CURRICULUM VITAE OREGON HEALTH & SCIENCE UNIVERSITY

NAME Owen McCarty DATE 7OCT2025

PRESENT POSITION AND ADDRESS

Academic Rank: Gordon Moore Endowed Professor & Chair

Department Biomedical Engineering

Professional Address:

CH13B; 3303 S Bond Ave, Portland, OR 97239

E-Mail Address: mccartvo@ohsu.edu

II. EDUCATION

Undergraduate and Graduate:

B.S. Chemical Engineering, Minor: Chemistry; May, 1997; State University of New York at Buffalo, Buffalo, NY. Advisor: Dr. Scott Diamond

Ph.D. Chemical & Biomolecular Engineering; Oct, 2002; Johns Hopkins University. Baltimore, MD Advisor: Dr. Konstantinos Konstantopoulos

Postgraduate:

Wellcome Trust Postdoctoral Fellowship; Pharmacology; 2003-2005; Oxford University, Oxford, UK and University of Birmingham, Birmingham, UK

Mentor: Dr. Steve Watson

III. PROFESSIONAL EXPERIENCE

Academic (Include Year, Position, and Institution):

July 2005 – June 2011 Assistant Professor

Department of Biomedical Engineering Oregon Health & Science University

July 2011 – June 2016 Associate Professor

Department of Biomedical Engineering Oregon Health & Science University

July 2016 – present Professor

Department of Biomedical Engineering Oregon Health & Science University

Feb 2014 – June 2015 Vice-Chair

Department of Biomedical Engineering Oregon Health & Science University

July 2015 – Dec 2018 Interim Chair

Department of Biomedical Engineering Oregon Health & Science University

Jan 2019 – present Chair

Department of Biomedical Engineering Oregon Health & Science University

IV. LEADERSHIP

I have been honored to serve as the Chair of the Department of Biomedical Engineering (BME) during a time of transition and growth within OHSU and the School of Medicine (SOM). I have worked with the BME faculty in this dynamical environment to facilitate the following initiatives:

1) Merged the BME graduate program into the SOM and grew the program to the largest within the SOM at 117 PhD students; helped in the creation of a DMD/PhD program with the School of Dentistry

- 2) Built a team that translated two drugs from creation to FDA approval and first-in human trials (ClinicalTrials #NCT03097341, #NCT03612856, #NCT04465760)
- 3) Founded the Program in Quantitative and Systems Biology as a point of convergence for multiple OHSU units focused on the study of complex (patho)physiological systems across length and time scales.
- 4) Facilitated the recruitment of 14 new faculty into or jointly with BME with expertise in Computational Biology, Oncological Sciences, Biomedical Imaging, and Regenerative Medicine
- 5) Co-recruited two physician-scientists with the Division of Hematology/Medical Oncology to lead a group focused on the design and utility of novel anticoagulants to reduce cardiovascular disease
- 6) Established a promotion and tenure (P&T) committee that successfully promoted 10 faculty to Professor, 15 faculty to Associate Professor, and 4 faculty to Research Associate Professor; and formed a policy for transition from Postdoctoral Fellow, Instructor, Research Faculty and Tenure-track faculty. I was honored to serve two terms on the SOM P&T committee and successfully incorporated team science and innovation & enterpreneurship as two additional criteria available for promotion; served on a national P&T in Innovation and Entrepreneurship Committee to disseminate lessons learned to universities nationwide. These recommendations were published in a landmark paper in *Science* 2021;373(6561):1312-1314.
- 7) Increased the number of women faculty to >40% and graduate student population to >50% female; increased the number of URM graduate students to 24 out of 117 students
- 8) Improved the ranking of our BME Graduate Engineering Program (from unranked to #51 overall, #12/197 for all US Engineering Graduate Programs in research expenditures per faculty member)
- 10) Fostered the spinout of 7 startup companies from BME faculty, creating 47 jobs within the Portland biotech industry

V. SCHOLARSHIP

Area(s) of Research/Scholarly Interest:

The vascular system represents an exquisite feat of bioengineering. Fluid (blood) flow and mass transfer are intimately integrated with and actively regulate vascular cell responses. As such, elucidating the molecular nature of cellular processes in the dynamic setting of the vasculature requires the synthesis of engineering fundamentals with the tools of cell biology, with relevance to the underlying processes of cancer metastasis, cardiovascular disease, and inflammation. The goal of my research program is to develop molecular-targeted therapies to combat these disorders. We have followed the arch of discovery from identification of a druggable target in the coagulation cascade to creation and translation of a therapeutic for safe and effective use in preventing thrombotic complications associated with blood-biomaterial interfaces.

Grants and Contracts:

Current Federal:

Grant Title: Characterization of coagulation factor-platelet interactions: role of FXI

PI: Owen McCarty

Agency: National Institute of Health – NHLBI; 5 R01 HL101972

Period of support and Total Direct Costs: 01-APR-10 - 30-APR-28; \$2,814,141

Grant Title: Contact Pathway Activation on Vascular Devices

MPI: Owen McCarty; Monica Hinds

Agency: National Institute of Health – NHLBI; 1 R01 HL144113

Period of support and Total Direct Costs: 01-AUG-18 – 30-JUN-27; \$3,094,518

Grant Title: Biodegradable Metal Stent Alloys for Vascular Applications

PI: Monica Hinds; Jeremy Goldman; Co-investigator: McCarty Agency: National Institute of Health – NHLBI; 1 R01 HL168696

Period of support and Total Direct Costs: 12-APR-23 – 31-MAR-27; \$3,998,136

Grant Title: Contact Activation and Infection

MPI: Owen McCarty; Florea Lupu

Agency: National Institute of Health – NIAID; 1 R01 AI157037

Period of support and Total Direct Costs: 23-SEP-20 – 31-AUG-25; \$3,260,682

Grant Title: Evaluating the Safety and Efficacy of Targeting the Contact Pathway to Prevent Device-

Associated Thrombosis

PI: Joseph Shatzel; Co-investigator: McCarty

Agency: National Institute of Health – NHLBI; 1 R01 HL151367

Period of support and Total Direct Costs: 15-JUN-20 - 31-MAY-25; \$1,125,000

Past Federal:

Grant Title: Immune Evasion by Gamma 2 Herpesviruses

PI: Klaus Frueh (VGTI - OHSU)

Agency: National Institute of Health - NCI; 2 R01 CA94011

Period of support and Total Direct Costs: 1-JUL-09 – 30-JUN-11; \$500,000

Direct Costs to McCarty Group per year: \$25,906

Grant Title: MMP1-PAR1-based Interventions in Arterial Thrombosis

PI: Athan Kuliopulos (Tufts Medical Center, Boston, MA)
Agency: National Institute of Health – NHLBI; 1RC2HL101783

Period of support and Total Direct Costs: 30-SEP-09 – 29-SEP-11; \$161,032

Grant Title: Characterization of procoagulant leukemic cells

PI: Owen McCarty

Agency: National Institute of Health – NCI; TIME Award

Period of support and Total Direct Costs: 1-MAR-12 – 28-FEB-13; \$30,000

Grant Title: Therapeutic thrombin analogs

PI: Andras Gruber (BME - OHSU)

Agency: National Institute of Health-SBIR; 1 R44 HL095315

Period of support and Total Direct Costs: 1-SEP-09 – 31-AUG-13; \$673,023

Grant Title: Role of CD44 in metastasis under coagulation and shear

PI: Owen McCarty

Agency: National Institute of Health – NCI; Outreach Award

Period of support and Total Direct Costs: 1-JUL-12 – 30-JUN-13; \$25,000

Grant Title: Four-dimensional heterogeneity of fluid phase biopsies in cancer (4DB-Center)

Project Leader: Owen McCarty

PI: Peter Kuhn (Scripps Research Institute, La Jolla, CA) Agency: National Institute of Health – NCI; 5 U54 CA143906

Period of support and Total Direct Costs: 30-SEP-09 – 31-AUG-14; \$525,000

Grant Title: What makes a microenvironment permissible for tumor growth?

PI: Michael Shuler (Cornell)

Agency: National Institute of Health – NCI; Transnetwork Award

Period of support and Total Direct Costs: 1-AUG-12 – 31-JUL-14; \$1,050,000

Grant Title: Factor XI inhibitor for thrombosis

PI: Erik Tucker (Aronora, Inc.)

Agency: National Institute of Health-SBIR; 2 R44 HL106919

Period of support and Total Direct Costs: 1-JUL-12 – 30-JUN-15; \$2,225,567

Grant Title: Therapeutic Protein C Activator for Myocardial Ischemia

PI: Norah Verbout (Aronora, Inc.)

Agency: National Institute of Health-SBIR; R44 HL117589

Period of support and Total Direct Costs: 1-MAR-13 – 28-FEB-20; \$2,165,979

Grant Title: Factor XII Inhibitor for Surface Initiated Thrombosis

PI: Erik Tucker (Aronora, Inc.)

Agency: National Institute of Health-SBIR; 1R44HL126235

Period of support and Total Direct Costs: 1-AUG-16 – 31-JUL-19; \$2,261,422

Grant Title: FXI and sepsis PI: Owen McCarty; Florea Lupu

Agency: National Institute of Health-General Medicine; 1R01GM116184 Period of support and Total Direct Costs: 1-SEP-15 – 30-JUN-20; \$1,796,186

Grant Title: Targeting PAR4 in Thrombotic Disorders: Pharmacogenomic Approach

PI: Heidi Hamm (Vanderbilt University)

Agency: National Institute of Health-NHLBI; 1 R01 HL133923

Period of support and Total Direct Costs: 1-APR-17 - 31-MAR-21; \$3,064,997

Grant Title: Molecular Imaging of Platelets and Oxidative Stress in Atherosclerosis

PI: Jonathan Lindner; Co-investigator: McCarty

Agency: National Institute of Health – NHLBI; 5 R01 HL078610

Period of support and Total Direct Costs: 01-AUG-19 – 30-JUN-23; \$1,593,604

Current Foundation & Industry Support:

Grant Title: OHSU Institutional Award for Undergraduate Training

PI: Owen McCarty

Agency: American Heart Association; 23IAUST1019750

Period of support and Total Direct Costs: 1-JAN-23 – 31-DEC-25; \$132,000 These funds are used to support summer internship in cardiovascular sciences

Grant Title: ARTEMIS

PI: Simon Calaminus (University of Hull, UK) Agency: UK Research & Funding (UKRI)

Period of support and Total Direct Costs: 1-SEP-25 – 31-AUG-27; \$3,697,000

The goal is to develop and validate a novel, high throughput model of the vascular system

Past Foundation & Industry Support:

Grant Title: Hemophilia Treatment Center

PI: Michael Recht

Agency: Health Resources and Services Administration; H30MC24049 Period of support and Total Direct Costs: 1-NOV-17 – 1-OCT-18; \$1,288,282

Grant Title: Role of role of aspirin in reducing cancer-associated thrombosis

PI: Owen McCarty

Agency: Altarum Institute

Period of support and Total Direct Costs: 1-JAN-18 - 31-DEC-18; \$10,000

Grant Title: Platelet recruitment, activation and thrombus formation

PI: Owen McCarty

Agency: American Heart Association, Established Investigator Award Period of support and Total Direct Costs: 1-JAN-13 – 31-DEC-17; \$400,000

Grant Title: Role of platelet activation in colon cancer metastasis under coagulation and shear

PI: Owen McCarty

Agency: Altarum Institute

Period of support and Total Direct Costs: 1-SEP-16 – 30-AUG-17; \$20,000

Grant Title: Role of platelet activation in colon cancer metastasis under coagulation and shear

PI: Owen McCarty

Agency: Altarum Institute

Period of support and Total Direct Costs: 1-JUL-15 – 30-JUN-16; \$20,000

Grant Title: Study of Blood Clotting

PI: Owen McCarty

Agency: Hewlett Packard; SRA-16-028

Period of support and Total Direct Costs: 12-OCT-15 – 11-Oct-16; \$50,000

Grant Title: Development of WE-thrombin for the treatment of MS

PI: Owen McCarty

Agency: National Multiple Sclerosis Society

Period of support and Total Direct Costs: 1-OCT-12 – 30-SEP-13; \$44,000

Direct Costs to McCarty Group per year: \$40,000

Grant Title: Immunoregulation and Neuroprotection by RTLs in EAE

PI: Halina Offner (OHSU VA)

Agency: National Multiple Sclerosis Society

Period of support and Total Direct Costs: 1-OCT-09 – 30-SEP-12; \$541,876

Direct Costs to McCarty Group per year: \$12,037

Grant Title: Targeted CEU Imaging of Atherosclerosis

PI: Owen McCarty

Agency: Wallace Coulter Foundation

Period of support and Total Direct Costs: 1-AUG-07 – 31-JUL-09; \$200,000

Grant Title: Regulation of platelet activation and spreading by GPIb

PI: Owen McCarty

Agency: American Heart Association, Beginning Grant-in-Aid

Period of support and Total Direct Costs: 1-JUL-06 – 30-JUN-09; \$120,000

Grant Title: Evaluation of novel antithrombotic therapeutics

PI: Andras Gruber (OHSU) Agency: Bayer Healthcare

Period of support and Total Direct Costs: 1-JUN-08 – 31-MAY-11; \$272,020

Direct Costs to McCarty Group per year: \$89,485

Grant Title: Elucidation of FXI-platelet interactions

PI: Owen McCarty

Agency: American Heart Association, Grant-in-Aid

Period of support and Total Direct Costs: 1-JUL-09 – 30-JUN-12; \$120,000

Grant Title: Hemostasis study of Bruton's Tyrosine Kinase inhibitors

PI: Owen McCarty

Agency: Pharmacyclics, Inc.

Period of support and Total Direct Costs: 7-MAY-13 – 6-MAY-15; \$94,700

Direct Costs to McCarty Group per year: \$94,700

Grant Title: FXI inhibitors

PI: Owen McCarty

Agency: Aronora, Inc; SRA-12-086

Period of support and Total Direct Costs: 1-APR-12 – 31-MAR-16; \$116,869

Grant Title: Factor XI inhibitors

PI: Owen McCarty

Agency: Aronora, Inc; SRA-16-066

Period of support and Total Direct Costs: 22-JAN-16 – 21-JAN-18; \$90,000

Grant Title: WE-thrombin for the treatment of inflammatory demyelination

PI: Larry Sherman

Agency: National Multiple Sclerosis Society

Period of support and Total Direct Costs: 1-OCT-17 - 30-SEP-20 (NCE); \$575,556

Grant Title: AHA Undergraduate Student Fellowship

PI: Owen McCarty

Agency: American Heart Association; 18UFEL33960363

Period of support and Total Direct Costs: 1-APR-18 – 31-MAR-23; \$36,000 These funds are used to support summer internship in cardiovascular sciences

Grant Title: Tumor-Induced Endothelial PD-L1 and Lymphocyte Trafficking

PI: Amanda Lund; Co-investigator: McCarty

Agency: American Cancer Society

Period of support and Total Direct Costs: 1-JAN-19 – 31-DEC-22; \$660,000

Current State and Local:

None

Past State and Local:

Grant Title: Identifying tyrosine kinase pathway targets in tumor tissue using quantum dot assays

PI: Tania Vu (BME - OHSU)

Agency: Oregon Nanoscience and Microtechnologies Institute (ONAMI)
Period of support and Total Direct Costs: 1-SEP-10 – 30-AUG-11; \$199,785

Grant Title: Characterization of protein C as a novel prohemostatic agent

PI: Owen McCarty

Agency: Collins Medical Trust

Period of support and Total Direct Costs: 1-OCT-08 – 30-SEP-10; \$30,000

Grant Title: Contrast-enhanced ultrasound imagining of thrombotic thrombocytopenic purpura

PI: Owen McCarty

Agency: Oregon Clinical and Translational Research Center, OHSU

Period of support and Total Direct Costs: 1-SEP-07 – 31-AUG-09; \$30,000

Grant Title: Role of gender in the regulation of platelet activation and thrombus formation

PI: Owen McCarty

Agency: Research Center for Gender Based Medicine, OHSU

Period of support and Total Direct Costs: 1-FEB-08 – 31-JAN-09; \$20,000

Grant Title: Modulation of platelet spreading: the role of GPIIbIIIa and actin assembly

PI: Owen McCarty

Agency: Medical Research Foundation

Period of support and Total Direct Costs: 1-MAR-06 – 28-FEB-07; \$30,000

Grant Title: Development of contact pathway inhibitors for the treatment of thrombotic diseases

PI: Owen McCarty

Agency: Oregon Clinical and Translational Research Center, OHSU

Period of support and Total Direct Costs: 1-FEB-13 – 31-MAR-14; \$67,000

Grant Title: Creation and validation of a function-based circulating tumor cell assay

PI: Owen McCarty

Agency: Knight Cancer Institute

Period of support and Total Direct Costs: 1-DEC-11 – 30-NOV-14; \$100,000

Grant Title: CLOT: Role of platelets in cancer-associated thrombosis

PI: Owen McCarty

Agency: Knight Cancer Institute, CEDAR

Period of support and Total Direct Costs: 1-SEP-17 – 31-AUG-18; \$50,000

Grant Title: Sub-proteomic signatures of tumor-exposed platelets: preliminary studies

PI: Samuel Tassi Yunga

Agency: Knight Cancer Institute, CEDAR

Period of support and Total Direct Costs: 1-NOV-17 – 31-OCT-18; \$25,000

Grant Title: Study of the role of platelet activation in atherogenesis in an obese, non-human primate model

PI: Joseph Shatzel (Heme/Onc, BME – OHSU)

Agency: OHSU Cardiometabolic Research

Period of support and Total Direct Costs: 1-MAR-19 – 29-FEB-20; \$45,203

Publications/Creative Work:

Patents

- 1. TOMOGRAPHIC BRIGHT FIELD IMAGING (TBFI). Phillips KG, McCarty OJ, Jacques SL. US Patent 9,588,330. Issued Mar 7, 2017.
- 2. METHODS AND COMPOSITIONS USED IN TREATING INFLAMMATORY AND AUTOIMMUNE

DISEASES. McCarty OJ, Verbout N, Offner-Vandenbark, H, Tucker El. US Patent 10,137,177. Issued Nov 27, 2018.

Peer-reviewed

- 1. <u>McCarty OJ</u>, Mousa SA, Bray PF, Konstantopoulos K. Immobilized platelets support human colon carcinoma cell tethering, rolling and firm adhesion under dynamic flow conditions. *Blood* 2000 Sep 1; 96(5): 1789-1797.
- 2. Abulencia JP, Tien N, McCarty OJ, Plymire D, Mousa SA, Konstantopoulos K. Comparative antiplatelet efficacy of a novel nonpeptide GPIIb/IIIa antagonist (XV454) and abciximab (c7E3) in flow models of thrombosis. *Arterioscler Thromb & Vasc Biol.* 2001 Jan; 21(1): 149-156.
- 3. Mousa SA, Abulencia JP, McCarty OJ, Turner NA, Konstantopoulos K. Comparative efficacy between the GPIIb/IIIa antagonists, roxifiban and orbofiban, in inhibiting platelet function in flow models of thrombosis. *Journal of Cardiovascular Pharmacology* 2002 Apr; 39(4): 552-560.
- 4. <u>McCarty OJ</u>, Jadhav S, Burdick MM, Bell WR, Konstantopoulos K. Fluid shear regulates the kinetics and molecular mechanisms of activation-dependent platelet binding to colon carcinoma cells. *Biophysical Journal* 2002 Aug; 83(2): 836-48.
- 5. <u>McCarty OJ</u>, Tien N, Bochner BS, Konstantopoulos K. Exogenous eosinophil activation converts PSGL-1-dependent binding to CD18-dependent stable adhesion to platelets in shear flow. *American Journal of Physiology: Cell Physiology* 2003 May; 284(5): C1223-34.
- 6. Hanley W*, McCarty OJ*, Jadhav S, Tseng Y, Wirtz D, Konstantopoulos K. Single-molecule characterization of P-selectin/ligand binding. *Journal of Biological Chemistry* 2003 Mar 21; 278(12): 10556-61. *equally contributing first authors
- 7. McCarty OJ, Zhao Y, Andrew N, Machesky LM, Staunton D, Frampton J, Watson SP. Evaluation of the role of platelet integrins in fibronectin-dependent spreading and adhesion. *Journal of Thrombosis and Haemostasis* 2004 Oct; 2(10): 1823-1833. (2004 JTH Paper of the Year in Platelets)
- 8. Ahn KC, Jun A, Pawar P, Jadhav S, Napier S, <u>McCarty OJ</u>, Konstantopoulos K. Preferential binding of platelets to monocytes over neutrophils under flow. *Biochemical and Biophysical Research Communications* 2005 Apr 1; 329(1): 345-355.
- 9. McCarty OJ, Larson M, Auger JM, Atkinson BT, Kalia N, Pearce AC, Ruf S, Henderson, Tybulewicz V, Machesky LM, Watson SP. Rac1 is essential for platelet lamellipodia formation and aggregate stability under flow. *Journal of Biological Chemistry* 2005 Nov; 280(47): 39474-39484.
- 10. Inoue O, Suzuki-Inoue K, McCarty OJ, Moroi M, Ruggeri ZM, Kunicki TJ, Ozaki Y, Watson SP. Laminin stimulates spreading of platelets through integrin $\alpha_6\beta_1$ -dependent activation of GPVI. *Blood* 2006 Feb 15; 107(4): 1405-12.
- 11. McCarty OJ, Calaminus SDJ, Berndt MC, Machesky LM, Watson SP. VWF mediates platelet spreading through GPIb and $\alpha_{\text{IIb}}\beta_3$ in the presence of botrocetin and ristocetin, respectively. *Journal of Thrombosis and Haemostasis* 2006 Jun; 4(6): 1367-78.
- 12. Thornber K, McCarty OJ, Watson SP, Pears CJ. Distinct but critical roles for integrin $\alpha_{\text{Ilb}}\beta_3$ in platelet spreading on fibrinogen, collagen-related peptide and thrombin. *FEBS Journal* 2006 Nov 15; 273(22): 5032-5043. (Cover)
- 13. Pearce AC, McCarty OJ, Calaminus SDJ, Vigorito E, Turner M, Watson SP. Vav family proteins are required for optimal regulation of the PLCγ2 by integrin αIIbβ3. *Biochemical Journal* 2007; 401: 753-761.
- 14. Hughan SC, Hughes CE, McCarty OJ, Schweighoffer E, Soultanova I, Ware J, Tybulewicz VL, Watson SP. GPVI-potentiation of platelet activation by thrombin and adhesion molecules independent of Src kinases and Syk. *Arterioscler Thromb & Vasc Biol*. 2007; 27:422-429.
- 15. Dhanjal TS, Ross EA, Auger JM, McCarty OJ, Hughes CE, Senis YA, Buckley CD, Watson SP. Minimal regulation of platelet activity by PECAM-1. *Platelets* 2007 Feb; 18(1): 56-67.
- 16. Calaminus SD*, McCarty OJ*, Auger JM, Insall RH, Watson SP, Machesky LM. A major role for Scar/WAVE-1 downstream of GPVI in platelets. *Journal of Thrombosis and Haemostasis* 2007 Mar; 5(3): 537-43. *equally contributing first authors

- 17. White TC, Berny MA, Robinson DK, Yin H, DeGrado WF, Hanson SR, McCarty OJ. The leech product saratin is a potent inhibitor of platelet integrin $\alpha_2\beta_1$ and von Willebrand factor binding to collagen. *FEBS Journal* 2007 Mar; 274(6): 1481-1492.
- 18. Gruber A, Marzec U, Bush L, Di Cera E, Fernandez JA, Berny MA, Tucker EI, McCarty OJ, Griffin JH, Hanson SR. Relative antithrombotic and antihemostatic effects of protein C activator versus low molecular weight heparin in primates. *Blood* 2007 May 1; 109(9): 3733-40.
- 19. Calaminus SDJ, Auger JM, McCarty OJ, Wakelam MJO, Machesky LM, Watson SP. MyosinIIa contractility is required for maintenance of platelet structure during spreading on collagen and contributes to thrombus stability. *Journal of Thrombosis and Haemostasis* 2007 Oct; 5(10): 2136-45. (2007 JTH Paper of the Year in Platelets)
- 20. Berny MA, White TC, Tucker EI, Bush-Pelc LA, Di Cera E, Gruber A, McCarty OJ. The thrombin mutant W215A/E217A acts as a platelet GPIb antagonist. *Arterioscler Thromb & Vasc Biol.* 2008 Feb;28(2):329-34. (Featured article with Editorial)
- 21. Markway BD, McCarty OJ, Marzec UM, Courtman DW, Hanson SR, Hinds MT. Capture of flowing endothelial cells using surface-immobilized anti-KDR antibody. *Tissue Engineering Part C* 6 2008 Jun; 14(2):97-105.
- 22. White TC, Berny MA, Tucker EI, Urbanus RT, de Groot PG, Fernandez JA, Griffin JH, Gruber A, McCarty OJ. Protein C supports platelet binding and activation under flow: role of glycoprotein lb and apolipoprotein E receptor 2. *Journal of Thrombosis and Haemostasis* 2008 Jun; 6(6): 995-1002. (Cover)
- 23. Calaminus SDJ, Thomas S, McCarty OJ, Machesky LM, Watson SP. Identification of a novel, actinrich structure, the actin nodule, in the early stage of platelet spreading. *Journal of Thrombosis and Haemostasis* 2008 Nov; 6(11):1944-52.
- 24. Lovely RS, Rein CM, White TC, Jouihan SA, Boshkov LK, Bakke AC, McCarty OJ, Farrell DH. $\gamma A/\gamma'$ fibrinogen inhibits thrombin-induced platelet aggregation. *Thrombosis and Haemostasis* 2008 Nov; 100(5):837-846.
- 25. Yang XV, Banerjee Y, Fernandez JA, Deguchi H, Xu X, Mosnier LO, Urbanus RT, de Groot PG, White-Adams TC, McCarty OJ, Griffin JH, "Activated protein C ligation of ApoER2 (LRP8) causes Dab1-dependent signaling in U937 cells", *PNAS* 2009 Jan; 106(1): 274-279.
- 26. Miller MW, Basra S, Kulp DW, Billings PC, Choi S, Beavers MP, McCarty OJ, Zou Z, Kahn M, Bennett JS, DeGrado WF. Small molecule inhibitors of integrin $\alpha_2\beta_1$ that prevent pathological thrombus formation via an allosteric mechanism. *PNAS* 2009 Jan; 106(3): 719-724.
- 27. Tucker EI, Marzec UM, White TC, Hurst S, Rugonyi S, McCarty OJ, Gailani D, Gruber A, Hanson SR. Prevention of vascular graft occlusion and thrombus-associated thrombin generation by inhibition of factor XI. *Blood* 2009 Jan; 113(4): 936-944.
- 28. Scholl B, Liu HY, Long BR, McCarty OJ, O'Hare T, Druker, BJ, Vu TQ. Single Particle quantum dot imaging achieves ultrasensitive detection capabilities for western immunoblot analysis. *ACS Nano* 2009 Jun 23;3(6):1318-28.
- 29. White-Adams TC, Berny MA, Tucker EI, Gertz JM, Gailani D, Urbanus RT, de Groot PG, Gruber A, McCarty OJ. Identification of coagulation factor XI as a ligand for platelet apolipoprotein E receptor 2 (ApoER2). Arterioscler Thromb & Vasc Biol. 2009 Oct; 29 (10):1602-7. (Featured article with Editorial) PMC2756776
- 30. Vartanian KB, Kirkpatrick SJ, McCarty OJ, Vu TQ, Hanson SR, Hinds MT. Progenitor and carotid endothelial cells elongated on micropatterned surfaces exhibit distinct and shape-dependent extracellular matrix microenvironments. *Journal of Materials Research A* 2009 Nov; 91A(2): 528-539.
- 31. Eshel-Green T, Berny MA, Conley RB, McCarty OJ. Effect of sex difference on platelet adhesion, spreading and aggregate formation under flow. *Thrombosis and Haemostasis* 2009 Nov;102(5):958-65.
- 32. Vartanian KB, Berny MA, McCarty OJ, Hanson SR, Hinds MT. Cytoskeletal structure regulates endothelial cell immunogenicity independent of fluid shear stress. *American Journal of Physiology: Cell Physiology* 2010 Feb; 298(2):C333-41.
- 33. Berny MA, Munnix ICA, Auger JM, Schols SEM, Cosemans JMEM, Panizzi P, Bock PE, Watson SP, McCarty OJ*, Heemskerk JWM*. "Spatial distribution of factor Xa, thrombin, and fibrin(ogen) on thrombi at

- venous shear", PLoS ONE 2010 Apr; 5(4): e10415(1-8). *equally contributing senior authors PMC2861630
- 34. Berny MA, Patel IA, White-Adams TC, Simonson P, Gruber A, Rugonyi S, McCarty OJ. Rational design of an ex vivo model of thrombosis. *Cellular and Molecular Bioengineering* 2010 Jun; 3(2): 187-189.
- 35. White-Adams TC, Berny MA, Patel IA, Tucker EI, Gailani D, Gruber A, McCarty OJ. Laminin promotes coagulation and thrombus formation in a FXII-dependent manner. *Journal of Thrombosis and Haemostasis* 2010 Jun; 8(6):1295-301.
- 36. Tucker EI, Marzec UM, Berny MA, Hurst S, Bunting S, McCarty OJ, Gruber A, Hanson SR. Safety and antithrombotic efficacy of moderate platelet count reduction by thrombopoietin inhibition in primates. *Science Translational Medicine* 2010 Jun; 2(37): 37ra45. PMC3271054
- 37. Sinha S, Miller L, Subramanian S, McCarty OJ, Proctor T, Meza-Romero R, Burrows GG, Vandenbark AA, Offner H. Binding of recombinant T cell receptor ligands (RTL) to APC prevents upregulation of CD11b and Ly6c and inhibits T cell activation and transfer of experimental autoimmune encephalomyelitis. *Journal of Neuroimmunology* 2010 Aug 25;225(1-2):52-61. PMC2924959
- 38. McCarty OJ, Conley RB, Shentu W, Tormoen GW, Zha D, Xie A, Qi Y, Zhao Y, Carr C, Belcik T, Keene DR, de Groot PG, Lindner JR. Molecular imaging of activated von Willebrand factor to detect highrisk atherosclerotic phenotype. *JACC: Cardiovascular Imaging* 2010 Sep; 3: 947-955 (with Editorial) PMC3204804
- 39. Cheng Q, Tucker EI, Pine MS, Sisler I, Matafonov A, Sun M, White-Adams TC, Smith SA, Hanson SR, McCarty OJ, Renne T, Gruber A, Gailani D. A role for factor XIIa-mediated factor XI activation in thrombus formation in vivo. *Blood* 2010 Nov; 116(19): 3981-9. PMC2981546
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- 57. Taskin B, Kohs TCL, Shatzel JJ, Puy C, McCarty OJ. Factor XI as a therapeutic target in neuroinflammatory disease. *Current Opinions in Hematology* 2024 Jan; 31(1): 32-38.
- 58. Moellmer SA, Puy C, <u>McCarty OJ</u>. Biology of Factor XI. *Blood* 2024 Apr 11;143(15):1445-1454. PMC11033592
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- 60. Vu HH, McCarty OJ, Favaloro EJ. Contact activation: where thrombosis and hemostasis meet on a foreign surface, plus a mini-editorial compilation ("Part XVI"). *Semin Thromb Hemost* 2024 Oct;50(7):933-936.
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- 62. Goel A, Tathireddy H, Wang S, Vu HH, Puy C, Hinds MT, Zonies D, McCarty OJ, Shatzel JJ. Targeting the contact pathway of coagulation for the prevention and management of medical device-associated thrombosis. *Semin Thromb Hemost* 2024 Oct;50(7):989-997. PMC11069398
- 63. Vu HH, Moellmer SA, McCarty OJ, Puy C. New mechanisms and therapeutic approaches to regulate

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- 65. Zhang Y, McCarty OJ, Aslan JE. ZO-2 seals the deal for platelet tight junctions. *Res Pract Thromb Haemost* 2025 Jun; 9(4): 102952. PMC12284520
- 66. Crosland BA, Hedges MA, Ryan KS, D'Mello RJ, McCarty OJ, Malhotra SV, Spindel ER, Shorey-Kendrick LE, Scottoline BP, Lo JO. Amniotic fluid: its role in fetal development and beyond. *Journal of Perinatology* 2025 Aug;45(8):1163-1170. PMC12354197
- 67. Lira AL, Puy C, Shatzel JJ, Lupu F, McCarty OJ. Bacterial infection and activation of the contact pathway of coagulation. *Blood Vessels, Thrombosis* & Hemostasis 2025 Jul 5;2(4):100091. PMC12455109
- 68. Rodolf AA, McCarty OJ. Thrombopoiesis comes full circle. Blood 2025: In Press.
- 69. Lira AL, Drew KC, Puy C, Shatzel JJ, <u>McCarty OJ</u>. Lipopolysaccharide and coagulation factor XII: biophysics of contact activation in infection. *Semin Thromb Hemost*: *In Press*.
- 70. Falama RB, Matsumoto LR, Piatski ME, Malhotra AK, McCarty OJ, Shatzel JJ. Are Factor XI inhibitors useful in atrial fibrillation: insights and implications from recent trials. Submitted to *European Journal of Haematology* (Aug, 2025).

Invited Lectures, Conference Presentations: International and National

- 1. "Platelets and Coagulation Factor Interactions: Sticky Wickets in the Blood", Department of Chemical Engineering, Indian Institute of Technology of Bombay, Mumbai, India (Jan, 2007).
- 2. "Role of Rac family G proteins in platelet physiology". *Gordon Research Conference: Cell Biology Of Megakaryocytes & Platelets*, Buellton, CA (Mar, 2007).
- 3. "Platelet-Coagulation Factor Interactions: a Sticky Situation in the Blood", Department of Biochemistry and Biophysics, University of Pennsylvania, Philadelphia, PA (Nov, 2007).
- 4. "Platelets, Coagulation, and Cancer Metastasis: a Sticky Situation in the Blood", Beatson Institute for Cancer Research UK, Glasgow, Scotland, United Kingdom (Dec. 2007).
- 5. "Platelet-Coagulation Factor Interactions: Sticky Wickets in the Blood", Centre for Cardiovascular Sciences, University of Edinburgh, Edinburgh, Scotland, United Kingdom (Dec, 2007).
- 6. "Platelet-Coagulation Factor Interactions: a Sticky Situation in the Blood", Cardiovascular Research Institute, Maastricht University, Maastricht, the Netherlands (Dec, 2007).
- 7. "Vascular Shear and Platelet Cell Biology: A Sticky Situation in the Blood", Department of Biology, Augustana College, Sioux Falls, SD (Sept, 2008).
- 8. "Vascular Shear and Platelet Cell Biology: Sticky Wickets in the Blood", Department of Molecular Haemostasis and Thrombosis, University of Aberdeen, Scotland, United Kingdom (Oct, 2008).
- 9. "The Yin and Yang of platelet adhesion; so what's the catch?" Department of Cell Biology, The Scripps Research Institute, La Jolla, CA (Jan, 2009).
- 10. "A Sticky Situation in the Blood: Dissecting Platelet-Coagulation Factor Interactions", School of Chemical Biological and Materials Engineering, University of Oklahoma, Norman, OK (Jan, 2009).
- 11. "The platelet ApoER2' receptor and factor XI binding to platelets", 55th Scientific and Standardization Committee: Plasma Kallikrein-Kinin system, *XXIInd Congress of the International Society on Thrombosis and Haemostasis*, Boston, MA (July, 2009).
- 12. "Circulating Tumor Cells (CTCs): Emerging Technologies for Detection, Diagnosis and Treatment", *American Physical Society Conference*, Portland, OR (Mar, 2010).
- 13. "The Role of FXI in Thrombosis & Haemostasis", Division of Medicinal Chemistry & Structural Biology, University of Nottingham, Nottingham, England, United Kingdom (May, 2010).

- 14. "Cytoskeletal Regulators of Platelet Morphology and Function", Inositide Laboratory, Babraham Institute, Cambridge, England, United Kingdom (May, 2010).
- 15. "Vascular Shear and Platelet Cell Biology: Sticky Wickets in the Blood", Bayer Schering Pharma AG, Wuppertal, Germany (Oct, 2010)
- 16. "Platelet-Coagulation Factor Interactions: Sticky Wickets in the Blood", Pediatric Hematology/Oncology, University of Colorado, Denver, CO (Nov, 2010).
- 17. "Vascular Shear and Blood Cell Biology: A Sticky Situation", Department of Chemical Engineering, Colorado School of Mines, Golden, CO (Nov, 2010).
- 18. "Platelets, Coagulation, and Cancer Metastasis: a Sticky Situation in the Blood", Department of Chemical Engineering & Biomolecular Engineering, Johns Hopkins University, Baltimore, MD (Mar, 2011).
- 19. "Circulating tumor cells and thrombosis", Division of Hematology/Oncology, Department of Medicine, University of North Carolina, Chapel Hill, NC (Mar, 2011).
- 20. "Characterization of circulating tumor cells using differential interference contrast based quantitative phase imaging", *American Chemical Society National Meeting*, Anaheim, CA (Mar, 2011).
- 21. "An overview of blood coagulation and cancer metastasis", 2nd Annual Physical Sciences in Oncology Meeting, San Diego, CA (Apr, 2011).
- 22. "Cancer faces a sticky situation in the blood", Cancer Cell Motility and the Metastatic Cascade, The Beyond Center for Fundamental Concepts in Science, Tucson, AZ (May, 2011).
- 23. "Characterization of the physical parameters of blood cells", Biological and Mechanical Engineering, Massachusetts Institute of Technology, Boston, MA (May, 2011).
- 24. "Role of FXII and FXI in thrombosis and hemostasis", Department of Medicine, University of Yamanashi, Kofu, Japan (July, 2011).
- 25. "Characterization of FXI-blood cell interactions", 57th Scientific and Standardization Committee: Factor XI and the contact system, *XXIII Congress of the International Society on Thrombosis and Haemostasis*, Kyoto, Japan (July, 2011).
- 26. "Development of an in vitro model of occlusive thrombus formation", 57th Scientific and Standardization Committee: Biorheology, *XXIII Congress of the International Society on Thrombosis and Haemostasis*, Kyoto, Japan (July, 2011).
- 27. "Optical characterization and feasibility study of PLGA nanoparticles designed for photo-thermal optical coherence tomography", *IEEE Nanotechnology Conference*, Portland, Oregon (August, 2011).
- 28. "Circulating tumor cells and thrombosis", Center for Applied Molecular Medicine, University of Southern California, Los Angeles, CA (Dec, 2011).
- 29. "Role of coagulation factors XI and XII in thrombosis and hemostasis", Department of Clinical Chemistry and Haematology, University Medical Center Utrecht, Utrecht, the Netherlands (Feb. 2012).
- 30. "Dynamics: time domain of cell motility", Assessment of Physical Sciences and Engineering Advances in Life Sciences and Oncology (APHELION), Washington, DC (Jun, 2012)
- 31. "Characterization of the physical parameters of mass, volume and density of platelet aggregates and thrombus formation", *58th Scientific and Standardization Committee Meeting*, Liverpool, UK (Jun, 2012).
- 32. "Vascular Shear and Blood Cell Biology: A Sticky Situation in the Blood", Human Oncology and Pathogenesis Program, Memorial Sloan Kettering Cancer Center, New York, NY (Sep. 2012).
- 33. "Vascular Shear and Cancer Cell Biology", Physical Science-Oncology Center Webinar, Arizona State University, Phoenix, AZ (Sep. 2012).
- 33. "Vascular Shear and Blood Cell Biology: A Sticky Situation in the Blood", Instituto de Biofísica da Universidade Federal do Rio de Janeiro (UFRJ), Rio de Janeiro, Brazil (Oct, 2012).
- 34. "Imaging the dynamics of thrombus formation", Department of Biology, University of Delaware, Newark, DE (Feb, 2013).
- 35. "Regulation of the Rac1 axis in platelet function", *Gordon Research Conference: Cell Biology of Megakaryocytes & Platelets*, Galveston, TX (Mar, 2013).
- 35. "Development of coagulation factor probes for the identification of procoagulant circulating tumor

- cells", Experimental Biology Meeting, Boston, MA (Apr., 2013).
- 36. "Characterization of the physical parameters of mass, volume and density of platelet aggregates and thrombus formation", XXIV Congress of the ISTH, Amsterdam, the Netherlands (June, 2013).
- 37. "The physical biology of circulating tumor cells", *VII Oncobiology Symposium*, Rio de Janeiro, Brazil (Sep, 2013).
- 38. "Platelet cytoskeletal remodelling and thrombosis", *14th Annual UK Platelet Group Meeting*, Birmingham, UK (Sep. 2013).
- 39. "Platelet cytoskeletal remodeling", Institut de Bioenginyeria de Catalunya (IBEC), Barcelona, Spain (Nov, 2013).
- 40. "Procoagulant phenotype of circulating tumor cells", *60th Scientific and Standardization Committee Meeting*, Milwaukee, WI (Jun, 2014).
- 41. "FXI activation and the virulence of infectious agents", 60th Scientific and Standardization Committee Meeting, Milwaukee, WI (Jun, 2014).
- 42. "Platelets and coagulation pathways in vascular disease", *Gordon Research Conference: Hemostasis*, Waterville Valley, NH (Jul, 2014).
- 43. "Platelet cytoskeletal remodeling and thrombus formation", Centre for Blood Research, University of British Columbia, Vancouver, Canada (Jan, 2015).
- 44. "The hemostatic role of platelet polyphosphates", Centre for Cardiovascular Sciences, University of Birmingham, Birmingham, England, UK (Mar, 2015)
- 45. "Platelet cytoskeletal remodeling and thrombus formation", 9th Platelet Colloquium, Versailles, KY (Apr, 2015).
- 46. "The hemostatic role of platelet polyphosphates", Keenan Research Centre, St. Michael's Hospital, Toronto, Canada (Sept, 2015)
- 47. "The physical biology of thrombosis and hemostasis", Department of Chemical Engineering, Ohio University, Athens, OH (Sept, 2015)
- 48. "Platelets and coagulation pathways in vascular disease", School of Molecular Biosciences, Washington State University, Pullman, WA, (Sep. 2015).
- 49. "The hemostatic role of platelet polyphosphates", Oklahoma Medical Research Foundation, Oklahoma City, OK (Oct, 2015)
- 50. "The hemostatic role of platelet polyphosphates", Annual Earl W. Davie Symposium, Centre for Blood Research, University of British Columbia, Vancouver, Canada (Nov. 2015)
- 51. "The CTC pilgrimage: one cells' journey through the blood microenvironment", NCI Physical Sciences-Oncology Symposium, Washington, DC (Feb, 2016)
- 52. "The hemostatic role of platelets and the contact pathway of coagulation", Center for Neuroscience and Regenerative Medicine, Uniformed Services University, Washington, DC (Feb, 2016)
- 53. "Role of factor XI(a)", 8th Symposium on Hemostasis, Chapel Hill, NC (May, 2016)
- 54. "Collaborations for international research", Annual Meeting of the Biomedical Engineering Society, Minneapolis, MN (Oct, 2016).
- 55. "Targeting the Contact Pathway of Coagulation", American Heart Association Scientific Sessions, New Orleans, LA (Nov, 2016).
- 56. "Platelets and immunothrombosis", Department of Biology, University of Puerto Rico, San Juan, Puerto Rico (Feb, 2017)
- 57. "A commotion in the blood: navigating the blood microenvironment", Division of Cancer Biology, National Cancer Institute, National Institute of Health, Washington, DC (Apr, 2017)
- 58. "Platelets: frenemies of circulating tumor cells", Center for Strategic Initiatives, Office of the Director, National Institute of Health, Washington, DC (Apr, 2017)
- 59. "The hemostatic role of platelets and the contact pathway of coagulation", Dept. of Medical Microbiology & Immunology, University of Toledo, Toledo, OH (May, 2017)
- 60. "Contact activation under flow", XXVI Congress of the International Society on Thrombosis and

Haemostasis, Berlin, Germany (July, 2017).

- 61. "Contact pathway activation of the coagulation cascade in the setting of sepsis and inflammation", Broad Institute, Boston, MA (Mar, 2018).
- 62. "Surface activation of the contact system", KININ 2018 Conference, Cleveland, OH (June, 2018).
- 63. "Platelet count and cancer metastasis", XXVII Congress of the International Society on Thrombosis and Haemostasis, Dublin, Ireland (July, 2018).
- 64. "The coagulation cascade in sepsis and inflammation", University of Rochester, Rochester, NY (Nov, 2018).
- 65. "The coagulation cascade in sepsis and inflammation", Department of Biomedical Engineering, University of Utah, Salt Lake City, UT (Jan, 2019).
- 66. "The Raven", CBR Symposium in Honour of Dr. Ed Conway, Vancouver, BC (April, 2021, online).
- 67. "Coagulation in atherosclerosis: Regulating macrophage trafficking", Maastricht Consensus Conference on Thrombosis, Maastricht, NL (Mar, 2022)
- 68. "A commotion in the blood: applying quantitative biology to the study thrombosis", Maastricht Consensus Conference on Thrombosis, Maastricht, NL (Mar, 2022)
- 69. "Scaling the blood microenvironment", Keynote Speaker, Patient-Derived Models of Cancer (PDMC) and Cancer Tissue Engineering Collective (TEC) Annual Investigators Meeting, Portland, OR (Aug. 2023)
- 70. "Translation from target to therapy; going with the flow", Department of Bioengineering, University of Texas, Dallas (Sep, 2024)
- 71. "The blood microenvironment and medical devices: from discovery to utility". Department of Biomedical Engineering, Michigan Technological University, Houghton, MI (Jan, 2025)

Regional and Local

- 1. "Molecular Mechanisms of Platelet-Tumor Cell Adhesion Under Flow", Maryland Chapter Meeting of American Institute of Chemical Engineers, Baltimore, MD (Apr, 2000).
- 2. "Modulation of Receptor-Mediated Interactions in Thrombosis", Department of Biochemistry, University of Oxford, Oxford UK (May, 2003).
- 3. "The Graceful Platelet: Signals Controlling Actin Assembly", Northwest Tissue Center, Seattle, WA (Aug, 2005).
- 4. "The Elegant Platelet and a Sticky Situation in the Blood", Department of Physics, Portland State University, Portland, OR (Nov, 2006).
- 5. "The Elegant Platelet and a Sticky Situation in the Blood", Puget Sound Blood Center, University of Washington, Seattle, WA (Nov, 2006).
- 6. "The Graceful Platelet", OHSU Pediatric Hematology/Oncology Seminar Series (Oct, 2007)
- 7. "Platelet Physiology and the Role of Coagulation Factors in Hemostasis", OHSU Hemostasis and Thrombosis Research Seminar Series, Portland, OR (Oct, 2007)
- 8. "The Elegant Platelet and a Sticky Situation in the Blood", OHSU HEart And Related Topics (HEART) Seminar Series, Portland, OR (Jan, 2008)
- 9. "A Sticky Situation in the Blood", Arteille ImmunoTherapeutics, Portland, OR (Feb, 2008).
- 10. "Contrast-enhanced ultrasound imaging of thrombotic thrombocytopenic purpura", Oregon Clinical and Translational Research Institute Seminar Series, Portland, OR (May, 2008)
- 11. "The Yin and Yang of platelet adhesion; so what's the catch?" OHSU Department of Medicine Grand Rounds, Portland, OR (Oct, 2008)
- 12. "My Bloody Career", Pacific University, Forest Grove, OR (Feb. 2009).
- 13. "The Yin and Yang of platelet adhesion; so what's the catch?" Department of Chemical Engineering, Oregon State University, Corvallis, OR (May, 2009)
- 14. "Playing catch with GPIb", Awards Dinner, Oregon Clinical and Translational Research Institute, Portland, OR (Sept, 2009)
- 15. "The Cancer Fluid Biopsy Research Group: Who wants to try to find a circulating tumor cell?", OHSU

- Try One on For Size (TOFS) Seminar Series, Portland, OR (Oct, 2009)
- 16. "Circulating Tumor Cells: A Sticky Situation in the Blood", OHSU Hematology/Oncology, Portland, OR (Nov, 2009)
- 17. "The Elegant Platelet and a Sticky Situation in the Blood", Institute of Molecular Biology, University of Oregon, Eugene, OR (Feb, 2010)
- 18. "Playing Catch with Blood Cells", Oregon Clinical and Translational Research Institute Seminar Series, Portland, OR (Mar, 2010)
- 19. "The Elegant Platelet and a Sticky Situation in the Blood", OHSU MD/PhD Grand Rounds, Portland, OR (Mar, 2010)
- 20. "Vascular Shear and Platelet Cell Biology: Sticky Wickets in the Blood", Department of Anesthesiology, OHSU, Portland, OR (Oct, 2010)
- 21. "The Imaging of Blood Cells", Center for Ophthalmic Optics & Lasers, Casey Eye Institute, OHSU, Portland, OR (Feb, 2011).
- 22. "A Commotion in the Blood", OHSU Hemostasis and Thrombosis Research Seminar Series, Portland, OR (Nov, 2011)
- 23. "Measuring blood cells one at a time", OHSU Try One on For Size (TOFS) Seminar Series, Portland, OR (Jan, 2012)
- 24. "Development of coagulation factor probes for the identification of procoagulant cancer cells", Knight Cancer Biology & Translational Meetings, OHSU, Portland, OR (Nov, 2012)
- 25. "Physical biology of epithelial cells", Dermatology Research Division, OHSU, Portland, OR (Jan, 2013)
- 26. "The Elegant Platelet and a Sticky Situation in the Blood", Department of Anesthesiology & Perioperative Medicine, OHSU, Portland, OR (July, 2013)
- 27. "The physical biology of thrombosis and cancer metastasis", Department of Physics, Oregon State University, Corvallis, OR (Feb. 2014)
- 28. "Platelets and coagulation pathways in vascular disease", OHSU Stroke Center, Portland, OR (Jun, 2014)
- 29. "The Elegant Platelet and a Sticky Situation in the Blood", Institute of Environmental Health, OHSU, Portland, OR (Jun, 2014)
- 30. "The life of PI", OHSU Student Seminar Series, Portland, OR (July, 2014)
- 31. "Collaborations in Science", Women in Science Seminar Series, OHSU, Portland, OR (Dec. 2014).
- 32. "The physical biology of thrombosis and cancer metastasis", Engineers Club, University of Portland, Portland, OR (Mar, 2015)
- 33. "The makings of an inspirational seminar", RIPPS Postdoctoral Association, OHSU, Portland, OR (Sept, 2015)
- 34. "The hemostatic role of platelets: a commotion in the blood", Mechanical Engineering Department, Portland State University, Portland, OR (Jun, 2016)
- 35. "Creating a safer "clot buster" for the brain", 2nd Annual Jay D. Miller Neuroscience Conference, Portland, OR (Jan, 2019)
- 36. "Cancer-associated thrombosis", Knight Cancer Research Seminar Series (Feb. 2022).
- 37. "The good, bad, and the sticky", Sommer Lecture, Portland, OR (May, 2024).
- 38. "Cancer-associated thrombosis", Knight Cardio-Oncology Retreat (Jan, 2025).

Press Interviews and News Articles

- 1. Science Daily, Mar 11, 2008, "Heart Attack and Stroke: Key Found to Breakthrough Drug for Clot Victims"
- 2. United Press International, Mar 17, 2008, "New clot-dissolving treatment possible"
- 3. ScienCentral News, Apr 7, 2008, "Emergency Stroke Drug"; http://youtube.com/watch?v=R7xh1Tj02Ac
- 4. Portland Tribune, May 29, 2008, "Can City Conquer Biotech Barriers?"
- 5. OregonLive.com, Jan 31, 2011, "OHSU researchers explore different methods for detecting cancer cells

in the bloodstream"

- 6. The Daily Barometer, Apr 28, 2011, "OSU's Ishan Patel receives Goldwater Scholarship"
- 7. Corvallis Gazette-Times, May 18, 2011, "Blood flow relates to clots"
- 8. Science Daily, Aug 24, 2012, "Modeling metastasis"
- 9. Science NOW, Aug 30, 2012, "Pictures reveal weight of cells"
- 10. Physics.org, Sept 10, 2012, "Optical microscopy enters a new phase: 3D measurement through tomographic bright field imaging"
- 11. American Physical Society, Sept 13, 2012, "How much does a cell weigh?"
- 12. "Scientists share skills to crack cancer cell secrets," April 26, 2013.

http://www.whitehouse.gov/blog/2013/04/26/scientists-share-skills-crack-cancer-cell-secrets

- 13. American Physiological Society, Dec 14th, 2016, "Aspirin slows spread of colon, pancreatic cancer"
- 14. Oregonian, Dec 16th, 2016, "Study: Aspirin prevents growth of cancer"
- 15. @OHSUNews Instagram Takeover, Mar 6th, 2019
- 16. American Physiological Society, Feb 8th, 2020, "THC in Cannabis May Reduce Platelet Function"
- 17. "Oregon & SW Washington leaders join local initiative to drive equitable health for all", American Heart Association, Sept 27th, 2022

Honors & Awards

- 1997 Abel Wolman Fellowship, Johns Hopkins University
- 1999 Biomedical Engineering Society Travel Award
- 2002 Howard & Jacqueline Chertkof Endowed Fellowship, Johns Hopkins University
- 2003 University Merit Review Award, University of Oxford
- 2004 Overseas Conference Travel Award, University of Birmingham
- 2004 British Journal of Haematology Research Trust Award
- 2004 Paper of the Year in the Platelets Section of the Journal of Thrombosis & Haemostasis
- 2004 International Society of Thrombosis & Haemostasis Young Investigator Award
- 2005 Gordon Research Conference Speaker Award
- 2006 Oregon Health & Science University SoSE Significant Discovery Award
- 2007 Paper of the Year in the Platelets Section of the Journal of Thrombosis & Haemostasis
- 2007 Oregon Health & Science University SoSE Junior Faculty Research Achievement Award
- 2009 American Heart Association Karl Link New Investigator Award in Thrombosis
- 2009 Oregon Clinical & Translational Research Institute Most Innovative Research Award
- 2010 American Heart Association Kenneth M. Brinkhous Young Investigator in Thrombosis Finalist
- 2012 American Heart Association Appreciation Award for Outstanding Achievement in Support of the AHA Mission in Cardiovascular Science, Education and Community Program
- 2013 American Heart Association Established Investigator Award
- 2014 Fellow of the American Heart Association
- 2014 Oregon Health & Science University Excellence in Teaching Graduate Education Award
- 2014 American Heart Association Research Administration Volunteer Recognition Award
- 2017 OHSU School of Medicine Paper of the Month
- 2017 Oregon Representative for the American Heart Association You're the Cure Federal Advocacy Day
- 2019 OHSU School of Medicine Paper of the Month
- 2019 Best Basic Science Award at the International Sepsis Forum
- 2019 Oregon Representative for the American Heart Association You're the Cure Federal Advocacy Day
- 2021 Douglas Strain Endowed Professorship, OHSU Department of Biomedical Engineering
- 2022 American Physiological Society Select Award
- 2022 John A. Resko Faculty Excellence in Research and Mentoring Award
- 2022 Gordon Moore Endowed Professorship, OHSU School of Medicine
- 2024 Sommers Lecture, Scientific Speaker Award, OHSU

VI. SERVICE

A. Membership in Professional Societies:

International Society of Thrombosis and Haemostasis

American Heart Association American Physiological Society

B. Granting Agency Review Work:

National Institute of Health:

Member, Mentored Transition to Independence (MTI), NHLBI, 2014-2018

Reviewer, Innovative Technologies Development, NCI, Spring 2010

Reviewer, Innovative Technologies Development, NCI, Fall 2010

Reviewer, Vascular Cell & Molecular Biology Study Section, NHLBI, Spring 2011

Reviewer, Pathway to Independence K99/R00, NHLBI, Fall 2011

Reviewer, Pathway to Independence K99/R00, NHLBI, Summer 2012

Reviewer, Innovative Technologies Development, NCI, Summer 2012

Reviewer, Program Project Review Committee, Workgroup 001, NHLBI, Fall 2012

Reviewer, Program Project Review Committee, Workgroup 002, NHLBI, Fall 2012

Reviewer, Hemostasis & Thrombosis Study Section, NHLBI, Fall 2012

Reviewer, Innovative Technologies Development, NCI, Spring 2013

Reviewer, Atherosclerosis and Vascular Dysfunction, NHLBI, Spring 2013

Reviewer, Loan Repayment Program, NHLBI, Spring 2013

Reviewer, Pathway to Independence K99/R00, NHLBI, Summer 2013

Reviewer, Pathway to Independence K99/R00, NHLBI, Fall 2013

Reviewer, Pathway to Independence K99/R00, NHLBI, Spring 2014

Reviewer, Translational Research in Pediatric and Obstetric Pharmacology R01, NICHD, Spring 2014

Reviewer, Loan Repayment Program, NHLBI, Spring 2014

Reviewer, Pathway to Independence K99/R00, NHLBI, Summer 2014

Reviewer, Translational Research in Pediatric and Obstetric Pharmacology, NICHD, Fall 2014

Reviewer, Pathway to Independence K99/R00, NHLBI, Fall 2014

Reviewer, Mentored Transition to Independence K99/R00, NHLBI, Spring 2015

Reviewer, Loan Repayment Program, NHLBI, Spring 2015

Reviewer, Tumor Microenvironment Study Section, IRG, Spring 2015

Reviewer, Mentored Transition to Independence K99/R00, NHLBI, Summer 2015

Reviewer, Program Project Review Committee, Workgroup 001, NHLBI, Fall 2015

Reviewer, Mentored Transition to Independence K99/R00, NHLBI, Fall 2015

Reviewer, Mentored Transition to Independence K99/R00, NHLBI, Spring 2016

Reviewer, Loan Repayment Program, NHLBI, Spring 2016

Reviewer, Mentored Transition to Independence K99/R00, NHLBI, Summer 2016

Reviewer, NIH Director's Early Independence Award, NHLBI, Fall 2016

Reviewer, Mentored Transition to Independence K99/R00, NHLBI, Fall 2016

Reviewer, Loan Repayment Program, NHLBI, Spring 2017

Reviewer, Mentored Transition to Independence K99/R00, NHLBI, Spring 2017

Reviewer, Vascular Biology and Hematology R15, NHLBI, Spring 2017

Reviewer, Bold New Bioengineering Methods and Approaches R21, NHLBI, Spring 2017

Reviewer, Mentored Transition to Independence K99/R00, NHLBI, Summer 2017

Reviewer, Vascular and Hematology R01, NHLBI, Fall 2017 (Acting Chair)

Reviewer, Mentored Transition to Independence K99/R00, NHLBI, Fall 2017

Reviewer, Loan Repayment Program, NHLBI, Spring 2018

Reviewer, Mentored Transition to Independence K99/R00, NHLBI, Spring 2018

Reviewer, Program Project Review Committee Workgroup, NHLBI, Spring 2018

Reviewer, Mentored Transition to Independence K99/R00, NHLBI, Summer 2018

Reviewer, Vascular and Hematology Member Special Emphasis Panel, NHLBI, Summer 2018

Reviewer, HLBP Platelet Biology, NHLBI, Fall 2018

Reviewer, NHLBI Institutional T32 Training Grants, NHLBI, Fall 2018

Reviewer, Loan Repayment Program, NHLBI, Spring 2019

Reviewer, Program Project Review Committee, HLBP Workgroup, NHLBI, Spring 2019

Reviewer, Conference Grants in Support of Heart, Lung and Blood Research, NHLBI, Spring 2019

Reviewer, NHLBI Short-Term Institutional Training Grant T35 Program, NHLBI, Spring 2019

Reviewer, Hemostasis & Thrombosis Study Section, NHLBI, Summer 2019

Reviewer, Conference Grants in Support of Heart, Lung and Blood Research, NHLBI, Summer 2019

Reviewer, Trans-Agency Blood-Brain Interface R61/R33 Program, NHLBI/DoD, Spring 2020

Reviewer, Loan Repayment Program, NHLBI, Spring 2020

Reviewer, NHLBI Short-Term Institutional Training Grant T35 Program, NHLBI, Summer 2020

Reviewer, Conference Grants in Support of Heart, Lung and Blood Research, NHLBI, Summer 2020

Reviewer, Vascular and Hematology Special Emphasis Panel, NHLBI, Fall 2020

Reviewer, Heart, Lung, and Blood Program Project Review Committee, NHLBI, Fall 2020

Reviewer, Trans-Agency Blood-Brain Interface R61/R33 Program, NHLBI/DoD, Spring 2021

Reviewer, Heart, Lung, and Blood Program Project Review Committee, NHLBI, Spring 2021

Reviewer, Loan Repayment Program, NHLBI, Spring 2021

Reviewer, Catalyze: Product Definition for Small Molecules and Biologics, NHLBI, Summer 2021

Reviewer, R25 Short-Term Training Grant Review Meeting, Fall 2021

Reviewer, Conference Grants in Support of Heart, Lung and Blood Research, NHLBI, Winter 2022

Reviewer, Loan Repayment Program, NHLBI, Spring 2022

Reviewer, SBIR/STTR Small Business Applications, NHLBI, Fall 2022

Reviewer, Loan Repayment Program, NHLBI, Spring 2023

Reviewer, Heart, Lung, and Blood Program Project Review Committee, NHLBI, Spring 2023

Reviewer, NHLBI Short-Term Institutional Training Grant T35 Program, NHLBI, Spring 2023

Reviewer, Catalyze: Product Definition for Small Molecules and Biologics, NHLBI, Fall 2023

Reviewer, Small Grant Program for NHLBI K01/K08/K23/K25 Recipients, NHLBI, Fall 2023

Reviewer, Small Grant Program for NHLBI K01/K08/K23/K25 Recipients, NHLBI, Winter 2024

Reviewer, Catalyze: Product Definition for Small Molecules and Biologics, NHLBI, Summer 2024

Reviewer, Loan Repayment Program, NHLBI, Winter 2025

Chair and Reviewer, Catalyze: Product Definition for Small Molecules and Biologics, NHLBI, Spring 2025

Co-chair and Reviewer, HLBS Small Business Panel, NHLBI, Spring 2025

Reviewer, UNC-CH Canine Colony Contract Review Panel, NHLBI, Spring 2025

Reviewer, Cardiovascular and Hematological Sciences Small Business Panel, NHLBI, Summer 2025

National Science Foundation / National Cancer Institute

Reviewer, Physical and Engineering Sciences in Oncology, Spring 2011

National Blood Foundation

Reviewer, Grants Review Committee, Spring 2015

Department of Defense

Reviewer, Discovery Award, Congressionally Directed Medical Research Programs, Summer 2020

American Heart Association:

Reviewer, Bioengineering, Spring 2008

Reviewer, Bioengineering, Fall 2008

Reviewer, Bioengineering, Spring 2009

Reviewer, Bioengineering, Fall 2009

Reviewer, Bioengineering, Spring 2010

Reviewer, Bioengineering, Spring 2011

Reviewer, Bioengineering, Fall 2011

Chair and Reviewer, Bioengineering, Spring 2012

Chair and Reviewer, Bioengineering, Fall 2012

Chair and Reviewer Bioengineering, Spring 2013

Chair and Reviewer, Bioengineering, Spring 2014

Reviewer, Strategically Focused Prevention Research Network, Spring 2014

Chair and *Reviewer*, Bioengineering, Fall 2014

Reviewer, Collaborative Science Award, Winter 2015

Reviewer, Career Development Award, Basic Sciences, Winter 2018

Reviewer, Strategic Collaborative Grants and Strategic Renewal Grants, Spring 2019

Reviewer, Career Development Award, Winter 2020

Reviewer, Strategic Collaborative Grants and Strategic Renewal Grants, Spring 2020

Reviewer, COVID Rapid Response Grant, Spring 2020

Co-Chair and Reviewer, Transformational Project Award, Spring 2022

Co-Chair and Reviewer, Transformational Project Award, Fall 2022

Reviewer, Innovative Project Award, Basic Science, Fall 2022

Chair and Reviewer, Career Development Award, Bioengineering, Spring 2023

Reviewer, Career Development Award, Basic Science, Spring 2023

Reviewer, Fellowship Engineering & Technology, Fall 2023

Reviewer, Institutional Award for Undergraduate Student Training, Fall 2023

Reviewer, Second Century Early Faculty Independence Award, Fall 2023

Chair and Reviewer, Career Development Award, Bioengineering, Winter 2024

Reviewer, Second Century Early Faculty Independence Award, Spring 2024

Reviewer, Fellowship Engineering and Technology, Fall 2024

Reviewer, Innovative Project Award, Winter 2025

Chair and Reviewer, Career Development Award, Bioengineering, Winter 2025

Reviewer, Innovative Project Award, Basic Science, Spring 2025

Other:

External Reviewer, Health Research Board, Ireland, 2008

External Reviewer, University City Science Center QED Program, 2010

External Reviewer, National Health and Medical Research Council, Australia, 2012

External Reviewer, North Carolina Biotechnology Center Program, 2012

External Reviewer, Swiss National Science Foundation, 2013

External Reviewer, Heart Research UK, 2014

External Reviewer, French National Research Agency, Spring 2014

External Reviewer, COBRE Center, University of Kansas, Winter 2015

External Reviewer, Cancer Research Wales, UK, Winter 2015

External Reviewer, Blood Research Institute, Milwaukee, WI, Winter 2015

External Reviewer, Ohio University Research Council, Fall 2015

External Reviewer, French National Research Agency, Fall 2015

External Reviewer, Natural Sciences and Engineering Research Council of Canada, Fall 2015

External Reviewer, Fulbright Scholar Program Visiting Scholar, Fall 2016

External Reviewer, Natural Sciences and Engineering Research Council of Canada, Fall 2016

External Reviewer, Swiss National Science Foundation, Spring 2017

External Reviewer, Dutch Heart Foundation, Fall 2017

External Reviewer, UConn SPARK Technology Commercialization Fund, Winter 2018

External Reviewer, The Netherlands Organisation for Scientific Research, Vici Programme, Fall 2018

External Reviewer, Breast Cancer Now, UK, Fall 2018

External Reviewer, French National Cancer Institute, Summer 2019

External Reviewer, Medical Research Council, UK, Winter 2021

External Reviewer, Dutch Landsteiner Foundation for Blood Transfusion Research, NL, Spring 2021

External Reviewer, The Netherlands Organisation for Scientific Research, Spring 2023

External Reviewer, National Science Center, Poland, Fall 2023

External Reviewer, Swiss National Science Foundation, Winter 2024

External Reviewer, Canada Foundation, Summer 2024

External Reviewer, Swiss National Science Foundation, Summer 2025

External Reviewer, Dutch Research Council, Summer 2025

C. Reviewer for Scientific Journals

Nature Medicine; Circulation; Circulation Research; Proceedings of the National Academy of Science; Journal of Cell Biology; Science Translational Medicine; Science Advances; Blood; Blood Advances; Journal of Biological Chemistry; Cancer Research; Arteriosclerosis, Thrombosis and Vascular Biology; Journal of Thrombosis and Haemostasis; Thrombosis & Haemostasis; Scientific Reports; PLoS ONE; Nanoscale; FASEB Journal; Biophysical Journal; Thrombosis Research; American Journal of Physiology: Cell Physiology; ACS Nano; Haematologica; Annals of Biomedical Engineering; Integrative Biology; Oncotarget; Chemistry Today; Journal of Biomaterials Science: Polymer Edition; Wiley Encyclopedia of Chemical Biology; Platelets; Advances in Hematology; Transfusion; Physical Biology; Cytometry, Part A:

Toxins: Journal of Colloid and Interface Science: Journal of Biomedical Optics: Tissue Engineering: ACS Applied Materials & Interfaces; Bioconjugate Chemistry; Journal of Immunological Methods; Acta Biomaterialia; Acta Histochemica; Frontiers in Oncology; IET Nanobiotechnology; European Journal of Haematology; Soft Matter; Sensors; EPJ Nonlinear Biomedical Physics; QScience Connect; Biomechanics and Modeling in Mechanobiology; Cardiovascular Research; Molecules; World Journal of Clinical Oncology: International Journal of Molecular Sciences: International Journal for Numerical Methods in Biomedical Engineering; Biosensors & Bioelectronics; Cellular and Molecular Bioengineering; International Journal of Oral Science: Coronary Artery Disease - Causes, Symptoms and Treatments; Convergent Science Physical Oncology: Protein Journal: Aging Cell: Journal of Controlled Release: Journal of Biomechanical Engineering; Biomicrofluidics; Biointerphases; SAGE Open Medicine; BBA General Subjects; BBA - Reviews on Cancer; BBA - Molecular Cell Research; Mathematical Biosciences; Head & Neck; Expert Review of Cardiovascular Therapy; Biomaterials; Biomedicine & Pharmacotherapy; European Journal of Cell Biology; Annals of Rheumatic Disease; Histology & Histopathology; Micromachines; Neonatalogy; Nanomaterials; Journal of the Royal Society Interface; Journal of Pharmacological and Toxicological Methods: Communications Biology: Current Opinion in Biomedical Engineering: The European Journal of Pharmacology: Clinical and Translational Medicine: Computer Methods in Biomechanics and Biomedical Engineering; Neurochemical Research; Peptides; Journal of Theoretical Biology; Advances in Therapy

D. Reviewer for Scientific Meetings

Abstract Reviewer, American Society of Hematology Annual Meeting (Orlando, FL), 2010 Abstract Reviewer, American Heart Association Council on Arteriosclerosis, Thrombosis & Vascular Biology Annual Meeting (San Francisco, CA), 2010

Abstract Reviewer, American Society of Hematology Annual Meeting (Atlanta, GA), 2012

Abstract Reviewer, International Society of Thrombosis & Haemostasis Meeting (Amsterdam, NL), 2013

Coordinating Reviewer, American Society of Hematology Annual Meeting (New Orleans, LA), 2013

Abstract Reviewer, ISTH Scientific and Standardization Committee Meeting (Milwaukee, WI), 2014

Abstract Reviewer, International Society of Thrombosis & Haemostasis Meeting (Toronto, CAN), 2015

Abstract Reviewer, International Society of Thrombosis & Haemostasis Meeting (Berlin, GER), 2017

Abstract Reviewer, Biomedical Engineering Society Annual Meeting (Phoenix, AZ), 2017

Abstract Reviewer, Biomedical Engineering Society Annual Meeting (Atlanta, GA), 2018

Abstract Reviewer, International Society of Thrombosis & Haemostasis Meeting (Melbourne, AUS), 2019

Abstract Reviewer, Biomedical Engineering Society Annual Meeting (Philadelphia, PA), 2019

Abstract Reviewer, International Society of Thrombosis & Haemostasis Meeting (Virtual), 2020

Abstract Reviewer, International Society of Thrombosis & Haemostasis Meeting (Virtual), 2021

Abstract Reviewer, International Society of Thrombosis & Haemostasis Meeting (London, UK), 2022

Abstract Reviewer, Biomedical Engineering Society Annual Meeting (San Antonio, TX), 2022

Abstract Reviewer, AHA/ATVB Scientific Sessions (Boston, MA), 2023

Abstract Reviewer, International Society of Thrombosis & Haemostasis Meeting (Montreal, Canada), 2023 Abstract Reviewer, American Heart Association Council on Arteriosclerosis, Thrombosis & Vascular Biology Annual Meeting (Chicago, IL), 2024

Abstract Reviewer, International Society of Thrombosis & Haemostasis Meeting (Bangkok), 2024 Abstract Reviewer, International Society of Thrombosis & Haemostasis Meeting (Washington, DC), 2025

E. Organizer for Scientific Meetings & Scholarly Output

- 1) Organizer "The physical biology of thrombus formation", Cardiovascular Session, American Physiological Society, Experimental Biology Meeting (Boston, MA), Mar, 2015
- 2) Guest Editor for the Special Issue for Cellular & Molecular Bioengineering Special Issue on 'Emerging Technologies for Use in the Study, Diagnosis and Treatment of Patients with COVID-19', Apr-Aug 2020

F. Committees / Advisory Boards

Editorial

Editorial Advisory Board for Journal of Thrombosis and Haemostasis, 2009-2013

Editorial Board for Journal of Thrombosis and Haemostasis, 2015, 2018-2024

Editorial Board for Arteriosclerosis, Thrombosis & Vascular Biology, 2012-2014; 2020-2022; 2023-2025 Editorial Board for Advances in Hematology, 2009-2017

Editorial Board for Frontiers in Oncology, 2011-2012

Editorial Board for Frontiers in Medicine, Hematology, 2014-2025

Editorial Board for Platelets, 2016-2025

Editorial Board for Circulation Research, 2022-2026

Editorial Board for Seminars in Thrombosis & Hemostasis, 2015-present

Editorial Board for Blood Vessels, Thrombosis and Hemostasis, 2024-present

<u>International</u>

Co-chair, ISTH Scientific and Standardization Committee on Biorheology, 2012-2015

Co-chair, ISTH Scientific and Standardization Committee on FXI and the Contact System, 2017-2020 International Advisory Board, Congress of the International Society on Thrombosis and Haemostasis, 2019-2024

International Society on Thrombosis and Haemostasis Basic Science Task Force, 2020-2022

National

Participant, The Physical Sciences-Based Frontiers in Oncology Think Tank, NCI, NIH, 2008 American Heart Association Research Advisory Committee, 2009-2012

Expert Panelist, International Assessment of Physical Sciences and Engineering Advances in Life Sciences and Oncology - Europe (APHELION), 2012

Expert Panelist, International Assessment of Physical Sciences and Engineering Advances in Life Sciences and Oncology - Asia (APHELION), 2013

Session Leader & Panelist, Cancer & Thrombosis Think Tank, NHBLI-NCI, NIH, 2014

American Heart Association Peer Review Subcommittee, 2016-2020

American Heart Association ATVB Kenneth M. Brinkhous Young Investigator Prize in Thrombosis Award Selection Committee, 2017-2022

American Heart Association Research Leaders Academy, 2017

Johns Hopkins University Physical Science-Oncology Center Advisory Committee, 2018-2020

Promotion and Tenure Innovation & Entrepreneurship (PTIE) Committee, 2020-2021

Biomedical Engineering Society Council of Chairs Long Range Planning Committee, 2022-2024 University of Houston External Advisory Board Member, 2026

Local

IACUC Review Board, Providence Portland Medical Center, 2012-2013 Industry Advisory Board, University of Portland, 2014-2018

Institutional

OHSU/OGI Educational Policy Committee 2005-2006

OHSU Sponsored Projects Administration Stewardship Alliance; 2006-2009

OHSU Research Communications Strategic Plan Committee, 2008

ARCS Selection Committee, 2008-2015

OCTRI Advisory Board, 2009-2016

OHSU School of Medicine Graduate Studies Council, 2009-2015

OCTRI Pilot Project Review Panel, 2010

OCTRI Biomedical Innovation Program Scientific Review Member, 2012-2014

Molecular Hematology T32 Training Grant Review Committee, 2008

Molecular Hematology T32 Training Grant Review Committee, 2009

Molecular Hematology T32 Training Grant Review Committee, 2011

OHSU School of Medicine Graduate Program Review Committee, 2011

Chair, Heart Research Center Annual Retreat, 2012

Skin/Mucosa Molecular Pathobiology T32 Training Grant Review Committee, 2012-2014

OHSU Academic Program Review Committee, 2012-2015

OHSU Institutional Biosafety Committee, 2013-2015

Chair, Charles Patrick Scholarship Committee, 2013

Chair, Charles Patrick Scholarship Committee, 2014

OHSU Basic Science Task Force, 2014

OHSU Research Roadmap Scholar Award Committee, 2014

OHSU Library Promotion & Tenure Committee, 2014

Chair, Charles Patrick Scholarship Committee, 2015

OHSU Research Roadmap Scholar Award Committee, 2015

OCTRI Biomedical Innovation Program, Scientific Director, 2015-2016

Chair, Charles Patrick Scholarship Committee, 2016

OHSU IDEAS Committee Member, 2016-2017

OHSU Faculty Compact Task Force, 2017

Member, Chair Search Committee, OHSU Department of Surgery, 2018

OHSU School of Medicine Committee of Promotion & Tenure, 2019-2021; 2021-2024

OHSU Collaborative Recruitment Committee, 2020

OHSU Trunkey Center Executive Committee, 2020-2022

OHSU Casey Eye Institute Internal Review Committee, 2021

OHSU Flow Cytometry Shared Resource Oversight Committee, 2021

OHSU Department of Oncological Sciences Faculty Search Committee, Chair, 2021-2022

OHSU Chair Executive Committee, 2022-2024

OHSU Department of Obstetrics & Gynecology Internal Advisory Committee, 2024-2026

OHSU University Cabinet, 2024-present

OHSU Research Restructuring Commission, 2025

OHSU Research Advisory Committee, 2025-2026

Departmental

BME Graduate Studies / Curriculum Committee; 2005-2015

BME Department Seminar Chair; 2007-2010

BME Director of Graduate Education; 2009-2015

BME Vice-Chair; 2014-2015 BME Interim Chair; 2015-2018 BME Chair; 2019-present

G. Professional Mentoring Committees

- 1. NIH PRIDE in Health-Related Research Mentor, Scharri Walker (2016-2018): Outcome promoted to Chair, Department of Biology, Dallas College
- 2. American Heart Association Mentor for Professionals, Richard Beard (2017-2018)

H. Community Service

- 1. Created the "Walk for Cancer" program, which has raised over \$6,700 for Camp Sunrise, a summer camp sponsored by the American Cancer Society for children with cancer, 1999, 2000, 2002
- 2. Created the "Walk for Our Sisters" program, which raised over \$2,800 in support My Sister's Circle, non-profit mentoring program for academically promising, inner-city fifth grade girls in Baltimore, MD, 2005
- 3. Created the "Walk for Ronald McDonald House" program, which raised over \$1,400 in support of the local Ronald McDonald Houses of Portland, OR, 2006
- 4. Created the "Walk for Camp Ukandu" program, which raised over \$3,400 in support of Camp Ukandu, a summer camp sponsored by the ACS for children with cancer, 2007, 2008
- 5. Session Chair, Johns Hopkins University Center for Talented Youth Academic Program; "Explorations in Nanoscale Science", Portland, OR, 2007
- 6. Speaker, Saturday Academy, Portland, OR, 2007, Keynote Address 2013
- 7. Speaker, City of Portland Portland Multnomah Youth Corps, Portland, OR, 2009
- 8. Created the "Walk for Jake" program, which raised over \$5,500 for Jake French to attend Adapt Advanced, an advanced neuro-muscular redevelopment program for spinal cord injury survivors, 2010
- 9. Speaker, Summer Undergraduate Research Program, Portland, OR, 2010, 2011
- 10. Speaker, Lego League, Portland, OR, 2010
- 11. Speaker, American Heart Association Outreach Program, Lacamas Heights Middle School, Camas, WA, 2011
- 12. Created and Directed the OHSU BME Summer Student Research Symposium, 2011, 2012, 2013, 2014
- 13. Speaker, American Heart Association Outreach Program, Discovery Middle School, Vancouver, WA, 2012

- 14. Speaker and Workshop Leader, Engineers Week, Portland, OR, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024
- 15. Speaker, American Indian Science and Engineering Society, Portland, OR, 2012
- 16. Keynote Speaker, American Heart Association Executive Leadership Team Annual Meeting, Portland, OR. 2013
- 17. Director, Saturday Academy Workshop in Microscopy, 2013
- 18. Speaker, American Heart Association Go Red for Women, Portland, OR, 2014
- 19. Keynote Speaker, American Heart Association Executive Leadership Team Annual Meeting, Portland, OR, 2014
- 18. Director, Saturday Academy Workshop in Microscopy, 2014
- 19. Organizer and Group Leader, American Heart Association Heart Walk, which raised over \$1400, Portland. OR. 2017
- 20. Speaker, Medical Advances in Healthcare, Leadership Portland Panel, Portland, OR 2018
- 21. Speaker, OHSU Summer Internship Career Panel, Portland, OR, 2021
- 22. Keynote Speaker, American Heart Association Executive Leadership Team Annual Meeting, Portland, OR, 2021 (online)
- 23. Leader of Impact, American Heart Association, raised over \$12,000 as part of this campaign. Portland, OR. Sep-Oct, 2022.

VII. TEACHING:

Overview of your Role as Communicator:

Teaching has been a commitment throughout my academic career at OHSU. I was fortunate to have served as the Director of Graduate Education for the Biomedical Engineering Department for 7 years, and honored to helped this program rise to be the largest graduate education programs on the OHSU campus. I have hosted a number of undergraduate and high school summer interns in my laboratory, many of whom have gone on to present their work at local, national and international meetings. I value the privilege and responsibility of helping to educate the next generation of scientists and health care professionals. I endeavor to instill in students an appreciation for the role that basic research plays in medicine and excitement that comes with discovery.

Scholarship of Teaching:

A. Courses Taught

Co-Director & Lecturer, CON 667, Organ Systems, Spring 2008

Lecturer, CON 606, PMCB Literature Club, Winter 2009

Co-Director & Lecturer, CON 667, Organ Systems, Spring 2009

Lecturer, CON 606, PMCB Literature Club, Fall 2009

Director & Lecturer, CON 667, Organ Systems, Spring 2010

Lecturer, CON 605, Practice & Ethics in Science, Fall 2010

Director & Lecturer, CON 667, Organ Systems, Spring 2011

Lecturer, PHPH 607, Grant Writing, Spring 2011

Director & Lecturer, CON 667, Organ Systems, Spring 2012

Director & Lecturer, PHPH 607, Grant Writing, Spring 2012

Director & Lecturer, ME461/561, Biomaterials (University of Portland), Fall 2012

Director & Lecturer, MGEN 605, Cardiovascular Journal Club, Fall 2012

Creator, Director & Lecturer, BME 650, Teaching Practicum, Fall 2012

Lecturer, CON 605, Practice & Ethics in Science, Fall 2012

Lecturer, HIP 514, Molecular and Cellular Approaches to Disease, Fall 2012

Director & Lecturer, MGEN 605, Cardiovascular Journal Club, Winter 2013

Director & Lecturer, CON 667, Organ Systems, Spring 2013

Co-Director & Lecturer, PHPH 607, Grant Writing, Spring 2013

Director & Lecturer, MGEN 605, Cardiovascular Journal Club, Spring 2013

Director, MGEN 605, Cardiovascular Journal Club, Fall 2013

Lecturer, CON 605, Practice & Ethics in Science, Fall 2013

Director, MGEN 605, Cardiovascular Journal Club, Winter 2014

Director & Lecturer, ME461/561, Biomaterials (University of Portland), Spring 2014

Director & Lecturer, BME 650, Teaching Practicum, Spring 2014

Director & Lecturer, CON 667, Organ Systems, Spring 2014

Lecturer, HIP 514, Genetics of Cardiovascular Development and Disease, Spring 2014

Co-Director & Lecturer, PHPH 607, Grant Writing, Spring 2014

Director, MGEN 605, Cardiovascular Journal Club, Spring 2014

Director & Lecturer, CON 667, Organ Systems, Spring 2015

Co-Director & Lecturer, PHPH 607, Grant Writing, Spring 2015

Lecturer, Blood, Cancer & Palliation, Physician's Assistant Program, Fall 2015

Lecturer, HIP 514, Genetics of Cardiovascular Development and Disease, Spring 2016

Lecturer, BME 645, Biomaterials, Spring 2016

Lecturer, Blood, Cancer & Palliation, Physician's Assistant Program, Fall 2016

Lecturer, Blood, Cancer & Palliation, Physician's Assistant Program, Fall 2017

Lecturer, CON 606, PMCB Journal Club, Fall 2018

Lecturer, Blood, Cancer & Palliation, Physician's Assistant Program, Fall 2018

Lecturer, Blood, Cancer & Palliation, Physician's Assistant Program, Fall 2019

Lecturer, BME 645, Biomaterials, Spring 2018

Lecturer, BME 645, Biomaterials, Spring 2020

Lecturer, BME 645, Biomaterials, Spring 2022

Lecturer, BME 645, Biomaterials, Winter 2024

Lecturer, Blood, Cancer & Palliation, Physician's Assistant Program, Fall 2020

Lecturer, Blood, Cancer & Palliation, Physician's Assistant Program, Fall 2021

Creator, Director & Lecturer, BME 605, Let's Write a Research Paper, Winter 2021

Director & Lecturer, BME 605, Let's Write a Research Paper, Winter 2023

Director & Lecturer, BME 620, Science Writing for Journals, Winter 2024

Director & Lecturer, BME 620, Science Writing for Journals, Winter 2025

Creator, Director & Lecturer, BME 608, Grant Writing, Spring 2015

Co-Director & Lecturer, BME 608, Grant Writing, Spring 2016

Co-Director & Lecturer, BME 608, Grant Writing, Spring 2017

Co-Director & Lecturer, BME 608, Grant Writing, Fall 2017

Co-Director & Lecturer, BME 608, Grant Writing, Spring 2018

Co-Director & Lecturer, BME 608, Grant Writing, Fall 2018

Co-Director & Lecturer, BME 608, Grant Writing, Spring 2019

Co-Director & Lecturer, BME 608, Grant Writing, Fall 2019

Co-Director & Lecturer, BME 608, Grant Writing, Spring 2020

Co-Director & Lecturer, BME 608, Grant Writing, Fall 2020

Co-Director & Lecturer, BME 608, Grant Writing, Spring 2021

Co-Director & Lecturer, BME 608, Grant Writing, Fall 2021

Co-Director & Lecturer, BME 608, Grant Writing, Spring 2022

Co-Director & Lecturer, BME 608, Grant Writing, Fall 2022

Co-Director & Lecturer, BME 608, Grant Writing, Spring 2023

Co-Director & Lecturer, BME 608, Grant Writing, Fall 2023

Co-Director & Lecturer, BME 608, Grant Writing, Spring 2024

Co-Director & Lecturer, BME 608, Grant Writing, Fall 2024

Co-Director & Lecturer, BME 608, Grant Writing, Spring 2025

B. Appointments

2005-present Graduate Faculty Member in Biomedical Engineering

2006-present Appointment in Department of Cancer, Cell & Developmental Biology

2006-2018 Faculty member in the Program for Molecular & Cellular Bioscience

2009-2015 Assistant Scientist in the Heart Research Center

2012-present Appointment in the Division of Hematology and Medical Oncology, Department of Medicine

2012-present Adjunct Professor of Mechanical Engineering, University of Portland, Portland, OR

2017-present Member, Johns Hopkins University Institute for NanoBioTechnology, Baltimore, MD

C. Education Grants and Contracts

1. Mentor to D. Kyle Robinson, Oregon State University Johnson Scholar, 2006 - winner of the annual AIChE Pacific Northwest Regional Paper Competition

- 2. Sponsor for NIH Molecular Hematology T32 Training Grant to Tara White, 2007-2008
- 3. Mentor to Madeline Midgett, Oregon State University Johnson Scholar, 2007
- 4. Sponsor for Jacqueline Gertz, University of Rochester Reach Scholar, 2007
- 5. Sponsor for a Biomedical Engineering Society Undergraduate Travel Award to Jacqueline Gertz, awarded Oct. 2008
- 6. Mentor to Tara White, Young Investigator Award, International Society of Thrombosis and Haemostasis, July, 2007
- 7. Mentor to Michelle Berny, SoSE Achievement in Education Award, OHSU, 2007
- 8. Mentor to Tara White, SoSE Research Achievement Award, OHSU, 2007
- 9. Sponsor for Michelle Berny, Whitaker International Scholar Grant, 2007-2008
- 10. Sponsor for NIH Molecular Hematology T32 Training Grant to Michelle Berny, 2008-2009
- 11. Mentor to Jessica Powers, Oregon State University Johnson Scholar, 2008
- 12. Mentor to Brian Fuchs, Oregon State University Johnson Scholar, 2008
- 13. Sponsor for a Vertex Pharmaceutical Grant to Tara White, awarded Dec, 2008
- 14. Sponsor for an American Heart Association Predoctoral Fellowship to Tara White, 2008-2009
- 15. Sponsor for an American Society of Hematology Travel Award to Tara White, awarded Dec, 2008
- 16. Mentor to Michelle Berny, Young Investigator Award, International Society of Thrombosis and Haemostasis, July, 2009
- 17. Mentor to Robert Conley, Young Investigator Award, International Society of Thrombosis and Haemostasis, July, 2009
- 18. Sponsor for an American Heart Association Predoctoral Fellowship to Michelle Berny, 2009-2010
- 19. Mentor to Samir Kadkade, Oregon Junior Academy of Science Award, 2009
- 20. Mentor to Ishan Patel, Oregon State University Johnson Scholar, 2009 winner of the annual AIChE Pacific Northwest Regional Paper Competition
- 21. Sponsor for a NIH/NCI Young Investigator Transnetwork Award to Kevin Phillips, awarded Apr, 2010
- 22. Sponsor for NIH Molecular Hematology T32 Training Grant to Joseph Aslan, 2010-2012
- 23. Sponsor for Michelle Berny, AAAS Pacific Division Alen E. Leviton Student Research Award, July, 2010
- 24. Mentor to Joseph Aslan, Young Investigator Award, International Society of Thrombosis and Haemostasis, July, 2011
- 25. Mentor to Garth Tormoen, Young Investigator Award, International Society of Thrombosis and Haemostasis, July, 2011
- 26. Sponsor for Asako Itakura, Bayer Schering Pharma AG International Fellows Award, 2011-2012
- 27. Sponsor for a Barry M. Goldwater Scholarship to Ishan Patel, 2011
- 28. Sponsor for an American Heart Association Undergraduate Research Fellowship to Ishan Patel, 2011
- 29. Mentor to Allison McClain, Oregon State University Johnson Scholar, 2011
- 30. Sponsor for NIH Molecular Dermatology T32 Training Grant to Garth Tormoen, 2011
- 31. Mentor to Joseph Aslan, OHSU Postdoctoral Fellow Paper of the Year, 2011
- 32. Sponsor for an American Heart Association Predoctoral Fellowship to Garth Tormoen, 2012-2013
- 33. Sponsor for an American Heart Association Undergraduate Research Fellowship to Ishan Patel, 2012
- 34. Sponsor for a Vertex Pharmaceutical Grant to Asako Itakura, awarded May, 2012
- 35. Sponsor for Joseph Aslan, Fulbright Fellowship, 2012
- 36. Mentor to Sandra Baker, Young Investigator Award, International Society of Thrombosis and Haemostasis, July, 2012
- 37. Sponsor for a Tartar Trust Scholarship to Sandra Baker, 2012
- 38. Sponsor for a Medical Research Foundation Early Clinical Investigator Grant to Kristina Haley, 2012
- 39. Sponsor for a NIH / NHLBI Supplemental Award to Flor Cianchetti, 2012
- 40. Mentor to Flor Cianchetti, American Society of Hematology Abstract Achievement Award, Dec 2012
- 41. Mentor to Asako Itakura, American Society of Hematology Abstract Achievement Award, Dec 2012
- 42. Mentor to Cristina Puy, American Society of Hematology Abstract Achievement Award, Dec 2012
- 43. Mentor to Kristina Haley, American Society of Hematology Abstract Achievement Award, Dec 2012
- 44. Sponsor for a Medical Research Foundation Early Clinical Investigator Grant to Kevin Phillips, 2012
- 45. Sponsor for an American Heart Association Postdoctoral Fellowship to Joseph Aslan, 2012-2014
- 46. Mentor to Branden Kusanto, Bio & Pharmaceuticals Poster Award, AIChE National Meeting, 2012
- 47. Mentor to Garth Tormoen, Joel Drillings Award for Cardiovascular Research, American Heart

Association, 2012-2013

- 48. Sponsor for Sandra Baker-Groberg, Whitaker International Scholar Grant, 2013-2014
- 49. Mentor to Sandra Baker-Groberg, Young Investigator Award, International Society of Thrombosis and Haemostasis, July, 2013
- 50. Mentor to Cristina Puy, Young Investigator Award, International Society of Thrombosis and Haemostasis, July, 2013
- 51. Sponsor for an American Heart Association Undergraduate Research Fellowship to Branden Kusanto, 2013
- 52. Mentor for a NIH/NCI Young Investigator Transnetwork Award to Sandra Baker, 2013-2014
- 53. Mentor to Laura Healy, Keystone Symposia Future of Science Scholarship, Jan 2014
- 54. Sponsor for an American Heart Association Postdoctoral Fellowship to Cristina Puy, 2014-2015
- 55. Sponsor for an OSLER TL1 Fellowship to Ishan Patel, 2014
- 56. Sponsor for an OSLER TL1 Fellowship to Laura Healy, 2014-2015
- 57. Mentor to Cristina Puy, Oral Communication Award, 23rd Biennial International Congress on Thrombosis, May, 2014
- 58. Sponsor for an American Heart Association Summer Medical Student Fellowship to Kyle Robinson, 2014
- 59. Creation of the OHSU Research Roadmap Scholar Award, Jun, 2014
- 60. Mentor to Tiffany Chu, Oregon Top High School Technical Talent Award, Mar, 2015
- 61. Sponsor for Rachel Rigg, Whitaker International Scholar Grant, 2015-2016
- 62. Mentor to Cristina Puy, American Heart Association Kenneth M. Brinkhous Young Investigator in Thrombosis Finalist, May, 2015
- 63. Mentor to Cristina Puy, Young Investigator Award, International Society of Thrombosis and Haemostasis, June, 2015
- 64. Mentor to Sandra Baker, Young Investigator Award, International Society of Thrombosis and Haemostasis, June, 2015
- 65. Mentor for Kyle Robinson, OHSU Outstanding Medical Student Award, 2015
- 66. Mentor for Laura Healy, T32 Predoctoral Fellowship in Interactions at the Microbe-Host Interface, 2015
- 67. Mentor to Laura Healy, Young Investigator Award, International Society of Thrombosis and Haemostasis, May, 2016
- 68. Mentor to Annachiara Mitrugno, Young Investigator Award, International Society of Thrombosis and Haemostasis, May, 2016
- 69. Sponsor for a Tartar Trust Scholarship to Annachiara Mitrugno, 2016
- 70. Sponsor for a Tartar Trust Scholarship to Jevgenia Zilberman-Rudenko, 2016
- 71. Sponsor for an American Heart Association Undergraduate Research Fellowship to Marisa Thierheimer, 2016
- 72. Mentor to Laura Healy, Society for Leukocyte Biology Presidential Student Finalist, Sept, 2016
- 73. Sponsor for a BD-Step Fellowship to Joanna Sylman, 2016
- 74. Sponsor for an OHSU Graduate Student Organization Travel Award to Jevgenia Zilberman-Rudenko, 2016
- 75. Mentor to Anh Ngo, Sigma Xi Student Research Award in Cell Biology & Biochemistry, Nov, 2016
- 76. Mentor to Jevgenia Zilberman-Rudenko for an OHSU Surgery Innovation internship, 2016
- 77. Mentor to Anh Ngo, Biomedical Engineering Society Annual Meeting Travel Award, Oct, 2017
- 78. Mentor to Daniel Sallee, Biomedical Engineering Society Annual Meeting Travel Award, Oct, 2017
- 79. Sponsor for a Tartar Trust Scholarship to Annachiara Mitrugno, 2017
- 80. Sponsor for a Tartar Trust Scholarship to Jevgenia Zilberman-Rudenko, 2017
- 81. Mentor to Stephanie Reitsma, Travel Award, Kinin Conference, 2018
- 82. Mentor to Stephanie Reitsma, Young Investigator Award, International Society of Thrombosis and Haemostasis, July, 2018
- 83. Mentor to Anh Ngo, Young Investigator Award, International Society of Thrombosis and Haemostasis, July, 2018
- 84. Sponsor for an American Heart Association Junior Investigator Award for Women to Jevgenia Zilberman-Rudenko. 2018
- 85. Sponsor for OHSU Graduate Student Organization Travel Award, Jevgenia Zilberman-Rudenko, 2018
- 86. Sponsor for a Tartar Trust Scholarship to Anh Ngo, 2018

- 87. Sponsor for a Tartar Trust Scholarship to Daniel Sallee, 2018
- 88. Mentor to Sven Olson, Junior Investigator Award, Hemostasis & Thrombosis Research Society Fellows Consortium, Miami, FL, Nov, 2018
- 89. Mentor to Toshiaki Shirai, Early Career Travel Grant, International Society of Thrombosis and Haemostasis, July, 2019
- 90. Mentor to Cristina Puy, Early Career Travel Grant, International Society of Thrombosis and Haemostasis, July, 2019
- 91. Mentor to Sven Olson, Travel Award, HTRS/NASTH 2019 Scientific Symposium, New Orleans, LA, July, 2019
- 92. Mentor to Jevgenia Zilberman-Rudenko, recipient of the OHSU Resko Outstanding Doctoral Thesis Award, 2019
- 93. Mentor to Derrick Tao, ASH Hematology Opportunities for the Next Generation of Research Scientists Award. 2019
- 94. Mentor to Sven Olson, Finalist for the ASH Empowering Quality Initiatives in Patient Safety (EQUIPS) Trainee Competition, 2019
- 95. Mentor to Vikram Raghunathan, Junior Investigator Award, Hemostasis & Thrombosis Research Society Fellows Consortium, Miami, FL, Oct, 2019
- 96. Mentor to Sven Olson, OHSU Hematology & Medical Oncology Fellow Teaching Award, 2020
- 97. Mentor to Bethany Bannow, NIH Loan Repayment Award, 2020
- 98. Mentor to Sven Olson, NIH Loan Repayment Award, 2020
- 99. Mentor to Cristina Puy, Young Investigator Award, International Society of Thrombosis and Haemostasis, July, 2021
- 99. Mentor to Ang Ngo, Young Investigator Award, International Society of Thrombosis and Haemostasis, July, 2021
- 100. Mentor to Stephanie Reitsma, Young Investigator Award, International Society of Thrombosis and Haemostasis, July, 2021
- 101. Mentor to Derrick Tao, Resident Scholarship Impact Award, OHSU Department of Medicine
- 102. Sponsor for Kylee Marten, American Society of Hematology Research Training Award for Fellows
- 103. Mentor to Tia Kohs, Young Investigator Award, International Society of Thrombosis and Haemostasis, July, 2022
- 104. Mentor to Tia Kohs, Women in Science Portland Professional Development Scholarship, 2022
- 105. Mentor to Tia Kohs, Center for Developmental Health (CDH) Travel Grant, 2022
- 106. Sponsor for OHSU Graduate Student Organization Travel Award, Tia Kohs, 2022
- 107. Mentor to Andre Lira, Young Investigator Award, International Society of Thrombosis and Haemostasis, July, 2023
- 108. Mentor to Andre Lira, Dr. James L. Roberts Postdoctoral Researcher Award at ASBM, 2025
- 109. Mentor to Andre Lira, Eberhard F. Mammen Young Investigator Award, 2025
- 110. Mentor to Andre Lira, Young Investigator Travel Award, International Proteolysis Society, 2025
- 111. Mentor to Andre Lira, Top Presentation Award, International Proteolysis Society, 2025
- 112. Mentor to Amelia Rodolf, Goldwater Scholarship, 2025
- 113. Mentor to Eliana Choi, 2025 ASH Abstract Achievement Award
- 114. Mentor to Yiheng Zheng, 2025 ASH Abstract Achievement Award
- 115. Sponsor for Corinne LaVasseur, Medical Research Foundation Early Clinical Investigator Grant, 2025

D. Current Trainees

- 1. Chih-Jen 'Anthony' Yang, M.D., BME Ph.D. student (Sept, 2021 present)
- 2. André Lira Da Silva, Ph.D., Postdoctoral Fellow (May, 2022 present)
- 3. Samantha Moellmer, BME Ph.D. student (Jun, 2022 present)
- 4. Si-Han 'Jenny' Wang, Ph.D., Postdoctoral Fellow (Jun, 2022 present)
- 5. Ethan Oseas, BME Ph.D. student (Sept. 2022 present)
- 6. Yiheng Zheng, M.D., BME Ph.D. student (Sept, 2022 present)
- 7. Malik Seals, MD/PhD student (Sept 2025 present)

E. Previous Trainees and Current Positions

E1. Postdoc Fellow Trainees

1. Joseph Aslan, Ph.D., Postdoctoral Fellow, Jan 2010 – May 2015; Current position: Associate Professor,

Knight Cardiovascular Institute, Oregon Health & Science University

- 2. Kevin Phillips, Ph.D., Postdoctoral Fellow, Jan 2010 Jul 2013; Current position: Director of Data Science, Convergent Genomics, San Francisco, CA
- 3. Hrebesh Subhash, Ph.D., Postdoctoral Fellow, Jul 2010 Jun 2011; Current position: Senior Technical Associate, Colgate Palmolive, Global Technology Center, NJ
- 4. Cristina Garcia Puy, Ph.D., Postdoctoral Fellow, Aug, 2011 Jun, 2015; Current position: Research Assistant Professor, Biomedical Engineering Department, Oregon Health & Science University
- 5. Flor Cianchetti Medina, Ph.D., Postdoctoral Fellow, Feb 2012 Jul 2013; Current position: Sr Engineer, Sensor Test Development and Analytics, Medtronic, San Francisco, CA
- 6. Jeevan Maddala, Ph.D., Postdoctoral Fellow, Aug 2015 Dec 2015; Current position: SW Optimization Engineer in Technology Development, Intel, Hillsboro, OR.
- 7. Anne Rocheleau, Ph.D., Postdoctoral Fellow, Aug 2016 Dec 2017; Current position: Research Scientist, Algorithm Analysis Lead, Hemex Health, Inc, Portland OR
- 8. Annachiara Mitrugno, Ph.D., Postdoctoral Fellow, Jan 2015 Jun 2018; Current position: Medical Advisor Breast & Biomarkers, Menarini Stemline, Italy
- 9. Joanna Sylman, Ph.D., Postdoctoral Fellow, Mar 2016 Dec 2018; Current position: Senior Manager, Data and Science, Verana Health, San Francisco, CA
- 10. Toshiaki Shirai, Ph.D., Postdoctoral Fellow, Jun 2016 Mar 2019; Current position: Assistant Professor, University of Yamanashi, Yamanashi, Japan
- 11. Maaike Jongen, Ph.D., Postdoctoral Fellow, Feb 2020 Sept 2020; Current position: Postdoctoral Fellow, Karolinska Institute, Stockholm, Sweden
- 12. Ivan Parra-Izquierdo, Ph.D., Postdoctoral Fellow, Nov, 2019 Sept, 2022; Current position: Senior Scientist, Drug Concept Discovery, Boehringer Ingelheim, Ridgefield, CT

E2. Clinical Fellow Trainees

- 1. Kristina Haley, DO, Pediatric Resident, Jul 2011 Jun 2013; Current position: Associate Professor, Pediatric Hematology & Medical Oncology, Oregon Health & Science University
- 2. Kate Garland, MD, Pediatric Resident, Jul 2015 Jun 2017; Current position: Partner, Pediatric Hematology, Children's Minnesota, Minneapolis, MN.
- 3. Joseph Shatzel, MD, Hematology & Medical Oncology Resident, Jul 2017 Jun 2018; Current position: Associate Professor, Division of Hematology & Medical Oncology, Oregon Health & Science University
- 4. Sven Olson, MD, Hematology & Medical Oncology Resident, Jul 2018 Jun 2020; Current position: Assistant Professor, Division of Hematology & Medical Oncology, Oregon Health & Science University
- 5. Helena Ventosa Capell, MD, Jan, 2024 Jun, 2025; Current position: Internal Medicine Resident, OHSU Hillsboro Medical Center

E3. MD/PhD Trainees

- 1. Garth Tormoen, M.D./Ph.D., Biomedical Engineering, Jul, 2009 Jul, 2013; Radiation Oncologist, West Michigan Cancer Center, Kalamazoo, MI
- 2. Jevgenia Zilberman-Rudenko, M.D./Ph.D., Biomedical Engineering, Jul, 2014 May, 2018; Current position: MIS Advance GI Fellow, Scripps Health, La Jolla, CA
- 3. Tony Zheng, M.D./Ph.D., Biomedical Engineering, Jun, 2019 June, 2022; Current position: 4th year MD student, OHSU

E4. PhD Trainees

- 1. Tara White-Adams, Ph.D., Biomedical Engineering, Oct 2005 Feb 2010; Postdoctoral Fellow, Pediatric Hematology/Oncology, University of Colorado Denver Medical School; Advisor: Jorge DiPaola, MD; Current position: Medical Technologist, Gove County Medical Center, KS
- 2. Michelle Berny-Lang, Ph.D., Biomedical Engineering, Jul 2006 Nov 2010; Postdoctoral Fellow, Division of Hematology/Oncology, Harvard University; Advisor: Alan Michelson, MD; Current position: Program Manager, National Cancer Institute, NIH
- 3. Sandra Baker-Groberg, Ph.D., Biomedical Engineering, Jun 2011 Dec 2015; Lead SBIR Grant Writer, Grant Engine, Durham, NC
- 4. Asako Itakura, Ph.D., Cell & Developmental Biology, Jan 2010 Oct 2013; Current position: Global Medical Director, Novartis, London UK
- 5. Laura Healy, Ph.D., Cell & Developmental Biology, Mar 2013 Jun 2017; Current position: Senior

Manager, Medical Writing, 89bio, San Diego, CA.

- 6. Rachel Rigg, Ph.D., Biomedical Engineering, Jul 2013 Nov, 2017; Immediate past position: Postdoctoral Researcher at New England Complex Systems Institute, Boston, MA
- 7. Anh Ngo, Ph.D., Biomedical Engineering, Jan, 2016 Oct, 2020; Ruth L. Kirschstein NRSA Postdoctoral Fellow in Pediatric Clinical Pharmacology, UCSD, San Diego, CA.
- 8. Hari Hara Sudhan Lakshmanan, Ph.D., Biomedical Engineering, Jan, 2018 Dec, 2021; Current position: Process & Technology Engineer, Intel, Hillsboro, OR.
- 9. Stephanie Reitsma, Ph.D., Biomedical Engineering, Sept, 2017 Dec, 2021; Current position: Postdoctoral Fellow, University of North Carolina
- 10. Tia Kohs, Ph.D., Biomedical Engineering, June, 2019 Apr, 2023; Current position: Consultant, McKinsey & Company, Washington, DC.

E5. MS Trainees

- 1. Anna Astashkina, Ph.D., OGI Biomedical Engineering, 2005-2006; Current position: Research Scientist, Intellectual Ventures, Seattle, WA
- 2. Marie Nowak, University of Lille, France, Jan 2014 May 2014; Current position: PHD Student at CERN, Geneva, Switzerland
- 3. Chantal Wiesenekker, University of Utrecht, the Netherlands, Jan 2015 Sept 2015; Current position: Project Specialist at Syneos Health, the Netherlands
- 4. Stephanie Reitsma, University of Utrecht, the Netherlands, Jul 2016 Mar 2017; Current position: Postdoctoral Fellow, University of North Carolina
- 5. Alan Bylund (2015): MS, University of Portland; Product Development Engineer, Applied Medical, Orange County, CA
- 6. Nyiawung Taku (2016): MS, University of Portland; Quality Compliance Specialist, Accelerate Diagnostics, Tucson AZ.
- 7. Daniel Sallee, OHSU Biomedical Engineering, 2016-2019; Current position: Customer Success Manager, Dozuki
- 8. Ting Liu, M.D., OHSU Biomedical Engineering, 2023-2025

F. Research Scientists and Staff

- 1. Jiaqing Pang, MS, 2009 –present
- 2. Nhu Nguyen, 2021-2022
- 3. Helen Vu, 2021-2025; Current position: Clinical Research Coordinator, OHSU

G. Undergraduate Research Mentor

- 1. Kyle Robinson (2006-2007): currently Resident, Anesthesiology, OHSU
- 2. Madeline Midgett (2007): Senior Engineer-Applied Research at MSEI / BIOTRONIK
- 3. Jacqueline Gertz (2007): Regulatory Advisor, FDA
- 4. Brian Fuchs (2008): currently graduate student, Department of Chemical Engineering, OSU
- 5. Jessica Powers (2008): currently Manufacturing Technician, Intel
- 6. Tal Eshel-Green (2008): currently graduate student, Polymer Engineering, Technion IIT, Israel
- 7. Ishan Patel (2009-2012): currently Fellow, Pulmonary and Critical Care, University of New Mexico
- 8. Cassandra Loren (2010-2012): currently Resident, Pediatrics, OHSU
- 9. Allison McClain (2011): currently medical student, University of Central Florida
- 10. Ayesha Khader (2012): currently medical student, OHSU
- 11. Branden Kusanto (2012-2013): Research and Solutions Specialist, Xperiome, London, UK
- 12. Merhawi Mehari (2012): TEM Lab, Asbestos TEM Laboratories, Inc., Berkeley, CA
- 13. Julie Pham (2013): currently undergrad at University of Portland
- 14. Julianna Porter (2013): currently Advisory Associate, PwC, San Francisco, CA
- 15. Liam Wong (2013): currently medical student, OHSU
- 16: Heidi Oldenkamp (2014): currently graduate student, University of Texas at Austin
- 17. Marisa Thierheimer (2015-2016): currently medical student, Case Western Reserve University
- 18. Nicole Laschober (2016-2017): graduate student, University of Colorado, Boulder
- 19. Tiffany Chu (2017): currently undergrad at Johns Hopkins University
- 20. Parsa Farhang (2017): currently grad student at Johns Hopkins University
- 21. Zhoe Rub (2017): currently undergrad at Bryn Mawr College

- 22. Kendra Jones (2017): currently graduate student at CU Denver
- 23. Noah Webster (2018): currently Research Associate at Singular Genomics
- 24. Anna-Liisa Sepp (2018-2019): currently graduate student at Columbia University
- 25. Katie Trese (2018): currently undergrad OSU Chemical Engineering
- 26. Alexis Flaherty (2019-2020): currently undergrad at Trinity College, Dublin Ireland
- 27. Rachel Thompson (2019): currently medical student, University of Vermont
- 28. Sarah Elgamal (2019): currently undergrad OSU Chemical Engineering
- 29. Elizabeth Lofurno (2019): currently undergrad OSU Chemical Engineering
- 30. Micki Geffert (2022): currently undergrad at RIT
- 31. Kirrali Schofield (2022): currently undergrad at University of Minnesota
- 32. Gavin Hutchison (2023): currently undergrad at University of Wisconsin
- 33. Amelia Rodolf (2024): currently undergrad at UCLA
- 34. Katelyn Drew (2025): currently undergrad at Cal Poly

H. High School Research Mentor

- 1. Samir Kadkade (Lakeridge High School, OR; 2008): Design Engineer, BURN Manufacturing
- 2. Patrick Simonson (Clackamas High School, OR; 2009): Software Engineer II, Microsoft
- 3. Will Potter (Cleveland High School, OR; 2011): undergrad at Johns Hopkins University
- 4. Jasmin Watt (Perth High School, UK; 2011): social work, Inverness, UK
- 5. Zoë Wong (Lake Oswego High School, OR; 2012-2013): NIH Oxford/Cambridge Scholars program
- 6. Tiffany Chu (Tigard High School, Portland, OR; 2014-2016): graduate student at Johns Hopkins University
- 7. Katherine Pelz (Portland, OR; 2015): currently medical student, OHSU
- 8. Parsa Farhang (Catlin Gabel High School; 2016): graduate student at Johns Hopkins University
- 9. Kai Britt (Frankfurt International School; 2022): undergrad student at Haveford College
- 10. Ocean Pusalan: undergrad at University of Washington

I. Scholarly Oversight Committees

1. Matthew Dietz, MD, Pediatric Resident (2018-2020): Current position: Assistant Professor, University of Utah, Salt Lake City, UT

J. Dissertation Advisory Committees (Current)

- 1. Yong How Tan, Biomedical Engineering (Advisor Karina Nakayama)
- 2. Ella Stimson, Biomedical Engineering (Advisor Stuart Ibsen)
- 3. Jason Ware, Biomedical Engineering (Advisor Stuart Ibsen)

K. Thesis Defense Committees

- 1. Kristof Vanschoonbeck, PhD, Biochemistry, University of Maastricht, the Netherlands, Dec 2007 (Advisor Dr. Johan Heemskerk)
- 2. Norah Verbout, PhD, Physiology & Pharmacology, Oregon Health & Science University, Jun 2007 (Advisor Dr. Alison Fryer)
- 3. Erik Tucker, PhD, Biomedical Engineering, Oregon Health & Science University, Apr 2009 (Advisor Dr. Steve Hanson)
- 4. Keri Vartanian, PhD, Biomedical Engineering, Oregon Health & Science University, Apr 2009 (Advisor Dr. Monica Hinds)
- 5. Brandon Markway, PhD, Biomedical Engineering, Oregon Health & Science University, Mar 2010 (Advisor Dr. Monica Hinds)
- 6. Chantelle Rein, PhD, Cell & Developmental Biology, Oregon Health & Science University, Apr 2010 (Advisor Dr. David Farrell)
- 7. Chelsea Shields Bahney, PhD, Cell & Developmental Biology, Oregon Health & Science University, Aug 2010 (Advisor Dr. Brian Johnstone)
- 8. Yali Jia, PhD, Biomedical Engineering, Oregon Health & Science University, Nov 2010 (Advisor Dr. Ricky Wang)
- 9. Jed Perkins, MS, Biomedical Engineering, Oregon Health & Science University, Jan 2011 (Advisor Dr. Misha Pavel)
- 10. Kristine Alexander, PhD, Cell & Developmental Biology, Oregon Health & Science University, Jul 2012 (Advisor Dr. David Farrell)

- 11. Clayton Winkler, PhD, Neuroscience, Oregon Health & Science University, Sept 2012 (Advisor Dr. Larry Sherman)
- 12. Chris Veys, MS, Biomedical Engineering, Oregon Health & Science University, Dec 2012 (Advisor Dr. Fay Horak)
- 13. Ishan Patel, Honors Thesis, Chemical, Biological and Environmental Engineering, Oregon State University, May, 2013 (Mentor Dr. Owen McCarty)
- 14. Merryl Lobo, PhD, Biomedical Engineering, Oregon Health & Science University, Oct 2013 (Advisor Dr. Martin Pike)
- 15. Cassandra Loren, Honors Thesis, Chemical, Biological and Environmental Engineering, Oregon State University, May, 2013 (Mentor Dr. Owen McCarty)
- 16. Angela Lee, PhD, Aerospace & Mechanical Engineering, University of Southern California, Dec 2013 (Advisor Dr. Paul Newton)
- 17. Ashley Kamimae-Lanning, PhD, Cell & Developmental Biology, Oregon Health & Science University, Dec 2013 (Advisor Dr. Peter Kurre)
- 18. Jeremy Glynn, PhD, Biomedical Engineering, Oregon Health & Science University, Oct 2015 (Advisor Dr. Monica Hinds)
- 18. Sara Botto, PhD, Molecular Microbiology & Immunology, Oregon Health & Science University, Apr 2016 (Advisor Dr. Ashlee Moses)
- 19. Devon Anderson, MD, PhD, Biomedical Engineering, Oregon Health & Science University, Aug 2016 (Advisor Dr. Brian Johnstone)
- 20. Spencer Watson, PhD, Molecular and Medical Genetics, Oregon Health & Science University, May 2017 (Advisor Dr. Joe Gray)
- 21. Tyler Risom, PhD, Cancer Biology, Oregon Health & Science University, Aug 2017 (Advisor Dr. Rosie Sears)
- 22. Tyler Hulett, PhD, Cancer Biology, Oregon Health & Science University, May 2018 (Advisor Dr. Bernie Fox)
- 23. Connor Barth, PhD, Biomedical Engineering, Oregon Health & Science University, Aug 2018 (Advisor Dr. Summer Gibbs)
- 24. Ying Zhang, PhD, Biomedical Engineering, Oregon Health & Science University, Aug 2018 (Advisor Dr. Xiaolin Nan)
- 25. Gwen Hryciw, DMD, PhD, Oregon Health & Science University, Feb 2019 (Advisor Dr. Mary Heinricher)
- 26. Anjali Narayanan, MD, PhD, Biomedical Engineering, Oregon Health & Science University, Apr 2019 (Advisor Dr. David Lewinsohn)
- 27. Ryan Lane, PhD, Cancer Biology, Oregon Health & Science University, June 2019 (Advisor Dr. Amanda Lund)
- 28. Matthew Hagen, PhD, Biomedical Engineering, Oregon Health & Science University, Dec 2019 (Advisor Dr. Monica Hinds)
- 29. Mohammad Farhad, PhD, Cancer Biology, Oregon Health & Science University, Jan 2020 (Advisor Dr. William Redmond)
- 30. Ramona Luna, MS, Biomedical Engineering, Oregon Health & Science University, Jun 2021 (Advisor Dr. Stuart Ibsen)
- 31. Chanel Carmen La, PhD, Chemistry, University of British Columbia, July 2021 (Advisor Dr. Jayachandran Kizhakkedathu)
- 32. Kyle Gustafson, PhD, Biomedical Engineering, Oregon Health & Science University, Sept 2021 (Advisor Dr. Stuart Ibsen)
- 33. Adrian Baris, PhD, Program in Biomedical Sciences, Oregon Health & Science University, April 2024 (Advisor Sudarshan Anand)

J. Qualifier Exam Committee

- 1. Eric Benedetti, Department of Cell & Developmental Biology, OHSU 2010
- 2. Merryl Lobo, Department of Biomedical Engineering, OHSU, 2011
- 3. Worapol Ngamcherdtrakul, Department of Biomedical Engineering, OHSU, 2012
- 4. Ian Tagge, Department of Biomedical Engineering, OHSU, 2012

- 5. Max Quinn, Department of Biomedical Engineering, OHSU, 2012
- 6. Nichole Owen, Department of Molecular & Medical Genetics, OHSU 2012
- 7. Thanapon Sangvanich, Department of Biomedical Engineering, OHSU, 2013
- 8. Bora Lee, Department of Cell & Developmental Biology, OHSU 2013
- 9. Maddie Midgett, Department of Biomedical Engineering, OHSU, 2014
- 10. Devon Anderson, Department of Biomedical Engineering, OHSU, 2014
- 11. Shenda Gu, Department of Biomedical Engineering, OHSU, 2014
- 12. Kevin Kolahi, Department of Biomedical Engineering, OHSU, 2014
- 13. Jing Wang, Department of Biomedical Engineering, OHSU, 2014
- 14. Cheryl Claunch-Rabe, Department of Biomedical Engineering, OHSU, 2015
- 15. Gitanjali Narayanan, Department of Biomedical Engineering, OHSU, 2015
- 16. Ying Zhang, Department of Biomedical Engineering, OHSU, 2015
- 17. Yerim Lee, Department of Biomedical Engineering, OHSU, 2015
- 18. Navid Resalat, Department of Biomedical Engineering, OHSU, 2016
- 19. Matt Hagen, Department of Biomedical Engineering, OHSU, 2016
- 20. Connor Barth, Department of Biomedical Engineering, OHSU, 2016
- 21. Eran Brown, Department of Biomedical Engineering, OHSU, 2017
- 22. Matt Rames, Department of Biomedical Engineering, OHSU, 2018
- 23. Nichole Tyler, Department of Biomedical Engineering, OHSU, 2018
- 24. Xiang Wei, Department of Biomedical Engineering, OHSU, 2018
- 25. Jie Wang, Department of Biomedical Engineering, OHSU, 2019
- 26. Luke Ternes, Department of Biomedical Engineering, OHSU, 2019
- 27. Jose Luis Montoya, Department of Biomedical Engineering, OHSU, 2020
- 28. Sean Hamilton, Department of Biomedical Engineering, OHSU, 2020
- 29. Tina Ghodsi, Department of Biomedical Engineering, OHSU, 2020
- 30. Gavin Young, Department of Biomedical Engineering, OHSU, 2020
- 31. John Russo, Department of Biomedical Engineering, OHSU, 2021
- 32. Chris Boniface, Department of Biomedical Engineering, OHSU, 2021
- 33. Debika Debnath, Department of Biomedical Engineering, OHSU, 2021
- 34. Rick Mathews, Department of Biomedical Engineering, OHSU, 2022
- 25. Alexander Honkala, Department of Biomedical Engineering, OHSU, 2022