CURRICULUM VITAE FOR PROMOTION AND TENURE

TINEN LEE ILES, PhD

PERSONAL INFORMATION

Home Address: 4100 44th Avenue South, Minneapolis, MN 55406
Cell Phone: 952-412-4064

Birthplace/Date: St. Paul, Minnesota, July 21, 1983
Citizenship: USA
Marital Status: Married (2/25/2012) Christopher Braden Iles
Children: Caris (6/18/16), Lily (7/13/18)

Research Interests:

- The physiology of skeletal and cardiac muscle (studied *in vivo*, *in situ* and in vitro).
- Pharmacologic applications for heart and lung transplantation and treatment strategies for cardiothoracic surgery.
- The development of novel instrumentation and biomedical devices for physiological monitoring, clinical evaluation and/or therapeutic use.
- The use of large data sets and computational methodologies for simulation and information management.
- The study of hibernation physiology in the American black bear and its translational value for human medicine.
- Non-invasive and invasive correlates of wound formation, status, healing and prevention: development of animal models, effects of anesthetics and design of biomedical instrumentation.

Professional Address:

420 Delaware St. SE
B172 Mayo, MMC 195
Minneapolis, MN 55455
Office: 612-625-3641
Lab: 612-625-9965
F: 612-624-2002
E-mail: thealy@umn.edu

EDUCATION

Degree	Institution	Date Degree Granted
BA/BS	Bethel University Biology	2005
MS	University of Minnesota, Twins Cities Biological Sciences	2015
PhD Advisor: Paul A. Iaizzo, PhD FHRS	University of Minnesota, Twin Cities Bioinformatics and Computational Biology	2017

CERTIFICATIONS, LICENSES

Certified Nursing Assistant (lapsed)

ACADEMIC APPOINTMENTS

University of Minnesota, Twin Cities, Department of Surgery
Assistant Professor January 2018-present

University of Minnesota, Twin Cities, Bioinformatics and Computational Biology
Graduate Faculty August 2018-present

Academic Administrative Appointments

Clinical/Hospital Appointments

Consulting Positions
None

CURRENT MEMBERSHIP AND OFFICES IN PROFESSIONAL ORGANIZATIONS

American Heart Association (AHA)	2016-present
American Physiological Society (APS)	2016-present
European Society of Cardiology (ESC)	2019-present
Heart Rhythm Society (HRS)	2016-present
International Bear Association (IBA)	2016-present
International Society for Heart and Lung Transplantation (ISHLT)	2017-present
Malignant Hyperthermia Association of the United States (MHAUS)	2016-present

Visiting Professorships or Visiting Scholar Positions
None

HONORS AND AWARDS FOR RESEARCH WORK, TEACHING, PUBLIC ENGAGEMENT AND SERVICE

University of Minnesota

External Sources

RESEARCH AND SCHOLARSHIP

Grants and Contracts

EXTERNAL SOURCES

Current
None

Pending

College of Veterinary Medicine Signature Program Research Proposal

Project Title:

Comparative Analysis of 3-Dimensional Heart Modeling to Enhance Translational Medicine
Principal Investigator: Lauren Markovic, DVM, DACVIM (Cardiology)
Department of Veterinary Clinical Sciences Co-investigator: Paul Anthony Iaizzo, PhD, FHRS Co-investigator: Tinen L. Iles, PhD

FY18 PRORP Applied Research Award (ARA) for Acute Compartment Syndrome Animal Model, Department of Defense

Analyses to Identify Adaptive Responses in the American Black Bear (*Ursus americanus*): From Basic Science Knowledge to Clinical Applications (In preparation for DOD)

Past
None

UNIVERSITY SOURCES

Current
None

Pending
None

Past
None

PUBLICATIONS

Peer-Reviewed Publications

1. Seewald MS, Gaasedelen EN, **Iles TL**, Mattison LM, Mattson AR, Schmidt MM, Braun-Dullaeus RC, Iaizzo PA. Effects of ATP administration on isolated swine hearts: Implications for ex vivo perfusion and cardiac transplantation Exp Biol Med (Maywood). 2019 May

27:1535370219850786. doi: 10.1177/1535370219850786
2. Bateman MG, Durfee WK, **Iles TL**, Martin CM, Liao K, Erdman AG, Iaizzo PA, Patient-specific 3D models as surgical planning tools. SURGERY: Innovation SeriesFeb 18. pii: S0039-6060(18)30843-2. doi: 10.1016/j.surg.2018.11.022
3. **Iles TL**, Quallich SG, Iaizzo PA. Identification of Radiofrequency Ablation Catheter Parameters That May Induce Intracardiac Steam Pops: Direct Visualization of Elicitation in Reanimated Swine Hearts. J Cardiovasc Transl Res. 2018 Nov 14. doi: 10.1007/s12265-018-9844-7. PMID: 30430355
4. Timothy G. Laske, Alina L. Evans, Jon M. Arnemo, **Tinen L. Iles**, Mark A. Ditmer, Ole Fröbert, David L. Garshelis and Paul A. Iaizzo, Development and utilization of implantable cardiac monitors in free-ranging American black and Eurasian brown bears: system evolution and lessons learned, Animal Biotelemetry 2018 6:13 https://doi.org/10.1186/s40317-018-0157-z
5. Spratt JR, Mattison LM, Iaizzo PA, Meyer C, Brown RZ, **Iles T**, Panoskaltsis-Mortari A, Loor G. Lung transplant after prolonged ex vivo lung perfusion: predictors of allograft function in swine. Transpl Int. 2018 Dec;31(12):1405-1417. doi: 10.1111/tri.13315. Epub 2018 Jul 31
6. Sacco F, Paun B, Lehmkuhl O, **Iles TL**, Iaizzo PA, Houzeaux G, Vázquez M, Butakoff C, Aguado-Sierra J, Evaluating the roles of detailed endocardial structures on right ventricular haemodynamics by means of CFD simulations, Int J Numer Method Biomed Eng. 2018 Sep;34(9):e3115. doi: 10.1002/cnm.3115. Epub 2018 Aug
7. Spratt JR, Mattison LM, Iaizzo PA, Brown RZ, Helms H, **Iles TL**, Howard B, Panoskaltsis-Mortari A, Loor G An Experimental Study of the Recovery of Injured Porcine Lungs with Prolonged Normothermic Cellular Ex Vivo Lung Perfusion Following Donation after Circulatory Death. Transpl Int. 2017 May 11. doi: 10.1111/tri.12981. PMID: 28493634
8. **Iles T.L.** T.G. Laske, D.L. Garshelis, L Mattison, B. Lee, V. Eisele, E. Gaasedelen, P.A. Iaizzo, Medtronic Reveal LINQ™ Devices Provide Better Understanding of Hibernation Physiology in the American Black Bear (Ursus americanus), Technical Brief, Journal of Medical Devices, September 2017
9. Y. Eryaman, P. Zhang, L. Utecht, K. Kose, R.L. Lagore, L. DelaBarre ,J. Kulesa, L.E. Eberly, G.Adriany, K. Ugurbil, **T.L. Iles,** P. A. Iaizzo J. T. Vaughan, Investigating the Physiological Effects of 10.5T Static Field Exposure on Anesthetized Pigs, Magnetic Resonance Medicine Magn Reson Med. 2017 Mar 25. doi: 10.1002/mrm.26672. PMID: 28342176 2017
10. **Iles TL**, Laske TG, Garshelis DL, Iaizzo PA: Blood clotting behavior is innately modulated is Ursus Americanus during early and late denning relative to summer months. *Journal of Experimental Biology* (2017) DOI: 10.1242/jeb.141549.
11. Loor G, Howard BT, Spratt JR, Mattison LM, Panoskaltsis-Mortari A, Brown RZ, **Iles TL,** Meyer CM, Helms H, Price A, Iaizzo PA., Prolonged EVLP Using OCS Lung: Cellular and Acellular Perfusates. Transplantation. 2016 Dec 22. doi: 10.1097/TP.0000000000001616
12. B. Paun, B. Bijnens, **T. Iles**, P.A. Iaizzo, Constantine, Butakoff, Patient Independent Representation of the Detailed Cardiac Ventricular Anatomy, Med Image Anal. 2017 Jan;35:270-287. doi: 10.1016/j.media.2016.07.006
13. Schmitz A, Mattison L, Iles TL, **Iaizzo PA**: Novel visualization of coronary stenting techniques and subsequent 3D modeling and printing of deployed devices. *European Society of Cardiology (ESC) Clinical Case Gallery*. Published March 28, 2017. Link: http://learn.escardio.org/clinicalcase/EACVI/87660996-24e8-4092-82fb-4c345561a234?_ga=2.245188933.1308934638.1514967717-1974636603.1456216351
14. Goff RP, Howard BT, Quallich SG, **Iles TL,** Iaizzo PA: The novel in vitro reanimation of isolated human and large mammalian heart-lung blocs. *BMC Physiology* 16:4, 2016. DOI: 10.1186/s12899-016-0023-2.
15. **Iles TL**, Howard B, Howard SA, Quallich SG, Rolfes CD, Richardson ES, Iaizzo HR, Iaizzo PA: Testing the efficacy of pharmacological agents in a pericardial target delivery model in the swine. *Journal of Visualized Experiments* July 2016, e52600. DOI: 10.3791/52600.

Non-Peer-Reviewed Publications

Review Articles
None

Invited Articles
None

Editorial
None

Letters to the Editor
None

United States Government Publications
None

Articles Submitted for Publication

1. **T.L. Iles**, D.L. Garshelis, T.G. Laske, P.A. Iaizzo, Characterization of Blood Gases and Metabolism in the wild American Black Bear (*Ursus americanus*); Challenges of Adaptation during Denning Periods, (Comparative Physiology- A)

Electronic Publications
None

Educational Videos-Physician Education Material
None

Media Presentations or Interviews

1. "VR and 3D Printing for Heart Treatment: a tour" June 23, 2017, Alliance of Advanced Biomedical Engineering.
   https://aabme.asme.org/posts/virtual-reality-and-3d-printing-for-heart-treatment-a-tour
2. "Bear Week: Scientist look to unlock mysteries of hibernation"
   http://www.fox9.com/news/bear-week-scientists-look-to-unlock-the-mysteries-of-hibernation
3. "Bear study teams DNR, Medtronic and University of Minnesota researchers," Grand Forks Herald, March 14, 2015. http://www.grandforksherald.com/outdoors/wildlife/3700172-bear-study-teams-dnr-medtronic-and-university-minnesota-researchers
4. "From the lab to the north woods," University of Minnesota Foundation, January 28, 2015.
   http://give.umn.edu/stories/lab-to-north-woods

Books
None- proposal for second edition of Elecetrophysiology Models and Methods, Elsivier, Editors: P.A. Iaizzo, **T.L. Iles**

Book Chapters

1. **Tinen L. Iles**, Michael G. Bateman, Paul A. Iaizzo, Chapter 8: Preclinical Testing, Medical Device Innovation Handbook 7th edition

2. Michael G. Bateman, PhD, **Tinen Iles PhD**, Paul A. Iaizzo, PhD Advancing the Design and Testing of Novel Cardiac Device Technologies Using the Visible Heart®, Engineering in Medicine: Advances and Opportunities; Elsevier; Summer 2018 publication
3. Andrew Shaffer, Lars Mattison, John Spratt, **Tinen Iles**, Natalie Kerns, Michael Bateman, Stephen Huddleston, Rosemary Kelly, Kenneth Liao, Paul Iaizzo; A New Era for Improving Cardiothoracic Transplantations: Engineering in Medicine: Advances and Opportunities; Elsevier; Summer 2018 publication
4. Howard BT**, Iles TL**, Coles Jr JA, Sigg DC, Iaizzo PA: Reversible and irreversible damage of the myocardium: ischemia/reperfusion injury and cardioprotection. In: Handbook of Cardiac Anatomy, Physiology and Devices, 3rd edition, Springer, 2015.
5. Bateman MG, Eggen MD, Spencer JH, **Iles TL**, Iaizzo, PA: The use of isolated heart models and anatomic specimens as means to enhance the design and testing of cardiac devices. In: Handbook of Cardiac Anatomy, Physiology and Devices, 3rd edition, Springer, 2015

Special Journal Issue
None

Software Development
None

Patents

ISSUED US PATENTS
None

US PATENT APPLICATIONS
None.

Websites

1. Visible Heart Laboratory (http://www.vhlab.umn.edu/index.html)
2. Visible Heart website (http://www.visibleheart.com)
3. Atlas of Human Cardiac Anatomy (http://www.vhlab.umn.edu/atlas)

Presentations

Invited Oral Presentations at International Professional Meetings, Conferences, etc.

1. Iles TL, Howard BT, MacIver R, St. Louis J, Ameduri R, Iaizzo PA. Imaging, Modeling and Preservation of Hearts with Congenital Defects. Abstract presented at the ICI- Imaging in Cardiovascular Interventions, CSI- Congenital & Structural Interventions, Frankfurt, Germany, 2014

Invited International Lecture
1. Hibernation Physiology of the American Black Bear: computational, translational applications and Visible Heart Methodologies, CASE Seminar Barcelona Supercomputing Center March 29, 2019

Invited Oral Presentations at National Professional Meetings, Conferences, etc.

1. Bears and Cardiology, Institute for Engineerign in Medicine: Inspire Conference, September 2018

2. **Iles T.L.** T.G. Laske, D.L. Garshelis, L Mattison, B. Lee, V. Eisele, E. Gaasedelen, P.A. Iaizzo, Medtronic Reveal LINQ™ Devices Provide Better Understanding of Hibernation Physiology in the American Black Bear (Ursus americanus), Technical Brief, Journal of Medical Devices, April 2017

Peer-reviewed Oral Presentations at Professional Meetings, Conferences, etc.

None

Poster Abstract Presentations at Professional Meetings, Conferences, etc.

1. Federica Sacco, Rubén Doste, Carlos Bederián, Tinen L. Iles, Paul A. Iaizzo, Guillaume Houzeaux, Mariano Vázquez, Oscar Camara, Constantine Butakoff and Jazmin Aguado-Sierra The effect of gender and endocardial detail on anatomically normal human heart electrophysiology, Computation Biomed London September 2019
2. Sacco F, Paun B, Lehmkuhl O, **Iles TL**, Iaizzo PA, Houzeaux G, Vázquez M, Butakoff C, Aguado-Sierra J Electrophysiology Simulations of Female and Male Human Ventricles: Influence of Gender Phenotype and Endocardial Anatomy on Signal Propegation, The Heart by Numbers: Integrating Theory, Computation, and Experiment to Advance Cardiology, September 4-7, 2018, Berlin
3. John R. Spratt, MD, MA, Lars M. Mattison, BS, Paul A. Iaizzo, PhD, FHRS, Natalie K. Aldrich, PA-C, Linette Meyer, RN, BSN, **Tinen L. Iles**, MS, Scott Kerwin, RN, MSN, Brooke Simmones, PA-C, Meg Rogers, RN, Gabriel Loor, MD, Prolonged Extracorporeal Preservation and Evaluation of Human Lungs Initially Declined for Transplantation: A New Paradigm in Donor Evaluation, American Association for Thoracic Surgery, 2016
4. **T.L. Iles**, B. Howard, D. Garshelis, T.G. Laske, L. Mattison, P.A. Iaizzo, 3D Reconstruction of Black Bears: From Cubs to the World's Oldest Known Bear, Materialise Conference, Presented 2016
5. O. Bandschapp, A. Gonzalez, **T. Iles**, L. Mattison, M. Schmidt, C.L. Soule, P.A. Iaizzo, Influence of prior statin intake on masseter muscle force during an induced malignant hyperthermia episode in swine. Presented at the American Society of Anesthesiologists Annual Meeting, 2016
6. **T.L. Iles**, A. Fuher, S. Thurk, P.A. Iaizzo. Case Study: 3D Modeling and Visualization of a Patient with 28 Coronary Artery Stents and Triple Artery Bypass Graft, Abstract for Institute for Engineering in Medicine Conference, Presented 2015.
7. Panoskaltsis-Mortari A, Howard BT, Price A, Ehrhardt M, **Iles TL**, Meyer C, Iaizzo PA, Loor G. A New Ex Vivo Model of ARDS Associated with Processed Blood Cell Transfusions; Abstract American Thoracic Society, Presented 2015.
8. Howard BT, Iazzio PA, **Iles TL**, Mattison L, Meyers P, Day T, Kelly R, Loor G. Prolonged Lung Preservation at 24 hours Using Donor Whole Blood Perfusion in the Organ Care System (OCS). International Society for Heart and Lung Transplant. 2015.
9. Schmidt M, **Iles TL**, Fernandaz G, Benscoter M, Franz M, Iaizzo PA. The Recording of Monophasic Action Potentials Simultaneously from both the Epicardial and Endocardial Surfaces of Porcine Hearts; Extended abstract presented at TCT, published in JACC, 2014.
10. **Iles TL**, Howard BT, MacIver R, St. Louis J, Ameduri R, Iaizzo PA. Imaging, Modeling and Preservation of Hearts with Congenital Defects. Abstract presented at the ICI- Imaging in Cardiovascular Interventions, CSI- Congenital & Structural Interventions, Frankfurt, Germany, 2014
11. **T.L. Healy**, E. Nelson, L. Pook, S.L. Gottshall, Characterization of a Back Incision Model of

Post-Surgical Pain in the Rat using a Diode Laser (2010) Society for Neuroscience
12. **T.L. Healy**, C. Schaeffer, S.L. Gottshall, Characterization of a Model Ultraviolet B Irradiation in the Rat (2009) Society for Neuroscience
13. **T.L. Healy**, C.L. Marker, S.L. Gottshall, Measuring Primary Mechanical Hyperalgesia in a Model of Adjuvant-Induced Chronic Joint Pain in the Rat (2008) Society for Neuroscience
14. C.L. Marker, **T.L. Healy**, S.L. Gottshall, Measuring Primary Mechanical Hyperalgesia in a Model of Osteoarthritis Pain in the Rat (2008) Society for Neuroscience.

Symposium/ Congress Lectures
None

Scientific Presentations
None

Educational Presentations
STEM Honors Class Lectures, Burnsville School Systems
Topics: Hibernation Physiology and Cardiac Anatomy, Physiology and Devices (2011-2018)

TEACHING AND CURRICULUM DEVELOPMENT

University of Minnesota

Course/Lecture List

Physiology 5511 The Neuromuscular Junction (1 hour)(2015,2017, 2019)
Topics: Black bear physiology, electrocardiograms

Physiology 3701 Physiology Laboratory Course (1 hour)(2018, 2019) and Administration Electroencephology (EEG) and Reaction

Physiology 5510 Advanced Cardiac Physiology and Anatomy (1 hour)(2017-present)
Lecture topics: Cardiac Energy Metabolism

Curriculum Development
Heart to Learn Outreach Events Program Development

Collaborative Efforts and Activities
Congenital Heart Database and Imaging Projects; Masonic Children's and Minneapolis Children's (Dr. Robroy MacIver)

Heart and Lung Transplant / Transmedics Organ Care System (Dr. Andrew Shaffer and Dr. Stephen Hudelston)

Faculty Development Activities regarding teaching
None

Continuing Medical Education
None

ADVISING AND MENTORING

Undergraduate Student Activities

Current Undergraduate Students

1. Sung Jun "Paul" Cho, Volunteer (10-15 to present)
2. Ally Fuher, Volunteer (5-14 to present)
3. Josh Gangl, Volunteer (11-16 to present)
4. Jack Hartmann, Directed research (1-16 to present)
5. Melanie Menk, Volunteer (1-15 to present)
6. Olivia Shepler, Volunteer (5-15 to 8-15; 5-16 to present)

Former Undergraduate Students

1. Brady Anderson, Volunteer (1-15 to 6-16)
2. Jeremiah Atkinson, Volunteer (5-13 to 8-13)
3. Stephanie Bersie, Volunteer (5-13 to 5-15)
4. Vyvian Borse, Volunteer (5-16 to 8-16)
5. Madison Clague, Volunteer (5-15 to 9-15)
6. Hailey Corrigan, Volunteer (5-14 to 1-15)
7. Alec Donohue, Volunteer (9-14 to 12-15)
8. Peter Downie, Volunteer (6-13 to 8-13)
9. Rachel Drake, Volunteer (5-12 to 6-14)
10. Katy Empanger, Volunteer (5-12 to 8-15)
11. Kristen A. Engelhardt, Life Sciences Summer Research Programs (6-92 to 8-92)
12. Kyle Erickson, Volunteer (6-11 to 9-11)
13. Justin Esterberg, Research Explorations Program, Continuing Education and Extension, University of Minnesota (7-93 to 10-93)
14. Bret Fox, Volunteer (5-12 to 10-13)
15. Boutheina Fradj, Directed Research (9-14 to 5-15)
16. Grant Gangeness, Volunteer/UROP (5-13 to 8-14)
17. Sam Harpell, Volunteer (10-14 to 9-15)
18. Gabriel Hernandez, LSSURP (6-14 to 8-14)
19. Mackenzie Herzig, Volunteer (11-14 to 5-16)
20. Kevin Kriege, Volunteer (5-13 to 6-16)
21. Elizabeth Laakso, LHI scholar (5-15 to 9-15)
22. Juliet Laske, Volunteer/Casual-temp (10-13 to 8-14)
23. Mai Yer Lee, Volunteer (9-11 to 2-14)
24. Elizabeth Lezama, LSSURP (6-13 to 8-13, 6-14 to 8-14)
25. Erin Mahre (6-17 to 8-17)
26. Claire Manlove, Volunteer (11-12 to 5-15)
27. Gannon McGrath, Volunteer (8-12 to 8-13, 6-14 to 1-15)
28. Kari Mattison, Casual/temp (5-15 to 8-15)
29. Nate Menninga, Casual/temp (5-14 to 8-14)
30. Denise Nelson, Volunteer/Directed research (9-11 to 5-12)
31. Nicole Neumann, Volunteer (8-13 to 12-14)
32. Krista Neururer-Rothstein, Volunteer/Directed research (1-10 to 8-11)
33. Nicki Nguyen, President's Distinguished Faculty Mentor Program (10-95 to 12-99)
34. Naomi Ollila, Volunteer (12-13 to 8-14)

35. Steve Oommen, Directed research, Undergraduate Research Opportunity Award recipient (2-03 5-04)
36. Dylan Redden, Volunteer (12-13 to 8-14)
37. Dannah Reiter, Volunteer (2-14 to 8-15)
38. Casey Rieck, Volunteer (10-14 to 8-16)
39. Laura Rogers, Volunteer (10-14 to 9-15)
40. Emily Sakamoto, Volunteer (5-13 to 7-13)
41. Nate Schneider, Volunteer (1-11 to 6-11)
42. Bryant Schmitz, Volunteer (11-12 to 5-13)
43. Ashley Scott, LSSURP (6-13 to 8-13)
44. Jamilisse Segarra, LSSURP student (5-15 to 8-15)
45. Maria Seewald, Volunteer (3-12 to 4-12)
46. Nina Sigg, Volunteer (3-13 to 6-13)
47. Oliver Sogard, Volunteer (4-14 to 1-15)
48. Mario Soto, LSSURP student (6-16 to 8-16)
49. Kelly Thao, Volunteer (5-12 to 9-15)
50. Katia Y. Torres Román, Life Sciences Summer Undergraduate Research Program(6-12 to 8-12)
51. Peter Toy, Volunteer (6-10 to 8-13)
52. Nadine Yacoub, Volunteer/Directed research (9-11 to 10-13)
53. Mai Der Yang, LHI Scholar (5-14-9-14), Volunteer (5-15 to 9-15)
54. Melanie Yates, Volunteer (5-15 to 9-15)
55. Jon Yoon, Volunteer (5-15 to 8-15)
56. Jackie Youtsos, Honors Thesis Project in Physiology, UROP grantee (3-04 to 6-05)
57. Shawn Zani, Volunteer (9-09 to 5-11)
58. Maria Zauner, Volunteer/Life Sciences Summer Undergraduate Research Program/UROP students (6-10 to 5-12)
59. JingJing Zhu, LHI Scholar (6-16 to 8-16)
60. Jenna Zimmerman, Volunteer (1-10 to 6-14)

Graduate Student Activities

Master's Students (Theses Committee Only)

1. Ky O'ryke- Biomedical Enginnering (Defended December 2017)
2. Kailiegh Rock, Biomedical Engineering (1-19 defenese)
3. Alex Dekyne, Bionformatice and Computational Biology (1-19 defense)

Current Masters Students

1. Jorge Vergen, Biomedical Informatics and Computational Biology/Biomedical Engineering

Former Masters Students (Co-advisor)

1. Kailiegh Rock, Biomedical Engineering (9-17)

Doctoral Dissertations (Thesis Committee Only)

1.Erik Gassandelen, Biomedical Informatics and Computational Biology (7-19)
2. David Rameerez (
3. Thomas Valenzuela (WPE reader)

Doctoral Students Advised
None

Current Doctoral Students
None

Former Doctoral Students
None

Professional Student Activities
None

Post-doctoral Fellows

1. Alfonso Santiago, PhD, Biomedical Engineering, Barcelona Supercomputing Center

Residents

Visiting Scholars

1.Federica Sacco, PhD candidate Biomedical Engineering, Barcelona Supercomputing Center

Other Mentoring Activities

Medical Students

Current Medical/Veterinary Medicine Students
None

Former Medical Students

1. Rachel Busko, Medical student, University of Minnesota (5-16 to present)
2. Chen Chen, Medical student, University of Minnesota (5-15 to 9-15)
3. Alex DiBartolomeo, Medical student, University of Minnesota (1-16 to present)
4. Ellie Engelen, Veterinary medicine student, University of Minnesota (5-15 to 5-16)
5. Cole Holmgren, Medical student (MD/MS Program), University of Minnesota (5-12 to 5-14)
6. Tarissa Lai, Medical student, University of Minnesota (1-14 to 9-15)
7. Katelyn Madigan, Medical student, University of Minnesota (1-16 to present)
8. Sarah Mott, Medical student, Creighton (5-13 to 8-13)
9. Carrie Ronstrom, Medical student, University of Minnesota (9-13 to 5-15)
10. Maria Seewald, Medical student, University of Magdeburg, Germany (9-15 to 10-16)
11. Kim Sergerie, Medical student, McGill University, Montreal (9-16 to 10-16)
12. Bowei (LuLu) Song, Medical student, University of Minnesota (4-16 to 8-16)
13. Melanie Yates, Medical student, Case Western (5-16 to 8-16)

Former Pharmacy Students

1. Andrea Bochna, Pharmacy student, Research rotation, University of Wisconsin-Madison (8-16 to (10-16)

2. Dustin Fredrickson, Pharmacy student, Research rotation, University of Wisconsin-Madison School of Pharmacy (5-16 to 7-16)
3. A.J. Kellog, University of Wisconsin-Madison (8-16 to 10-16)

Former High School Students

1. Mai Der Yang, LHI Summer Scholar (6-14 to 8-14)

Former International Students

1. Maria Seewald, Medical Student, University of Magdeburg, Germany (2-12 to 4-12; 2015-16)

CLINICAL SERVICE (if applicable)

Clinical Leadership Accomplishments
None

Quality Improvement Projects
None

Clinical Service Responsibilities
Malignant Hyperthermia Diagnostic Center

PROFESSIONAL SERVICE AND PUBLIC OUTREACH

Service to the Discipline/Profession/Interdisciplinary Area(s)
None

Editorships/Journal Reviewer Experience

1. Frontiers in Physiology (2018-present)
2. American Society for Mechanical Engineering (ASME) (2018-present)
3. European Journal of Arrhythmia & Electrophysiology (2018-present)

Review panels for external funding agencies, foundations, etc.
None

Program review experience
None

Organization of conferences, workshops, panels, symposia
None

Committee memberships [indicate if the candidate served as chair]
None

Public Advocacy
None

Service to the University/Medical School/Department

University of Minnesota

University-wide service

Other

Medical School Service and Intercollegiate Service

Community Outreach Activities
Exhibits/Demonstrations at: Minnesota State Fair, American Heart Association Heart Walk, Science Fairs, Health Fairs, A Heart to Learn Youth Educational Events (formerly Hands on Hearts), TCT 2014, 2015, Design of Medical Devices Conferences, Mini medical school