of Technology
6/79-6/83	Assistant Professor, Chemical Engineering, Georgia Institute of Technology Research in Cardiovascular Fluid Mechanics and Polymer Rheology
8/77-5/79	Research Fellow, California Institute of Technology, Chemical Engineering. Research in Transport Phenomena
3/76-6/76	Teaching Assistant, California Institute of Technology. Present substitute lectures and grade papers for senior course in Chemical Engineering Design
10/73-6/74	Teaching Assistant, California Institute of Technology. Present tutorials and grade papers for graduate courses in Statistical and Chemical Engineering Thermodynamics
6/72-8/72	Engineering Assistant, Shell Oil Refinery, Stanlow, England. Industrial training program for undergraduate Chemical Engineers
9/75-8/78	Resident Associate, California Institute of Technology. Resident student advisor in undergraduate dormitory

HONORS & AWARDS

- Recognition of Lifetime Contributions and Advancements in the Field of Cardiovascular Research, 11th International Symposium on Biomechanics in Vascular Biology and Cardiovascular Disease, 2016
- Standards Developer Award, Association for the Advancement of Medical Instrumentation, 2015.
- Member, the National Academy of Engineering, 2015.
- The Emory 1% Award, Emory University, 2013.
- Ann Newman Lecturer in Pediatric Cardiology, Children's Hospital of Philadelphia, 2012.

- Pritzker Lecturer, Biomedical Engineering Society, 2012.
- Fellow, Biomedical Engineering Society, 2008.
- Theo Pilkington Award for Biomedical Engineering Education, American Society of Engineering Education, 2005.
- Honorary Professor of Hemodynamic, Faculty of Health Sciences, University of Aarhus, Denmark, August 2003.
- H. R. Lissner Award in Bioengineering, American Society of Mechanical Engineers, November 1997.
- Sigma Xi Research Award, Georgia Institute of Technology May 1995
- Founding Fellow, American Institute of Medical & Biological Engineering, 1992.
- Edwin Walker Prize - British Institute of Mechanical Engineers, 1988.
- Humboldt Fellowship, Helmholtz Institute for Biomedical Research, Technical University of Aachen, West Germany, 1985.
- Metro-Atlanta Engineer of the Year in Education, 1983.
- California Institute of Technology Fellowship, 1973-77.
- Graduated with First Class Honors at top of the class, 1973
- Goldsmid Medal and Prize for the most distinguished performance at the final examinations in all branches of Engineering - University College, University of London, 1973.
- Goldsmid Prize for the most distinguished results in second-year examinations in Chemical Engineering - University College, University of London, 1972.
- British Council Scholarship for Undergraduate Studies, University College, University of London, 1971-73.

MAJOR PROFESSIONAL POSITIONS & RECOGNITION

- Invited Speaker, the Congenital Heart Disease Skills Course at the 95th Annual Meeting of the American Association for Thoracic Surgery (AATS) in Seattle, WA, 2015.
- Chair, Cardiovascular Sub-Committee (SC2), International Standards Organization Technical Committee (TC 150) on Implants for Surgery, 2005-2017.
- Founding Editor-in-Chief, Cardiovascular Engineering and Technology (CVET), a journal of the Biomedical Engineering Society), 2010-2017. **In 2015 CVET was accepted to PubMed.**
- Member, Board of Directors, Global Center for Medical Innovation (GCMI), 2015-2018.

- Member, Board of Directors, Translational Testing and Training Laboratories, Inc. (T3 Labs), 2015-present.
- Member, Advisory Board of the Department of Biomedical Engineering at the University of Arkansas, 2015-present.
- Consultant to major cardiovascular medical device companies, 1978-present.
- Ad Hoc Reviewer for major scientific journals and for scientific proposals for both national and international foundations and organizations (1978 – present); see details in later sections of CV.
- Member, Scientific Advisory Board, Medtronic Cardiac Surgery Division, 2008-2010.
- Co-founder, APICA Cardiovascular Inc., 2009.
- Member, Executive Committee, Biomedical Engineering Society, 2006-2008.
- Chair, Publications Board, Biomedical Engineering Society, 2006-2008.
- Board of Directors, Biomedical Engineering Society, 2004-2007.
- Chair Person, Bioengineering Division, American Society of Mechanical Engineers, 2004-2005.
- Member and USA Delegate to the International and Standards Organization Working Group on Cardiovascular Implants, and the Subcommittee on Prosthetic Heart Valves, 1985-2005.
- Member, Executive Committee, Bioengineering Division, American Society of Mechanical Engineers, 2001-2006.
- Member, Executive Council, Society of Heart Valve Disease, 1999-2007.
- Member, Scientific Committee 1st, 2nd & 3rd Biennial Conference on Heart Valve Disease, 1999-2005.
- Program Co-Chair, BMES/EMBS, 1st Joint International Conference, October 1999.
- Associate Editor, Journal of Biomechanical Engineering, 1999-2006.
- Program Chair, Bioengineering Division, American Society of Mechanical Engineers, Winter Annual Meeting, November 1998.
- North American Editor, Journal of Medical Engineering and Technology, 1996-2001.
- Chairman, American Society of Mechanical Engineering- Bioengineering Division Fluid Mechanics Committee, 1993-1995.
- Danish Research Academy, Visiting Professorship, January-June 1992.
- Member & Vice-Chair, Color Doppler Standards Committee, American Society of Echocardiography, 1989-96.

- Board of Directors, American Society of Echocardiography, 1989-93.
- Editorial Board, Journal of Biomechanics, 1988 -1998.
- Member, National Institutes of Health-Surgery and Bioengineering Study Section, 1988-91.
- Health Industry Manufacturers Association/AdvaMed - Main Consultant to National Heart Valve Task Force, 1987-present.

OTHER PROFESSIONAL ACTIVITIES

1. Member, AIMBE Academic Council, 1993-2004.
2. Chair, ASME/BED Honors Committee, 1998-2003.
3. Member, Future Directions Committee, ASME Bioengineering Division, 1995-2000.
4. Member, Food and Drug Administration Ad Hoc Committee for Standardized In Vitro Testing of Prosthetic Heart Valves, 1980-present.
5. Member, Scientific Steering committee, International Conference on Valvular Heart Disease, London, UK, June 1999.
6. Member, Scientific Steering Committee, 3rd International Conference of Stentless Bioprotheses, Virgin Islands, May 1999.
7. Program Committee, Co-Chair, BMES/EMBS Joint Meeting, Atlanta, October, 1999.
8. Program Chair, Bioengineering Division, American Society of Mechanical Engineers, Winter Annual Meeting, November 1998.
9. Chair, AIMBE Academic Council Committee on Biomedical Engineering Needs Assessments, 1996-1997.
10. Chairman, American Society of Mechanical Engineers Biofluid Mechanics Committee, 1993-1995.
11. Consultant to Journal of Biomechanics, 1988-present.
12. Adjunct Professor, Division of Cardiovascular Medicine, University of Alabama School of Medicine, Birmingham, AL, 1987- 1996.
13. Director, American Society of Echocardiography, 1987-1990.
14. Engineering Consultant, Division of Cardiovascular Medicine, University of Kentucky Medical School, Lexington, KY, 1984-86.
15. Engineering Consultant, Division of Cardiovascular Medicine, University of Alabama School of Medicine, Birmingham, AL, 1984-86.

16. Engineering Consultant, Department of Pediatric Cardiology, University of California at San Diego Medical School, San Diego, CA, 1983-1992.
17. Member, American Heart Association, Georgia Affiliate, Research Committee, 1983-86.
18. Editor, Materials Engineering and Science Division, American Institute of Chemical Engineers, News Letter, 1983-84.
19. Co-Editor, Materials Engineering and Science Division, American Institute of Chemical Engineers, News Letter, 1981-82.
20. Visiting Professor, Polymer Engineering Section, Engineering Technology Laboratory, E. I. DuPont Company, Wilmington, DE, January-March, 1981.

PUBLISHED BOOKS, INVITED BOOK CHAPTERS AND MAJOR TECHNICAL REPORTS

1. Grbic, S., Easley, T.F., Mansi, T., Bloodworth, C.H., Pierce, E.L., Voigt, I., Neumann, D., Krebs, J., Yuh, D.D., Jensen, M.O., Comaniciu, D., Yoganathan, A.P., "Multi-modal Validation Framework of Mitral Valve Geometry and Functional Computational Models" in *Statistical Atlases and Computational Models of the Heart - Imaging and Modelling Challenges* (pp. 239-48). Editors: Camara, O., Mansi, T., Pop, M., Rhode, K., Sermesant, M. and Young, A., Springer, 2015.
2. Haggerty, C.M., Mirabella, L., Restrepo, M., de Zélicourt, D.A., Rossignac, J., Sotiropoulos, F., Spray, T.L., Kanter, K.R., Fogel, M.A., Yoganathan, A.P., "Patient-Specific Surgery Planning for the Fontan Procedure" in *Computer Models in Biomechanics: From Nano to Micro* (pp. 217-228). Editors: Holzapfel, G.A., Kuhl, E., Springer, 2013.
3. Lee, C-H, Sacks, M.S., Oomen, P.J.A., Rabbah, J.P., Yoganathan, A.P., Gorman, R.C., Gorman III, J.H., Amini, R., "A High-Fidelity and Micro-anatomically Accurate 3D Finite Element Model for Simulations of Functional Mitral Valve" in *Functional Imaging and Modeling of the Heart* (Vol. 7954, pp. 416-424). Editors: Ourselin, S., Rueckert, D., and Smith, N. Springer-Verlag, 2013.
4. Chandran, K.B., Yoganathan, A.P., Rittgers, S.E., "Biofluid Mechanics: The Human Circulation, Second Edition" Editors: Taylor and Francis. CRC Press, 2012.
5. Yoganathan, A.P., Travis, B.R., "Fluid Dynamics of Prosthetic Valves" in *The Practice of Clinical Echocardiograph* (4th ed.), Editors: Otto, C. Saunders, 2012.
6. de Zélicourt, D.A., Steele, B.N., Yoganathan, A.P., "Advances in Computational Simulations for Interventional Treatments and Surgical Planning" in *Image-Based Computational Modeling of the Human Circulatory and Pulmonary Systems: Methods and Applications* (pp. 343-373). Editors: Chandran, K.B., Udaykumar, H.S., and Reinhardt, J.M. Springer, 2011
7. Lucas C.L., Cole R., Yoganathan A.P., "Closed Loop Modeling of Circulatory System", in *Vascular Hemodynamics: Bioengineering and Clinical Perspectives*. Editor: Peter Yim. John Wiley & Sons, Inc., 2008.
8. Fallon, A., Jimenez, J., Yoganathan, A.P., "Heart Valve Mechanics" in *Encyclopedia of Biomaterials and Biomedical Engineering*, Sapna Maloor, Eds., Marcel Dekker, Inc., New York 2007.

9. Yoganathan, A.P., Travis, B.R., "Fluid Dynamics of Prosthetic Valves" in *The Practice of Clinical Echocardiography* (3rd ed.). Editor: Otto, C. Saunders, 2007.
10. Chandran, K.B., Yoganathan, A.P., Rittgers, S., *Fluid Mechanics in the Human Circulation*. CRC Press, 2006.
11. Yoganathan, A.P., Kitajima, H., "Blood Flow – The Basics of the Discipline" in *Ventricular Function and Blood Flow in Congenital Heart Disease* (pp. 38-54). Editor: Fogel, M. Blackwell Futura, 2005.
12. Yoganathan, A.P., He, Z., Leo, H-L, Fallon, A.M, "Mechanical Heart Valves" in *Encyclopedia of Biomaterials and Biomedical Engineering* (pp. 737-745). Maloor, S., Marcel Dekker, Inc., 2004.
13. Yoganathan, A.P., Travis, B., Leo, H-L., Teoh, S-H., "Heart Valve Prostheses" in *Materials Science and Materials Engineering*. Editor: Hashmi, S. Elsevier Science, 2003.
14. Yoganathan, A.P., Chatzimavroudis, G.P., "Hemodynamics" in *Theory and Practice of Vascular Medicine*. Editors: Lanzer, P., Topol, E.J. Springer-Verlag, 2002.
15. Yoganathan, A.P., Travis, B.R., "Fluid Dynamics of Prosthetic Valves" in *The Practice of Clinical Echocardiography* (2nd ed.). Editor: Otto, C. Saunders, 2002.
16. Yoganathan, A.P., Chatzimavroudis, G.P., Wilkerson, P.W., "Basics of Ultrasound" in *Imaging in Cardiovascular Disease*. Editors: Pohost, G.M., Shah, P.M., O'Rourke, R.A., Berman, D.S. Lippincott - Williams & Wilkins, 2000.
17. Lemmon, J.D., Healy, T.M., Yoganathan, A.P., "Fluid Dynamics of the Left Heart" in *Advances in Fluid Mechanics: Computational Fluid-Structure Interaction in the Cardiovascular System*. Editors: Verdonck, P., Pertold, K., WIT Press Southampton, 2000.
18. Lemmon, J.D., Healy, T.M., Yoganathan, A.P., "Left-Heart Fluid Mechanics" in *Intra and Extracorporeal Cardiovascular Fluid Dynamics, Volume 2 – Fluid Structure Interaction*, Editors: Verdonck, P., Perktold, K. WIT Press, 2000.
19. Yoganathan A.P., Lemmon J.D., Ellis J.T., "Heart Valve Dynamics" in *The Biomedical Engineering Handbook*. CRC Press, London, 1999.
20. Ha, B., Henry, W.G., Lucas, C.L., Sung, H-W., Yoganathan, A.P., "Pulmonary Artery Flow and Hemodynamics" in *Advances in Hemodynamics and Hemorheology*. Editor: How, T.V., J.A.T. Press Ltd., 1996. Invited.
21. Yoganathan, A.P., Fontaine, A.A., Heinrich, R. S., "Fluid Dynamics of Prosthetic Heart Valves" in *The Practice Clinical Echocardiography* (1st ed.). Editor: Otto, C.M. Saunders, 1996. Invited.
22. Cape, E.G., Yoganathan, A.P., "Principles and Instrumentation for Doppler" in *Marcus' Cardiac Imaging*. Editor: Skorton, D.J. Saunders, 1995. Invited.
23. Yoganathan, A.P., Hopmeyer, J., Heinrich, R.S., "Mechanics of Heart Valves" in *The Biomedical Engineering Handbook*. Editor: Bronzino, E. CRC Press, 1995. Invited.
24. Yoganathan, A.P., "Cardiac Valve Prostheses" in *The Biomedical Engineering Handbook*. Editor: Bronzino, E. CRC Press, 1995. Invited.
25. Cape, E.G., Yoganathan, A.P., "Imaging Technology" in *Vascular Diagnostics*. Editor: Lanzer, P., Rösch, J. Springer Verlag, 1994.

26. Cape, E.G., Yoganathan, A.P., "Principles of Fluid Mechanics and Doppler Echocardiography Relevant to Clinical Assessment of Artificial Heart Valve Hemodynamic Performance" in *Echocardiography of Prosthetic Heart Valves*. Editor: Zabalgoitia, M. R.G. Landes Company, 1994. Invited.
27. Cape, E.G., Yoganathan, A.P., "Ultrasonic Imaging Technology for Vascular Studies" in *Textbook of Vascular Diagnostics*. Editor: Lanzer, P., Springer Verlag, 1994. Invited.
28. Cape, E.G., Sung, H-W., Yoganathan, A.P., "The Physics of Blood Flow" in *Doppler Echocardiography*. Editor: Nanda, N.C. Lea & Febiger, 1992. Invited.
29. Sung, H-W., Cape, E.G., Yoganathan, A.P., "Basic Principles of Color Doppler Flow Mapping" in *Doppler Echocardiography*. Editor: Nanda, N.C. Lea and Febiger, 1992. Invited.
30. Yoganathan, A.P., Wick, T.M., Reul, H., "Influence of Flow Characteristics on Thrombus Formation" in *Thrombosis, Embolism and Bleeding*. Editors: Butchart, E.G., Bodnar, E. ICR Publishers, 1992.
31. Yoganathan, A.P., Reul, H., Black, M.M., "Heart Valve Replacements: Problems and Developments" in *Cardiovascular Biomaterials*. Editor: Hastings, G.W. Springer-Verlag, 1992.
32. Black, M.M., Cochrane, T., Lawford, P.V., Reul, H., Yoganathan, A.P., "Design and Flow Characteristics" in *Replacement Cardiac Valves*. Editors: Bodnar, E., Frater, R. Pergamon Press, 1991.
33. Vesier, C.C., Levine, R.A., Yoganathan, A.P., "Simulation of Blood Flow in the Left Ventricle: The Effect of Papillary Muscle Geometry on Mitral Valve Function" in *Computers in Biomedicine*. Editors: Held, K.D., Brebbia, C.A., Ciskowski, R. D. Computational Mechanics Publication, September 1991.
34. Cape, E.G., Sung, H-W., Yoganathan, A.P., "Basics of Color Doppler Imaging" in *Vascular Imaging by Color Doppler and Magnetic Resonance*. Editors: Lanzer, P., Yoganathan, A.P. Springer-Verlag, 1991. Invited.
35. Lefebvre, X.P., Pedersen, E.M., Hjortdal, J.O., Yoganathan, A.P., "Principles of Hemodynamics" in *Vascular Imaging by Color Doppler and Magnetic Resonance*. Editors: Lanzer, P., Yoganathan, A.P. Springer-Verlag, 1991. Invited.
36. Lanzer, P., Yoganathan, A.P., (Editors), *Vascular Imaging by Color Doppler and Magnetic Resonance*, Springer-Verlag, 1991.
37. Cape, E.G., Yoganathan, A.P., "Basic Principles of Ultrasound," in *The Principles and Practice of Cardiovascular Imaging*. Editor: Pohost, G. Little, Brown and Company, 1991. Invited.
38. Yoganathan, A.P., Woo, Y-R., Sung, H-W., Jones, M., "Experimental Evaluation of Prosthetic Valve Flow", in *Echocardiography and Doppler in Cardiac Surgery* (pp. 81-108). Editor: Maurer, G. Igaku-Shoin, 1989. Invited.
39. Yoganathan, A.P., "Velocity Mapping of Prosthetic Aortic Heart Valves Using Laser Doppler Anemometry" in *Atlas of Color Doppler Echocardiography* (pp. 301-311). Editor: Nanda, N.C. Lea and Febiger, 1989. Invited.
40. Yoganathan, A.P., McMillan, S.T., Sung, H-W., Woo, Y-R., "In Vitro Evaluation of Prosthetic Mitral Heart Valves by Doppler Flow Imaging" in *Atlas of Color Doppler Echocardiography* (pp. 312-318). Editor: Nanda, N.C. Lea and Febiger, 1989.
41. Yoganathan, A.P., Sung, H-W., Philpot, E.F., Woo, Y-R., McMillan, S.T., Jimoh, A., Ridgway, A.J., "Flow Visualization Studies Applied to Cardiovascular Problems" in *Handbook of Flow Visualization* (pp. 589-602). Editor: Yang, W.J. Hemisphere Publishing Corp., New York, 1989.

42. Yoganathan, A.P., Woo, Y-R., "In Vitro Fluid Dynamics of Tissue Valves: Old Versus New Designs" in *Biologic and Bioprosthetic Valves* (pp. 596-604). Editors: Bodnar, E., Yacoub, M. Yorke Medical Books, 1986. Invited.
43. Yoganathan, A.P., Woo, Y-R., Williams, F.P., "In Vitro Hydrodynamic Characteristics of the St. Jude Bileaflet Aortic Prosthesis" in *Advances in Cardiac Valves* (pp. 229-246). Editor: DeBakey, M. E. Yorke Medical Books, 1983. Invited.
44. Yoganathan, A.P., "Prosthetic Heart Valves: A Study of In Vitro Performance", Phase II Final Report (Parts I, II and III), FDA Contract #223-81-5000, December 1983 (NTIS #PB 84-162379, 84-162387, 84-162395).
45. Yoganathan, A.P., "Prosthetic Heart Valves: A Study of In Vitro Performance", Phase I Final Report, FDA Contract #223-81-5000, April 1982 (NTIS #PB 83-134478).
46. Yoganathan, A.P., Corcoran, W.H., Harrison, E.C. (Editors), *Prosthetic Heart Valves*, Cal Tech Press, 1980.

PUBLISHED PAPERS IN PEER-REVIEWED JOURNALS

1. Grbic, S., Easley, T., Mansi, T., Bloodworth C., Pierce, E., Voigt, I., Neumann, D., Krebs, J., Yuh, D., Jensen, M., Comaniciu, D., Yoganathan, A.P., "Personalized Mitral Valve Closure Computation and Uncertainty Analysis from 3D Echocardiography", *Medical Image Analysis*, Volume 35, pp. 238-249, 2017. DOI: <http://dx.doi.org/10.1016/j.media.2016.03.011>. PMID: 27475910
2. Midha, P.A., Raghav, V., Condado, J.F., Okafor, I.U., Lerakis, S., Thourani, V.H., Babaliaros, V., Yoganathan, A.P. "Valve type, size and deployment location affect hemodynamics in an in vitro valve-in-valve model", *Journal of American College of Cardiology Cardiovascular Interventions*, 2016. DOI:10.1016/j.jcin.2016.05.030
3. Midha, P., Raghav, V., Okafor, I., Yoganathan, A.P., "The Effect of Valve-in-Valve Implantation Height on Sinus Flow", *Annals of Biomedical Engineering*, 2016. DOI:10.1007/s10439-016-1642-2. PMID: 27164838
4. Pierce, E.L., Bloodworth, C.H., Naran, A., Easley, T.F., Jensen, M.O., Yoganathan, A.P., "Novel Method to Track Soft Tissue Deformation by Micro-Computed Tomography: Application to the Mitral Valve", *Annals of Biomedical Engineering*, Vol. 44(7):2273-81, 2016. DOI:10.1007/s10439-015-1499-9. PMID: 26553575. PMCID: PMC4861692
5. Pierce E.L., Rabbah J.P.M., Thiele K., Wei Q., Jensen M.O., Vidakovic B., Hung J., Yoganathan A.P., "Three-Dimensional Field Optimization Method: Gold-Standard Validation of a Novel Color Doppler Method for Quantifying Mitral Regurgitation", *Journal of the American Society of Echocardiography*, 2016. DOI: 10.106/j.echo.2016.05.009
6. Raghav, V., Okafor, I., Quach, M., Dang, L., Marquez, S., Yoganathan, A.P. "Long-Term Durability of Carpentier-Edwards Magna Ease Valve: A One Billion Cycle In Vitro Study", *The Annals of Thoracic Surgery*, Vol. 101(5), pp. 1766-1767, 2016. PMID: 26806168

7. Okafor, I., Raghav, V., Midha, P., Kumar, G., Yoganathan, A.P. "The Hemodynamic Effects of Acute Aortic Regurgitation Into a Stiffened Left Ventricle Resulting From Chronic Aortic Stenosis", *American Journal of Physiology: Heart and Circulatory Physiology*, 2016. DOI: 10.1152/ajpheart.00161.2016. PMID: 27106040
8. Toma, M., Einstein, D.R., Bloodworth, C.H., Cochran, R.P., Yoganathan, A.P., Kunzelman, K.S., "Fluid-Structure Interaction and Structural Analyses using a Comprehensive Mitral Valve Model with 3D Chordal Structure", *International Journal for Numerical Methods in Biomedical Engineering*, 2016. DOI: 10.1002/cnm.2815.
9. Rathan, S., Ankeny, C.J., Arjunon, S., Ferdous, Z., Kumar, S., Esmerats, J.F., Heath, J.M., Nerem, R.M., Yoganathan, A.P., Jo, H., "Identification of Side- and Shear-Dependent microRNAs Regulating Porcine Aortic Valve Pathogenesis", *Scientific Reports*. Accepted. SREP-15-30907A, 2016.
10. Toma, M., Bloodworth, C.H., Einstein, D.R., Pierce, E.L., Cochran, R.P., Yoganathan, A.P., Kunzelman, K.S., "High Resolution Subject-Specific Mitral Valve High Resolution Imaging and Modeling: Experimental & Computational Methods", *Journal of Biomechanics and Modeling in Mechanobiology*, 2016. DOI: 10.1007/s10237-016-0786-1. PMID: 27094182
11. Trusty, P., Restrepo, M., Kanter, K.R., Yoganathan, A.P., Fogel, M.A., Slesnick, T.C., "A Pulsatile Hemodynamic Evaluation of the Commercially Available Bifurcated Y-Graft Modification and Comparison to the Lateral Tunnel and Extracardiac Conduits", *The Journal of Thoracic and Cardiovascular Surgery*, Vol 151.6: pp. 1529-1536, 2016. DOI:10.1007/s10237-016-0786-1. PMID: 27056758
12. Pierce, E.L., Gentile, J., Siefert, A.W., Gorman, R.C., Gorman III, J.H., Yoganathan, A.P., "Real-Time Recording of Annuloplasty Suture Dehiscence Reveals Potential Mechanism for Dehiscence Cascade", *The Journal of Thoracic and Cardiovascular Surgery*, 2016. DOI: 10.1016/j.jtcvs.2016.01.043. PMID: 26971379
13. Toma, M., Jensen, M.O., Einstein, D.R., Yoganathan, A.P., Cochran R.P., Kunzelman, K.S., "Fluid-Structure Interaction Analysis of Papillary Muscle Forces Using a Comprehensive Mitral Valve Model with 3D Chordal Structure", *Annals of Biomedical Engineering*, Volume 44, Issue 4, pp. 942-953, 2016. DOI: 10.1007/s10439-015-1385. PMID: 26183963
14. Skov, S.N., Røpcke, D.M., Ilkjær, C., Rasmussen, J., Tjørnild, M.J., Jimenez, J.H., Yoganathan, A.P., Nygaard, H., Nielsen, S.L., Jensen, M.O., "New Mitral Annular Force Transducer Optimized to Distinguish Annular Segments and Multi-plane Forces", *Journal of Biomechanics*, Vol. 49(5), pp.742-748, 2016. PMID: 26903412
15. Santhanakrishnan, A., Okafor, I., Kumar, G., Yoganathan, A.P., "Atriole Systole Enhances Intraventricular Filling Flow Propagation During Increasing Heart Rate", *Journal of Biomechanics*, Vol. 49(4), pp. 618-623, 2016. PMID: 26895781
16. Pierce, E.L., Siefert, A.W., Paul, D., Wells, S., Bloodworth, C.H., Takebayashi, S., Aoki, S., Jensen, M.O., Gillespie, M.J., Gorman, R.C., Gorman III, J.H., Yoganathan, A.P., "How Local Annular Force and Collagen Density Govern Annuloplasty Ring Dehiscence Risk", *The Annals of Thoracic Surgery*, Vol. 102 (2): pp. 518-26, 2016. DOI: 10.1016/j.athoracsur.2016.01.107. PMID: 27133454. PMCID: PMC4958491

17. Tang, E., McElhinney, D.B., Restrepo, M., Valente, A.M., Yoganathan, A.P., " Hemodynamic Impact of Stent Implantation for Lateral Tunnel Fontan Stenosis: A Patient-Specific Computational Assessment", *Cardiology in the Young*, Vol. 26(1), pp.116-126, 2016. PMID: 25712430
18. Gunning, P., Saikrishnan, N., Yoganathan, A.P., McNamara L., "Total Ellipse of the Heart Valve: The Impact of Eccentric Stent Deployment on the Regional Dynamic Deformation of Pericardial Tissue Leaflets of a Transcatheter Aortic Valve Replacement", *Journal of the Royal Society Interface*, Vol. 12(113), 2015. PMID: 26674192. PMCID: PMC4707849
19. Trusty, P. M., Restrepo, M., Fogel, M. A., Kanter, K., Yoganathan, A. P., & Slesnick, T. C. , "Hemodynamic Evaluation of 30 Y-Graft Fontan Completions", *Circulation*, Vol. 132(Suppl 3), 2015. A14364.
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PATENTS

ISSUED PATENTS

1. Co-inventor of a novel cardiac implant device: Method and Apparatus for Minimally Invasive Heart Valve Procedures. U.S. Patent No. 9,050,189. Issue date: June 9, 2015. Co-inventors: Sai Muralidhar Padala (Atlanta, GA).
2. Co-inventor of a novel cardiac implant device: Conduit device and systems for implanting a conduit device in a tissue wall. U.S. Patent No. 8,858,489 Issue date: October 14, 2014. Co-inventors: Vassiliades, Thomas A. (Atlanta, GA); Jimenez, Jorge Hernan (Atlanta, GA).

3. Co-inventor of a novel cardiac implant device: Conduit device and systems for implanting a conduit device in a tissue wall. U.S. Patent No. 8,858,489 Issue date: October 14, 2014. Co-inventors: Vassiliades, Thomas A. (Atlanta, GA); Jimenez, Jorge Hernan (Atlanta, GA).
4. Co-inventor of a novel medical fluid treatment device and system that provides continuous renal replacement therapy to children. U.S. Patent No. 8,821,135. Issue Date: September 2, 2014. Co-inventors: Paden, Matthew L. (Stone Mountain, GA); Dasi, Lakshmi Prasad (Fort Collins, CO).
5. Co-inventor of a novel cardiac implant device: Conduit device and systems for implanting a conduit device in a tissue wall. U.S. Patent No. 8,430,836. Issue date: April 30, 2013. Co-inventors: Vassiliades, Thomas A. (Atlanta, GA); Jimenez, Jorge Hernan (Atlanta, GA).
6. Co-inventor of a data reconstruction system using directional interpolation techniques. U.S. Patent No. 8,233,701. Issue date: July 31, 2012. Co-inventors: Frakes, David (Scottsdale, AZ); Monaco, Joseph (Atlanta, GA); Smith, Mark (West Lafayette, IN).
7. Co-inventor of a fluid management system for accurate continuous hemofiltration. U.S. Patent No. 8,206,594. Issue date: June 26, 2012. Co-inventors: Fortenberry, James D. (Atlanta, GA); Sucusky, Philippe (South Bend, IN); Dasi, Lakshmi Prasad (Fort Collins, CO); Paden, Matthew L. (Stone Mountain, GA).
8. Co-inventor of a conduit device and system for implanting a conduit device in a tissue wall. U.S. Patent No. 7,846,123. Issue date: December 7, 2010. Co-inventors: Vassiliades, Thomas A. (Atlanta, GA); Jimenez, Jorge Hernan (Atlanta, GA).
9. Co-inventor of a data reconstruction system using directional interpolation techniques. U.S. Patent No. 7,831,088. Issue date: November 9, 2010. Co-inventors: Frakes, David Harold (Atlanta, GA); Monaco, Joseph Wilson (Atlanta, GA); Smith, Mark J. T. (West LaFayette, IN).
10. Co-inventor of an anatomical connection. U.S. Patent No. 7,811,244. Issue date: October 12, 2010. Co-inventors: Soerensen, Dennis Dam (Smyrna, GA); Dasi, Lakshmi Prasad (Atlanta, GA); Pekkan, Kerem (Athens, GA); De Julien de Zelicourt, Diane (Atlanta, GA).

PATENT APPLICATIONS

1. Co-inventor of a novel cardiac implant device: The Annuloplasty Chain. PCT/US04/20219; U.S. Patent Application No. 20060184240. Co-inventors: Jimenez, Jorge Hernan (Atlanta, GA); He, Zhaoming (Lubbock, TX).
2. Co-inventor of a novel cardiac implant device: Vascular conduit device and system for implanting. PCT/US2006/039435; U.S. Patent Application No. 20060089707. Co-inventors: Vassiliades, Thomas A. (Atlanta, GA); Jimenez, Jorge Hernan (Atlanta, GA).
3. Co-inventor of continuation in part for the patent: Vascular Conduit device and system for implanting A Conduit Device in a Tissue Wall. U.S. Patent Application No. 20080269662. Co-inventors: Vassiliades, Thomas A. (Atlanta, GA); Jimenez, Jorge Hernan (Atlanta, GA).

4. Co-inventor of a novel cardiac implant device: Systems and methods to control the dimension of a heart valve. PCT/US2006/062192; U.S. Patent Application No. 20090292353. Co-inventor: Jimenez, Jorge Hernan (Atlanta, GA).
5. Co-inventor of a novel cardiac implant device: Systems and methods for enabling heart valve replacement. PCT/US2006/062199; U.S. Patent Application No. 20090157174. Co-inventor: Jimenez, Jorge Hernan (Atlanta, GA).
6. Co-inventor of a novel cardiac implant device: Papillary muscle position control devices, systems, & methods. PCT/US06/62185; U.S. Patent Application No. 20100023117. Co-inventor: Jimenez, Jorge Hernan (Atlanta, GA).
7. Co-inventor of a novel fluid management system for accurate continuous hemofiltration in extracorporeal membrane oxygenation (ECMO). PCT/US08/66108; U.S. Patent Application No. 20100288703. Co-inventor: Fortenberry, James D. (Atlanta, GA).
8. Co-inventor of a novel cardiac implant device: Annuloplasty rings and methods for heart valve repair. PCT/US2009/039777; U.S. Patent Application No. 20130030523. Co-inventors: Padala, Sai Muralidhar (Atlanta, GA); Thourani, Vinod H. (Atlanta, GA); Jimenez, Jorge H. (Atlanta, GA).
9. Co-inventor of a novel cardiac hemostasis device: Systems, Apparatus, and Methods for delivering a conduit through a tissue wall. PCT/US12/23476; U.S. Patent Application No. 20140039375. Co-inventors: Jimenez, Jorge H. (Atlanta, GA); West, Seth (Calhoun, GA); Thourani, Vinod (Atlanta, GA).
10. Co-inventor of a minimally invasive tricuspid annuloplasty system. Provisional patent in process. GTRC ID 6384.
11. Co-inventor of a splittable needle. Provisional patent in process. GTRC ID 6565.
12. Co-inventor of a blood vessel sized calibrator for radiology applications. Provisional patent in process. GTRC ID 6566.

INVITED CONFERENCE, LECTURE AND SEMINAR PRESENTATIONS

1. "Glass Models to Virtual Surgery Platforms: 20+ Years of Fontan Translational Research", 5th International Conference on Engineering Frontiers in Pediatric and Congenital Heart Disease, University of Central Florida, June 9-10, 2016.
2. "Heart Valve Mechanics: From Bench to Bedside", Keynote Speaker, 11th International Symposium on Biomechanics in Vascular Biology and Cardiovascular Diseases, Emory University, May 2, 2016
3. "Hydrodynamic and Mechanical Testing for Transcatheter Heart Valves: Can Industry Do More to Improve Patient Safety?", Design of Medical Devices Conference, University of Minnesota, April 12, 2016.
4. "Heart Valve Biomechanics", Keynote Speaker, Heart Valve Society, New York City, March 19, 2016.

5. "Experimental and Computational Analyses of Valve Disease and Treatment", Keynote Speaker, Heart Valve Society, New York City, March 17, 2016.
6. "Cardiovascular Engineering - A Personal Journey from Bench to Bedside", International Conference on Mathematical and Computational Biology, IIT-Kanpur, India, February 8, 2016.
7. "Current Trends in CVMS", International Conference on Mathematical and Computational Biology, IIT-Kanpur, India, February 7, 2016.
8. "Prosthetic Heart Valves", International Conference on Mathematical and Computational Biology, IIT-Kanpur, India, February 6, 2016.
9. "Cardiovascular Engineering: A Personal Journey from Bench to Bedside", Special Seminar at Georgia Tech to celebrate induction into NAE, November 17, 2015.
10. "Planning the Perfect Fontan", Annual Conference of Pediatric Cardiac Society of India, Hyderabad, India, October 16, 2015.
11. "Computational Fluid Hemodynamics in Fontan", Annual Conference of Pediatric Cardiac Society of India, Hyderabad, India, October 15, 2015.
12. "Computational Challenges in Cardiovascular Fluid Mechanics", Keynote Speaker, 4th International Conference on Computational and Mathematical Biomedical Engineering, Paris, France, June 29, 2015.
13. "What Bench Studies Are Needed to Support Design of Implants for Valve-in-Valve and Paravalvular Leak Repair Procedures?", The Heart Valve Society Inaugural Scientific Meeting, Monte Carlo, Monaco, May 8, 2015.
14. "3 Dimensional Imaging of the Complex Congenital Heart", Congenital Heart Disease Skills Course, 95th Annual Meeting of the American Association for Thoracic Surgery (AATS), Seattle, WA, April 25, 2015.
15. "Image-Based Surgical Planning for Single Ventricle Heart Defects", South West Mechanics Lecture Series, Texas A&M, April 2015.
16. "Image-Based Surgical Planning for Single Ventricle Heart Defects", South West Mechanics Lecture Series, University of Texas, April 2015.
17. "Computational Challenges in Cardiovascular Fluid Mechanics", International Conference on Mathematical and Computational Biology, IIT-Kanpur, India, March 1, 2015.
18. "When Engineering is the Best Medicine: Professor Ajit P. Yoganathan's Pioneering Research Makes People's Hearts Work Better Every Day", 70th Annual Sessions of the Sri Lanka Association for the Advancement of Science (SLAAS), Colombo, Sri Lanka, December 2, 2014.
19. "Using Basic Science and Engineering to Gain Mechanistic Insight for Reconstructive Mitral Valve Surgery", Seminar at Politecnico di Milano, Milan, Italy, October 15, 2014.

20. "Virtual Prediction of Surgery", Predictive and Non-Invasive Evaluation of Congenital Heart Disease Session, 28th Annual Meeting of the European Association for Cardio-Thoracic Surgery (EACTS), Milan, Italy, October 13, 2014.
21. "Computational Challenges in Cardiovascular Fluid Mechanics", Keynote Speaker, 12th Symposium on Overset Composite Grids and Solution Technology, School of Aerospace Engineering, Georgia Institute of Technology, Historic Academy of Medicine at Georgia Tech, October 8, 2014.
22. "Examples of Cardiac Imaging: From Bench to Bedside", Cardiac Imaging Grand Rounds, Mayo Clinic, Rochester, MN, July 30, 2014.
23. "Advanced Analysis of Echo and MRI Images to Assess Mitral and Aortic Heart Valve Function", Hemodynamics and Medical Imaging Session, 7th World Congress of Biomechanics, Boston, MA, July 9, 2014.
24. "State of the Art Valve Fluid Mechanics Studies on Bileaflet Heart Valves", 7th World Congress of Biomechanics, Heart Valve Fluid Mechanics: The Chandran Impact Session, Boston, MA, July 8, 2014.
25. "Using Basic Science and Engineering to Gain Mechanistic Insight for Reconstructive Mitral Valve Surgery", Siemens Distinguished Speaker Series, Princeton, NJ, April 15, 2014.
26. "Improving Clinical Practice With Translational Research: A Case Study of the Mitral Valve", Physiology Seminar Series at Morehouse School of Medicine, Atlanta, GA, February 20, 2014.
27. "Virtual Surgical Planning in CHD", Speaker and Chairman at 10th Anniversary DHZB Lange Symposium, Berlin, Germany, January 18-19, 2014.
28. "Georgia Tech and Emory, Engineering Solutions for Unmet Clinical Needs – Apica Cardiovascular Collaboration", Co-presenter with Dr. Vinod Thourani, 100th Anniversary of Wallace H. Coulter's Birthday, Emory University, Atlanta, GA, December 6, 2013.
29. "Mitral Valve Degeneration and Prolapse: An Engineering Perspective", American Heart Association Scientific Sessions 2013, Dallas, TX, November 16-20, 2013.
30. "Experimental Platforms for Validating Computational Approaches to Simulating Heart Valve Flows", Mathematical Biosciences Institute Special Topics Workshop: Mathematics Guiding Bioartificial Heart Valve Design, Ohio State University, Columbus, OH, October 28-31, 2013.
31. "Breakthroughs in Palliation of Single Ventricle Physiology", PEDS Workshop – Diagnostics, Devices, and Delivery, Atlanta, GA, September 30, 2013.
32. "Computer-Based Surgery Planning and the Y-Graft: The Next Innovations of Fontan's Procedure", The 6th World Congress of Paediatric Cardiology and Cardiac Surgery, Cape Town, South Africa, February 17-22, 2013.
33. "Surgical Repair of the Mitral Valve: In Vitro Engineering Studies", Cardiology Grand Rounds, Albert Einstein Medical Center, Philadelphia, PA, February 6, 2013.

34. "Surgical Repair of the Mitral Valve: In-vitro Engineering Studies", Department of Biomedical Engineering 2012-2013 Seminar Series, University of Texas at Austin, Austin, TX, January 24, 2013.
35. "From Bench to Bedside: A Journey through Translational Research", St. Jude Medical, Minneapolis, MN, December 10, 2012.
36. "From Bench to Bedside: A Journey through Translational Research", Pritzker Lecture at the Biomedical Engineering Society (BMES) 2012 Annual Meeting, Atlanta, GA, October 25, 2012.
37. "Bioengineering Innovation and Commercialization of Research: A Faculty Perspective", Educating Engineers: Preparing 21st Century Leaders in the Context of New Modes of Learning, National Academy of Engineering, Washington, D.C. October 1, 2012.
38. "Utilizing Experimental and Computational Tools in Tandem to Assess Cardiovascular Devices and Surgical Planning", Keynote Speaker, The Institute of Mathematics (IMA) Conference on Mathematics of Medical Devices and Surgical Procedures, University College London, London, United Kingdom, September 17-19, 2012.
39. "Utilizing Engineering Principles to Understand and Improve Single Ventricle Physiology: Patient Specific Surgical Planning for the Fontan Procedure", National University of Ireland - Galway, Galway, Ireland. June 7, 2012.
40. "Surgical Repair of the Mitral Valve: In-vitro Engineering Studies", Distinguished Lecturer Series at Materials and Surface Science Institute (MSSI), University of Limerick, Ireland. June 1, 2012.
41. "Utilizing Engineering Principles to Understand and Improve Single Ventricle Physiology: Patient Specific Surgical Planning for the Fontan Procedure", Distinguished Lecturer Series at Materials and Surface Science Institute (MSSI), University of Limerick, Ireland. May 31, 2012.
42. "Biomechanics of Heart Valves", Keynote speaker and Conference Director, 5th Biennial Meeting on Heart Valve Biology and Tissue Engineering, Myconos, Greece, May 18-20, 2012.
43. "Bench to Bedside in Congenital Heart Disease: How Biomedical Engineering Tools can Impact Congenital Cardiac Interventions", Ann Newman Lecture/Grand Rounds at Children's Hospital of Philadelphia (CHOP), Philadelphia, PA, May 16, 2012.
44. "Surgical Repair of the Mitral Valve: In-Vitro Engineering Studies", Cardiology Grand Rounds, Albert Einstein Medical Center, Philadelphia, PA, May 9, 2012.
45. "Using Engineering Principles to Help Babies Born with 'Half a Heart'", 2011-2012 Bioengineering Series at CalTech, Pasadena, CA, April 23, 2012.
46. "Utilizing Engineering Principles to Understand and Improve Single Ventricle Physiology: Patient Specific Surgical Planning for the Fontan Procedure", Lecturer, Illinois Institute of Technology, Chicago, IL, April 20, 2012.
47. "Fluid Mechanics of Bileaflet Mechanical Heart Valves", Biological Flow: A Conference to Celebrate the 70th Birthday of Professor Tim Pedley FRS, University of Cambridge, UK, April 2-3, 2012.

48. "Using CFD for Patient Specific Surgical Planning in Single Ventricle Patients", The 1st International Conference on Computational Fluid Dynamics (CFD) in Medicine and Biology in conjunction with The Seventh International Biofluid Mechanics Symposium, Crowne Plaza Dead Sea Ein Bokek, Dead Sea, Israel, March 28, 2012.
49. "Surgical Repair of the Mitral Valve: In-Vitro Engineering Studies", Seminar at Tel Aviv University, Israel, March 19, 2012.
50. "Potential of Computational 4D Fluid Dynamics in Cardiovascular Disease", Speaker at the Society for Cardiovascular Magnetic Resonance (SCMR) 15th Annual Scientific Sessions for session titled Potential of Computational 4D Fluid Dynamics in Cardiovascular Disease, Orlando, FL, February 2-5, 2012.
51. "Pre-intervention Computer Modeling in Congenital Heart Disease: From Computers to Practice", Speaker at the Society for Cardiovascular Magnetic Resonance (SCMR) 15th Annual Scientific Sessions for session titled Advanced CMR Techniques in Pediatric/Congenital Heart Disease, Orlando, FL, February 2-5, 2012.
52. "Applying Biomechanical Principles to Valve Design", Speaker at the American Heart Association Scientific Sessions for session titled Biomedical Engineering Insights into Congenital Heart Disease, Orlando, FL, November 12-16, 2011.
53. "Optimization of Patient Specific Modeling for Cardiovascular Surgeries", Patient Specific Modeling – Translation from Basic Research to Clinical Practice, Engineering and Physical Sciences Research Council (EPSRC) Network Meeting, Edinburgh, U.K., September 28-29, 2011.
54. "Structural Defects of the Heart at Birth: Using Emerging Technologies to Aid the Single Ventricle", Special Track: Structural Heart Disease, American Society of Mechanical Engineers (ASME) Emerging Technologies' 6th Frontiers in Biomedical Devices Conference & Exhibition, Irvine, CA, September 26-27, 2011.
55. "Patient-Specific Surgical Planning for the Fontan Procedure", International Union of Theoretical and Applied Mechanics (IUTAM) Symposium on Computer Models in Biomechanics: from Nano to Macro, Stanford University, California, USA, August 29-September 2, 2011.
56. "Aortic Valve: Mechanics and Mechanobiology", Tissue Engineering & Regenerative Medicine International Society (TERMIS), Waterfront Conference Centre, Singapore, August 3, 2011.
57. "Pediatric Cardiac Device Consortium: Cardiovascular Device Development & Clinical Trials", 57th Annual Conference of American Society for Artificial Internal Organs (ASAIO), Washington, D.C., June 10-13, 2011.
58. "Utilizing Engineering Principles to Help Babies Born with Half a Heart", Seminar given at Mechanical Engineering Department, Virginia Commonwealth University, Richmond, VA, April 10, 2011.
59. "Pediatric Cardiovascular Device Consortium: Helping Those That Dare to Try", Stanford Medical Innovation Conference on Pediatric Devices, Palo Alto, CA, April 9, 2011.

60. "Applications of Computational Technique – Surgical Modeling", Engineering Frontiers in Congenital Heart Disease, London, U.K., March 17-18, 2011.
61. "Surgical Modeling of the Fontan Procedure: Growing the Knowledge Base One Patient at a Time", Society for Industrial and Applied Mathematics – Computational Science and Engineering Conference, Reno, NV, March 3, 2011.
62. "Preclinical Testing for Percutaneous Valves", Cardiovascular Research Technologies (CRT) Annual Conference, Washington, DC, February 27, 2011.
63. "Surgical Repair of the Mitral Valve: In Vitro Engineering Studies", Division of Cardiac Surgery, Northwestern University School of Medicine, Chicago, IL, February 24, 2011.
64. "Bench to Bedside: Using Virtual Surgery to Correct the Failing Fontan", Cardiovascular Grand Rounds Lecture, Division of Cardiology, Emory University School of Medicine, Atlanta, GA, February 21, 2011.
65. "Surgical Repair of the Mitral Valve: In Vitro Engineering Studies", Grand Rounds Lecture Series, Division of Cardiology, Vanderbilt University School of Medicine, Nashville, TN, February 17, 2011.
66. "Surgical Planning Research Efforts", Lecture given at Edwards Lifesciences, Newport Beach, CA, January 27, 2011.
67. SADRA Medical, Invited speaker, San Francisco, CA, January 7, 2011.
68. "Utilizing Engineering Principles to Help Babies Born with 'Half a Heart", Department of Mechanical Engineering, Auburn University, Auburn, AL, Nov 9-10, 2010.
69. "Mechanotransduction in Cardiac Valve Biology, Pathology and Regeneration", 12th Biennial Meeting of International Society for Applied Cardiovascular Biology (ISCAB), Cambridge, MA, September 22-25, 2010.
70. "Mechanics of the Percutaneous Aortic Valve: Implications for the Evaluation of Valve Design and Performance", Transcatheter Cardiovascular Therapeutics (TCT) Conference, Washington, D.C., September 21-25, 2010.
71. Invited Co-Chair of the Track: Artificial Organs, World Congress of Biomechanics, Singapore, August 1-6, 2010.
72. "(Computer) Bench to Bedside: Using Virtual Surgery to Correct the Failing Fontan", Grand Rounds Lecture Dept. of Pediatric Cardiology, Cincinnati Children's Hospital Medical Center, July 21-22, 2010.
73. "ISO Standards for Valve Manufacturing" and "Artificial materials: Most Recent Developments", Heart Valve Society of America (HVSA) 2nd Annual Scientific Meeting, New York, NY, April 15-17, 2010.
74. "Surgical Planning of the Total Cavopulmonary Connection Using MRI and Computational Fluid Mechanics", Department of Biomedical Engineering City College, New York, NY, April 14, 2010.

75. "Flow Dynamics in Prosthetic Valves: Can We Design the Perfect Valve?" and "Fluid Dynamics of the Fontan Circuit: From the Bench to the Operating Room, CTCOMCON 2010, Delhi, India, February 26-March 1, 2010.
76. "Imaging & Computational Modeling: Their Role in the Fontan Surgery", 1st International Conference on Computational Simulation in Congenital Heart Disease, San Diego, CA, February 26-27, 2010.
77. "Valve Durability Considerations: Fluid Dynamic Principles, Assessment Techniques, Predictors, and Minimum Standards" and "Perspectives From the Advisory Panels and Case Vignettes", Cardiovascular Research Technologies (CRT) Conference, Washington, D.C., February 21-23, 2010.
78. "Imaging & Computational Modeling: Their Role in the Fontan Surgery", Dept. of Biomedical Engineering Arizona State University, January 29, 2010.
79. AdvaMed/FDA Pediatric Heart Valve Workshop, Invited panelist and leader for preclinical discussion at breakout Session, Washington, D.C., January 12, 2010.
80. "Hemodynamics and Mechanism of Surgical Repair of Mitral Valve - A Biomedical Engineering Perspective", The International Society for Minimally Invasive Cardiothoracic Surgery (ISMICS) Winter Meeting, New Delhi, India, December 11-13, 2009.
81. "Imaging and Computational Modeling: Their Role in Congenital Heart Surgery", Morton Friedman Research Symposium, Duke University in Durham, NC, November 13, 2009.
82. "Case Study: Heart Valve Replacement Devices", International Knowledge Millennium Conference, Hyderabad, India, November 2-11, 2009.
83. "Determinants of Prosthetic Tissue Valve Durability", Transcatheter Cardiovascular Therapeutics (TCT) Conference, San Francisco, CA, September 21-25, 2009.
84. "The Effects of Mechanical Force (Cyclic Stretch and Shear Stress) on Aortic Valve Disease", National Heart, Lung, and Blood Institute Workshop on Calcific Aortic Stenosis, Chicago, IL, September 21-22, 2009.
85. "ISO 5840: A Guide to Harmonize Prosthetic Heart Valve Standards", American Society for Artificial Internal Organs (ASAIO), Dallas, TX, May 28-29, 2009.
86. "Surgical Repair of the Mitral Valve: In-Vitro Engineering Studies", Dept of Mechanical Engineering, University of Notre Dame, Notre Dame, Indiana, April 28, 2009.
87. "Computational Modeling and Image Libraries in Research", Pediatric Heart Network (PHN) Workshop/National Heart, Lung, and Blood Institute (NHLBI) Perioperative Working Group Meeting, Bethesda, MD, April 6-7, 2009.
88. "Valve Durability Considerations: Fluid Dynamic Principles, Assessment Techniques, Predictors, and Minimum Standards", Cardiovascular Research Technologies (CRT) 2009: Valve & Structural Heart Intervention, Washington, D.C., March 4-6, 2009.
89. Georgia Bio Committee Scientific Researchers Workshop, Emory University School of Medicine, Atlanta, GA, February 26, 2009.

90. "Surgical Planning of the Total Cavopulmonary Connection Using MRI, Experimental and Computational Fluid Mechanics", Dept. of Biomedical Engineering, University of Southern California, Los Angeles, CA, February 22-24, 2009.
91. Venetura '09, India Business Plan Contest Trip, Trichy, India, February 8-17, 2009.
92. "Valve Durability Considerations: Fluid Dynamic Principles, Assessment Techniques, Predictors, and Minimum Standards", Transcatheter Cardiovascular Therapeutics (TCT) Conference, Washington D.C., October 12 – 17, 2008.
93. Seminar, Department of Biomedical Engineering, University of North Carolina, Chapel Hill, NC, February 2008.
94. "Mitral Valve Mechanics and Hemodynamics", Cardiovascular Grand Rounds Lecture, Division of Cardiology, Emory University School of Medicine, Emory University, Atlanta, GA, August 2008.
95. "Surgical Repair of the Mitral Valve: In Vitro Engineering Studies", Department of Biomedical Engineering Faculty Candidate Seminar Series, University of California Irvine, Irvine, CA, May 2008.
96. "Valve Mechanics", Co-chair the session at the 3rd Biennial Heart Valve Biology & Tissue Engineering Meeting, London, UK, May 2008.
97. "Mitral Web: A New Concept for Mitral Valve Repair – Improved Engineering Design and In Vitro Studies", World Society of Cardio-Thoracic Surgeons (WSCSTS), Kos Island, Greece, April 30 – May 3, 2008.
98. "Towards Understanding Anatomical Fluid Dynamics and Surgical Planning of Total Cava Pulmonary Connection", Acibadem Bakirkoy Hospital, Istanbul, Turkey, April 26, 2008.
99. "Surgical Repair of the Mitral Valve: Fundamental Engineering In vitro Studies", Acibadem Bakirkoy Hospital, Istanbul, Turkey, April 26, 2008.
100. Co-chaired the breakout session on heart valves at the FDA-CFD Workshop on Computer Methods for CV Device Design and Evaluation, Bethesda, MD, March 18-19, 2008.
101. "Challenges in Preclinical Testing of Percutaneous Valve Technology: Academic View", Cardiovascular Revascularization Therapies (CRT) Meeting, Washington, D.C., February 11-13, 2008.
102. "Surgical Repair of the Mitral Valve: In Vitro Engineering Studies", UC Irvine's 2008 Biomedical Engineering Faculty Candidate Seminar Series, Irvine, CA, January 2008.
103. "Surgical Planning of the Total Cavopulmonary Connection Using MRI, Experimental and Computational Fluid Mechanics", Los Andes University Engineering Building Dedication, Bogota, Colombia, November 2007.
104. "Advance in Cardiovascular Fluid Mechanics: Bench to Bedside", Interdisciplinary Transport Phenomena Conference, Bansko, Bulgaria, October 2007.

105. "Surgical Repair of the Mitral Valve: In Vitro Studies", Seminar at Fu Wai Medical School & Hospital, Beijing, September 2007.
106. "Aortic Valve Mechanobiology", Dept. of Physiology Seminar, Peking University, September 2007
107. "Surgical Planning of the Total Cavopulmonary Connection Using MRI, Experimental and Computational Fluid Mechanics", Dept. of Biomedical Engineering Seminar, Vanderbilt University, Nashville, TN, August 2007.
108. "Surgical Repair of the Mitral Valve: In Vitro Studies", Dept. of Biomedical Engineering Seminar, Carnegie Mellon University, Pittsburgh, PA, July 2007.
109. "Surgical Planning of the Total Cavopulmonary Connection Using MRI, Experimental and Computational Fluid Mechanics", Cardiac Surgery & Cardiology Seminar, Boston Children's Hospital, MA, May 2007.
110. "Surgical Repair of the Mitral Valve: In Vitro Studies", Experimental Surgical Sciences Division Seminar, University of Minnesota, Minneapolis, MN, May 2007.
111. "Surgical Planning of the Total Cavopulmonary Connection Using MRI, Experimental and Computational Fluid Mechanics", Dept. of Bioengineering Seminar, Penn State University, PA, March 2007.
112. "Surgical Planning of the Total Cavopulmonary Connection Using MRI, Experimental and Computational Fluid Mechanics", Dept. of Bioengineering Seminar, University of Pittsburgh, PA, March 2007.
113. "Surgical Repair of the Mitral Valve: In Vitro Studies", Cardiac Surgery Grand Rounds, Mt. Sinai Medical School, New York, March 2007.
114. "Overview of Heart Valve Function, Disease & Replacement", Indo-US Cardiovascular Devices Workshop, Trivandrum, India, February 2007.
115. "Surgical Repair of the Mitral Valve: In Vitro Studies", Heart Center seminar, Crawford Long Hospital, Emory University, Atlanta, GA, November 2006
116. "Surgical Planning of the Total Cavopulmonary Connection Using MRI, Computational and Experimental Fluid Mechanics", Biomedical Engineering and Cardiovascular Surgery seminar, University of Aarhus, Denmark, June 2006.
117. "Towards Understanding Anatomical Fluid Dynamics and Surgical Planning of the TCPC", Surgery Grand Rounds, University of North Carolina, Chapel Hill, NC, June 2006.
118. "Towards Understanding Anatomical Fluid Dynamics and Surgical Planning of the TCPC", Pediatric Cardiology Grand Rounds, Children's Hospital of Philadelphia, PA, May 2006.
119. "Towards Understanding Anatomical Fluid Dynamics and Surgical Planning of the TCPC", Naming Ceremony of Department of Biomedical Engineering, University of Florida, Gainesville, FL, May 2006.

120. "The Function and Loading of the Mitral Valve Under Normal, Pathological and Repair Conditions: In Vitro Studies", Engineering School seminar, University of Los Andes, Bogota, Colombia, April 2006.
121. "Towards Understanding Anatomical Fluid Dynamics and Surgical Planning of the TCPC", Bioengineering & Pediatric Cardiovascular Medicine seminar, University of Los Andes, Bogota, Colombia, April 2006.
122. "Surgical Planning of the Total Cavopulmonary Connection Using MRI, Computational and Experimental Fluid Mechanics," Bioengineering seminar, California Institute of Technology, Pasadena, CA, January 2006.
123. "Understanding Mitral Valve Mechanics for Surgical Repair", BMES Annual Meeting, Baltimore, MD, October 2005.
124. "The Loading and Function of the Mitral Valve Under Normal, Pathological and Repair Conditions: In Vitro Studies", 12th ICBME, Singapore, December 2005.
125. "Progress Towards Understanding the Fluid Dynamics Surgical Planning of the Total Cavopulmonary Connection", 12th ICBME, Singapore, December 2005.
126. "Surgical Planning of the Total Cavopulmonary Connection Using MRI, Computational and Experimental Fluid Mechanics", EMBE Conference, Prague, Czech Republic, November 2005.
127. "Perspectives on New Directions in Biomedical Engineering", Biomedical Engineering Society of Sweden, September 2005.
128. "Engineering Focused Circulatory Support Device Design", American Society of Artificial Internal Organs Annual Conference, Washington DC, May 2005.
129. "Surgical Planning of the Total Cavopulmonary Connection Using MR Imaging, Experimental and Computational Fluid Mechanics", Seminar, Department of Biomedical Engineering, Yonsei University, S. Korea, October 2005.
130. "Towards Understanding Anatomical Fluid Dynamics and Surgical Planning of the Total Cavo Pulmonary Connection, Grand Rounds, Cardiac Surgery and Cardiology", Boston Children's Hospital, Boston, MA, March 2005.
131. "Capability of Fluid Mechanic Studies To Predict PHV Clinical Performance: Fact or Fiction!", Plenary Lecture, Bioengineering Division at IMECE Annual Meeting, November 2004.
132. "Why Cardiac Surgeons Should Understand Hemodynamics", Symposium in honor of Professor Peter Paulsen, Aarhus, Denmark, September 2004.
133. "A Gallery of Cardiovascular Flow Fields: From Heart Valves to Congenital Heart Disease", Keynote Lecture, 11th International Symposium on Flow Visualization, Notre Dame University, IN, August 2004.
134. "An Integrated Approach in the Assessment of Children Born with a Single Functional Ventricle: The Total Cavopulmonary Connection", seminar given at the University of Colorado, Boulder, CO, April 2004.

135. "A Pragmatic Approach Towards Accurately Modeling Cardiovascular Flows: Integrating High Resolution CFD & Sophisticated Experimental Techniques", Plenary Lecture given at the International Conference on Mathematical Biology, IIT Kanpur, Kanpur, India, February 2004.
136. "Capability of In Vitro Fluid Mechanics to Predict PHV Clinical Performance: Fact or Fiction!", presented at workshop on Cardiovascular Device Failures – sponsored by Italian government, Rome Italy, November 2003.
137. "An Integrated Engineering Approach in the Assessment of Children Born with a Single Functioning Ventricle: The Total Cavopulmonary Connection", presented at Aarhus University, Denmark, October 2003.
138. "An Integrated Engineering Approach in the Assessment of Children Born with a Single Functioning Ventricle: The Total Cavopulmonary Connection", seminar presented at Virginia Polytechnique Institute and University, VA, April 2003.
139. "Fluid Dynamics of the Fontan Circulation", Plenary Lecture 10th International Congress on Biological and Medical Engineering, Singapore, December 2002.
140. "Fluid Mechanics of the Mitral Valve", seminar presented at Nanyang Technological University, Singapore, November 2002.
141. "Understanding Biomechanics of Mitral Valve Repair", seminar presented at the National University of Singapore, November 2002.
142. "Integrated Engineering Approach in the Assessment of Children Born with a Single Functioning Ventricle: The Total Cavopulmonary Connection", presented at Stanford University, CA, May 2002.
143. "BME Ph.D. Degree Program", presented at the Workshop on European Biomedical Engineering Education, Eindhoven, The Netherlands, November 2001.
144. "Assessing the Impact of Modeled Vascular Structures on Power Losses in the Total Cavopulmonary Connection", presented at the Workshop on Modeling of Hemodynamics, Imperial College, London, UK, April 2001.
145. "Palliating Congenital Heart Lesions: Developing Diagnostic Tools and Surgical Planning using Computational Fluid Dynamics", presented at Workshop on Hemodynamics of Vascular Flow, Argonne National Lab, Argonne, IL, March 2001.
146. "In Vitro Studies of the Mechanisms of Ischemic Mitral Regurgitation", presented at the Workshop on Ischemic Mitral Regurgitation, Organized by Edwards Life Sciences, Monterey, CA, October 2000.
147. "Functional Characteristics of the Mitral Valve", Keynote Lecture, 10th International Conference on Biomedical Engineering, Singapore, December 2000.
148. "Fluid Mechanics of Valvular Heart Disease: Recent Advances", Seminar presented at Texas Tech University, Lubbock, TX, October 20, 2000.

149. "In Vitro Studies of the Mechanisms of Ischemic Mitral Regurgitation", presented at the Workshop on Ischemic Mitral Regurgitation, Organized by Baxter Edwards, Nice, France, March 1999.
150. "Quantification of Valvular Regurgitation", Seminar presented at Laval University, Quebec City, Canada, February 1999.
151. "Cardiovascular Fluid Mechanics: Recent Advances", Seminar presented at the University of Montreal, Montreal, Canada, February 1999.
152. "Fluid Mechanics of the Fontan Circulation", Seminar presented at Duke University, Durham, NC, March 1998.
153. "In Vitro Modelling for Prosthetic Valves", Lectures presented at Short courses organized by Medtronic, Inc. for Cardiac surgeons and Cardiologists at: Rome, Italy (January 1997), Hawaii (February 1997), Napa valley, Ca (April 1997), Naples, FL (May 1997), Aix-Baines, France (October 1997), and Amelia Island, FL (November 1997).
154. "Fluid Mechanics of Prosthetic Heart Valves", Lecture presented at the Bangalore University Medical School, Bangalore, India, June 1997.
155. "Fluid Mechanics of Prosthetic Heart Valves", Lecture presented at the Hyderabad University Medical School, Hyderabad, India, June 1997.
156. "Fluid Mechanics of Valvular Heart Disease: Recent Advances", Plenary Lecture, 9th International Conference on Biomedical Engineering, Singapore, December 1997.
157. "Fluid Mechanics of Valvular Heart Disease: Recent Advances", Lissner Award Lecture at the ASME Winter Annual Meeting, Dallas, TX, November 1997.
158. "Fluid Mechanics of Valvular Heart Disease," Seminar presented at the California Institute of Technology, Pasadena, CA, May 22, 1997.
159. "Fluid Mechanics of Prosthetic Heart Valves," Seminar presented at Oxford University School of Medicine, Oxford, UK, April 16, 1997.
160. "Application of the Immersed Boundary Method at Physiologic Reynolds Numbers to Thin-Walled Models of Cardiac Chambers," Computational Biology of the Heart: From Structure to Function, San Diego, CA, June 1997.
161. "Fluid Mechanics of the Native Mitral Valve", Lecture presented at a work shop on "The Mitral Valve: Concepts and Controversies - Seeking Resolution," organized by the Department of Surgery, University of Washington, Seattle, Washington, August 23 - 24, 1996.
162. "In Vitro Modeling for Prosthetic Valves", Lectures presented at Short Courses organized by Medtronic, Inc. for Cardiac Surgeons at: Turnbury, FL (March 1996), Bermuda (April 1996), Amelia Island, FL (June 1996), and Scottsdale, AZ (November, 1996).
163. "Essentials of Fluid Dynamics," "Physics of the Mitral Valve Apparatus," "Flow Patterns with the LVOT: Experimental Observations Including MRI", "Pressure Flow Characteristics of Native and Prosthetic Valves", Lectures presented at Cardiac Flow Dynamics Short Course

(University of Colorado Health Sciences Center - Division of Cardiology, The Children's Hospital, Denver, CO), Aspen, CO, August 29 - 31, 1996.

164. "Assessment of Diastolic Function with Velocity Encoded Magnetic Resonance Imaging", Lecture presented at the First European Diastology Meeting (European Heart Association), Nice, France, November 27 - 29, 1996.
165. "Essentials of Fluid Dynamics", Lecture presented at the First European Diastology Meeting (European Heart Association), Nice, France, November 27 - 29, 1996.
166. "Fluid Mechanics of Prosthetic Heart Valves", Seminar presented at the All India Institute of Medical Sciences, New Delhi, India, September 1996.
167. "Fluid Mechanics of Native Heart Valves," Invited lecture presented at the Gwalior Applied Mathematics Society, Gwalior, India, September 1996.
168. "Hemodynamics of Heart Valve Prostheses," Department of Cardiothoracic Surgery, New Delhi University Medical School, New Delhi, December 1995.
169. "Hemodynamics of Heart Valve Prostheses," Department of Cardiothoracic Surgery, Bombay University Medical School, Bombay, India, December 1995.
170. "Hemodynamics of Heart Valve Prostheses," Department of Cardiothoracic Surgery, Apollo Clinic, Madras, India, December 1995.
171. "In Vitro Engineering Studies of Prosthetic Heart Valves", Cardiology Update Meeting (organized by Medtronic, Inc.), Phoenix, Arizona, December 1995.
172. "Quantification of Valvular Regurgitation", Departments of Biomedical Engineering and Applied Mechanics, Sichuan Union University, Chengdu, People's Republic of China, May 1995.
173. "Fluid Mechanics of Prosthetic Heart Valves", Department of Applied Mechanics, Jitang-Xian University, Xian, People's Republic of China, May 1995.
174. "Fluid Mechanics of Prosthetic Heart Valves", Department of Bioengineering, Beijing University, Beijing, People's Republic of China, May 1995.
175. "Bioengineering at Georgia Tech and Fluid Mechanics of Heart Valves", Seminar presented to the Faculty of Engineering, University of Peradeniya, Kandy, Sri Lanka, July 1993.
176. "Fluid Mechanics of Heart Valves", Lecture presented at the Institution of Engineers, Colombo, Sri Lanka, June 1993.
177. "Physics of Doppler Ultrasound", Two-part lecture series presented to the Sri Lanka Medical Association, Colombo, Sri Lanka, June 1993.
178. "Fluid Mechanics of Regurgitant Valves", Seminar presented at the University of Linköping (Dept. of Biomedical Engineering), Sweden, April 1992.
179. "Hemodynamics of Prosthetic Heart Valves", Seminar presented at the University of Linköping (Dept. of Cardiothoracic Surgery), Sweden, April 1992.

180. "Hemodynamics of Artificial Heart Valves", Lecture at Symposium to honor the retirement of Professor O. Albrechtsen, Aarhus, Denmark, March 1992.
181. "Hemodynamics of Prosthetic Heart Valves", Seminar presented at the University of Leiden, The Netherlands, March 1992.
182. "In Vitro Studies on Prosthetic Heart Valves", Lecture presented Scandinavian Society of Thoracic and Cardiovascular Surgery-Experimental Research Working Group, Geilo, Norway, February 1992.
183. "Hemodynamics of Prosthetic Heart Valves", Seminar presented at the University of Copenhagen, Denmark, February 1992.
184. "The Aortic Valve: Patient/Prosthesis Mismatch", Medtronic Cardiovascular Technology Symposium, Ayrshire, Scotland, October 1991.
185. "The Value and Application of Echo-Doppler Techniques", Medtronic Cardiovascular Technology Symposium, Ayrshire, Scotland, October 1991.
186. "Hemodynamics of Prosthetic Heart Valves", Seminars (two) presented at Dartmouth School of Medicine, Dartmouth, NH, September 1991.
187. "Basic Principles of Conventional Color Doppler Flow Mapping", 5th Annual Conference on 2D Echo, Conventional and Color Doppler Echocardiography (University of Alabama School of Medicine) Callaway Gardens, GA, October 1991.
188. "Quantitation of Valvular Regurgitation", Seminar presented at the Department of Biomedical Engineering, Hokkaido University, Japan, July 1991.
189. "Quantitative Color Doppler Flow Mapping of Cardiac Blood Flow", ASME Biomechanics Symposium, Columbus, OH, June 1991.
190. "Fluid Mechanics of Prosthetic Heart Valves", Seminar presented at the Greenlane Hospital, University of Auckland, New Zealand, December 1990.
191. "Basic Principles of Conventional and Color Doppler Flow Mapping", 4th Annual Conference on 2D Echo, Conventional and Color Doppler Echocardiography, University of Alabama School of Medicine, Callaway Gardens, GA, October 1990.
192. "Cardiac Blood Flow", Keynote Lecture at 7th Meeting of the European Society of Biomechanics, Aarhus, Denmark, July 1990.
193. "Fluid Mechanics of Prosthetic Heart Valves", Seminar presented at the Division of Cardiology, Laval University School of Medicine, Quebec City, Canada, April 1990.
194. "Quantitative Applications of Color Flow Doppler in Valvular Heart Disease", Fireside Panel Discussion, 39th Annual Scientific Sessions - American College of Cardiology, New Orleans, LA, March 1990.
195. "Current Limitations of Color Doppler Flow Mapping Technology", 6th Annual Symposium on Recent Advances in 2D, Conventional and Color Doppler Echocardiography, University of Alabama School of Medicine, New Orleans, LA, March 1990.

196. "Basic Principles of Conventional Doppler", 3rd Conference on 2D Echo, Conventional and Color Doppler Echocardiography, University of Alabama School of Medicine, Callaway Gardens, GA, October 1989.
197. "Fluid Mechanics of Artificial Heart Valves", Seminar Presented at the Department of Biology, Morehouse College, Atlanta University, Atlanta, GA, September 1989.
198. "In Vitro Evaluation of Artificial Heart Valves", Postgraduate Course on Cardiovascular Flow Dynamics, Scandinavian Association of Thoracic and Cardiovascular Surgery, Aarhus, Denmark, September 1989.
199. "Surgical Approach to Basic Fluid/Hemodynamics", Postgraduate Course on Cardiovascular Flow Dynamics, Scandinavian Association of Thoracic and Cardiovascular Surgery, Aarhus, Denmark, September 1989.
200. "Practical Aspects of Ultrasound Physics in the Study of Prosthetic Valves", Sixth Annual Doppler Echocardiography Color Flow Imaging Seminar, Bowman Gray School of Medicine, Charleston, SC, September 1989.
201. "Overview of the Physics of Ultrasound as Applied to Conventional Doppler and Doppler Color Flow Imaging", Sixth Annual Doppler Echocardiography Color Flow Imaging Seminar, Bowman Gray School of Medicine, Charleston, SC, September 1989.
202. "Physics of Doppler & Color Flow Mapping", Short Course on 2-D Transesophageal & Epicardial Echocardiography, Emory University School of Medicine, Atlanta, GA, May 1989.
203. "Physics of Doppler & Color Flow Mapping", Seminar Presented at the Division of Cardiology, Medical University of South Carolina, Charleston, SC, May 1989.
204. "Principles of Fluid Dynamics as Applied to Prosthetic Heart Valves", Short Course on Frontiers in Heart Valve Therapy (Baxter-Edwards Laboratories), Irvine, CA, May 1989.
205. "Flow Characteristics of Prosthetic Heart Valves", 2nd Int'l Conference on Echocardiography & Doppler in Cardiac Surgery, Salzburg, Austria, April 1989.
206. "Basic Physics of Doppler & Color Flow Mapping", Fourth International Congress on Cardiac Doppler, Anaheim, CA, March 1989.
207. "Physics of Doppler & Color Flow Mapping", Short Course on Echocardiography & Color Flow Mapping (St. Josephs Heart Institute), Tampa, FL, February 1989.
208. "Principles of Fluid Dynamics as Applied to Prosthetic Heart Valves", Short Course on Frontiers in Heart Valve Therapy (Baxter-Edwards Laboratories), Irvine, CA, November 1988.
209. "Conventional and Color Doppler Assessment of Prosthetic Heart Valves", 2nd International Conference on Conventional Color Doppler Echocardiography (Univ. of Alabama - Birmingham Medical School), Callaway Gardens, GA, October 1988.
210. "Basics of Pulsed and Continuous Wave Doppler", 2nd International Conference on Conventional Color Doppler Echocardiography (Univ. of Alabama - Birmingham Medical School), Callaway Gardens, GA, October 1988.

211. "Pulmonary Artery Fluid Mechanics", Seminar presented at the Department of Chemical Engineering, Penn State University, PA, October 1988.
212. "Practical Aspects of Ultrasound Physics in the Study of Prosthetic Valve Function", 5th Annual Doppler Echocardiography Color Flow Imaging Seminar (Bowman Gray School of Medicine), Charleston, SC, September 1988.
213. "Understanding the Physics of Ultrasound as Applied to Echo Doppler and Color Flow Imaging", 5th Annual Doppler Echocardiography Color Flow Imaging Seminar (Bowman Gray School of Medicine), Charleston, SC, September 1988.
214. "Doppler Assessment of Prosthetic Heart Valves", Seminar presented at the Division of Cardiology, Sherbrook University Medical School, Sherbrook, Canada, May 1988.
215. "Experimental Evaluation of Prosthetic Heart Valve Flow", First International Conference of Doppler Ultrasound in Cardiac Surgery, Vienna, Austria, April 1988.
216. "Fluid Mechanics of Artificial Heart Valves", Spotlight on Biomedical Technology, Georgia Tech, Atlanta, GA, April 1988.
217. "In Vitro Doppler Studies of Prosthetic Heart Valves and Their Implications in Clinical Assessment", 4th Annual Symposium on Recent Advances in Doppler Flow Mapping (Univ. of AL-Birmingham Medical School), Atlanta, GA, March 1988.
218. "Fluid Mechanics of Aortic Stenosis and Pulmonic Stenosis", Seminar presented at the Surgery Branch - National Heart, Lung and Blood Institute, NIH, Bethesda, MD, March 1988.
219. "Experimental Evaluation of Prosthetic Heart Valve Flows", First International Conference of Echocardiography and Doppler in Cardiac Surgery, Vienna, Austria, April 1988.
220. "The Fundamental Difference Between Jet Volume and Regurgitant Volume", Update in Echocardiography (Harvard Medical School), Boston, October 1987.
221. "Pressure Recovery: Advantage of Doppler vs. Invasive Gradient Determination", Update in Echocardiography (Harvard Medical School), Boston, October 1987.
222. "Physics of Doppler Flow Mapping", First International Conference on Color Doppler Flow Mapping, (Univ. of Alabama - Birmingham Medical School), Callaway Gardens, GA, October 1987.
223. "Fluid Mechanics of Artificial Heart Valves", Seminar presented at the Department of Mechanical Engineering, National University of Singapore, July 1987.
224. "Fluid Mechanics of Aortic Stenosis", Invited Lecture presented at International Congress on Aortic Stenosis, Paris, France, May 1987.
225. "Doppler Flow Mapping of Prosthetic Heart Valves", Seminar presented at the Department of Thoracic and Cardiovascular Surgery, University of Bergen, Norway, May 1987.
226. "Doppler Flow Mapping of Prosthetic Heart Valves", Seminar presented at the Department of Biomedical Engineering, Technical University of Trondheim, Norway, May 1987.

227. "Physics of Doppler Flow Mapping", 3rd Annual Symposium on Recent Advances in Doppler Color Flow Mapping, New Orleans, LA, March 1987.
228. "Fluid Mechanics of Prosthetic Heart Valves", Seminar presented at the University of Lausanne Medical School, Lausanne, Switzerland, January 1987.
229. "Fluid Mechanics of Prosthetic Heart Valves", Seminar presented at the University of Basel Medical School, Basel, Switzerland, January 1987.
230. "Doppler Flow Mapping of Prosthetic Heart Valves", Seminar presented at Medtronic Inc., Minneapolis, MN, December 1986.
231. "Doppler Flow Mapping of Prosthetic Heart Valves", Seminar presented at the Mayo Clinic, Rochester, MN, December 1986.
232. "Color Doppler Assessment of Regurgitation: Is It Quantitative?", Update in Echocardiography (Harvard Medical School), Boston, MA, October 1986.
233. "When Does 4V2 Not Work? Doppler Estimation of Gradient", Update in Echocardiography (Harvard Medical School), Boston, MA, October 1986.
234. "Physics of Blood Flow", Seminar presented at Seimens Inc. (Ultrasound Division), Pleasanton, CA, June 1986.
235. "Physics of Blood Flow", Seminar presented at Advanced Technology Laboratories, Bellvue, WA, June 1986.
236. "Physics of Blood Flow", Seminar presented at General Electric Co. (Ultrasound Division), Rancho Cordova, CA, June 1986.
237. "Doppler Flow Mapping of Prosthetic Heart Valves", Seminar presented at Shiley Laboratories, Irvine, CA, June 1986.
238. "Flow Characteristics Across Prosthetic Valves and Relevance to Doppler Assessment", Advanced Echocardiography and Doppler Ultrasound Course (Am. College of Cardiology), San Diego, CA, June 1986.
239. "Physics of Abnormal Intracardiac and Vascular Blood Flow", Advanced Echocardiography and Doppler Ultrasound Course (Am. College of Cardiology), San Diego, CA, June 1986.
240. "Physics of Normal Intracardiac and Vascular Blood Flow", Advanced Echocardiography and Doppler Ultrasound Course (Am. College of Cardiology), San Diego, CA, June 1986.
241. "Laser Doppler Anemometry: Principles and Technique. How Does It Help in the Validation of Color Doppler Findings?", Second Annual Symposium on Recent Advances in Doppler Color Flow Mapping, Atlanta, GA, March 1986.
242. "Fluid Mechanics and Hydrodynamics as Applied to Cardiac Disease", Fifth Curriculum on Color Flow Mapping and Cardiac Doppler, Atlanta, GA, March 1986.
243. "Hydrodynamics Basis of Blood Flow in the Normal and Abnormal Circulation", Doppler Ultrasound Course, American Heart Association Meeting, Washington, DC, November 1985.

244. "Fluid Mechanics of Prosthetic Heart Valves", Seminar presented at the Fluid Mechanics Institute, Fachhochschule of Munich, West Germany, July 1985.
245. "Fluid Mechanics of Prosthetic Heart Valves", Seminar presented at the Institute for Experimental Surgery, Technical University of Munich, West Germany, July 1985.
246. "Fluid Mechanics of Prosthetic Heart Valves", Seminar presented at the Fluid Mechanics Institute, Technical University of West Berlin, West Germany, July 1985.
247. "Fluid Mechanics of Prosthetic Heart Valves", Seminar presented at the Fluid Mechanics Institute, University of Essen, West Germany, June 1985.
248. "How Can the Doppler Color Flow Equipment be Calibrated for Accuracy? Doppler Color Flow Mapping - Laser Doppler Correlations", Symposium on Recent Advances in Doppler Echocardiography, American College of Cardiology Meeting, Anaheim, CA, March 1985.
249. "Hydrodynamic Basis of Blood Flow in the Normal and Abnormal Circulation", Doppler Ultrasound Course, American College of Cardiology Meeting, Anaheim, CA, March 1985.
250. "Fluid Mechanics of Prosthetic Heart Valves", Doppler Ultrasound Course, American Heart Association Meeting, Miami Beach, FL, November 1984.
251. "Basic Principles of Blood Flow Dynamics", Doppler Ultrasound Course, American Heart Association Meeting, Miami Beach, FL, November 1984.
252. "Normal and Abnormal Flow Dynamics", Lecture presented at the Doppler Ultrasound Course, American College of Cardiology, Dallas, TX, March 1984.
253. "Fluid Mechanics of Prosthetic Heart Valves", Seminar presented at the Physiologic Flow Studies Unit, Imperial College, University of London, England, July 1984.
254. "In Vitro Testing Methods for Prosthetic Heart Valves", Seminar presented at the Dept. of Medical Physics, University of Sheffield, Sheffield, England, July 1984.
255. "In Vitro Fluid Dynamics of the Medtronic-Hall Tilting Disc Valve", (with Dr. R. H. Franch) Emory University Medical T.V. Network, Atlanta, GA, June 1984.
256. "Fluid Mechanics of Prosthetic Heart Valves", Division of Cardiovascular Medicine, University of Kentucky Medical School, Lexington, KY, June 1984.
257. "In Vitro Hemodynamic Studies on Prosthetic Heart Valves in Current Clinical Use", Bureau of Medical Devices (FDA) Workshop on Prosthetic Heart Valves, Annapolis, MD, July 1983.
258. "Current Status of Prosthetic Heart Valves", 185th National ACS Meeting, Seattle, WA, March 1983.
259. "In Vitro Hemodynamics of the St. Jude Bileaflet Heart Valve Prosthesis", 3rd International Symposium on the St. Jude Medical Heart Valve, Scottsdale, AZ, November 1982.
260. "In Vitro Fluid Dynamics of Prosthetic Heart Valves", Presented at Helmholtz Institute for Biomedical Research, RWTH Aachen, W. Germany, July 1982.

261. "In Vitro Fluid Dynamics of Prosthetic Heart Valves", Seminar presented at the Technical University of Eindhoven, Eindhoven, The Netherlands, July 1982.
262. "In Vitro Fluid Dynamics of Prosthetic Heart Valves", Seminar presented at the Courant Institute of Mathematics, New York University, New York, April 1982.
263. "Laboratory & Clinical Testing of Prosthetic Heart Valves", Presented with Dr. R. H. Franch, Emory University Medical T.V. Network, Atlanta, GA, February 2, 1981.
264. "In Vitro Fluid Dynamics of Prosthetic Aortic Heart Valves", Seminar presented at Dept. of Mechanical Engineering, University of Pennsylvania, Philadelphia, PA, February 1981.
265. "Prosthetic Heart Valves: What Have We Learned From Our Clinical Pathologic Experience", Invited Paper at NBS Conference on Implant Retrieval: Material and Biological Analysis, Gaithersburg, MD, May 1980.
266. "Fluid Dynamics Testing of Prosthetic Aortic Heart Valves", Seminar presented at the Dept. of Chemical Engineering, Rice University, Houston, TX, September 1979.
267. "Fluid Dynamic Testing of Prosthetic Aortic Heart Valves", Keynote Speaker at the First Colloquium on Heart Valve Prostheses, Windedale, TX, September 1979.

CONFERENCE PRESENTATIONS WITH PROCEEDINGS

1. Pierce E.L., Paul D.M., Naran A., Bloodworth C.H., Gorman R.C., Gorman J.H., Yoganathan A.P., "Suture Anchoring in the Atrioventricular Valves: Collagen Mechanics and Their Potential Implications", 7th Biennial Heart Valve Biology and Tissue Engineering Meeting, Hilton Head, S.C. October 2016. (Poster)
2. Toma, M., Bloodworth, C.H., Einstein, D.R., Cochran, R.P., Yoganathan, A.P., Kunzelman, K.S., "Fluid Dynamics of Mitral Valve Closure: Smooth Particle Hydrodynamics Fluid-Structure Interaction Simulationse", 12th World Congress on Computational Mechanics, South Korea, July 2016.
3. Khalighi A.H., Drach A., Bloodworth C.H., Pierce E.L., Yoganathan A.P., Gorman R.C., Gorman J.H. III, Sacks M.S., "The Mitral Valve Chordae Tendineae: A Topological and Geometric Analysis", Summer Biomechanics, Bioengineering, and Biotransport Conference, National Harbor, M.D., June 2016.
4. Khalighi AH, Drach A, Bloodworth CH, Pierce EL, Yoganathan AP, Gorman RC, Gorman JH III, Sacks MS. Multi-Resolution Models of the Mitral Valve Leaflets for High Fidelity Biomechanical Simulations. Summer Biomechanics, Bioengineering, and Biotransport Conference, National Harbor, MD. June 2016. (Poster)
5. Easley, T.F., Bloodworth, C.H., Yoganathan, A.P. "Design of a Novel In Vitro Simulation of a Dynamically Contracting Mitral Valve Annulus", 2016 Summer Biomechanics, Bioengineering, and Biotransport Conference, National Harbor, MD, June 2016.

6. Houser, S., Okafor, I., Raghav, V., Yoganathan, A., "Understanding the Fluid Mechanics of Aortic Regurgitation," 2016 Summer Biomechanics, Bioengineering, and Biotransport Conference, National Harbor, MD, June 2016.
7. Okafor, I., Raghav, V., Kumar, G., Yoganathan, A., "Aortic Regurgitation on Left Ventricular Diastolic Flow," 2016 Summer Biomechanics, Bioengineering, and Biotransport Conference, National Harbor, MD, June 2016. (Poster).
8. Trusty, P., Wei, A., Tree, M., Kanter, K., Fogel, M., Yoganathan, A., Slesnick, T., "Local Hemodynamic Differences between Commercially Available Y-Grafts and Traditional Fontan Baffles under Simulated Exercise Conditions: Implications for Exercise Tolerance," 5th International Conference on Engineering Frontiers in Pediatric and Congenital Heart Disease, Orlando, Florida, June 2016.
9. Trusty, P., Luffel, M., Rossignac, J., Restrepo, M., Fogel, M., Kanter, K., Slesnick, T., Yoganathan, A., "SURGEM: Computer-aided Pediatric Cardiovascular Surgical Planning," FDA/BMES Frontiers in Medical Devices Conference, College Park, Maryland, May 2016.
10. Pierce E.L., Paul D.M., Naran A., Bloodworth C.H., Yoganathan A.P., "Suture Anchoring in the Tricuspid Annulus: Tissue Mechanics and Their Potential Implications", 11th International Symposium on Biomechanics in Vascular Biology and Cardiovascular Disease, Atlanta, GA, May 2016. (Poster)
11. Salim, M. T., Arjunon, S., Rathan, S., Jo, H., Yoganathan, A. P., "Elevated Cyclic Stretch Modulates the Expression of miR-214 in Aortic Valve", 11th International Symposium on Biomechanics in Vascular Biology and Cardiovascular Disease, Atlanta, GA, May 2016. (Poster).
12. Midha, P.A., Raghav, V., Condado, J.F., Okafor, I, Lerakis, S., Thourani, V.H., Babaliaros, V., Yoganathan, A.P. "Optimisation of transcatheter valve-in-valve therapy: an in vitro haemodynamic evaluation", EuroPCR 2016, Paris, France, May 2016. (Poster)
13. Tree, M., Trusty, P., Munz, B., Samuel, M., Slesnick, T. C., Maher, K. O., Yoganathan, A. P., Deshpande, S., " In Vitro Examination of the HeartWare Circulite VAD in the Fontan Circulation ", International Society of Heart and Lung Transplantation Annual Meeting, Washington, D.C., April 2016.
14. Wei, Z., Trusty, P., Lakshman, A., Haggerty, C., Yoganathan, A., "Effect of transient boundary conditions on modeling the hemodynamics in total cavopulmonary connections," 8th International Bio-Fluid Symposium, Pasadena, California, February 2016.
15. Raghav, V., Gnanamanickam, E., Yoganathan, A., " Measurement of pulsatile wall shear stress using micro sensors," 8th International Bio-Fluid Symposium, Pasadena, California, February 2016.
16. Yun, M., Okafor, I., Aidun, C., Yoganathan, A., " A Multiphase Flow Methodology for Quantifying Blood element Damage in Cardiovascular Flows," 8th International Bio-Fluid Symposium, Pasadena, California, February 2016. (Poster)
17. Trusty, P.M., Restrepo, M.; Fogel, M.A., Kanter, K., Yoganathan, A.P., Slesnick, T.C., "Hemodynamic Evaluation of 30 Y-Graft Fontan Completions", American Heart Association, Scientific Sessions, Orlando, FL, November 2015.

18. Khalighi, A.H., Drach, A., Lee, C.H., Bloodworth, C.H., Pierce, E.L., Jensen, M.O., Yoganathan, A.P., Gorman, R.C., Gorman, J.H. III, Sacks, M.S., "Development of a Population-Averaged Model of the Complete Mitral Valve Geometry", Biomedical Engineering Society 2015 Annual Meeting, Tampa, FL, October 2015.
19. Klusak, E., Okafor, I., Raghav, V., Yoganathan, A., Quinlan, N., "Time-resolved PIV measurements of a leakage flow near-hinge in a clinical St. Jude Medical bileaflet heart valve model", Biomedical Engineering Society 2015 Annual Meeting, Tampa, FL, October 2015. (Poster)
20. Zhenglun Wei, Maria Restrepo, Alessandro Veneziani, Kevin K. Whitehead, Stephen M. Paridone, Mark A. Fogel, Ajit P. Yoganathan, "A Patient-Specific Multi-scale Surgical Planning Framework to Assess Exercise Physiology of Fontan Patients", Computational Fluid Dynamics (CFD) in Medicine and Biology II, September 2015, Albufeira, Portugal.
21. Toma, M., Einstein, D.R., Yoganathan, A.P., Cochran R.P., Kunzelman K.S., "Role of Detailed Chordal Structure in Mitral Valve Fluid-Structure Interaction Simulations", 4th International Conference on Computational and Mathematical Biomedical Engineering (CMBE2015), France, June 2015.
22. Toma, M., Jensen, M.O., Einstein, D.R., Yoganathan, A.P., Cochran R.P., Kunzelman K.S., "Fluid-Structure Interaction Analysis of Mitral Valve Forces Using a Comprehensive Model With 3D Chordal Structure: Synergy of Modeling and Experiments", SB3C Summer Biomechanics, Bioengineering and Biotransport Conference, Utah, USA, June 2015.
23. Pierce, E.L., Bloodworth, C.H., Naran, A., Easley, T.F., Jensen, M.O., Yoganathan, A.P., "Novel Micro-Computed Tomography Technique for Soft Tissue Deformation Tracking – Application to the Mitral Valve", Summer Biomechanics, Bioengineering, and Biotransport Conference, Snowbird, UT, June 2015.
24. Khalighi, A.H., Drach, A., ter Huurne, F.M., Lee, C.H., Bloodworth, C.H., Pierce, E.L., Jensen, M.O., Yoganathan, A.P., Sacks, M.S., "Characterization of Mitral Valve Geometry and Development of a Population-Averaged Model", Summer Biomechanics, Bioengineering, and Biotransport Conference, Snowbird, UT, June 2015.
25. Bloodworth, C.H., Pierce, E.L., Easley, T.F., Toma, M., Jensen, M.O., Yoganathan, A.P., "Capturing Detailed 3D Mitral Valve Geometry for Computational Valve Modeling", Summer Biomechanics, Bioengineering, and Biotransport Conference, Snowbird, UT, June 2015.
26. Khalighi, A.H., Drach, A., ter Huurne, F.M., Lee, C.H., Bloodworth, C.H., Pierce, E.L., Jensen, M.O., Yoganathan, A.P., Sacks, M.S., "Multi-scale Framework for the Characterization of the Full Mitral Valve Geometry and Development of a Population-Averaged Model", 8th International Conference on Functional Imaging and Modeling of the Heart, Maastricht, The Netherlands, June 2015.
27. Pierce, E.L., Paul, D.M., Wells, S.K., Bloodworth, C.H., Jensen, M.O., Siefert, A.W., Gorman, R.C., Gorman, J.H. III, Yoganathan, A.P., "Why is Annuloplasty Ring Dehiscence More Common on the Posterior Mitral Valve Annulus?", The Heart Valve Society Inaugural Scientific Meeting, Monte Carlo, Monaco, May 2015.

28. Midha, P.A., Arjunon, S., Uceda, D., Raghav, V., Condado, J.F., Lerakis, S., Thourani, V.H., Babaliaros, V., Yoganathan, A.P., "An In Vitro Case Study: How Can We Help a Patient with a Small Failing Bioprosthesis?", The Heart Valve Society Inaugural Scientific Meeting, Monte Carlo, Monaco, May 2015.
29. Okafor, I.U., Houser, S., Lerakis, S., Kumar, G., Yoganathan, A.P., "Acute Aortic Regurgitation Post Chronic Aortic Stenosis: A Ventricular Performance Analysis", The Heart Valve Society Inaugural Scientific Meeting, Monte Carlo, Monaco, May 2015.
30. Toma, M., Jensen, M.O., Einstein, D.R., Yoganathan, A.P., Cochran R.P., Kunzelman K.S., "Validating Fluid Structure Interaction in Medical Device Design with Force Measurements", BMES Frontiers in Medical Devices Conference: Innovations in Modeling and Simulation", Washington DC, USA, May 2015.
31. Khalighi, A.H., Drach, A., ter Huurne, F.M., Lee, C.H., Bloodworth, C.H., Pierce, E.L., Jensen, M.O., Yoganathan, A.P., Sacks, M.S., "Multi-Scale Geometric Framework for Population-Averaging of the Mitral Valve Apparatus", Biomedical Engineering Society/Food and Drug Administration Frontiers in Medical Devices Conference, College Park, MD, May 2015.
32. Midha, P.A., Arjunon, S., Uceda, D., Raghav, V., Condado, J.F., Lerakis, S., Thourani, V.H., Babaliaros, V., Yoganathan, A.P., "An In Vitro Investigation of Hemodynamic and Pullout Forces in a Valve-in-Valve Implantation", BMES/FDA Frontiers in Medical Devices Conference, College Park, MD, May 2015.
33. Pierce, E.L., Spragan, D.D., Bloodworth, C.H., Kawamura, T., Takayama, T., Jensen, M.O., Siefert, A.W., Gorman, R.C., Gorman, J.H. III, Yoganathan, A.P., "Can Optimized Annuloplasty Ring Size and Shape Mitigate Risk of Dehiscence?", American Association for Thoracic Surgery Mitral Conclave 2015, New York, NY, April 2015.
34. Drach, A., Khalighi, A.H., ter Huurne, F.M., Lee, C.H., Bloodworth, C.H., Pierce, E.L., Jensen, M.O., Yoganathan, A.P., Sacks, M.S., "Population-Averaged Geometric Model of Mitral Valve from Patient-Specific Imaging Data", Design of Medical Devices Conference, Minneapolis, MN, April 2015.
35. Okafor, I.U., Garcia, C., Barker, A.J., Oshinski, J.N., Yoganathan, A.P., "A Physiologic Flow Phantom for the Evaluation of 4D Flow MRI in the Left Ventricle", Society of Cardiovascular Magnetic Resonance 2015 Annual Meeting, Nice, France, February 2015.
36. Raghav, V., Sekar, K., Garcia, C., Gnanamanickam, E., Yoganathan, A., " Measurement of wall shear stress in a pulsatile pipe flow system using micro-pillar shear stress sensor (MPS3)", presented at the Bulletin of the American Physical Society, 67th Annual Meeting of the American Physical Society Division of Fluid Dynamics, San Francisco, CA, November 2014
37. Tree, M., Fagan, K., Yoganathan, A. P., "The Direct Effect of Flexible Walls on Fontan Connection Fluid Dynamics," 67th Annual Meeting of the American Physical Society Division of Fluid Dynamics, San Francisco, CA, November 2014.
38. Tang, E., Khiabani, R.H., Whitehead, K.K., Restrepo, M., Mirabella, L., Bethel, J., Paridon, S.M., Marino, B.S., Fogel, M.A., Yoganathan, A.P., "Total Cavopulmonary Connection Geometry and Hemodynamics: Implications on Patient Exercise Performance", American Heart Association Scientific Sessions 2014, Chicago, IL, November 2014.

39. Bloodworth, C.H., Pierce, E.L., Easley, T.F., Toma, M., Khalighi, A., Lee, C.H., Sacks, M., Siefert, A.W., Jensen, M.O., Yoganathan, A.P., "Design of an In Vitro Simulation Pipeline for the Development of Computational Mitral Valve Modeling", BMES 2014 Annual Meeting, San Antonio, TX, October 2014.
40. Grbic, S., Easley, T., Mansi, T., Cochran, R.P., Neumann, D., Pierce, E., Jensen, M.O., Bloodworth, C.H., Siefert, A.W., Krebs, J., Yuh, D., Yoganathan, A.P., Comaniciu, D., "Multi-Modal Validation Framework of Mitral Valve Geometry and Biomechanical Models", BMES 2014 Annual Meeting, San Antonio, TX, October 2014.
41. Skov, S.N., Røpcke, D.M., Siefert, A.W., Ilkjær, C., Tjørnild, M.J., Yoganathan, A.P., Nygaard, H., Nielsen, S.L., Jensen, M.O., "New Concept for Measuring the Forces in Mitral Valve Annuloplasty Rings", 2014 BMES Annual Meeting, San Antonio, TX, October 2014.
42. Rathan, S., Rajamani, A., Lee, S., Kumar, S., Aphivantrakul, A., Jo, H., Yoganathan, A.P., "Role of Shear-and Side-dependent MicroRNAs in Aortic Valve Biology", 6th Biennial Heart Valve Biology & Tissue Engineering Meeting, London, UK, September 2014.
43. Grbic, S., Easley, T.F., Mansi, T., Bloodworth, C.H., Pierce, E.L., Voigt, I., Neumann, D., Krebs, J., Yuh, D.D., Jensen, M.O., Comaniciu, D., Yoganathan, A.P., "Multi-modal Validation Framework of Mitral Valve Geometry and Functional Computational Models" In proceedings of the STACOM 2014 workshop series, Boston, MA, September 2014.
44. Lee, M.E., Siefert, A.W., Pierce, E.L., Aoki, C., Takebayashi, S., Jensen, M.O., Gorman, R., Yoganathan, A.P., Gorman, J.H.III., "Mitral Annuloplasty Cyclic Suture Forces: True-sized Versus Undersized Annuloplasty Rings", AATS Cardiovascular Valve Symposium, Istanbul, Turkey, September 2014. (Poster Presentation)
45. Toma, M., Einstein, D.R., Yoganathan, A.P., Cochran, R.P., Kunzelman, K.S., "Fluid-Structure Interaction Analysis Utilising a Comprehensive Mitral Valve Model", 11th World Congress on Computational Mechanics (WCCM XI), Barcelona, Spain, July 2014.
46. Santhanakrishnan, A., Okafor, I., Mirabella, L., Oshinski, J., Yoganathan, A.P., "Characterization of Wall Motion and Hemodynamics on an Idealized Left Ventricle Phantom Using Multiple Medical and Laboratory-level Modalities for Validation of FSI Simulations", World Congress of Biomechanics, Boston, MA, July 2014.
47. Saikrishnan, N., Okafor, I., Yoganathan, A.P., "Bicuspid Aortic Valves are Associated with Increased Turbulence and Wall Shear Stress Compared to Trileaflet Aortic Valves", World Congress of Biomechanics, Boston, MA, July 2014.
48. Tang, E., Khiabani, R.H., Restrepo, M., Mirabella, L., Whitehead, K.K., Fogel, M.A., Yoganathan, A.P., "'Stressing' the Fontan Circulation", 7th World Congress of Biomechanics, Boston, MA, July 2014.
49. Rabbah, J.P.M., Pierce, E.L., Wei, Q., Thiele, K., Jensen, M.O., Yoganathan, A.P. "Accurate Quantification of Mitral Regurgitation Through 3D Echocardiography Using an Automated Field Optimization Method", American Society of Echocardiography: 25th Annual Scientific Sessions, Portland, Oregon, June 2014. (Poster Presentation)
50. Jensen, M.O., Siefert, A.W., Toma, M., Gorman, R.C., Gorman III, J.H., Yoganathan, A.P., "Utilizing Computational and Experimental Tools in Tandem for Development and

Evaluation of Mitral Valve Devices" FDA Medical Device and Innovation Consortium Annual Meeting, Washington, DC, June 2014.

51. Pierce, E.L., Siefert, A.W., Lee, M., Aoki, C., Gorman, R.C., Gorman, J.H. III, Yoganathan, A.P., "Annuloplasty Suture Forces: Preliminary Insights for Identifying the Mechanisms of Ring Dehiscence" (Oral Presentation), Valves in the Heart of the Big Apple VIII, Heart Valve Society of America, New York, NY, May 2014.
52. Rathan, S., Sanchez-Palencia, D., Fogg, R., Ankeny, C.J., Briceno, J.C., Yoganathan, A.P., "Small Intestinal Submucosa Scaffolds: The role of Fabrication Parameters in Modulating the Mechanotransduction of Seeded Endothelial Cells", The 14th Biennial Meeting of the International Society for Applied Cardiovascular Biology (ISACB), Cleveland, OH, April 2014.
53. Tang, E., Khiabani, R.H., Whitehead, K.K., Restrepo, M., Bethel, J., Fogel, M.A., Yoganathan, A.P. "Relationship between Total Cavopulmonary Connection Geometry and Exercise Hemodynamics", American College of Cardiology 63rd Annual Scientific Session, Washington, DC, March 2014.
54. Maria, R., Tang, E., Haggerty, C.M., Khiabani, R.H., Mirabella, L., Bethel, J., Whitehead, K.K., Fogel, M.A., Yoganathan, A.P., "Quantification of Vessel Growth and Flow Changes in Fontan Patients: Impact on Hemodynamics", American Heart Association Scientific Sessions, Dallas, TX, November 2013.
55. Santhanakrishnan, A., Okafor, I., Angirish, Y., Yoganathan, A.P., "Effect of varying heart rate on intra-ventricular filling fluid dynamics," 66th Annual American Physical Society Division of Fluid Dynamics Meeting, Pittsburgh, PA, November 2013.
56. Okafor, I., Angirish, Y., Yoganathan, A.P., Santhanakrishnan, A., "Effect of mitral orifice shape on intra-ventricular filling fluid dynamics," 66th Annual American Physical Society Division of Fluid Dynamics Meeting, Pittsburgh, PA, November 2013.
57. Rathan, S., Yoganathan, A.P., O'Neill, W.C., "Inorganic Pyrophosphate and Aortic Valve Calcification", Kidney Week, American Society of Nephrology, Atlanta, GA, November 2013. (Poster Presentation)
58. Crouch, C., Restrepo, Haggerty, C., Kanter, K., Slesnick, T., Rossignac, J., Spray, T., Fogel, M., Yoganathan, A.P., "Effect of the superior vena cava placement in the Y-graft Fontan for single ventricle congenital heart defects", Biomedical Engineering Society 2013 Annual Meeting, Seattle, WA, September 2013. (Poster Presentation)
59. Mundkur, M., Restrepo, M., Tang, E., Haggerty, C., Fogel, M., Valente, A., McElhinney, D., Yoganathan, A.P., "Hemodynamic Impact of the Anatomical Differences between the Lateral Tunnel and Extra-Cardiac Fontan Connections", Biomedical Engineering Society 2013 Annual Meeting, Seattle, WA, September 2013. (Poster Presentation)
60. Yun, B.M., Aidun, C.K., Yoganathan, A.P., "Blood Damage Quantification in Cardiovascular Flows through Medical Devices Using a Novel Suspension Flow Method", ASME/FDA 2013 1st Annual Frontiers in Medical Devices: Applications of Computer Modeling and Simulation, Washington, DC, September 2013.
61. Saikrishnan, N., Rabbah, J.P., Gunning, P., Okafor, I., Santhanakrishnan, A., McNamara, L., Yoganathan, A.P., "Experimental Platforms for Validation of Computational Approaches to

- Simulating Cardiovascular Flows", ASME/FDA 2013 1st Annual Frontiers in Medical Devices: Applications of Computer Modeling and Simulation, Washington, D.C., September 2013.
62. Rabbah, J.P., Saikrishnan, N., Siefert, A.W., Yoganathan, A.P., "Developing an Experimental Database for Mitral Valve Computational Modeling, Surgical Repair, and Device Evaluation", ASME/FDA 2013 1st Annual Frontiers in Medical Devices: Applications of Computer Modeling and Simulation, Washington, D.C., September 2013.
 63. Siefert, A.W., Icenogle, D.A., Rabbah, J.P.M., Saikrishnan, N., Rossignac, J., Lerakis, S., Yoganathan, A.P., "Accuracy of a Mitral Valve Segmentation Method for Real-Time 3D Echocardiography Using Disease Mitral Valve Models", The Society of Heart Valve Disease 7th Biennial Congress, Venice, Italy, June 2013.
 64. Khiabani, R., Phoneko, S., Srinimukesh, H., Tang, E., Fogel, M., Yoganathan, A.P., "Effect of Flow Pulsatility and Wall Compliance on the Energy Loss in the Total Cavopulmonary Connection", ASME Summer Bioengineering Conference, Sunriver, OR, June 2013.
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 66. Rathan, S., O'Neill, W.C., Yoganathan, A.P., "The role of inorganic pyrophosphate in aortic valve calcification", 7th Biennial Congress, The Society for Heart Valve Disease, Venice, Italy, June 2013.
 67. Sanchez, D., Rathan, S., Ankeny, C.J., Ankeny, R.F., Fogg, R., Briceño, J.C., Yoganathan, A.P., "Fabrication parameters of small intestinal submucosa scaffolds modulate the shear-induced expression of PECAM-1 and eNOS", TERMIS-EU Annual Meeting, Istanbul, Turkey, June 2013.
 68. Yun, B.M., Aidun, C.K., Yoganathan, A.P. "A Multiphase Flow Methodology For Quantifying Blood Element Damage In Cardiovascular Flows", 11th International Symposium of Computer Methods in Biomechanics and Biomedical Engineering, Salt Lake City, UT, April 2013. (Poster Presentation)
 69. Haggerty, C.M., Mirabella, L., Bethel, J., Whitehead, K.K., Fogel, M.A., Yoganathan, A.P., "Increased Power Loss in the Total Cavopulmonary Connection is Related to Decreased Single Ventricle Volume", American College of Cardiology Scientific Sessions, San Francisco, CA, April 2013.
 70. Khiabani, R., Vallecilla, C., Sandoval, N., Briceno, J., Yoganathan, A.P., "Bidirectional Glenn and High Altitude: Modeling the Performance of Palliated Single Ventricle", 11th International Symposium of Computer Methods in Biomechanics and Biomedical Engineering, Salt Lake City, UT, April 2013.
 71. Haggerty, C.M., Restrepo, M., Kanter, K.R., Slesnick, T.C., Rossignac, J., Spray, T.L., Fogel, M.A., Yoganathan, A.P. "Image-Based Computational Simulations for Patient-Specific Fontan Surgery Planning", 6th National Image-Guided Therapy Workshop, Washington, D.C., March 2013. (Poster Presentation)

72. Saikrishnan, N., Yoganathan, A.P., "Transcatheter Valve Implantation Can Alter the Fluid Flow Fields in the Aortic Sinuses and Ascending Aorta: An In Vitro Study", American College of Cardiology 62nd Annual Scientific Session, San Francisco, CA, March 2013.
73. Tang, E., Haggerty, C.M., Restrepo, M., Mirabella, L., Whitehead, K.K., Bethel, J., Fogel, M.A., Yoganathan, A.P., "A Retrospective Cohort of 100 Fontan Connections: Relationship between Geometric Features and Hemodynamics Outcomes", American College of Cardiology 62nd Annual Scientific Session, San Francisco, CA, March 2013. (Poster Presentation)
74. Restrepo, M., Mirabella, L., Tang, E., Haggerty, C.M., Mundkur, M.S., Fogel, M.A., Valente, A.M., McElhinney, D.B., Yoganathan, A. P., "Lateral tunnel growth: magnitude and impact on the total cavopulmonary resistance", 6th World Congress of Pediatric Cardiology and Cardiac Surgery, Cape Town, South Africa, February 2013. (Poster Presentation)
75. Haggerty, C. M., Kanter, K.R., Restrepo, M., Slesnick, T.C., Rossignac, J., Spray, T.L., Fogel, M. A., Yoganathan, A.P., "Computer-based surgical planning and the Y-graft: the next innovation of Fontan's procedure", 6th World Congress of Pediatric Cardiology and Cardiac Surgery, Cape Town, South Africa, February 2013. (Poster Presentation)
76. Haggerty, C.M., Mirabella, L., Bethel, J., Whitehead, K.K., Fogel, M.A., Yoganathan, A.P., "Single Ventricle Function: Predictors of Cardiac Index and Relation to Cavopulmonary Hemodynamics", 6th World Congress of Paediatric Cardiology and Cardiac Surgery, Cape Town, South Africa, February 2013.
77. Tang, E., Restrepo, M., Haggerty, C.M., Mirabella, L., Bethel, J., Whitehead, K.K., Fogel, M.A., Yoganathan, A.P., "Geometric Characterization of 100 Patient Specific Total Cavopulmonary Connections and Its Relation to Hemodynamic Outcomes", 6th World Congress Paediatric Cardiology & Cardiac Surgery, Cape Town, South Africa, February 2013. (Poster Presentation)
78. Herrmann, T.A., Gollin, H., Siefert, A.W., Haggerty, C.M., Telling, K., Pressman, G., Yoganathan, A.P., "Patient Specific Modeling of Mitral Stenosis: Isolated effect of restricted leaflet opening on transvalvular pressure gradient", (Poster Presentation), Biomedical Engineering Society: 2012 Meeting, Atlanta, GA. October 24-27, 2012.
79. Touchton, S.A., Siefert, A.W., Koomalsingh, K.J., Rabbah, J.P., Strohsnitter, L., Saikrishnan, N., Gorman, R.C., Gorman, J.H. 3rd, Yoganathan, A.P., "In vivo validation of an in vitro model of ischemic mitral regurgitation", (Poster Presentation), Biomedical Engineering Society: 2012 Meeting, Atlanta, GA. October 24-27, 2012.
80. Santhanakrishnan, A., Johnson, J., Kotz, M., Tang, E., Khiabani, R., Yoganathan, A. P., Maher, K. M., "Experimental investigation of the effects of inserting a bovine venous valve in the inferior vena cava of Fontan circulation," Bulletin of the 65th Annual American Physical Society Division of Fluid Dynamics Meeting, San Diego, CA, November 18-20, 2012.
81. Saikrishnan, N., Yoganathan, A.P., "Transcatheter Valve Implantation Can Alter Fluid Flow in the Aortic Sinuses and Ascending Aorta", 65th Annual Meeting of the American Physical Society: Division of Fluid Dynamics, San Diego, CA. November 18-20, 2012.
82. Yun, B.M., Aidun, C.K., Yoganathan, A.P. "Simulations of Pulsatile Suspension Flow Through Bileaflet Mechanical Heart Valves to Quantify Platelet Damage", 65th Annual Meeting of

the American Physical Society: Division of Fluid Dynamics, San Diego, CA, November 18-20, 2012.

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86. Jun, B., Saikrishnan, N., and Yoganathan, A.P., "In Vitro Micro Particle Image Velocimetry Measurement in the Hinge Region of St. Jude Medical® Regent™ Bileaflet Mechanical Heart Valve", Biomedical Engineering Society: 2012 Meeting, Atlanta, GA. October 24-27, 2012.
87. Santhanakrishnan, A., Chaffins, B., Le, T., Okafor, I., Sotiropoulos, F., Yoganathan, A.P., "An Experimental and Computational Study Inleft Ventricle Models Examining Vortex Formation from Inclined Inflownozzles During Diastolic Filling," Biomedical Engineering Society: 2012 Meeting, Atlanta, GA. October 24-27, 2012.
88. Mirabella L., Saikrishnan N., Barker A., Coco E., von Knobelsdorff-Brenkenhoff F., Yoganathan A.P., "Development of a MRI-Based Protocol to Analyze Bicuspid Aortic Valve Morphology and Flow", Biomedical Engineering Society: 2012 Meeting, Atlanta, GA. October 24-27, 2012.
89. Khiabani R., Phonekeo S., Srinimukesh H., Tang E., Fogel M., Yoganathan A.P., "In Vitro Investigation of Energy Loss in the Total Cavopulmonary Connection at Rest and Exercise Conditions", Biomedical Engineering Society: 2012 Meeting, Atlanta, GA. October 24-27, 2012.
90. Chaffins, B., Santhanakrishnan, A., Mirabella, L., Oshinski, J., Yoganathan A.P., "Multi-Modality Motion Analysis of a Magnetic Resonance Imaging Compatible Left Ventricular Phantom", Biomedical Engineering Society: 2012 Meeting, Atlanta, GA. October 24-27, 2012.
91. Yun B.M., Aidun C.K., Yoganathan A.P. "Simulations of Platelet Damage in Pulsatile Flows through Bileaflet Mechanical Heart Valves with Parameter Variation", Biomedical Engineering Society: 2012 Meeting, Atlanta, GA. October 24-27, 2012.
92. Yun B.M., Lee L., Aidun C.K., Yoganathan A.P. "Simulations of Platelet Damage in Bileaflet Mechanical Heart Valve Flows in the Closing Phase", Biomedical Engineering Society: 2012 Meeting, Atlanta, GA. October 24-27, 2012.

93. Santhanakrishnan, A., Nestle, T., Moore, B.L., Yoganathan, A.P., Paden, M.L., "An In Vitro Comparative Study of Fluid Balance Accuracies Between Pediatric-Specific and In-Line Hemo Filtration Devices for Continuous Renal Replacement Therapy During Extracorporeal Membrane Oxygenation," 7th International Conference on Pediatric Continuous Renal Replacement Therapy/1st International Symposium on AKI in Children, Cincinnati, OH, September 27-30, 2012.
94. Santhanakrishnan, A., Nestle, T., Moore, B. L., Yoganathan, A.P., Paden, M.L., "Design and Validation of a Novel Fluid Management System for Pediatric Continuous Renal Replacement Therapy," 7th International Conference on Pediatric Continuous Renal Replacement Therapy/1st International Symposium on AKI in Children, Cincinnati, OH, September 27-30, 2012.
95. Chaffins, B., Le, T.B., Santhanakrishnan, A., Mirabella, L., Sotiropoulos, F., Yoganathan, A.P., "Development of an Anatomically Realistic Left Ventricle Physical Model and Multi-Modality Experimental Platform for Validation of Patient-Specific Computational Simulations", 14th Annual Summer Bioengineering Conference of the American Society of Mechanical Engineers, Fajardo, Puerto Rico, June 20-23, 2012.
96. Tang, E., McElhinney, D.B., Yoganathan, A.P., "Hemodynamic Impact of Stenting in the Total Cavopulmonary Connection with Lateral Tunnel Stenosis", 14th Annual Summer Bioengineering Conference of the American Society of Mechanical Engineers, Fajardo, Puerto Rico, June 20-23, 2012.
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98. Santhanakrishnan, A., Nestle, T., Moore, B.L., Yoganathan, A.P., Paden, M.L., "Characterization of a Low Extracorporeal Volume, High Accuracy Pediatric Continuous Renal Replacement Device", 14th Annual Summer Bioengineering Conference of the American Society of Mechanical Engineers, Fajardo, Puerto Rico, June 20-23, 2012.
99. Restrepo, M., Mirabella, L., Tang, E., Haggerty, C., Fogel, M., Valente, A., McElhinney, D., Yoganathan, A.P., "Investigation of Vessel Growth and its Impact on Hemodynamics in Patients with Lateral Tunnel Total Cavopulmonary Connection", 14th Annual Summer Bioengineering Conference of the American Society of Mechanical Engineers, Fajardo, Puerto Rico, June 20-23, 2012.
100. Haggerty, C.M., de Zélicourt, D.A., Restrepo, M., Rossignac, J., Spray, T.L., Kanter, K.R., Fogel, M.A., Yoganathan, A.P., "Comparing Pre-Operative Predictions and Post-Operative Fontan Hemodynamic Outcomes: Implications for Computer-Based Surgery Planning", 14th Annual Summer Bioengineering Conference of the American Society of Mechanical Engineers, Fajardo, Puerto Rico, June 20-23, 2012.
101. Saikrishnan, N., Milligan, N.C., Yoganathan, A.P., "Bicuspid Aortic Valves are Associated With Increased Turbulence Compared to Pure Aortic Stenosis - An In Vitro Study", 14th Annual Summer Bioengineering Conference of the American Society of Mechanical Engineers, Fajardo, Puerto Rico, June 20-23, 2012.

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103. Dolensky, J.R., Casa, L.D.C., Yoganathan, A.P., "The Effect of Pulmonary Hypertension on Tricuspid Valve Coaptation in Normal and Pathologic Valve Geometries: An In Vitro Study", 14th Annual Summer Bioengineering Conference of the American Society of Mechanical Engineers, Fajardo, Puerto Rico, June 20-23, 2012.
104. Yun B.M., Aidun C.K., Yoganathan A.P. "Simulations of Flow Through Bileaflet Mechanical Heart Valves with Asymmetric Leaflet Motion", 14th Annual Summer Bioengineering Conference of the American Society of Mechanical Engineers, Fajardo, Puerto Rico, June 20-23, 2012.
105. Yap, C.H., Saikrishnan, N., Tamilselvan, G., Vasilyev, N., Yoganathan, A., "The Congenital Bicuspid Aortic Valve can Experience High Frequency Unsteady Shear Stresses on its Leaflet Surface", 5th Biennial Meeting on Heart Valve Biology and Tissue Engineering, Myconos, Greece, May 18-20, 2012.
106. Le, T.B., Chaffins, B., Mirabella, L., Santhanakrishnan, A., Yoganathan, A., Sotiropoulos, F., "Experimental and Computational Studies of the Aortic Bi-Leaflet Mechanical Heart Valve (BMHV) Hemodynamics in an Idealized Left Ventricle", 5th Biennial Meeting on Heart Valve Biology and Tissue Engineering, Myconos, Greece, May 18-20, 2012.
107. Rathan, S., Rajamani, A., Gorti, H., Arjunon, S., Jo, H., Yoganathan, A., "Calcification of Aortic Valve Leaflets is Shear Dependent and Side-Specific", 5th Biennial Meeting on Heart Valve Biology and Tissue Engineering, Myconos, Greece, May 18-20, 2012.
108. Arjunon, S., Dinh, A.T., Rathan, S., Yoganathan, A., "Design of a Novel Ex Vivo Bioreactor to Investigate the Effect of Pressure Induced Stretch on Aortic Valve Biology", 5th Biennial Meeting on Heart Valve Biology and Tissue Engineering, Myconos, Greece, May 18-20, 2012.
109. Santhanakrishnan, A., Nestle, T., Moore, B.L., Yoganathan, A.P., Paden, M.L., "Performance Characterization of a Low Extracorporeal Volume Pediatric Continuous Renal Replacement Therapy Device," 3rd International Conference on Engineering Frontiers in Pediatric and Congenital Heart Disease, Stanford University, Stanford, CA, May 1-2, 2012.
110. Saikrishnan, N., Yap, C.H., Yoganathan, A.P., "Characterization of Altered Fluid Mechanics Associated with the Bicuspid Aortic Valve," 3rd International Conference on Engineering Frontiers in Pediatric and Congenital Heart Disease, Stanford University, Stanford, CA, May 1-2, 2012.
111. Rathan, S., Rajamani, A., Gorti, H., Arjunon, S., Jo, H., Yoganathan, A., "Side Specific Responses of Aortic Valve Exposed to Altered Shear Stress", The 7th International Symposium on Biomechanics in Vascular Biology and Cardiovascular Disease, Atlanta, GA, April 26-27, 2012.
112. Yun B.M., Dasi L.P., Aidun C.K., Yoganathan A.P. "Simulations of Pulsatile Flow Through Bileaflet Mechanical Heart Valves", The 7th International Symposium on Biomechanics in Vascular Biology and Cardiovascular Disease, Atlanta, GA, April 26-27, 2012.

113. Mirabella L., Tang E., Haggerty C.M., Passerini T., Piccinelli M., Fogel M.A., Del Nido P.J., Kanter K.R., Veneziani A., Yoganathan A.P., "Effects of Moving Wall on Hemodynamics in Patient--Specific TCPC Models", The 7th International Symposium on Biomechanics in Vascular Biology and Cardiovascular Disease, Atlanta, GA, April 26-27, 2012.
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116. Santhanakrishnan, A., Nestle, T., Moore, B.L., Yoganathan, A.P., Paden, M.L., "Design, Development, and Validation of KIDS-CRRT - a Safe and Accurate Pediatric Continuous Renal Replacement Device," 11th Annual Design of Medical Devices Conference, Minneapolis, MN April 10-12, 2012.
117. Haggerty, C.M., Kanter, K.R., Restrepo, M., de Zelicourt, D.A., Rossignac, J., Yoganathan, A.P., "Toward Optimizing Hemodynamic Efficiency of the Fontan Y-Graft Within Anatomic Constraints", Computational Fluid Dynamics in Medicine and Biology, Dead Sea, Israel. March 25-30, 2012.
118. Siefert, A.W., Jimenez, J.H., West, D.S., Koomalsingh, K.J., Shuto, T., Gorman, R.C., Gorman III, J.H., Yoganathan, A.P., "Quantification of Dynamic Annular Forces in an Ovine model of Ischemic Mitral Regurgitation", American College of Cardiology (ACC) and ACC-i2 with Transcatheter Cardiovascular Therapeutics, Chicago, IL, March 23-27, 2012.
119. Restrepo, M., Mirabella, L., Tang, E., Haggerty, C., Fogel, M., Valente, A., McElhinney, D., Yoganathan, A.P., "Quantification of the Inferior Vena Cava Conduit Growth from Serial Magnetic Resonance Images in Patients with an Intra Atrial Total Cavopulmonary Connection", Society for Cardiac Magnetic Resonance 15th Annual Scientific Sessions, Orlando, FL, February 3-5, 2012.
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121. Bracaglia, L., Haggerty, C.M., Restrepo, M., Fogel, M.A., Yoganathan, A.P., "Fluid Mechanical Analysis in Surgically Reconstructed Aortas", Biomedical Engineering Society: 2011 Meeting, Hartford, CT, October 24, 2011.
122. Swanson, C., Haggerty, C.M., Rossignac, J., Kanter, K.R., Fogel, M.A., Yoganathan, A.P., "Assessment of Surgical Planning Accuracy: Comparing Virtual Models to Post-Operative Anatomies", Biomedical Engineering Society: 2011 Meeting, Hartford, CT, October 24, 2011.
123. Chaffins, B., Le, T., Mirabella, L., Santhanakrishnan, A., Saikrishnan, Sotiropoulos, N.F., Yoganathan, A.P., "High Resolution Experimental and Computational Study of Flow Through

- a Bi-leaflet Mechanical Heart Valve (BMHV) in a Model Left Ventricle", Biomedical Engineering Society: 2011 Meeting, Hartford, CT, October 24, 2011.
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 125. Yoganathan, A.P., "Structural Defects of the Heart at Birth: Using Emerging Technologies to Aid the Single Ventricle", Special Track: Structural Heart Disease, American Society of Mechanical Engineers (ASME) Emerging Technologies' 6th Frontiers in Biomedical Devices Conference & Exhibition, Irvine, CA, September 26-27, 2011.
 126. Yun, B.M., Aidun, C.K., Yoganathan, A.P. "Simulations of Pulsatile Flow Through Bileaflet Mechanical Heart Valves to Assess Platelet Damage", Food and Drug Administration Workshop: Computational Methods for Cardiovascular Devices, Silver Spring, MD, September 2011.
 127. Rabbah, J-P., Chaffins, B., Saikrishnan, N., Santhanakrishnan, A., Mirabella, L., Yoganathan, A.P., "Novel In-Vitro Platforms to Provide Comprehensive Experimental Data for Computational Fluid-Structure Interaction Models for the Mitral Valve and Left Ventricle", International Union of Theoretical and Applied Mechanics (IUTAM) Symposium on Computer Models in Biomechanics: from Nano to Macro, Stanford, CA, August 2011.
 128. Mirabella, L., Piccinelli, M., Passerini, T., Restrepo, M., Haber, E., Yoganathan, A.P., Veneziani A., "An Image-Based Approach for Flow Simulations in Deformable Blood Vessels", International Union of Theoretical and Applied Mechanics (IUTAM) Symposium on Computer Models in Biomechanics: from Nano to Macro, Stanford, CA, August 2011.
 129. Spinner, E.M., Troxler, L.G., Thourani, V.H., Yoganathan, A.P., "Importance of Understanding Tricuspid Valve Mechanics and Geometry: A Roadmap for Successful Valve Repair", 11th Annual Meeting of the International Society of Minimally Invasive Cardiothoracic Surgery (ISMICS), Washington D.C., June 2011.
 130. Haruo, Y., Vasilyev, N.V., Gerald, M., Loyola, H., Padala, M., Yoganathan, A.P., del Nido, P.J., "Right Ventricular Papillary Muscle Approximation toward Ventricular Septum as a Simple technique for Repair of Tricuspid Regurgitation: An Ex Vivo Study", 11th Annual Meeting of the International Society of Minimally Invasive Cardiothoracic Surgery (ISMICS), Washington D.C., June 2011.
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 132. Vasilyev, N.V., Padala, M., Delmo Walter, E.M., Sill, N., Thourani, V.H., Jimenez, J.H., Yoganathan, A.P., del Nido, P.J., "Functional and Hemodynamic Assessment of a Novel 3-Dimensional Anatomically Correct Annuloplasty Ring to Correct Functional Tricuspid Regurgitation", 6th Biennial Meeting of the Society of Heart Valve Disease, Barcelona, Spain, June 2011.

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135. Saikrishnan N., Yap C.H., Lerakis S., Yoganathan, A.P., "The Gorlin Equation Revisited - Is this Equation Being Correctly to Assess Aortic Valve Area?", 6th Biennial Meeting of the Society of Heart Valve Disease, Barcelona, Spain, June 2011.
136. Padala, M., Sacks, M.S., Thourani, V.H., Yoganathan, A.P., "Mechanics of the Strut Chordae to Anterior Leaflet Transition Zone in Normal, Prolapsing and Tethered Mitral Valve", 6th Biennial Meeting of the Society of Heart Valve Disease, Barcelona, Spain, June 2011.
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141. Rathan, S., Yap, C.H., Morris, E., Arjunon, S., Jo, H., Yoganathan, A.P., "Low and Unsteady Shear Stresses Upregulate Calcification Response of the Aortic Valve Leaflets", Proceedings of the American Society of Mechanical Engineers (ASME), Farmington, PA, June 2011.
142. Haggerty, C.M., de Zélicourt, D.A., Kanter, J.R., Sundareswaran, K.S., Fogel, M.A., Yoganathan, A.P., "Pulsatile Hemodynamics of the Fontan Connection: A Tri-Modal Investigation", Proceedings of the American Society of Mechanical Engineers (ASME), Farmington, PA, June 2011.
143. Kanter, K.R., Haggerty, C.M., Restrepo, M., de Zélicourt, D.A., Rossignac, J.R., Parks, W.J., Yoganathan, A.P. "Preliminary Clinical Experience with a Bifurcated Y-Graft Fontan Procedure" , 37th Annual Meeting of the Western Thoracic Surgical Association, Colorado Springs, CO, June 2011.
144. Haggerty, C.M., Fynn-Thompson, F., McElhinney, D.B., Valente, A.M., Saikrishnan, N., del Nido, P.J., and Yoganathan, A.P., "In Vitro Experience with Impella Pumps as Cavopulmonary Assist for Failing Fontans," 57th Annual American Society for Artificial Internal Organs Annual Conference, Washington, D.C., June 2011.

145. Yoganathan, A.P., "Pediatric Cardiac Device Consortium: Cardiovascular Device Development & Clinical Trials", 57th Annual Conference of American Society for Artificial Internal Organs (ASAIO), Washington, D.C., June 2011. (invited)
146. Throckmorton, A.L., Carr, J.P., Bryant, J., Lawson, D., Chopski, S.G., Moskowitz, W.B., Gangemi, J.J., Haggerty, C.M., Yoganathan, A.P., "Uniquely Shaped Cardiovascular Stents Enhance Pressure Generation of Minimally-Invasive Intravascular Blood Pumps", 57th Annual Conference of American Society for Artificial Internal Organs (ASAIO), Washington, D.C., June 2011.
147. Siefert, A., Jimenez, J., West, S., Koomalsingh, K., Shuto, T., Anguel, F., Gorgman, R.C., Gorman, J.H., Yoganathan, A.P., "In-Vivo Force Measurement of the Contractile Mitral Annulus", Mitral Conclave of the American Association of Thoracic Surgeons, New York, NY, May 2011.
148. Padala, M., Rabbah, J.P., Thourani, V.H., Guyton, R.A., Yoganathan, A.P., "Reducing Posterior Leaflet Tethering Using Patch Augmentation Improves Leaflet Mobility and Systolic Coaptation Length in Ischemic Mitral Regurgitation", Mitral Conclave of the American Association of Thoracic Surgeons, New York, NY, May 2011.
149. Spinner, E.M., Lerakis, S., Higginson, J., Pernetz, M., Howell, S., Veledar, E., Yoganathan, A.P., "Impact of Pulmonary Arterial Hypertension on the Tricuspid Valve Apparatus", Mitral Conclave of the American Association of Thoracic Surgeons, New York, NY, May 2011.
150. Padala, M., Thourani, V.H., Guyton, R.A., Yoganathan, A.P., "Functional Efficacy of Neochordoplasty vs. Chordal Translocation for Surgical Repair of Acute Posterior Leaflet Prolapse", Mitral Conclave of the American Association of Thoracic Surgeons, New York, NY, May 2011.
151. Gupta, S., Saikrishnan, N., Yoganathan, A.P., "Assessment of Bicuspid Aortic Valve blood flow as a Clinical Diagnostic Tool", Council on Undergraduate Research 15th Annual Posters on the Hill, Washington DC, April 2011.
152. Haggerty, C.M., Sundareswaran, K.S., Pekkan, K., Kanter, K.R., Fogel, M.A., Yoganathan, A.P. "Serial Changes in Single Ventricle Flows From Glenn to Total Cavopulmonary Connection: Comparison of MRI to Lumped Parameter Modeling," American College of Cardiology Annual Scientific Sessions. New Orleans, LA, April 2011.
153. Santhanakrishnan, A., Moore B. L., Paden, M. L., Yoganathan, A.P., "Development of KIDS-CRR: A Safe and Accurate Pediatric Continuous Renal Replacement Therapy Device", Southeastern Medical Device Association (SEMDA) 2011 Conference, Atlanta, GA, March 2011.
154. Padala, M., Thourani, V.H., Yoganathan, A.P., "A Novel Tricuspid Annuloplasty Repair System", South East Medical Device Association Annual Conference, Atlanta, GA, March 2011.
155. Mirabella, L., Piccinelli, M., Passerini, T., Restrepo, M., Haber, E., Yoganathan, A. P., Veneziani, A., "4D Image-Based Approach for CFD in Compliant Blood Vessels", 2nd International Conference on Mathematical and Computational Biomedical Engineering - CMBE2011, Washington D.C., March 2011.

156. Yoganathan, A.P., "Surgical Modeling of the Fontan Procedure: Growing the Knowledge Base One Patient at a Time", Society for Industrial and Applied Mathematics – Computational Science and Engineering Conference, Reno, NV, March 3, 2011 (invited).
157. Rathan, S., Yap, C.H., Morris, E., Jo, H., Yoganathan, A.P., "Effects of Shear Stress on Aortic Valve Calcification", Georgia Tech Research and Innovation Conference, Georgia Tech, February 2011.
158. Padala, M., Yoganathan, A.P., Guyton, R.A., Thouran, V.H., "Hemodynamic and Kinematic Insights into the Efficacy of Edge-to-Edge Repair for Mitral Valve Prolapse", 57th Annual meeting of the Southern Thoracic Surgical Association (STSA), Orlando, FL, November 2010.
159. Yun, B. M., Wu, J., Simon, H., Sotiropoulos, F., Aidun, C., Yoganathan, A., "A Numerical Investigation of Blood Damage in the Hinge Area of Bileaflet Mechanical Heart Valves", 63rd Annual Meeting of the APS Division of Fluid Dynamics, Long Beach, CA, November 2010.
160. Saikrishnan N., Yap C.H., Yoganathan A.P., "Particle Image Velocimetry studies of Bicuspid Aortic Valve Hemodynamics", 63rd Annual Meeting of the APS Division of Fluid Dynamics, Long Beach, CA, November 2010.
161. Buice, D., Spinner, E.M., Yoganathan, A.P., "The Effects of a Three-Dimensional Saddle-Shaped Annulus on Tricuspid Valve Leaflet Stretch", BMES 2010 Annual Meeting, Austin, TX October 2010.
162. Desai, K., Haggerty, C.M., de Zélicourt D.A., Fogel, M.A., Kanter, K.R., Yoganathan, A.P. "Anatomical Analysis of Optiflo on Patient Specific Geometries", Biomedical Engineering Society Annual Meeting. Austin, TX, October 2010.
163. Troxler, L. , Spinner, E.M., Yoganathan, A.P., "Measurement of Chordal Forces of the Tricuspid Valve using Miniature C Rings", BMES 2010 Annual Meeting, Austin, TX, October 2010.
164. Hussain, S., Choon Hwai Yap, C.H. , Balachandran, K., Yoganathan, A.P., "The Effects of Cyclic Stretch and Serotonin on Aortic Valve Remodeling", BMES 2010 Annual Meeting, Austin, TX, October 2010.
165. Saikrishnan, N., Yap, C.H., Yoganathan, A.P., "Characterization of Bicuspid Aortic Valve Hemodynamics Using Particle Image Velocimetry (PIV)", BMES 2010 Annual Meeting, Austin, TX, October 2010.
166. Rabbah, J.P., Saikrishnan, N., Yoganathan, A.P., "Multi-modality experimental platform for validation of dynamic mitral valve computational models", BMES 2010 Annual Meeting, Austin, TX, October 2010.
167. Spinner, E.M., Adams, A., Yoganathan, A.P., "Alterations in Tricuspid Valve Leaflet Mechanics Result in Regurgitation: An In Vitro Study", Oral presentation, 6th World Congress of Biomechanics, Singapore, August 2010.
168. Yap, C.H., Weiler, M.J., Balachandran, K., Yoganathan, A.P., "Dynamic Deformation Characteristics Native Aortic Valve Leaflet: Spatial and Temporal Variations under Normal,

- Hypertensive and Tachycardic Conditions", 6th World Congress on Biomechanics, Singapore, August 2010.
169. Yap C.H., Saikrishnan, N., Yoganathan, A.P., "Congenital Bicuspid Aortic Valve Geometry Can Result in Fluid Shear Stresses Associated with Sclerosis", 6th World Congress on Biomechanics, Singapore, August 2010.
 170. Haggerty, C.M., de Zélicourt, D.A., Kanter, K.R., Gaynor, J.W., Spray, T.L., Fogel, M.A., Yoganathan, A.P., "Pre-Operative Modeling of the Fontan Procedure: A Parametric Analysis of Boundary Condition Sensitivity", 6th World Congress on Biomechanics, Singapore, August 2010.
 171. Arjunon S., Saikrishnan N., Culp J., Dasi L., Vukasinovic J., Jones T., Bandari S., Glezer A., Yoganathan A.P., "Novel System to Quantify Thromboembolic Potential of Mechanical Heart Valves", 6th World Congress on Biomechanics, Singapore, August 2010.
 172. Wu, J., Yun, B.M., Fallon, A.M., Simon, H.A., Aidun, C.K., Yoganathan, A.P., "Numerical investigation of blood damage in the hinge area of bileaflet mechanical heart valves", American Society of Mechanical Engineers: Summer Bioengineering Conference, Naples, FL, June 2010.
 173. Restrepo, M., de Zélicourt, D., Horner, M., Yoganathan, A.P., "Effect of wall motion in the performance of an Intra-Atrial Total Cavopulmonary Connection", FDA Workshop on Computer Methods for Cardiovascular Devices, Rockville, MD, June 2010.
 174. Icenogle, D., Padala, M., Rabbah, J., Kendoush, A., Rossignac, J., Yoganathan, A.P., "Development of Virtual Mitral Valve Leaflet Models for Patient Specific Diagnosis and Surgical Planning", FDA Workshop on Computer Methods for Cardiovascular Devices, Rockville, MD, June 2010.
 175. Spinner, E.M., Buice, D., Lerakis, S., Yoganathan, A.P., "Alterations in tricuspid valve mechanics as a result of annular dilatation and papillary Muscle Displacement: An in vitro study", Oral presentation, American Society of Mechanical Engineering, Summer Bioengineering Conference, Naples, FL, June 2010.
 176. Haggerty, C.M., de Zélicourt, D.A., Sundareswaran, K.S., Fogel, M.A., Yoganathan, A.P., "Importance of Pre-Operative Hemodynamics in the Surgical Planning of Complex Single Ventricle Patients", ASME Summer Bioengineering Conference. Naples, FL, June 2010.
 177. Spinner, E.M., Buice, D., Lerakis, S., Yoganathan, A.P., "Alterations in Tenting Height and Tenting Area Predict Papillary Muscle Displacement and Incidence of Tricuspid Regurgitation", Poster and Oral presentation, American Society of Echocardiography, San Diego, CA, June 2010.
 178. Spinner, E.M., Lerakis, S., Yoganathan, A.P., "Effect of Ventricular Geometry on Papillary Muscle Position and Annulus Area and their Correlation with the Severity of TR as Determined by 3D Echocardiography", Poster and Oral presentation, American Society of Echocardiography, San Diego, CA, June 2010.
 179. Padala, M., Thourani, V.H., Adams, D.H., Yoganathan, A.P., "Hemodynamics and Kinematics of Edge-to-Edge Repair for Posterior Leaflet Prolapse – A Mechanistic Study", to

be presented at the International Society of Minimally Invasive Cardiothoracic Surgery, Berlin, Germany, June 2010.

180. de Zélicourt, D.A., Haggerty, C.M., Sundareswaran, K.S., Whited, B.S., Rossignac, J.R., Fogel, M.A., Kanter, K.R., Gaynor, J.W., Spray, T.L., Yoganathan, A.P., "Fontan Surgery in Patients with an Interrupted IVC: Guidelines for Optimizing the Hepatic Baffle Design", 36th Annual Meeting of the Western Thoracic Surgical Association. Ojai, CA, June 2010.
181. Chopski, S.G., Downs, E.A., Bhavsar, S.S., Kapadia, J.K., Haggerty, C.M., Yoganathan, A.P., Throckmorton, A.L. "Particle Image Velocimetry Measurements of an Idealized Total Cavopulmonary Connection with Mechanical Circulatory Assistance in the Inferior Vena Cava", 6th International Conference on Pediatric Mechanical Circulatory Support Systems and Pediatric Cardiopulmonary Perfusion. Boston, MA, May 2010.
182. Padala, M., Thourani, V.H., Adams, D.H., Yoganathan, A.P., "A Leaflet Extension Technique to Relieve Sub-valvular Tethering in Ischemic Mitral Regurgitation - an In-vitro Feasibility Study", to be presented at the Valves in the Heart of Big Apple VI Conference, New York City, NY, April 2010.
183. Padala, M., Thourani, V.H., Adams, D.H., Yoganathan, A.P., "Pre-operative Valve Geometry Impacts the Outcomes of Mitral Valve Repair in Ischemic Mitral Regurgitation", presented at the American College of Cardiology Annual Meeting, Atlanta, GA, March 2010.
184. Padala, M., Thourani, V.H., Adams, D.H., Yoganathan, A.P., "Concomitant annular undersizing improves the outcomes of Edge-to-Edge repair for posterior leaflet prolapse", presented at the American College of Cardiology Annual Meeting, Atlanta, GA, March 2010.
185. Spinner, E.M., Shannon, P., Yoganathan, A.P., "Annular Dilatation and PM Displacement Significantly Increase Tricuspid Regurgitation". Podium presentation, Heart Valve Biology Conference, Hilton Head, SC, March 2010.
186. Buice, D., Spinner, E.M., Yap, C.H., Yoganathan, A.P., "The Effects of a Three-Dimensional Saddle-Shaped Annulus on Tricuspid Valve Leaflet Strain", Presented at Georgia Tech Annual Undergraduate Student Symposium, Atlanta, GA, March 2010.
187. Spinner, E.M., Yoganathan, A.P., "The Effect of Annular Dilatation and PM Displacement on Tricuspid Regurgitation", Presented at Georgia Tech Annual Graduate Student Symposium, Atlanta, GA, February 2010.
188. Haggerty, C.M., de Zélicourt, D.A., Sundareswaran, K.S., Kanter, K.R., Gaynor, J.W., Spray, T.L., Fogel, M.A., Yoganathan, A.P., "Pre-Operative Modeling of the Fontan Procedure: Accuracy of Boundary Condition Approximations", 1st International Conference on Computational Simulation in Congenital Heart Disease. San Diego, CA, February 2010.
189. Yap, C.H., Dasi, L.P., Yoganathan, A.P., "Dynamic Energy Loss Characteristics in the Native Aortic Valve", DFD09 Meeting of the American Physical Society, Minneapolis, MN. November, 2009.
190. Spinner, E.M., Jimenez, J., Padala, Yoganathan, A.P., "Residual Leaflet Length as a Predictor of Tricuspid Regurgitation: An In Vitro Study", American Heart Association Scientific Sessions, Orlando, FL, November 2009.

191. Olivieri, L., de Zélicourt, D.A., Haggerty, C.M., Ratnayaka, K., Cross, R., and Yoganathan, A.P. "Modeling Blood Flow in Repaired Coarctation of the Aorta using Computational Fluid Dynamics", American Heart Association Scientific Sessions, Orlando, FL, November 2009.
192. Weiler, M., Balachandran, K., Padala, M., Yap, C.H., Yoganathan, A.P., "Spatial Analysis of Aortic Valve Leaflet Deformation Characteristics", Annual Meeting of the Biomedical Engineering Society, Pittsburgh, PA, October 2009.
193. Thayer, P., Balachandran, K., Sucosky, P., Jo, H., Yoganathan, A.P., "Effect of Pathophysiological Pressure and Cyclic Stretch on the Expression of ASMA and Vimentin in Aortic Valve Leaflets", Annual Meeting of the Biomedical Engineering Society, Pittsburgh, PA, October 2009.
194. Shannon, P., Spinner, E.M., Yoganathan, A.P. "Effects of Annular Dilatation on Tricuspid Regurgitation: An In Vitro Study", Annual Meeting of the Biomedical Engineering Society, Pittsburgh, PA, October 2009.
195. Padala, M., Yoganathan, A.P., "Mechanics of Secondary Chordal Cutting in Ischemic Mitral Regurgitation", Annual Meeting of the Biomedical Engineering Society, Pittsburgh, PA, October 2009.
196. Kanter, J.R., Haggerty, C.M., Desai, K., Bracaglia, L., Yoganathan, A.P., "Effect of Pulsatile Flow in an in vitro Model of the Total Cavopulmonary Connection", Annual Meeting of the Biomedical Engineering Society, Pittsburgh, PA, October 2009.
197. Jung, P., de Zélicourt, D.A., Pekkan, K., Horner, M., Kanter, K., Yoganathan, A.P., "Optimal Cannulation Location for Neonatal Aortic Arch Reconstruction", Annual Meeting of the Biomedical Engineering Society, Pittsburgh, PA, October 2009.
198. de Zélicourt, D., Yoganathan, A.P., "Impact of geometry on post-operative performance for Fontan patients with an interrupted IVC", Annual Meeting of the Biomedical Engineering Society, Pittsburgh, PA, October 2009.
199. Balachandran, K., Chester, A.H., Yoganathan, A.P., "Synergistic Effects of 5-Hydroxytryptamine and Cyclic Stretch on Aortic Valve Collagen Biosynthesis – Implications for Valve Function", Annual Meeting of the Biomedical Engineering Society, Pittsburgh, PA, October 2009.
200. Haggerty, C.M., de Zélicourt, D.A., Sundareswaran, K.S., Pekkan, K., Fogel, M.A., Yoganathan, A.P., "Hemodynamic Assessment of Virtual Surgery Options for a Failing Fontan Using Lumped Parameter Simulation", Computers in Cardiology 2009, Park City, UT, September 2009.
201. Padala, M., Thourani, V.H., Yoganathan, A.P., and Adams, D.H. "Effect of Mitral Annular Size on the Outcomes of Edge-to-Edge Repair in the Repair of Posterior Leaflet Prolapse", 5th Biennial Society of Heart Valve Disease Meeting, Berlin, Germany, June 2009.
202. Padala, M., Thourani, V.H., Adams, D.H., Yoganathan, A.P., "Hemodynamic Comparison of Surgical Techniques for Anterior Leaflet Prolapse", 5th Biennial Society of Heart Valve Disease Meeting, Berlin, Germany, June 2009.

203. Yap, C.H., Kim, H.S., Dasi, L.P., Weiler, M., Balachandran, K., Haj-Ali, R., Yoganathan, A.P., "Structural Deformation of Native Aortic Valve Leaflet Under Hypertension: An In Vitro Study", ASME Summer Bioengineering Conference, Lake Tahoe, CA, June 2009.
204. Padala, M., Gyoneva, L.I., Yoganathan, A.P., "Impact of Secondary Chordal Cutting on Mitral Valve Closure and Chordal Force Distribution in an Ischemic Dilated Ventricle - Engineering Insights and Clinical Implications", ASME Summer Bioengineering Conference, Lake Tahoe, CA, June 2009.
205. Babiker, H., Gonzalez, L.F., Albuquerque, F., Collins, D., Elvikis, A., Frakes, D., Yoganathan, A.P., "The Effects of Coil Packing Density on Cerebral Aneurysm Inflow: In Vitro Assessment with Particle Image Velocimetry", 10th Annual UC Systemwide Bioengineering Symposium, Merced, CA, June 2009.
206. Sucusky, P., Balachandran, K., Jo, H., Yoganathan, A.P., "Altered Sheer Stress Stimulates Upregulation of Endothelial VCAM-1 and ICAM-1 in a BMP-4 and TGF- β 1-Dependent Pathway", ASME Summer Bioengineering Conference, Lake Tahoe, CA, June 2009.
207. Haggerty, C.M., Dasi, L.P., Kanter, K.R., Yoganathan, A.P. "Effect of Flow Pulsatility on 2nd Stage Fontan Hemodynamics: An In Vitro Investigation", ASME Summer Bioengineering Conference, Lake Tahoe, CA, June 2009.
208. Balachandran, K., Chester, A.H., Yoganathan, A.P., "5-Hydroxytryptamine and Cyclic Stretch Result in Altered Aortic Valve Collagen Content – Implications for Valve Structure and Function", ASME Summer Bioengineering Conference, Lake Tahoe, CA, June 2009.
209. Skrinjar, O., Bistoquet, A., Oshinski, J., Sundareswaran, K., Frakes, D., Yoganathan, A. P., "A Divergence-Free Vector Field Model for Imaging Applications", IEEE International Symposium on Biomedical Imaging, Boston, MA, June 2009.
210. Simon, H.A., Ge, L., Dasi, L.P., Borazjani, I., Leo, H.L., Sotiropoulos, F., Yoganathan, A.P., "Numerical Simulations of The Three-Dimensional Pulsatile Hinge Flow Fields of Bileaflet Mechanical Heart Valves", FDA/NHLBI /NSF Workshop on Computer Methods for Cardiovascular Devices, Rockville, MD, June 2009.
211. Kim, H.S., Haj-Ali, R., Yap, C.H., Dasi, L.P., Yoganathan, A.P. "Multiscale Structural Analysis of Native Aortic Heart Valves", FDA/NHLBI /NSF Workshop on Computer Methods for Cardiovascular Devices, Rockville, MD, June 2009.
212. de Zélicourt, D., Sundareswaran, K.S., Frakes, D.H., Fogel, M.A., Skrinjar, O., Yoganathan, A.P. "Multi-dimensional Reconstruction of Velocity Fields Using Sparsely Acquired Phase-Contrast Magnetic Resonance Images", FDA/NHLBI/NSF Workshop on Computer Methods for Cardiovascular Devices, Rockville, June 2009.
213. Dasi, L.P., Ge, L., Borazjani, I., Simon, H.A., Sotiropoulos, F., Yoganathan, A.P. "Experimental Requirements For Validating High Resolution FSI-CFD Tools For Heart Valve Modeling", FDA/NHLBI /NSF Workshop on Computer Methods for Cardiovascular Devices, Rockville, Maryland, June 2009.
214. Kapadia, J.Y., Bhavsar, S.S., Chopski, S.G., Gullquist, S., Moskowitz, W., Yoganathan, A.P., Throckmorton, A.L., "Mechanical Cavopulmonary Assist using an Intravascular Axial Flow

- Blood Pump", 55th Annual Conference of the American Society for Artificial Internal Organs, Dallas, TX, May 2009
215. Padala, M., Thourani, V.H., Adams, D.H., Yoganathan, A.P., "3D Geometry of the Mitral Valve and Extent of Leaflet Tethering Determine the Success of Secondary Chordal Cutting in Treating Ischemic Mitral Regurgitation", 89th Annual Meeting of the American Association of Thoracic Surgeons, Boston, MA, May 2009.
 216. Balachandran, K., Sucusky, P., Jo, H., Yoganathan, A.P., "Elevated Cyclic Stretch and TGF- β 1 Induce Aortic Valve Calcific Progression via a Bone Morphogenic Protein Moderated Pathway", 14th Annual Hilton Head Meeting, Hilton Head, SC, March 2009.
 217. Haggerty, C., Dasi, L., Kanter, J., Yoganathan, A.P., "Effect of Flow Pulsatility on 2nd Stage Fontan Hemodynamics: An In Vitro Investigation", 2009 Summer Bioengineering Conference, Lake Tahoe, CA, June 2009.
 218. de Zelicourt, D., Sundareswaran, K.S., Frakes, D.H., Fogel, M.A., Skrinjar, O., Yoganathan, A.P., "Multi-dimensional reconstruction of velocity fields using sparsely acquired phase-contrast magnetic resonance images", FDA / NHLBI / NSF Workshop on Computer Methods for Cardiovascular Devices, Rockville, MD, June 2009.
 219. Bennett, K., Elvikis, A., Plasencia J., Beeman S., Frakes, D. "Quantitative 3D Molecular Imaging of Kidney Glomeruli", ISMRM Scientific Meeting and Exhibition. Honolulu, HI. April 2009.
 220. Yoganathan, A.P. "Computational Modeling and Image Libraries in Research" Pediatric Heart Network/NHLBI Perioperative Working Group Meeting Bethesda, MD, April 2009.
 221. Bennett, K., Elvikis, A., Plasencia, J., Beeman, S., Frakes, D., "MRI Quantification of Single Glomerular Function," National Kidney Foundation Spring Clinical Meetings, Nashville, TN, March 2009.
 222. Spinner, E.M., Sundareswaran, K.S., Dasi, L.P., Thourani, V.H., Oshinski, J., Yoganathan, A.P., "Altered Right Ventricular Papillary Muscle Position and Orientation in Patients with Dilated Left Ventricles", SCMR 12th Annual Scientific Session Conference, Orlando, FL, January 2009.
 223. Sundareswaran, K., Frakes, D., Fogel, M., Skrinjar, O., Yoganathan, A.P., "Divergence Free Interpolation of Phase Contrast MRI", SPIE Electronic Imaging, San Jose, CA, January 2009.
 224. Simon, H.A., Ge, L., Sotiropoulos, F., Yoganathan, A.P., "Numerical Study of the Influence of the Hinge Gap Width on The Hinge Flow Fields of Bileaflet Mechanical Heart Valves", 61st Annual Meeting of the APS Division of Fluid Dynamics, San Antonio, TX, November 2008.
 225. de Zelicourt, D., Ge, L., Sotiropoulos, F., Yoganathan, A.P., "Efficient Unstructured Cartesian/Immersed-Boundary Method with Local Mesh Refinement to Simulate Flows in Complex 3D Geometries", 61st Annual Meeting of the APS Division of Fluid Dynamics, San Antonio, TX, November 2008.
 226. Balachandran, K., Sucusky, P., Jo, H., Yoganathan, A.P., "Synergy between Cyclic Stretch and TGF- β 2-induced Aortic Valve Calcification Occurs via a Bone Morphogenic Protein

- Moderated Pathway", American Heart Association Scientific Sessions, New Orleans, LA, November 2008.
227. Sundareswaran, K.S., Frakes, D.H., de Zelicourt, D.D., Skrinjar, O., Kanter, K.R., Del Nido, P.J., Powell, A.J., Fogel, M.A., Yoganathan, A.P., "Comparison of Power Losses, Hepatic Flow Splits, and Vortex Sizes in Different Fontan Types using Non-Invasive Phase Contrast Magnetic Resonance Imaging", American Heart Association Scientific Sessions, New Orleans, LA, November 2008.
228. Sundareswaran, K.S., de Zelicourt, D., Dasi, L.P., Yoganathan, A.P., Fogel, M.A., "Wasted Energy and Right Ventricular Volumes in Patients after Tetralogy of Fallot Repair: A Key to Understanding Right Heart Function", E-Poster, American Heart Association Scientific Sessions, New Orleans, LA, November 2008.
229. Jimenez, J., Yoganathan, A.P., "Valve Durability Considerations: Fluid Mechanic Principles, Assessment, Techniques, Predictors, and Minimum Standards", Transcatheter Therapies Conference, Washington D.C., October 2008.
230. Jensen, M. Ø., Jensen, H., Levine, R. A., Yoganathan, A. P., Nygaard, H., Nielsen, S. L., Hasenkam, J. M. , "Left Ventricular Force Balance", 26th Danish Annual Congress in Biomedical Engineering, Brædstrup, Denmark, September 2008.
231. Dasi, L.P., Paden, M., Sucusky, P., Fortenberry, J., Yoganathan, A.P., "Accuracy of a Novel Continuous Renal Replacement Therapy Device Designed for Use on ECMO", Georgia Life Sciences Summit, Atlanta, GA, September, 2008. (Winner of Poster Award)
232. Balachandran, K., Sucusky, P., Jo, H., Yoganathan, A. P., "Cyclic Stretch and Heart Rate Regulate Matrix Metalloproteinases and their Inhibitors in Aortic Valves", ISACB Biennial Meeting, Bordeaux, France, September 2008.
233. Sucusky, P., Balachandran, K., Elhammali, A., Jo, H., Yoganathan, A. P., "Altered Shear Stress Induces Aortic Valve Leaflet Inflammation in a Bone Morphogenic Protein-4 and Transforming Growth Factor-b1-Dependent Mechanism", ISACB Biennial Meeting, Bordeaux, France, September, 2008.
234. Yap, C.H., Dasi, L.P., Rusly, R.J., Yoganathan, A.P., "Dynamics of the Aortic Valve Under Normal, Flow Rate-Varied and Heart Rate-Varied Conditions: An In Vitro Study", ASME Summer Bioengineering Conference, Marco Island, FL, June 2008.
235. Simon, H.A., Ge, L., Borazjani, I., Sotiropoulos, F., Yoganathan, A.P., "Simulations Of The Hinge Flow Fields Of A Bileaflet Mechanical Heart Valve Under Physiologic Pulsatile Aortic Conditions", ASME Summer Bioengineering Conference, Marco Island, FL, June 2008.
236. Padala, M., Sacks, M.S., Yoganathan, A.P. "Effect of Mitral Annular Saddle on Valve Mechanics and Function: an Invitro Study", ASME Summer Bioengineering Conference, 2008, Marco Island, FL, June 2008.
237. Kim, H.S., Yap, C.H., Dasi, L.P., Yoganathan, A.P., Haj-Ali, R.M. "Multiscale Structural Analysis of Porcine Aortic Heart Valves using a Collagen Fiber Network (CFN) Micromodel", ASME 2008 Summer Bioengineering Conference, Marco Island, FL, June 2008.

238. Murphy, D.W., Dasi, L.P., Glezer, A., and Yoganathan, A.P., "Reduction of Flow-Induced Blood Damage In Bileaflet Mechanical Heart Valves Through Passive Flow Control", ASME Summer Bioengineering Conference, Marco Island, FL, June 2008.
239. Dasi, L.P., Pekkan, K., Sundareswaran, K.S., de Zelicourt, D.A., Krishnankutty, R., del Nido, P., and Yoganathan, A.P., "Hemodynamic Energy Dissipation In The Cardiovascular System: Generalized Theoretical Analysis On Disease States", ASME Summer Bioengineering Conference, Marco Island, FL, June 2008.
240. Sucusky, P., Dasi, L. P., Goldman, S., Paden, M. L., Fortenberry, J. D., Yoganathan, A. P., "Design and Validation of a Novel Accurate Fluid Management System for Use in Extracorporeal Membrane Oxygenation", 54th ASAIO Conference, San Francisco, CA, June 2008.
241. Paden, M.L., Reid, C., Wagoner, S.F., Sucusky, P., Dasi, L.P., S., Yoganathan A.P., Fortenberry J.D. "Inaccuracy of concomitant CVVH in ECMO Patients", 5th International Pediatric Continuous Renal Replacement Therapy Conference, Orlando, FL, June, 2008. Also in *Pediatric Nephrology*, Vol. 23(10), pp. 1901-1901.
242. Jimenez, J., Yoganathan, A. P., "Challenges in the Engineering of New Minimally Invasive Cardiovascular Devices", Transvalvular Therapies Conference, Seattle, WA, June, 2008.
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Bioengineering Conference, The American Society of Mechanical Engineering Conference, Vail, CO, June 2005.

344. Pekkan, K., Soerensen, D., Parks, W.J., Kitajima, H., Salee, D., Fogel, M., Yoganathan, A.P., "Pre-Fontan surgery computational fluid dynamic analysis of three Glenn stage anatomies, Effects of innominate vein and upper-lobe RPA branch," The American Society of Mechanical Engineering Conference, Vail, CO, June 2005.
345. Patel, V., Dasi, L.P., Simon, H.A., Yoganathan, A.P., "Wavelet-Based Characterization of Small-Scale Turbulent Structures In A Mechanical Heart Valve Flow," The American Society of Mechanical Engineering Conference, Vail, CO, June 2005. (Winner of the Student Poster Competition).
346. Leo, H.L., Dasi, L.P., Carberry, J., Yoganathan, A.P., "Hemodynamics Assessment of Three Polymeric Heart Valves Using Three-Dimensional Particle Image Velocimetry," The American Society of Mechanical Engineering Conference, Vail, CO, June 2005.
347. Kitajima, H.D., Sundareswaran, K.S., Astarly, G.W., Parks, W.J., Sharma, S., Sallee, D., Kanter, K.R., Forbess, J.M., Oshinski, J.N., Yoganathan, A.P. "Comparison of Phase Contrast MRI and Particle Image Velocimetry of the Total Cavopulmonary Connection." The American Society of Mechanical Engineering Conference, Vail, CO, June 2005.
348. Jimenez, J.H., Soerensen, D.D., He, Z., Yoganathan, A.P., "Variations in chordae tendineae force with papillary muscle displacement: an in vitro study of ischemic mitral regurgitation", The American Society of Mechanical Engineering Conference, Vail, CO, June 2005.
349. He, Z.M., Sacks, M., Liou, W., Jimenez, J., Yoganathan, A.P., "Mitral valve strut chordae insertion strain analysis", The American Society of Mechanical Engineering Conference, Vail, CO, June 2005.
350. Ge, L., Wang, C., Sotiropoulos, F., Yoganathan, A.P., 2005, "Numerical Simulation of Flow in Mechanical Bileaflet Heart Valves", The American Society of Mechanical Engineering Conference, Vail, CO, June 2005.
351. Fallon, A., Shah, N., Marzec, U., Hanson, S., Yoganathan A.P., "Characterization of Thrombosis Caused by Flow Through Various Channels Approximating the Hinge Region of Mechanical Heart Valves", The American Society of Mechanical Engineering Conference, Vail, CO, June 2005.
352. Carberry, J., Simon, H., Leo, H.L., Yoganathan, A. P., "Bileaflet Mechanical Heart Valve Hinge Region Flows in the Aortic and Mitral Positions", Summer Bioengineering Conference, The American Society of Mechanical Engineering Conference, Vail, CO, June 2005.
353. Pekkan, K., Frakes, D., Zelicourt, D., Lucas, C. W., W. Parks, J., Yoganathan, A. P, "Coupling of pediatric ventricle assist devices to Fontan circulation, simulations with a lumped parameter model", First International Conference on Pediatric Mechanical Circulatory Support Systems and Pediatric Cardiopulmonary Perfusion, Hershey, Pennsylvania, May 2005.
354. Leo H.L., Fallon A., Simon H., Dasi, L.P., Yoganathan, A.P., "The Influence of Hinge Gap Width Tolerance on the Potential for Blood Element Damage and Platelet Activation in Bileaflet

- Mechanical Heart Valves," The 12th International Congress of Biorheology (ICB) and The 5th International Conference on Clinical Hemorheology (ICCH), Chongqing, China, May 2005.
355. Sundareswaran, K.S., Kitajima, H., Pekkan, K., Soerensen, D.D., Yerneni, V., Parks, W.J., Sallee, D., Yoganathan A.P., "Flow field comparison in reverse engineered total cavopulmonary connection anatomic models: High Resolution PC MRI vs CFD", International Society of Magnetic Resonance in Medicine (ISMRM) 13th Scientific Meeting, Miami, Florida, May 2005.
 356. Frakes, D.H., Wake, A.K., Pekkan, K., Oshinski, J., Giddens, D.P., Yoganathan, A.P., "Reconstruction of 3D PC-MRA Data Sets for Clinical Fluid Dynamic Analysis Applications" International Society of Magnetic Resonance in Medicine (ISMRM) 13th Scientific Meeting, Miami, Florida, May 2005.
 357. Chaikof, E. L., Kasirajan, K., Pekkan, K., Frakes, D. H., Milner, R, Dodson, T. F., Yoganathan, A.P., "Non-Invasive Analysis of Aortic Dissection Fluid Dynamics", Southern Association of Vascular Surgery, 29th Annual Meeting, Marco Island, Florida, January 2005.
 358. Gilmanov, A., Ge, L., Wang, C., de Zelicourt, D., Pekkan, K., Sotiropoulos, F., Yoganathan, A.P., "Flows in a Bileaflet Mechanical Heart Valve at Near Peak Systole Reynolds Number", 57th Annual Meeting of the Division of Fluid Dynamics, APS, Seattle, WA, November 2004.
 359. Gilmanov, A., Ge, L., Wang, C., de Zelicourt, D. Pekkan, K., Sotiropoulos, F., Yoganathan, A.P., "Numerical Simulations of Flow in Anatomically Realistic Total Cavopulmonary Connections", 57th Annual Meeting of the Division of Fluid Dynamics, APS, Seattle, WA, November 2004.
 360. Pekkan, K., Kitajima, H., Forbess, J.M., Fogel, M., Kanter, K.R., Parks, J., Sharma, S., Yoganathan, A.P., "Functional Left Pulmonary Artery Stenosis in Total Cavopulmonary Connection (TCPC): Assessing Improvements in Lung Perfusion and Cardiac Workload with Computer Aided Angioplasty", The American Heart Association (AHA) Scientific Sessions New Orleans, LA, November 2004.
 361. Ketner, M.E., Lucas, C.N., Mill, M.R., Sheridan, B., Lucas W.J., Yoganathan, A.P., "Energy Hemodynamics, and Respiration Effects in Lambs with Various Fontan Circulations", Biomedical Engineering Society, Annual Fall Meeting, Philadelphia, PA, October 13-16, 2004.
 362. Steele, B.N, Lucas, C.N., Ketner, M.E., Mill, M.R., Sheridan, B., Lucas, W.J., Yoganathan, A. P., "Energy Losses Due to Graft Compliance Under Steady and Pulsatile Flow in the Extracardiac TCPC", Biomedical Engineering Society, Annual Fall Meeting, Philadelphia, PA, October 13-16, 2004.
 363. Grashow, J.S., Yoganathan, A.P., Sacks, M.S., "Biaxial Mechanical Behavior of the Anterior Leaflet of the Mitral Valve at Physiologic Strain Rates", BMES Annual Fall Meeting, Philadelphia, PA, October 2004.
 364. Yernenei, S, Pekkan, K., Kitajima, H., Soerensen, D.D., de Zelicourt, D., Parks, W.J., Sallee, D., Sharma, S., Fogel, M.A., Yoganathan, A.P., "Computational Fluid Dynamics Study of an Intra-Atrial and Extra-Cardiac Patient-Specific Total Cavopulmonary Connection", Biomedical Engineering Society, Annual Fall Meeting, Philadelphia, PA, October 2004.

365. Ge, L., Gilmanov, A., Carberry, J., Pekkan, K., Sotiropoulos, F., Yoganathan, A.P., "Toward a Predictive CFD Framework for Multi-scale Cardiovascular Flow Simulations", BMES Annual Fall Meeting, Philadelphia, PA, October 2004.
366. Carberry, J., Leo, H., Ge, F., Sotiropoulos, F., Yoganathan, A.P., "Flow through an idealized heart valve: sensitivity to geometric asymmetry", BMES Annual Fall Meeting, Philadelphia, PA, October 13-16, 2004.
367. Pekkan, K., Yoganathan, A.P., Frakes, D., Kitajima, H., Soerensen, D., Sundareswaran, K., de Zelicour, D., "Progress towards understanding anatomical fluid dynamics and surgical planning of the TCPC", BMES Annual Fall Meeting, Philadelphia, PA, October 2004.
368. He, Z., Ritchie, J., Grashow, J.S., Sacks, M.S., Yoganathan, A.P., "In vitro dynamic strain behavior of the mitral valve posterior leaflet", BMES Annual Fall Meeting, Philadelphia, PA, October 2004.
369. Merritt K. L., Ritchie J. L., Warnock J. N., He Z., Yoganathan A. P., "The Relationship between Percent Strain and Percent Crimp of Chordae Tendinae of the Mitral Valve", Annual fall meeting of the Biomedical Engineering Society, Philadelphia, PA, October 2004.
370. Ikhumetse J. D., Konduri S., Warnock J. N., Yoganathan A. P., "Effects of Systemic Aortic Pressures on Synthetic Activity of Pulmonary Valve Leaflets", Annual fall meeting of the Biomedical Engineering Society, Philadelphia, PA, October 2004.
371. Warnock J. N., Konduri S., He Z., Yoganathan A. P., "A Pulsatile Organ Culture System to Study Aortic Valve Biology Ex Vivo", Annual Fall meeting of the Biomedical Engineering Society, Philadelphia, PA, October 2004.
372. Konduri, S., Warnock, J.N., Yoganathan, A.P., "Biological Study of Porcine Aortic Heart Valves in an *In Vitro* Organ Culture System", Advances in Tissue Engineering and Biology of Heart Valves, Florence, Italy, September 2004.
373. Baglia, M., He, Z. Jimenez, J., Chester, A., Yacoub, M. and Yoganathan, A.P., "Mechanical Behavior of Porcine Mitral Valve Leaflet Tissue under Endothelin-1", International Symposium on Advances in Tissue Engineering and Biology of Heart Valves, Florence, Italy, September 2004.
374. Jimenez, J.H., Ritchie, J., He, Z., Yoganathan, A.P., "Mechanics of the Mitral Valve", 26th Annual International Conference of the IEEE Engineering in Medicine and Biology Society, San Francisco, CA, September 2004.
375. Soerensen, D.D., Pekkan, K., Sundareswaran, K.S., Yoganathan, A.P., "New Power Loss Optimized Fontan Connection Evaluated by Calculation of Power Loss Using High Resolution PC-MRI and CFD", 26th Annual International Conference of the IEEE Engineering in Medicine and Biology Society, San Francisco, CA, September 2004.
376. Yoganathan, A.P., "A Gallery of Cardiovascular Flow Fields: From Heart Valves to Congenital Heart Disease", Keynote Lecture, 11th International Symposium on Flow Visualization, Notre Dame University, Indiana, August 2004.
377. Jimenez, J.H., Soerenson, D.D., He, Z., Ritchie, J., Yoganathan, A.P., "Effects of Papillary Muscle Position on Chordal Force Distribution in the Mitral Valve: An in vitro study", 14th

- European Society of Biomechanics Conference, Hertogenbosch, The Netherlands, July 2004. (Accepted, could not fly).
378. Simon, H.A., Leo, H-L., Carberry, J., and Yoganathan, A. P. "Investigation of the leakage flow fields of two bileaflet mechanical heart valves under aortic conditions", 14th European Society of Biomechanics Congress. 's-Hertogenbosch, The Netherlands, July 2004.
379. Yoganathan, A.P., Frakes, D., Kitajima, H., Soerensen, D., Sundareswaran, K., Pekkan, K., Sotiropoulos, F., deZelicourt, D., "Flow Dynamics of the Anatomic TCPC: An Integrated MRI, In Vitro Experimentation, and CFD Approach for Surgical Applications", International Interdisciplinary Workshop on Flow and Motion, ISMRM, University Hospital Zurich, July 2004.
380. Pekkan, K., Kitajima, H., Forbes, J.M., Fogel, M., Kanter, K.R., Parks, J., Sharma, S., and Yoganathan, A.P., "Total Cavopulmonary Connection Flow with Left Pulmonary Artery Stenosis", 14th European Society for Biomechanics Congress, s'Hertogenbosch, The Netherlands, July 2004.
381. de Julien de Zélicourt, D.A, Pekkan K., Frakes, D. H., Carberry, J., Fogel, M. and Yoganathan, A. P., "Fluid Mechanical Assessment of Anatomical Models of the Total Cavopulmonary Connection", 14th European Society for Biomechanics Congress, s'Hertogenbosch, The Netherlands, July 2004.
382. Hanson S. R., Warnock J. N., Marzec U., Shah N., Fallon A. M., Yoganathan, A. P., "Quantification of Clot Propensity through Round and Slit Orifices: Relevance to Bileaflet Mechanical Heart Valve Geometry," 14th European Society for Biomechanics Congress, s'Hertogenbosch, The Netherlands, July 2004.
383. Sacks, M.S., Grashow, J., Yoganathan, A. P., "Viscoelastic behavior of valvular tissues under biaxial stretch", 14th European Society for Biomechanics Congress, s'Hertogenbosch, The Netherlands, July 2004.
384. He, Z.M., Ritchie, J., Sacks, M.S., Yoganathan, A.P., "In Vitro Dynamic Strain Analysis on the Posterior Leaflet of the Mitral Valve", 14th European Society for Biomechanics Congress, s'Hertogenbosch, The Netherlands, July 2004.
385. Leo, H. L. Simon, H., Carberry, J. Lee, S. C., Yoganathan, A. P., "The Influence of Design Parameters on the Flow Structures In Tri-Leaflet Polymeric Heart Valves", 14th European Society for Biomechanics Congress, s'Hertogenbosch, The Netherlands, July 2004.
386. Simon, H.A., Leo, H-L., Carberry, J., Yoganathan, A. P., "Investigation of the leakage flow fields of two bileaflet mechanical heart valves under aortic conditions", 14th European Society for Biomechanics Congress, s'Hertogenbosch, The Netherlands, July 2004.
387. de Julien de Zélicourt, D.A, Pekkan K., Frakes, D. H., Carberry, J., Fogel, M., Yoganathan, A. P., "Fluid Mechanical Assessment of Anatomical Models of the Total Cavopulmonary Connection", 14th European Society for Biomechanics Congress, s'Hertogenbosch, The Netherlands, July 2004.
388. Ritchie, J., Jimenez, J., He, Z.M., Sacks, M.S., Yoganathan, A.P., "The Material Properties of the Chordae Tendineae of the Mitral Valve: An in vitro Investigation", SEM X International Congress & Exposition on Experimental and Applied Mechanics, Costa Mesa, CA, June 7-10, 2004.

389. Xing Y., Warnock J. N., Yoganathan A. P., "Expression of Matrix Metalloproteinases (MMPs) in Porcine Aortic Valve Leaflets under Elevated Pressure", Presented at the 8th Annual Hilton Head Workshop, Hilton Head Island, SC, March 2004.
390. Ritchie J. L., Warnock J. N., Jimenez J., He Z., Yoganathan A. P., "Evidence of Vascularization of the Chordae Tendinae of the Native Mitral Valve", Presented at the 8th Annual Hilton Head Workshop, Hilton Head Island, SC, March 2004.
391. Konduri S., Warnock J. N., Yoganathan A. P., "Development of a Sterile Ex Vivo Organ Culture System for the Study of Aortic Heart Valves", Presented at the 8th Annual Hilton Head Workshop, Hilton Head Island, SC, March 2004.
392. Xing Y., Warnock J. N., He Z., Hilbert S. L., Yoganathan A. P., "Effects of Cyclic Pressure on the Biological Properties of Porcine Aortic Valve Cusps", Presented at the 9th Biennial meeting of the International Society for Applied Cardiovascular Biology, Savannah, GA, March 2004.
393. Warnock J. N., Lees C. N., Teoh S-W., Yoganathan A. P., " Evaluation of Poly(α -caprolactone) Films for Tissue Engineered Heart Valve Leaflets", Presented at the 9th Biennial meeting of the International Society for Applied Cardiovascular Biology, Savannah, GA, March 2004.
394. Fallon A. M., Shah N., Marzec U., Warnock J. N., Hanson S. R., Yoganathan A. P., "Quantification of Clot Propensity through Circular Orifices: Relevance to Bileaflet Mechanical Heart Valve Hinge Geometry", Presented at the 9th Biennial meeting of the International Society for Applied Cardiovascular Biology, Savannah, GA, 10th - 13th March 2004.
395. Frakes, D.H., Fogel, M.A., Parks, J., Sharma, S., Smith, M.J.T. and Yoganathan, A.P., "MRI-Based 3D Modeling of Cardiac Vascular Anatomies for Surgical Applications", The American College of Cardiology Annual Scientific Session, New Orleans, LA, March 2004.
396. Ge, L., Pekkan, K., Leo, H.L., de Zélicourt, D., Sotiropoulos, F., Yoganathan, A.P., "A Pragmatic Approach towards Accurately Modeling Cardiovascular Flows: Integrating High Resolution Computational Fluid Dynamics & Sophisticated Experimental Techniques", International Conference on Mathematical Biology, Kanpur, India, February 2004.
397. Yoganathan, A.P., Xing, Y., Weston, M., Warnock, J., Konduri, S., "Effects of Shear Stress and Pressure on the Biosynthetic Activity of Porcine Heart Valve Leaflets", Indo-US Workshop on Tissue Engineering and Stem Cell Technology, Trivandrum, India, February 2004.
398. Ge, L., Pekkan, K., Leo, H.L., de Zélicourt, D., Sotiropoulos, F. and Yoganathan, A.P., "Toward Quantitatively Accurate Modeling of Cardiovascular Flows: Integrating High Resolution CFD & Experimental Techniques", US National Committee on Biomechanics, International Bio-Fluids Symposium and Workshop, (Caltech) Pasadena, California, December 12-14, 2003.
399. Ge, L., Sotiropoulos, F., Yoganathan, A.P., "DNS of Flow in a Bileaflet Mechanical Prosthetic Heart Valve", American Physical Society Conference, Newark, New Jersey, November 2003.

400. Pekkan, K., de Zélicourt, D., Yoganathan, A.P., "In vitro Visualization of an anatomic total cavopulmonary connection flow", 56th Annual Meeting APS division of fluid dynamics, East Rutherford, New Jersey, November 2003.
401. Sorensen, D.D., Frakes, D.H., Yoganathan, A.P., "Automated Tracking of Heart Valve Leaflet Markers for Nonrigid Surface Motion Reconstruction", Biomedical Engineering Society, Annual Fall Meeting, Nashville, Tennessee, October 2003.
402. Wallin, A.K., Frakes, D.H., Brummer, M., Yoganathan, A.P., Chapman, A.B., "Improvements in Validation Studies: Polyvinyl Alcohol (PVA) Phantoms and Magnetic Resonance Imaging", Biomedical Engineering Society, Annual Fall Meeting, Nashville, Tennessee, October 2003.
403. de Zélicourt, D.A., Frakes, D., Pekkan, K., Yoganathan, A.P., "Construction of morphologically accurate TCPC models for in vitro flow studies", First US National Symposium on Frontiers in Biomechanics, Nashville, Tennessee, October 2003.
404. Yoganathan, A.P., He, Z. and Jimenez, J., "Anterior Leaflet and Chordae Tendineae Mechanics Of The Mitral Valve: In Vitro Studies", World Congress of Biomedical Engineering, Sydney, Australia, August 2003.
405. He, Z., Sacks, M., Jimenez, J., Yoganathan, A.P., "Effects of Papillary Muscle Position On The In Vitro Dynamic Strain On The Porcine Mitral Valve", SHVD Second Biennial Meeting, Paris, France, July 2003.
406. Ge, L., Jones, C., Sotiropoulos, F., Yoganathan, A.P., "Numerical Simulation of Flows in Mechanical Heart Valves: Flow Symmetry and Grid Resolution", SHVD Second Biennial Meeting, Paris, France, July 2003.
407. Yoganathan, A.P., Saxena, R., Lemmon, J., Ellis, J., "Laser Doppler Velocimetry Assessment of the Hinge Flow for the Medtronic ADVANTAGE® and St. Jude Medical Bileaflet Valves", SHVD Second Biennial Meeting, Paris, France, July 2003.
408. Sacks, M., Yoganathan, A.P., "A Structural Constitutive Model For Mitral Valve Leaflets", SHVD Second Biennial Meeting, Paris, France, July 2003.
409. Xing, Y., He, Z., Yoganathan, A.P., "Effects Of Steady Shear Stress On The Biological Properties Of Porcine Aortic Valve Cusps", SHVD 2nd Biennial meeting, Paris, France, July 2003.
410. Sacks, M.S., Yoganathan, A.P., "A Structural Constitutive Model For The Mitral Valve Leaflets", presented at the International Society for Heart Valve Disease biannual meeting, Paris, France, 2003. Published in the meeting proceedings, page 84.
411. He, Z., Sacks, M.S., Yoganathan, A.P., "Effects of Papillary Muscle Position On The In Vitro Dynamic Strain On The Porcine Mitral Valve", presented at the International Society for Heart Valve Disease biannual meeting in Paris, France, 2003. Published in the meeting proceedings, page. 96.
412. Jimenez, J.H., Sorensen, D., He, Z., He, S., Yoganathan, A.P., "Effects of a saddle shaped annulus on mitral valve function and Chordal Force Distribution", Society of Heart Valve Disease Biennial Meeting, Paris, France, July 2003.

413. Fallon, A., Hanson, S., Marzec, U., Yoganathan, A.P., "Modeling of Blood Flow Through Mechanical Heart Valves During the Leakage Phase of the Cardiac Cycle Using Different Size Orifices", Society of Heart Valve Disease Biennial Meeting, Paris, France, July 2003.
414. Simon, H., Leo, H-L, Yoganathan, A.P., "Comparative Studies of the Micro Flow Fields within the Hinge and Thumbnail Region of the 23 mm St. Jude Medical Regent Heart Valve in the Aortic and Mitral Positions", SHVD Second Biennial Meeting, Paris, France, July 2003.
415. Ohashi, K.L., Culkar, J., Riebman, J.B., Estes, M., Constantz, B.R., Yoganathan, A.P., "Hemodynamic Characterization of Calcified Stenotic Human Aortic Valves Pre- and Post-Treatment with a Novel Aortic Valve Repair System", Society of Heart Valve Disease, Second Biennial Meeting, Paris, France, July 2003.
416. Ge, L., Jones, S.C., Sotiropoulos, F., Healy, T., Yoganathan, A.P., "Three Dimensional Numerical Simulation of Flow in a Bileaflet Mechanical Heart Valve Using Overset Grids", 2nd MIT Conference on Computational Fluid and Solid Mechanics, Cambridge, Massachusetts, June 2003.
417. Liu, Y., Pekkan K., Jones, C., Yoganathan, A.P., "The Effects of Different Mesh Generation Methods on Fluid Dynamic Analysis and Power Loss in Total Cavopulmonary Connection (TCPC)", ASME Summer Bioengineering Conference, Key Biscayne, Florida, June 2003.
418. Frakes, D.H., Sinotte, C.M., Parks, J., Sharma, S., Yoganathan, A.P., "Three-Dimensional Flow Field Reconstruction from Phase Encoded MR Velocity Images", The American Society of Mechanical Engineers, Summer Bioengineering Meeting, Key Biscayne, Florida, June 2003.
419. Jimenez, J.H., Sorensen D., He, Z., He, S., Yoganathan, A.P., "Effects of A Saddle Shaped Annulus on Mitral Valve Function and Chordal Force Distribution", Society of Heart Valve Disease Biennial Meeting, June 2003.
420. Liu, Y., Ryu, K., Frakes, D.H. and Yoganathan, A.P., "Fluid Dynamic Analysis and Power Loss Assessment for Total Cavopulmonary Connection Using Different Meshing Methods", The American Society of Mechanical Engineers, Summer Bioengineering Meeting, Key Biscayne, FL, June 2003.
421. Frakes, D.H., Sinotte, C.M., Parks, J., Sharma, S., Yoganathan, A.P., "Three-Dimensional Flow Field Reconstruction from Phase Encoded MR Velocity Images", The American Society of Mechanical Engineers, Summer Bioengineering Meeting, Key Biscayne, FL, June 2003.
422. Frakes, D., Smith, M., Fogel, M., Sharma, S., Yoganathan, A.P., "Clinical Implementation of MR-Based Pediatric Cardiovascular Surgical Planning", Submitted to: Society for Cardiac Magnetic Resonance Annual Meeting, Orlando, Florida, February 2003.
423. Yoganathan, A.P., "Fluid Dynamics of the Fontan Circulation", Plenary Lecture 10th International Congress on Biological and Medical Engineering, Singapore, December 2002.
424. Leo, H.L., Simon H., Lee, S.C., He, Z.M., Yoganathan, A.P., "An Investigation of the Effects of Various Flow Structures in the Vicinity of a Polymeric Heart Valve", ICBME 2002, International Congress on Biological and Medical Engineering: The Bio-Era - New Frontiers, New Challenges, Singapore, December 2002.

425. Soerensen, D.D., Jimenez, J., Christensen, T.B.N., He, Z., He, S., Honeycutt, C., Yoganathan, A.P., "Configuration of the Mitral Valves Subvalvular Complex and its Effect on the Chordal Force Distribution", Second Joint EMBS-BMES Conference, Houston, TX, October 2002.
426. He, Z.M., Sacks, M.S., Baijens, L., Wanant, S., Shah, P., He S., Yoganathan, A.P. "In Vitro Dynamic Strain Analysis on the Porcine Mitral Valve", Second Joint EMBS-BMES Conference, Houston, TX, October 2002.
427. Xing, Y., He, Z., Conway, D.E, Yoganathan, A.P., "Changes in the Structure & Biosynthetic Activity of Porcine Heart Valve Leaflets under Elevated Pressure", Second Joint EMBS-BMES Conference, Houston, TX, October 2002.
428. Travis, B., Ellis, J.T., Leo, H.L., Fallon, A., Hanson, S., Marzec, U., Yoganathan, A.P., "Evaluation of Bileaflet Mechanical Heart Valve Induced Blood Damage During Leakage Flow Using Laser Doppler Velocimetry and Indicators of Platelet Activation", 4th World Congress on Biomechanics, Calgary, Alberta, Canada, August 2002.
429. Frakes, D., Lucas, C., Ensley, E., Healy, T., Sharma, S., Yoganathan, A.P., "Analysis of Total Cavopulmonary Connection Fluid Dynamics: Experimental Studies", 4th World Congress on Biomechanics, Calgary, Alberta, Canada, August 2002.
430. Leo, H.L., He, Z.M., Ellis J.T., Yoganathan A.P., "Micro Flow Fields in the Hinge Region of the CarboMedics Bileaflet Mechanical Valve Design", Sixth Annual Hilton Head Workshop Prosthetic Heart Valves: Past, Present and Future, Hilton Head Island, SC, March 2002.
431. Fallon, A., Baijens, L., Hanson, S., Marzec, U., Yoganathan, A.P., "Developing a System to Initiate Clot Formation on a Thrombogenic Surface", 6th Annual Hilton Head Workshop for Prosthetic Heart Valves, Hilton Head, SC, March 2002.
432. He, Z.M., Baijens, L., Wanant, S., Shah, P., He, S., Sugimoto, B., Sacks M.S., Yoganathan, A.P., "In Vitro Dynamic Strain Analysis on the Porcine Mitral Valve", Sixth Annual Hilton Head Workshop on Prosthetic Heart Valves, Published in the Proceedings of the Prosthetic Heart Valve Workshop, pg. 30, Hilton Head Island, SC, March 6-10, 2002.
433. Xing, Y., Yoganathan, A.P., "Effects of Ambient Pressure on the Biological Properties of Porcine Heart Valves", ISACB 8th Biennial Meeting, Switzerland, February 2002.
434. Frakes, D., Sinotte, C., Conrad, C., Healy, T., Fogel, M., Monaco, J., Smith, M., Yoganathan, A. P., "Application of an Adaptive Control Grid Interpolation Technique to MR Data Enhancement for Morphological Vascular Reconstruction", SPIE Medical Imaging Conference, San Diego, CA, February 2002.
435. Frakes, D., Healy, T., Sharma, S., Fogel, M., Monaco, J., Smith, M., Yoganathan, A.P., "Adaptive Control Grid Interpolation-Based MR Data Reconstruction for Surgical Planning and Evaluation", IBB Educational Partners Symposium, Atlanta, GA, February 2002.
436. Healy, T.M., Sotiropoulos, F., Yoganathan, A.P., "Computational Simulation of Blood Flow Through Bileaflet Mechanical Heart Valve Protheses", American Physical Society, Division of Fluid Dynamics Conference, San Diego, CA, November 2001.

437. Frakes, D.H., Conrad, C.P., Healy, T.M., Monaco, J.W., Smith, M. J., Yoganathan, A.P., "Application of an Adaptive Control Grid Interpolation Technique to Morphological Vascular Reconstruction: A Component of a Comprehensive Surgical Planning and Evaluation Tool", 23rd Annual International Conference of the IEEE Engineering in Medicine and Biology Society, Istanbul, Turkey, October 2001.
438. Frakes, D. H., Conrad, C.P., Healy, T.M., Sharma, S., Fogel, M.A., Monaco, J.W., Smith, M.J.T., Yoganathan, A.P., "Application of An Adaptive Control Grid Interpolation Technique to MR Data Set Augmentation Aimed at Morphological Vascular Reconstruction", International Society for Magnetic Resonance in Medicine Conference, Marco Island, Florida, October 2001.
439. Travis, B., Leo, H., Frakes, D.H., Yoganathan, A.P., "An Analysis of the Turbulence in the Leakage Jets of Bileaflet Prosthetic Heart Valves", The American Society of Mechanical Engineers, Summer Bioengineering Meeting, Snowbird, UT, June 2001.
440. Frakes, D.H., Healy, T.M., Sharma, C., Monaco, J.W., Smith, M.J., Yoganathan, A.P., "Application of an Adaptive Control Grid Interpolation Technique to Total Cavopulmonary Blood Flow Image Reconstruction", The American Society of Mechanical Engineers, Summer Bioengineering Meeting, Snowbird, Utah, June 2001.
441. Frakes, D.H, Conrad, C., Healy, T.M., Monaco, J., Smith, M.J.T., Yoganathan, A.P., "An Integration of Adaptive Control Grid Interpolation-Based MR Reconstruction and CFD Analysis Aimed at Surgical Planning", Fifth International Symposium on Computer Methods in Biomechanics and Biomedical Engineering, Rome, Italy, 2001.
442. Leo, H.L., He, Z., Ellis, J.T., Yoganathan, A.P., "Micro Flow Fields in the Hinge Regions of Bileaflet Mechanical Valve Designs: Potential Predictor of Clinical Outcomes", First Biennial Meeting, The Society for Heart Valve Disease Conference, London, U.K., June 2001.
443. He, S., Conrad C., He Z., Yoganathan, A.P., "Leaflet Coaptation on the Mechanism of Functional Mitral Regurgitation", First Biennial Meeting, The Society for Heart Valve Disease Conference, London, U.K., June 2001.
444. Travis, B.R., Marzec, U.M., Leo, H.L., Sanders, C.B., Hanson, S.R., Yoganathan, A.P., "Bileaflet Pivot Gap Width Influences Platelet Damage", First Biennial Meeting, The Society for Heart Valve Disease Conference, London, U.K., June 2001.
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748. Woo, Y-R., Yoganathan, A.P., "An On-Line Method for the In Vitro Evaluation of Prosthetic Heart Valves", Proceedings of the 188th ACS National Meeting, Miami Beach, FL, May 1985.
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750. Stevenson, D.M., Yoganathan, A.P., "Computer Simulation of Steady Turbulent Flow Through Trileaflet Heart Valves", Proceedings of the Joint ASME/ASCE Mechanics Conference, Albuquerque, NM, June 1985.
751. Yoganathan, A.P., Woo, Y-R., Valdes-Cruz, L.W., Sahn, D.J., "Accuracy of Spatial Jet Mapping with a New Color Coded Flow Mapping Doppler Technique: Comparison of Ultrasound Doppler with Laser Doppler in an In Vitro Model of Valve Stenosis", 34th Annual Scientific Sessions-American College of Cardiology, JACC, vol. 5, pp. 453, March 1985.
752. Yoganathan, A.P., Woo, Y-R., Valdes-Cruz, L. M., Sahn, D.J., "Comparison of Continuous Wave and High PRF Ultrasound Doppler Velocities to Laser Doppler Anemometry in an In Vitro Pulsatile Flow Model of Valve Pulmonic Stenosis: Accuracy for Gradient Prediction", 57th Annual Scientific Sessions-American Heart Association, Circulation, vol. 70, 1984.

753. Yoganathan, A.P., Philpot, E.F., Franch, R.H., Sahn, D.M., "Flow Visualization in Pulmonary Artery Models", Proceedings of the Bioengineering Symposium, ASME Winter Annual Meeting, New Orleans, LA, December 1984.
754. Yoganathan, A.P., Woo, Y-R., "Pulsatile Flow Velocity Measurements in the Vicinity of Prosthetic Aortic Heart Valves", Proc of the 4th International Conference on Mechanics in Medicine & Biology, pp. 127-130, Buffalo, NY, July 1984.
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757. Yoganathan, A.P., Ball, J., Philpot, E.F., Woo, Y-R., Franch, R.H., "Preliminary In Vitro Fluid Dynamic Studies in a Pulmonary Artery Model", Proceedings of the XIIth Annual SECTAM Conference, pp. 291-295, Callaway Gardens, GA, May 1984.
758. Stevenson, D.M., Yoganathan, A.P., "Numerical Simulation of Turbulent Blood Flow Through a Prosthetic Tissue Valve", Proceedings of the XIIth Annual SECTAM Conference, pp. 281-286, Callaway Gardens, GA, May 1984.
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760. Yoganathan, A.P., Yarlagadda, P., "Flow of Viscoelastic Fluids in a Sudden Tubular Contraction", Proceedings of the Society of Plastic Engineers Annual Technical Conference, pp. 429-432, New Orleans, LA, April 1984.
761. Woo, Y-R., Williams, F.P., Yoganathan, A.P., Franch, R.H., Harrison, E.C., "Steady and Pulsatile Flow Visualization of Prosthetic Heart Valves in Current Clinical Use", Proceedings of the 3rd International Symposium on Flow Visualization, pp. 24-28, Ann Arbor, MI, September 1983.
762. Yarlagadda, P., Yoganathan, A.P., "The Flow of Viscoelastic Fluids in a Sudden Tubular Contraction", Proceedings of the 3rd International Symposium on Flow Visualization, pp. 295-299, Ann Arbor, MI, September 1983.
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765. Stevenson, D.M., Yoganathan, A.P., "Computer Simulation of Steady Flow Through an Axisymmetric Aortic Tissue Valve", Proceedings of the Joint ASME/ASCE Mechanics Conference, pp. 221-224, Houston, TX, June 1983.

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767. Yoganathan, A.P., Franch, R.H., Harrison, E.C., "Clinical Pathologic Problems Observed with Prosthetic Heart Valves: Possible Relationship to Fluid Dynamics", Proceedings of the Scientific Sessions American Heart Association - Georgia Affiliate, pp. 22, Pine Mountain, GA, October 1982.
768. Yoganathan, A.P., Franch, R.H., "Hemodynamic Characteristics of Current Prosthetic Heart Valves", Proceedings of the Scientific Sessions American Heart Association - Georgia Affiliate, pp. 21, Pine Mountain, GA, October 1982.
769. Yoganathan, A.P., Harrison, E.C., Franch, R.H., "Clinical Pathologic Problems Observed with Prosthetic Heart Valves: Possible Relationship to Fluid Dynamics", Proceedings of the 3rd International Conference on Mechanics in Medicine and Biology, pp. 201-202, Compiègne, France, July 1982.
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771. Yoganathan, A.P., Franch, R.H., Harrison, E.C., "Clinical Pathologic Problems Observed With Prosthetic Heart Valves: Possible Relationship to Fluid Dynamics", Proceedings of the ASME Winter Annual Meeting: Bio Engineering Symposium Series, Washington, D. C., November 1981.
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773. Yoganathan, A.P., Franch, R.H., "In Vitro Fluid Dynamics of Tissue Bioprotheses", Proceedings of the 2nd World Congress of Chemical Engineering, vol. 4, pp. 245, Montreal, Canada, October 1981.
774. Yoganathan, A.P., Harrison, E.C., "Correlation of In Vitro Fluid Dynamics of Prosthetic Heart Valves With In Vivo Performance," Proceedings of the Joint ASME/ASCE Mechanics Conference, pp. 7-8, Boulder, CO, June 1981.
775. Stevenson, D.M., Yoganathan, A.P., Franch, R.H., "The In Vitro Fluid Dynamics of the Hall-Kaster and New Bjork-Shiley Heart Valve Prostheses", Proceedings of the Joint ASME/ASCE Mechanics Conference, pp. 3-4, Boulder, CO, June 1981.
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777. Yoganathan, A.P., Reamer, H.H., Corcoran, W.H., Harrison, E.C., Shulman, I.A., Parnassus, W., "In Vitro Flow Measurements in the Near Vicinity of the Starr-Edwards Aortic Ball Valve Prosthesis", Proceedings of the 32nd ACEMB, vol. 32, pp. 33, Denver, October 1979.

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780. Shulman, I.A., Edmiston, W.A., Harrison, E.C., Parnassus, W., Yoganathan, A.P., Corcoran, W.H., "Description of Material Adherent to Rigid Heart Valve Prostheses", Proceedings of the 14th Annual AAMI Meeting, pp. 248, Las Vegas, May 1979.
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782. Yoganathan, A.P., Reamer, H.H., Corcoran, W.H., Harrison, E.C., "Flow Characteristics of the Present Model vs. the Convexo-Concave Bjork-Shiley Aortic Prosthesis", Proceedings of the 14th Annual AAMI Meeting, pp. 307, Las Vegas, May 1979.
783. Yoganathan, A.P., Corcoran, W.H., Harrison, E.C., "Frequency Analysis of the Closing Sounds of Prosthetic Aortic Valves: A Preliminary In Vitro Study", Proceedings of the 31st ACEMB, vol. 20, pp. 288, Atlanta, October 1978.
784. Yoganathan, A.P., Corcoran, W.H., Harrison, E.C., "Wall Shear Stress Measurements in the Near Vicinity of Prosthetic Heart Valves", Proceedings of the 31st ACEMB, vol. 31, pp. 38, Atlanta, October 1978.
785. Yoganathan, A.P., Corcoran, W.H., Harrison, E.E., "In Vitro Measurements of Pressure Drops Across Prosthetic Aortic Valves Under Steady and Pulsatile Flow", Proceedings of the 30th ACEMB, vol. 19, pp. 410, Los Angeles, CA, October 1977.
786. Yoganathan, A.P., Corcoran, W.H., Harrison, E.C., Carl, J.R., "In Vitro Velocity Measurement in the Near Vicinity of the Bjork-Shiley Aortic Prosthesis", Proceedings of the 30th ACEMB, vol. 19, pp. 414, Los Angeles, CA, October 1977.
787. Yoganathan, A.P., Gupta, R., Udawadia, F.E., Corcoran, W.H., Sarma, R., Bing, R.F., Johnson, J.L., Sarma, R., "Use of the Fast Fourier Transform for the Frequency Analysis of the First Heart Sound in Normal Man", Proceedings of the 28th ACEMB, vol. 17, pp. 301, New Orleans, LA, September 1975.

CONFERENCE PRESENTATIONS WITHOUT PROCEEDINGS

1. Weston, M.W., Yoganathan, A.P. Flow Affects Protein Synthesis and Alpha-SM Actin Distribution in Aortic Valve Leaflets. Presented at the Davos Tissue Engineering Workshop, February, 2000.
2. He S., Lemmon J.D., Weston M.W., Jensen M.O., Levine R.A., and Yoganathan A.P. In Vitro Studies of the Mechanisms of Ischemic Mitral Regurgitation. Presented in the International Forum on Ischemic Mitral Valve Regurgitation, March, 1999.

3. Weston M.W., Goldstein S., and Yoganathan A.P. Flow Affects the Biosynthetic Activity of Aortic Valve Leaflet Fibroblasts. Biomedical Engineering Society, Annual Fall Meeting, October 1999.
4. Cape, E. G., Lefebvre, X. P., Levine, R. A., and Yoganathan, A. P., "Fluid Mechanics of the Mitral Valve: In Vitro Studies," Paper #180e, presented at the Annual AIChE Meeting, Chicago, IL, November 1990.
5. Vesier, C.C., and Yoganathan, A. P., "A Method for Modeling 3-D Blood Flow in the Left Ventricle," Paper #167Aj, presented at the Annual AIChE Meeting, San Francisco, CA, November 1989.
6. Cape, E.G., Levine, R. A., and Yoganathan, A. P., "Momentum Transport Analysis of Regurgitant Jets: A New Technique for Quantification of Mitral Insufficiency," Paper #147a, presented at the Annual AIChE Meeting, San Francisco, CA, November 1989.
7. Williams, F. P. and Yoganathan, A. P., "Numerical Simulation of Fluid Flow Through an Axisymmetric Aortic Valve-Like Geometry", Paper #73a, presented at the 79th Annual AIChE Meeting, Miami Beach, FL, November 1986.
8. Yoganathan, A. P. and Woo, Y-R., "Pulsatile Flow Velocity and Shear Stress Measurements in the Vicinity of Aortic and Mitral Heart Valve Prostheses", Paper #99h, presented at the 77th Annual AIChE Meeting, San Francisco, CA, November 1984.
9. Sahn, D. J., Valdes-Cruz, L. M., Yoganathan, A. P. and Woo, Y-R., "Accuracy of Ultrasound Doppler Velocity Measurements for Predicting Gradients Across Stenotic Valves: Validation Using Laser Doppler in an In Vitro Pulsatile Flow Model of Pulmonic Stenosis", Annual Meeting of the Association of European Pediatric Cardiologists, Vienna, Austria, May 1984.
10. Stevenson, D. M., Yoganathan, A. P., "Computer Simulation of Steady Flow Through an Axisymmetric Tissue Valve", Paper #98a, presented at the 75th Annual AIChE Meeting, Los Angeles, November 1982.
11. Stevenson, D. M., Yoganathan, A. P., and Franch, R. H., "Fluid Dynamics of Tilting (Pivoting) Disc Heart Valve Prostheses", Paper #109c, presented at the 74th Annual AIChE Meeting, New Orleans, November 1981.
12. Yoganathan, A. P., "In Vitro Performance Characteristics of Prosthetic Aortic Heart Valves in Current Clinical Use", Paper #53c, presented at the 73rd Annual AIChE Meeting, Chicago, November 1980.
13. Yoganathan, A. P., Reamer, H., Corcoran, H., and Harrison, E. C., "In Vitro Fluid Dynamics of the Present Model and Convexo-Concave Model Bjork-Shiley Aortic Prostheses", Paper #126g, presented at the 72nd Annual AIChE Meeting, San Francisco, November 1979.
14. Yoganathan, A. P., Corcoran, W. H., and Harrison, E. C., "In Vitro Velocity Measurements in the Near Vicinity of Aortic Valve Prostheses", Paper #114b, presented at the 69th Annual AIChE Meeting, Chicago, November 1976.

INVITED CONFERENCE SESSION CHAIRMANSHIPS

1. Session Chair, Concurrent Session III: Biomechanics and Mechanobiology, Heart Valve Society, New York City, March 19, 2016.
2. Co-Chairman, 2 sessions on Pediatric Biomechanics and Pediatric Clinical Challenges, 7th World Congress of Biomechanics, Boston, MA, July 2014.
3. Invited Co-Chair of the Track: Artificial Organs, World Congress of Biomechanics, Singapore, August 1-6, 2010.
4. Conference Co-Chair, BMES/EMBS, 1st Joint, International Conference, October 1999.
5. Program Chair, Bioengineering Division, ASME Winter Annual Meeting, November 1998.
6. Lead Organizer, ten sessions organized in Biofluid Mechanics, American Society of Mechanical Engineering Winter Annual Meeting, New Orleans, LA, November 1993.
7. Co-chairman and Organizer, two sessions on Computational Fluid Dynamics, American Society of Mechanical Engineering Winter Annual Meeting, New Orleans, LA, November 1993.
8. Chairman and Organizer, session on Heart Valve Fluid Mechanics, Biomedical Engineering Society Annual Meeting, Memphis, TN, October 1993.
9. Organizer, two sessions on Cardiovascular Fluid Mechanics, 7th International Conference on Biomedical Engineering, Singapore, December 1992.
10. Co-Chairman and Organizer, Session Blood Cell Damage with Medical Devices, American Institute of Chemical Engineers Annual Meeting, Miami Beach, FL, November 1992.
11. Chairman, Session on Cardiac Blood Flow, American Society of Mechanical Engineers Winter Annual Meeting, Anaheim, CA, November 1992.
12. Chairman, Session on Medical Device Fluid Mechanics, American Society of Mechanical Engineers Winter Annual Meeting, Atlanta, GA, December 1991.
13. Co-Organizer, Five Sessions on Biofluid Mechanics, American Society of Mechanical Engineers Winter Annual Meeting, Atlanta, GA, December 1991.
14. Co-Chairman, Session on Considerations in Color Flow Quantitation, 64th Annual Scientific Sessions - American Heart Association, Anaheim, CA, November 1991.
15. Co-Chairman, Sessions (2) on Blood Flow in Model Systems, World Congress on Medical Physics and Biomedical Engineering, Kyoto, Japan, July 1991.
16. Co-Chairman, Session on Fluid Mechanics in Biological Systems, American Institute of Chemical Engineers Annual Meeting, Chicago, IL, November 1990.
17. Chairman, Session on Cardiovascular Mechanics, Biomedical Engineering Society Meeting, Blacksburg, VA, October 1990.

18. Co-Chairman, Session on Biomechanics and Design of Cardiac Valves, First World Congress on Biomechanics, San Diego, CA, September 1990.
19. Co-Chairman, Session on Cardiovascular Fluid Mechanics, 7th Meeting of the European Society of Biomechanics, Aarhus, Denmark, July 1990.
20. Co-Chairman, Session on Heart Valve Fluid Mechanics, World Congress on Medical Physics and Biomedical Engineering, San Antonio, TX, August 1988.
21. Co-Chairman, Session of Cardiovascular Fluid Mechanics, IEEE Engineering in Medicine and Biology, 9th Annual Conference, Boston, MA, November 1987.
22. Chairman, Session on Heart Valve Fluid Mechanics, 39th ACEMB, Baltimore, MD, September 1986.
23. Chairman, Session on Biomedical Applications, 3rd International Symposium on Flow Visualization, Ann Arbor, MI, September 1983.
24. Chairman, Symposium on Bio Fluid Mechanics, 12th Annual SECTAM Meeting, Callaway Gardens, GA, May 1984.
25. Chairman, Symposium on Current Status of Biological Heart Valve Prostheses, 19th Annual AAMI Meeting, Washington, DC, April 1984.
26. Chairman, Symposium on Testing Methods of Prosthetic Heart Valves, 16th Annual AAMI Meeting, Washington, DC, May 1981.
27. Co-Chairman, Symposium on Advances in Polymer Engineering, 89th National AIChE Meeting, Portland, OR, August 1980.
28. Chairman, Symposium on Prosthetic Heart Valves, 14th Annual AAMI Meeting, Las Vegas, NV, May 1979.

PROFESSIONAL MEMBERSHIP

1. Society for Cardiovascular Magnetic Resonance, 2009-present.
2. American Physiological Society, 2011-present.
3. International Society for Applied Cardiovascular Biology, 2005-present.
4. Society for Heart Valve Disease, 2005-2014.
5. American Institute of Medical and Biological Engineering, 1992-present.
6. American Society of Mechanical Engineers, 1990-present.
7. Biomedical Engineering Society, 1989-present.
8. American Society of Echocardiography, 1986-present.
9. American Society of Biomechanics, 1986-present.
10. American Society of Engineering Education, 1980-present

11. American Heart Association, 1979-present.
12. Association for the Advancement of Medical Instrumentation, 1978-present.
13. Sigma Xi, 1976-present.
14. American Institute of Chemical Engineers, 1973-2010.
15. British Institute of Chemical Engineers, 1970-1982.

ON-CAMPUS COMMITTEES

1. Member, Board of Directors, Global Center for Medical Innovation (GCMI), 2015-2018.
2. Member, Board of Directors, Translational Testing and Training Laboratories, Inc. (T3 Labs), 2015-present.
3. Leader, Education & Outreach Committee for Bioengineering & Bioscience Unified Graduate Students (BBUGS), Georgia Tech (2014-present).
4. Chair, Biomedical Engineering Industry Outreach Committee, Georgia Tech
5. Associate Chair for Translational Research, BME Georgia Tech
6. Member, BioE Graduate Committee, Georgia Tech
7. Member, BME Graduate Committee, Georgia Tech
8. Co-Chair, College of Engineering Translational Research Task Force, Georgia Tech
9. Overhaul of Coulter Translational Grant Program, Georgia Tech
10. Chair, BME RPT Committee, Georgia Tech
11. Chair, Biomedical Engineering Awards Committee, Georgia Tech
12. Member, Coulter Project Director Search Committee, Georgia Tech (2012-present)
13. Chair, Gellerstadt Chair Search Committee, Georgia Tech (2012-2013).
14. Georgia Tech PI on the NHLBI Cardiovascular Translational Research U54 Grant Proposal, Georgia Tech (2012-present).
15. Member, Task Force appointed by the Provost to evaluate the establishment of a joint Department of Biomedical Engineering between Georgia Tech and Emory University School of Medicine (1997).
16. Member IBB Steering Committee (1995-present)
17. Member IBB Building Committee (1995-1999)

18. Member, Faculty Recruiting Committee, School of Chemical Engineering (1995-1998)
19. Member, Tenure, Promotion and Reappointment Committee, School of Chemical Engineering (1995-1998)
20. Chairman, Search Committee for Director, Institute for Bioengineering and Bioscience (September 1993-1994)
21. Co-Director, Emory-Georgia Tech Biomedical Technology Center (September 1992-2004)
22. Chairman, Bioengineering Graduate Committee (1991-2004)
23. Member, Health Enhancement Technologies Committee (1990-1993)
24. Director, Bioengineering Center (1989-present).
25. Member, Task Force on Aids Education, Georgia Tech (1989-91).
26. Member, Institutional Review Board for Human Subjects Research, Georgia Tech (1989-90).
27. Member, Internal Advisory Committee Emory-Georgia Tech Biomedical Technology Center (1987-92).
28. Chairman, Graduate Studies Committee, School of Chemical Engineering, Georgia Tech (1987-1994).
29. Member, Faculty-Student Relations Committee, School of Chemical Engineering, Georgia Tech (1987).
30. Chairman, College of Engineering Multidisciplinary Bioengineering Committee, Georgia Tech (1984-1988).
31. Graduate Student Recruitment Committee, School of Chemical Engineering, Georgia Tech (1980-88).
32. Member, Multidisciplinary Bioengineering Committee, Georgia Tech (1979-present).

BROADCAST INTERVIEWS

1. Galvin, Beth. "Children's Heart Surgeons Use 3-D Heart Mapping to Plan Complicated Surgeries". Fox 5 News, T.V. story reporter Beth Galvin, September 17, 2014. Retrieved from: <http://www.myfoxtlanta.com/story/26561057/childrens-heart-surgeons-use-3-d-heart-mapping-to-plan-complicated-surgeries>

TEXT INTERVIEWS

1. Loftus, Mary. "CoLABoration: When Emory and Georgia Tech Put Their Heads Together, This Happens". *Emory Magazine*. pp.34, 37. November 7, 2014
2. Calleri, Chris. Interview with Ajit Yoganathan. "Georgia Tech Researchers Publish Findings on Significant Cardiovascular Study." *GT BME Website*. November 6, 2014. Retrieved from: <https://bme.gatech.edu/bme/georgia-tech-researchers-publish-findings-significant-cardiovascular-study>
3. Daniel, Smriti. Interview with Ajit Yoganathan. *The Sunday Times (Sri Lanka)*. "Fixing Hearts with 'Virtual Surgery Software'". May 18, 2014. Retrieved from: <http://www.sundaytimes.lk/plus/fixing-hearts-with-virtual-surgery-software-99300.html>
4. Cover photo, *Journal of the American College of Cardiology*. Photo of blood flow dynamics in total cavopulmonary connection from the article "Geometric Characterization of Patient-Specific Total Cavopulmonary Connections and its Relationship to Hemodynamics," by Tang, E., Restrepo, M., Haggerty, C.M., Mirabella, L., Bethel, J., Whitehead, K.K., Fogel, M.A., Yoganathan, A.P., in *Journal of the American College of Cardiology*. Vol.7. March 2014.
5. Cover photo, *Journal of Fluid Mechanics*. Photo from figure 19 (b) from the article "Computational Modeling of Flow Through Prosthetic Heart Valves Using the Entropic Lattice-Boltzmann Method," by Yun, B.M., Dasi, L.P., Aidun, C.K., and Yoganathan. A.P. *Journal of Fluid Mechanics*. Vol.743. March 2014.
6. Vieru, Tudor. "New Device Maps the Heart from the Inside". *Softpedia*. February 9, 2014. Retrieved from: <http://news.softpedia.com/news/New-Device-Maps-the-Heart-in-3D-from-the-Inside-428103.shtml>
7. Kleber, Dori. Interview with Ajit Yoganathan. *Georgia Tech Engineers*. "When Engineering is the Best Medicine". pp. 26-31. February 7, 2014.
8. Israel, Brett. *Georgia Tech Daily Digest*. "Wallace Coulter at 100: A Legacy of Biomedical Innovation". January 2, 2014. Retrieved from: <http://www.news.gatech.edu/features/wallace-coulter-100>

CONSULTING ACTIVITIES

1. St. Jude Medical, St. Paul, MN (2009-present).
2. Edwards Lifesciences, Irvine, CA (2009-present).
3. Philips Medical, Andover, MA (2009-present).
4. Sorin Biomedical, Milano, Italy (2009-present).
5. Boston Scientific/Sadra Medical, San Jose, CA (2006-present).
6. AdvaMed (formerly Health Industry Manufacturers Association), Washington, D.C. (1987-present).
7. Medtronic Inc, Spring Lake, MI (1984-present).

8. Food and Drug Administration (FDA), Center for Devices and Radiological Health- Cardiovascular Devices; Fluid Mechanics (1980-present).
9. Pi-R-Squared, Rehovot, Israel (2009-2010).
10. NeoChord, Minneapolis, MN (2007-2010).
11. Knobe, Bear, Martens, LLP, Irvine, CA (2007-2009).
12. ME II Inc. Santa Clara, CA (2007-2010).
13. Endo Valve, Princeton, NJ (2005-2008).
14. Mitral Solutions, Ft. Lauderdale, FL (2004-2009).
15. Lemman Cardiovascular, Switzerland (2005-2007).
16. Heart Leaflet Technologies, St. Paul, MN (2003-present).
17. TÜV Product Services, Munich, Germany - Engineering Studies on Artificial Heart Valves, (1994-present).
18. ATS Medical Inc., St. Paul, MN - Heart Valve Fluid Mechanics (1992-2010).
19. AorTech Inc., St. Paul, MN - Heart Valve Fluid Mechanics (1990-1993).
20. Kontron Instruments, Basel, Switzerland - Doppler Ultrasound; Cardiovascular Fluid Mechanics (1989-1996).
21. Bravo Cardiovascular, Irvine, CA, - Heart Valve Fluid Mechanics (1989-1993).
22. Bicer Medical, Vancouver, Canada - Heart Valve Fluid Mechanics (1989-1992).
23. Teepak Inc., Danville, IL - Fluid Mechanics, Polymer Rheology (1989-90).
24. Toshiba Medical Systems, Tustin, CA and Tokyo, Japan - Doppler Ultrasound; Cardiovascular Fluid Mechanics (1988-present).
25. Biocontrol Technology, Inc., Indiana, PA - Heart Valve Fluid Mechanics (1987-1988).
26. Baxter-Edwards Laboratories, Irvine, CA - Heart Valve Prostheses; Doppler Ultrasound (1986-present).
27. CarboMedics, Inc., Austin, TX - Heart Valve Prostheses, (1987-2005) Note: Purchased by Sorin Biomedical.
28. Advanced Technology Laboratories, Bothell, WA - Doppler Ultrasound; Cardiovascular Fluid Mechanics (1986-1996).
29. CryoLife, Inc., Atlanta, GA - Heart Valve Fluid Mechanics; Doppler Ultrasound (1985-1998).

30. Johnson and Johnson Cardiovascular, King of Prussia, PA - Heart Valve Prostheses; Doppler Ultrasound (1985-87).
31. Medical, Inc., InverGrove Heights, MN - Heart Valve Prostheses; Doppler Ultrasound (1984 - 2004).
32. Johnson and Johnson, Inc., E. Windsor, NJ - Blood Rheology (1980-85).
33. West Virginia Medical Center, Charleston, WV - Heart Valve Fluid Mechanics (1980).
34. Fish and Neave, Attorneys-at-Law, New York, NY - Fluid Mechanics (1979-80).

CIVIC ACTIVITIES

1. Member, American Heart Association, 1979-present.
2. Member, Children's Heart Foundation of Southern California, Los Angeles, CA, 1977-79.
3. Member, California Institute of Technology Alumni Association, 1978-present.
4. Member, University of London Alumni Association, 1973-present.
5. Member, Interact Club (Junior Rotary), 1966-70.

REVIEWER OF SCIENTIFIC JOURNALS AND PUBLICATIONS (LISTED ALPHABETICALLY BY JOURNAL)

1. American Journal of Cardiology
2. Annals of Thoracic Surgery
3. Annals of Biomedical Engineering
4. Biorheology
5. Circulation
6. Circulation Research
7. Cardiovascular Engineering and Technology
8. Echocardiography
9. IEEE Transactions in Biomedical Engineering
10. Journal American College of Cardiology
11. Journal American Society of Echocardiography
12. Journal of Applied Mechanics

13. Journal of Biomechanical Engineering
14. Journal of Biomechanics
15. Journal of Medical Engineering and Technology
16. Journal of Theoretical Biology
17. Journal of Thoracic and Cardiovascular
18. Life Support Systems
19. Medical and Biological Engineering and
20. Medical Instrumentation
21. Newsletter of the American Institute of Chemical Engineers

REVIEWER OF SCIENTIFIC PROPOSALS (LISTED ALPHABETICALLY BY FUNDING ORGANIZATION)

1. American Heart Association, Georgia Affiliate Research Committee
2. Candian Science Foundation
3. Danish Research Academy
4. INSERM (The French Institute of Health and Medical Research)
5. Medical Research Council, United Kingdom
6. National Institute of Health (NIH): Heart, Lung and Blood Institute
7. National Science Foundation
8. Polish Academy of Sciences
9. Swedish Research Academy
10. Whitaker Foundation

DOCTORAL STUDENTS MENTORED

1. D. W. Suobank - Chemical Engineering, California Institute of Technology (1983)
2. D. Hanle - Chemical Engineering, California Institute of Technology (1984)
- +3. Y- R. Woo - Chemical Engineering, Georgia Institute of Technology (1984)
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- +7. H-W. Sung - Chemical Engineering, Georgia Institute of Technology (1988)
- +8. E. G. Cape - Chemical Engineering, Georgia Institute of Technology (1991)
- +9. C. C. Vesier - Chemical Engineering, Georgia Institute of Technology (1991)
- +10. X. P. Lefebvre - Chemical Engineering, Georgia Institute of Technology (1992)

- +11. A. Cagniot - Chemical Engineering, Georgia Institute of Technology (1993)
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- +13. R. Grimes, M.D. - Mechanical Engineering, Georgia Institute of Technology (1996)
- +14. J. Hopmeyer - Chemical Engineering, Georgia Institute of Technology (1996)
- +15. R. Heinrich - Mechanical Engineering, Georgia Institute of Technology (1997)
- +16. G. Chatzimavroudis - Chemical Engineering, Georgia Institute of Technology (1997)
- +17. J. Lemmon - Mechanical Engineering, Georgia Institute of Technology (1998)
- +18. S. Millet - Bioengineering Center, Georgia Institute of Technology (1998)
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- +20. M. Weston, Chemical Engineering, Georgia Institute of Technology (2000)
- +21. B. Travis, Chemical Engineering, Georgia Institute of Technology (2001)
- +22. T. Healy, Chemical Engineering, Georgia Institute of Technology (2001)
- +23. D. Frakes, Biomedical Engineering, Georgia Institute of Technology (2003)
- +24. Y. Xing, Bioengineering/Chemical Engineering, Georgia Institute of Technology (2005)
- +25. H. W. Leo, Bioengineering/Mech. Engineering, Georgia Institute of Technology (2005)
- +26. A. Fallon, Chemical Engineering, Georgia Institute of Technology (2006)
- +27. J. Jimenez, Biomedical Engineering, Georgia Institute of Technology (2006)
- +28. H. Kitajima, Biomedical Engineering, Georgia Institute of Technology (2007)
- +29. K. Sudareswaran, Biomedical Engineering, Georgia Institute of Technology (2008)
- +30. H. Simon, Chemical Engineering, Georgia Institute of Technology (2009)
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- +32. S. Padala Murali, Biomedical Engineering, Georgia Institute of Technology (2010)
- +33. K. Balachandran, Biomedical Engineering, Georgia Institute of Technology (2010)
- +34. E. Spinner, Biomedical Engineering, Georgia Tech/Emory (2011)
- +35. C-H. Yap, Biomedical Engineering, Georgia Institute of Technology (2011)
- +36. C. Saikus, Biomedical Engineering, Georgia Tech/Emory (2012)
- +37. C. Haggerty, Biomedical Engineering, Georgia Institute of Technology (2013)
- +38. M. Yun, Mechanical Engineering, Georgia Tech (2014)
- +39. A. Siefert, Bioengineering, Georgia Institute of Technology (2014)
- +40. J.P. Rabbah, Biomedical Engineering, Georgia Tech/Emory (2014)
- +41. M. Restrepo, Biomedical Engineering, Georgia Institute of Technology (2015)
- +42. E. Tang, Chemical & Biomolecular Engineering, Georgia Institute of Technology (2015)
- +43. S. Rathan, Chemical & Biomolecular Engineering, Georgia Institute of Technology (2015)
- +44. I. Okafor, Chemical & Biomolecular Engineering, Georgia Institute of Technology (2016)

- +45. E. Pierce, Biomedical Engineering, Georgia Institute of Technology (2017)
- +46. M. Tree, Mechanical Engineering, Georgia Institute of Technology (2017)
- +47. T. Easley, Bioengineering, Georgia Institute of Technology (2018)
- +48. P. Midha, Bioengineering, Georgia Institute of Technology (2017)
- +49. P. Trusty, Biomedical Engineering, Georgia Institute of Technology (2020)
- +50. T. Sowers, Bioengineering, Georgia Institute of Technology (2018)
- +51. T. Salim, Chemical & Biomolecular Engineering, Georgia Institute of Technology (2020)
- 52. C. Johnson, Georgia Institute of Technology
- + Thesis Advisor

MASTERS THESIS STUDENTS MENTORED

1. D. M. Stevenson - Chemical Engineering, Georgia Institute of Technology (1980)
2. M. Howaldt - Chemical Engineering, Georgia Institute of Technology (1981)
3. F. P Williams - Chemical Engineering, Georgia Institute of Technology (1982)
4. A. P. Yarlagadda - Chemical Engineering, Georgia Institute of Technology (1983)
5. E. Tasi - Chemical Engineering, Georgia Institute of Technology (1983)
6. P. D. Faughnan - Chemical Engineering, Georgia Institute of Technology (1983)
7. J. Ball - Chemical Engineering, Georgia Institute of Technology (1983)
8. E. F. Philpot - Chemical Engineering, Georgia Institute of Technology (1984)
9. J. Schmidt-Dohna - Mechanical Engineering, Georgia Institute of Technology (1985)
10. A. J. Ridgway - Chemical Engineering, Georgia Institute of Technology (1986)
11. A. Jimoh - Chemical Engineering, Georgia Institute of Technology (1987)
12. D. Simmons - Chemical Engineering, Georgia Institute of Technology (1987)
13. E. Mumpower - Chemical Engineering, Georgia Institute of Technology (1988)
14. J. Ruo - Chemical Engineering, Georgia Institute of Technology (1988)
15. E. R. Gieseeking – Chemical Engineering, Georgia Institute of Technology (1989)
16. E. Poiseau – Mechanical Engineering, Georgia Institute of Technology (1989)
17. M. Simpson – Mechanical Engineering, Georgia Institute of Technology (1992)
18. F. Guenet – Chemical Engineering, Georgia Institute of Technology (1993)
19. S. Millet – Bioengineering Center, Georgia Institute of Technology (1994)
20. P. Wilkerson – Mechanical Engineering, Georgia Institute of Technology (1998)
21. M. Jensen – Biomedical Engineering, Georgia Institute of Technology (2000)
22. A. Ensley – Biomedical Engineering, Georgia Institute of Technology (2000)

23. K. Ryu – Biomedical Engineering, Georgia Institute of Technology (2000)
24. J. Jimenez – Biomedical Engineering, Georgia Institute of Technology (2003)
25. J. Ritchie – Biomedical Engineering, Georgia Institute of Technology (2004)
26. H. Simon – Chemical Engineering, Georgia Institute of Technology (2004)
27. D. de Zelicourt – Biomedical Engineering, Georgia Institute of Technology (2004)
28. D. Soerenson – Biomedical Engineering, Georgia Institute of Technology (2005)
29. S. Konduri – Chemical Engineering, Georgia Institute of Technology (2005)
30. R. Krishnankutty – Biomedical Engineering, Georgia Institute of Technology (2008)
31. D. Murphy – Mechanical Engineering, Georgia Institute of Technology (2010)
32. D. Icenogle – Bioengineering, Georgia Institute of Technology (2012)
33. B. Jun – Mechanical Engineering, Georgia Institute of Technology (2014)
34. C. Bloodworth - Bioengineering, Georgia Institute of Technology (2017)

POST DOCTORAL FELLOWS, RESEARCH STAFF AND VISITING FACULTY

1. Y-R. Woo, Ph.D. - Post Doctoral Fellow (1984-85)
2. S. T. McMillan, Ph.D. - Post Doctoral Fellow (1985-86)
3. H-W. Sung, Ph.D. - Post Doctoral Fellow (1988-89)
4. S. H. Winoto, Ph.D. - Lecturer, National University of Singapore (1988-89)
5. E. M. Pedersen, M.D. - University of Aarhus School of Medicine, Denmark (1989)
6. P. G. Walker, Ph.D. - Post Doctoral Fellow (1990-92)
7. E. Muralidharan, Ph.D. - Post Doctoral Fellow (1990-92)
8. S. He, M.D. - Zun Yi Medical College, China, (1990-2002)
9. P. G. Walker, Ph.D. - Research Engineer (1991-1995)
10. Y. H. Kim, Ph.D. - Post Doctoral Fellow (1992-1994)
11. A. Fontaine, Ph.D. - Post Doctoral Fellow (1993-1996)
12. J. Lemmon, Ph.D. - Post Doctoral Fellow (1998-2000)
13. Z. He, Ph.D. – Post Doctoral Fellow/Research Engineer II (2000 – 2005)
14. Y. Liu, Ph.D. – Post Doctoral Fellow (2002-2003)
15. K Pekkam, Ph.D. – Post Doctoral Fellow/ Research Engineer II (2002 – 2006)
16. J. Warnock, Ph.D. – Post Doctoral Fellow (2003 –2004)
17. C. Jones, Ph.D. – Research Engineer I (2003)
18. J. Carberry Ph.D. – Post Doctoral Fellow (2003 – 2004)
19. D. Frakes Ph.D. – Post Doctoral Fellow (2003 – 2005)

20. C. Wang Ph.D. – Post Doctoral Fellow (2004 – 2005)
 21. L. Prasad Dasi Ph.D. – Post Doctoral Fellow/Research Engineer I (2004 – 2009)
 22. P. Sucusky, Ph.D. – Post Doctoral Fellow (2005 – 2008)
 23. R. Wulandana, Ph.D. – Post Doctoral Fellow (2005 –2006)
 24. J. Jimenez, Ph.D. – Research Engineer II (2007 – present)
 25. S. Arjunon – Post Doctoral Fellow/Research Engineer (2009 – present)
 26. N. Saikrishnan – Post Doctoral Fellow (2009 – 2013)
 27. A. Kendoush – Post Doctoral Fellow (2009 – 2010)
 28. R. Khiabani – Post Doctoral Fellow (2010 – 2013)
 29. A. Santhanakrishnan – Post Doctoral Fellow (2010 – 2013)
 30. L. Mirabella – Post Doctoral Fellow (2010 - 2014)
 31. C. Vallecilla Erazo – Research Engineer (2011-2013)
 32. M. Toma – Post Doctoral Fellow (2013 – present)
 33. V. Raghav Shankare Gowda – Post Doctoral Fellow (2014 – present)
 34. M. Jensen - Research Engineer (2014 - present)
 35. A. Wei – Post Doctoral Fellow (2014 – present)
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