Na Li, PhD (she/her)
Associate Professor, Community Health Sciences, Cumming School of Medicine, University of Calgary

A. Research Leadership Profile

I am an Associate Professor in the Department of Community Health Sciences at the University of Calgary, and a statistician and health data scientist who develops advanced statistical, machine learning (ML), and AI methods for health research. My program is building an integrated capability for distributed AI in health: validated statistical and ML methods, deployable distributed AI software, multi-site governance infrastructure, and training environment that prepares people to use AI responsibly in health systems. My research addresses diagnostic accuracy, disease detection, clinical decision support, and health-system efficiency.

My record includes 91 peer-reviewed publications, including 66 since starting my faculty appointment since 2021, 15 trainee first-authored publications, and 8 senior-authored publications. I have secured 38 successful research funding applications since faculty appointment, totaling $8.46M, including 21 PI/NPI awards totaling $3.04M and 17 co-investigator awards totaling $5.42M. My major PI/NPI awards include CIHR Project Grants in temporal EHR modelling and federated learning, an NSERC Alliance–Alberta Innovates Advance award for FedEMR.ai, an NSERC Discovery Grant, and Canadian Blood Services funding. I also lead software/IP outputs, including FedEMR.ai and the copyrighted Platelet Variability Index.

My national and international recognition is reflected in repeated invitations to contribute AI/ML and health data science expertise to peer review, clinical research networks, and transfusion medicine initiatives. Key roles include membership in the International Society of Blood Transfusion (ISBT) Big Data Working Party, service on the Canadian Transfusion Trials Group and Sepsis Canada Steering Committees, participation in the NHLBI Novel Data Sciences Working Group for State of the Science meetings in transfusion medicine, and international collaboration through the Biomedical Excellence for Safer Transfusion (BEST) Collaborative. These roles complement my publications and invited contributions on federated learning, blood demand forecasting, transfusion AI, and data-informed allocation of scarce blood products.

Training and capacity building are central to my program. I have supervised 16 graduate and postdoctoral trainees to date, including 10 current trainees: 1 MSc student, 5 PhD students, and 4 postdoctoral fellows. My broader training contributions include supervision of 14 summer students, service on 8 supervisory committees, 7 examiner roles, and additional mentorship of 17 trainees. I have also taught 16 half-course equivalents with 306 graduate students and 437 undergraduate students, and have led 3 workshops with more than 200 learners.

My leadership is organized around three mutually reinforcing platforms:

- FedEMR.ai – Research Software and Translation
- CHOIR Alliance – Infrastructure and Governance
- QUAN-CORE Lab – People and Methods

B. Career Stage

My PhD was conferred by Western University in February 2016. I had maternity leave from October 2012 to March 2013 during my doctoral training. I hold a full-time faculty appointment at the University of Calgary with 75% protected research time. I do not currently hold any internal or external named Chair position.

C. Education and Academic Appointments

EDUCATION/TRAINING:		
McMaster University	Post Doc Fellowship. Computing and Software Engineering	2019-2020
Western University	PhD. Statistical and Actuarial Sciences	2011-2016
Western University	MSc. Statistical and Actuarial Sciences **Transferred to PhD program without completing Masters.*	2010-2011

POSITIONS, SCIENTIFIC APPOINTMENTS:	
2025 – present	Associate Professor, Dept. Community Health Sciences, University of Calgary
2025 – present	Co-Founder and Chief Scientific Officer, FedEMR Technologies Inc. Canada
2021 – 2025	Assistant Professor, Dept. Community Health Sciences, University of Calgary

2022 – present	Faculty Member, Libin Cardiovascular Institute, The University of Calgary
2021 – present	Faculty Member, O'Brien Institute for Public Health, The University of Calgary
2021 – present	Faculty Member, Centre for Health Informatics, The University of Calgary
2023 – present	Associate Faculty, McMaster Centre for Transfusion Research, McMaster University
2021 – present	Adjunct Faculty, Computing and Software, McMaster University
2020	Research Associate, McMaster Centre for Transfusion Research, McMaster University
2019 – 2020	Postdoctoral Fellow, Dept. Computing and Software Engineering, McMaster University
2016 – 2019	(Bio)Statistician, McMaster Centre for Transfusion Research, Dept. Medicine, McMaster University

D. Key Evidence of Research Excellence and Leadership

AREA	SELECTED EVIDENCE
Publications	• 91 peer-reviewed publications, including 66 since starting my faculty appointment, primarily in AI/ML for clinical prediction, disease detection, transfusion medicine, health-system analytics, federated learning, and statistical/operations research methods. • Includes 15 trainee first-authored publications and 8 senior-authored publications.
Funding leadership	• Since faculty appointment: Secured 38 successful research funding applications totaling $8.46M, including 21 PI/NPI awards ($3.04M) and 17 co-investigator awards ($5.42M). • Career total since 2019: Secured 42 successful research funding applications totaling $8.83M, including 22 PI/NPI awards ($3.07M) and 20 co-investigator awards ($5.76M).
Major NPI/Co-PI grants	Funding has been obtained from CIHR, NSERC, Alberta Innovates, Canadian Blood Services, MITACS, and UCalgary strategic programs, with current applications extending into CFI-related infrastructure development. • NPI, CIHR Project Grant; Development and Validation of AI-Based Methods for Temporal Pattern Learning in Repeated Electronic Health Record (EHR) Data; $761,176, 2026–2030 • NPI, NSERC Alliance – Alberta Innovates Advance; FedEMR.ai: A Scalable, Ethics-Ready Federated AI Platform for Multi-Hospital EHR Research; $299,925, 2026–2028 • NPI, CIHR Project Grant; Developing Federated Learning Strategies for Disease Surveillance Using Cross-Jurisdiction EHRs without Data Sharing; $703,800, 2023–2027 • NPI, CIHR Priority Announcement, Alberta Innovates; Developing Federated Learning Strategies for Disease Surveillance Using Cross-Jurisdiction EHRs; $150,000, 2022–2023 • NPI, NSERC Discovery Grant and Discovery Launch Supplement; Data-Driven Methods for Blood Supply Chain Management Using EHR Data; $147,500, 2022–2027 • NPI, Canadian Blood Services Kenneth J. Fyke Award; Pan-Canadian Immunoglobulin Database; $100,000, 2022–2024 • Co-PI, Alberta Innovates AICE Concepts; Implementation of KDpredict Clinical Decision Support Tool within the Epic System; $599,344, 2025–2028
Software and IP	• FedEMR.ai operational research software platform; spin-off as FedEMR Technologies Inc. (UCalgary, 2025). • Platelet Variability Index (PVI) copyrighted; under evaluation by pharmaceutical partners.
Trainees	• Current supervised trainees: 1 MSc student, 5 PhD students, and 4 postdoctoral fellows. • Completed supervised trainees: 4 MSc students, 1 PhD student, and 1 postdoctoral fellow. • Additional training roles: Supervised 14 summer students, including 7 graduate students and 7 undergraduate students; served on 8 supervisory committees and in 7 examiner roles; and provided additional mentorship to 17 trainees, including 7 graduate students, 9 undergraduate students, and 1 clinical resident.
Teaching	Taught 16 half-course equivalents for 306 graduate students and 437 undergraduate students, and led 3 workshops that trained more than 200 graduate students, postdoctoral fellows, faculty members, and professionals. • Course coordinator and instructor for graduate course MDCH 610/VET 610: Essentials of

	Biostatistics (2021, 2022, 2023, 2025) • Course coordinator and instructor for undergraduate course MDSC 407: Statistics and Research Design in Health Sciences (2022, 2023, 2024, 2025, 2026) • Course coordinator and instructor for graduate course Data 621: Advanced Statistical Modelling (2021, 2022, 2023, 2024, 2025, 2026) • Course coordinator and instructor for MDCH 700: Community Health Directed Study – Unsupervised Machine Learning in Electronic Medical Records (2022) • Workshop Coordinator for R Programming Workshops (2022, 2023, 2024)
National and International Recognition	• National peer-reviewed funding leadership: PI/NPI leadership on major awards from CIHR, NSERC Alliance–Alberta Innovates, NSERC Discovery, and Canadian Blood Services; 21 PI/NPI awards since faculty appointment. • National peer-review and research assessment service: Reviewer for CIHR Project Grant committees (Health Services Evaluation & Interventions Research Committee and Tri-Agency Interdisciplinary Committee); reviewer for CIHR Health Research Training Awards; CFI JELF expert reviewer; external reviewer for NFRF and Population Data BC. • National clinical and research network leadership: Member, Sepsis Canada Identifying Sepsis Committee; Steering Committee member, Canadian Transfusion Trials Group; participant in the Canadian Blood Services/National Advisory Committee ethical framework discussion for national immunoglobulin shortages. • National professional and health-system visibility: Canadian Blood Services public research story on data-driven blood demand forecasting and ordering; Digital Health Canada webinar; and the public-facing FedEMR.ai website. • International recognition in transfusion medicine AI/data science: Member, International Society of Blood Transfusion Big Data Working Party; NHLBI Novel Data Sciences Working Group member for State of the Science meetings in transfusion medicine; BEST Collaborative collaborator; and invited or published contributions on AI/ML, federated learning, blood demand forecasting, and big-data analytics in transfusion medicine. • International scholarly visibility: Publications and collaborations in federated learning, AI-enabled disease detection, transfusion AI, and trustworthy health data science in venues including *npj Digital Medicine*, *Artificial Intelligence in Medicine*, *Transfusion*, *Blood*, and *Transfusion Medicine Reviews*.

E. Selected Peer-reviewed Publications

* Trainee under my supervision/co-supervision or formal mentorship.

1) Foundational work on blood demand forecasting and inventory management. I have been engaged in developing data-driven strategies using electronic health record (EHR) data for blood demand and supply by exploring ideas from statistical modelling, machine learning (ML), and operations research modelling since 2019. Our *Operations Research for Health Care* paper (1.1) was the first to integrate large-scale clinical data into end-to-end management at hospital blood banks: we introduced a hybrid RBC demand-forecasting model and embedded it in a multiperiod perishable-inventory framework, yielding a data-driven (s, S) policy. This cross-disciplinary effort involved collaborators in computer science, data management, transfusion medicine, and decision makers at Canadian Blood Services (CBS); a clinical translation appeared in *Transfusion* (1.2).

Seven HQP-led papers (1.3–1.9) extended this program by benchmarking univariate/multivariate time-series and ML approaches across data sizes and evaluation metrics (1.3–1.5, 1.8–1.9), developing data-informed inventory/ordering policies for perishables (1.4–1.5), and introducing clustering and patient-segmentation methods for tailored resource allocation (1.7–1.9). They also proposed a fairness-aware framework for allocating blood resources during emerging epidemics, demonstrated with COVID-19 convalescent plasma, in *Health Care Management Science* (1.6).

This body of work has positioned me as a **recognized leader** in harnessing AI/ML to transform transfusion medicine, leading to invitations from national and international conferences and journals to present and contribute articles (1.10–1.13).

1.1. **Li N**, Chiang F, Down DG, Heddle NM. (2021). A decision integration strategy for short-term Demand forecasting and ordering for red blood cell components. Operations Research for Health Care. 29: 100290.

1.2. **Li N**, Arnold DM, Barty R, Blake J, Down DG, Chiang F, Courtney T, Waito M, Trifunove R, Heddle NM. (2022). From demand forecasting to inventory Ordering decisions for red blood cells through integrating machine learning, statistical modelling and inventory optimization. Transfusion. 62(1):87-99.

1.3. Motamedi M*, **Li N**, Down DG, Heddle NM. (2024). Demand forecasting for platelet usage: From univariate time series to multivariable models. PLOS One. 19(4): e0297391.

1.4 Motamedi M*, Dawson J*, **Li N**, Down DG. (2025). Blood Platelet Inventory Management: Incorporating Data-Driven Demand Forecasts. Health Care Management Science. 28(2): 191-206.

1.5 Motamedi M*, Down DG, **Li N**. (2025). Optimal Ordering Policy for Perishable Products by Incorporating Demand Forecasts. European Journal of Operational Research. 329(1): 124-137.

1.6 Akbari-Moghaddam M*, **Li N**, Down DG, Arnold DM, Callum J, Bégin P, Heddle NM. (2023). Data-driven fair resource allocation for novel emerging epidemics: A COVID-19 convalescent plasma case study. Health Care Management Science. 61(4), 559-588.

1.7 Akbari-Moghaddam M*, **Li N**, Down DG, Hands K, Ziman A. (2025). Patient Segmentation and Resource Allocation for Tailored Healthcare Delivery. Journal of the Operational Research Society. 2025: 1-24.

1.8 Rahimi Z*, **Li N**, Down DG, Arnold DM. (2025). Clustering-based Demand Forecasting with an Application to Immunoglobulin Products. Operations Research, Data Analytics and Logistics. 45(200469): 1-18.

1.9. Riazi K*, Ly M*, Barty B, Callum J, Arnold DM, Heddle NM, Down DG, **Li N**. (2023). An unsupervised learning approach to identify immunoglobulin utilization patterns using electronic health records. Transfusion. 63(12):2234-47.

1.10 **Li N**. Canadian Blood Services Research Unit: A more accurate and efficient way to manage blood demand and supply. (2021). https://www.blood.ca/en/hospital-services/transfusion-practice/research-units/more-accurate-and-efficient-way-manage-blood. Canadian Blood Services Centre for Innovation.

1.11 **Li N**, Goel R, Raza S, Riazi K*, Pan J*, Nguyen HQ, Shih AW, D'Souza A, Dubey R, Tobian A, Arnold DM. (2025). Artificial Intelligence and Machine Learning in Transfusion Practice: An Analytical Assessment. Transfusion Medicine Reviews. 39(4):150926.

1.12 **Li N**, Down DG. (2023). Deep Learning for Platelet Transfusion. Blood. 14(26): 2231-2232.

1.13 **Li N**, Pham T, Cheng C, McElfresh DC, Metcalf RA, Russell A, Birch R, Yurkovich J, Montemayor-Garcia C, Lane WJ, Tobian AAR, Roubinian N, Seheult J, Goel R. (2023). Blood Demand Forecasting and Supply Management: An Analytical Assessment of Key Studies Utilizing Novel Computational Techniques. Transfusion Medicine Reviews. 37(4): 150768.

2) Methodological advances with demonstrated clinical value. My team have delivered methods with direct clinical relevance: i) Unsupervised sepsis phenotyping (2.1): In >6,600 ICU admissions across 5 Calgary hospitals, they applied unsupervised clustering to uncover interpretable sepsis clusters while revealing atypical presentations, and showed that label-free surveillance can outperform current algorithms. ii) Large language model (LLM) pipeline (2.2): My team built a secure, guideline-integrated LLM pipeline that identified acute myocardial infarction, diabetes, and hypertension from >550,000 notes with competitive performance, providing a scalable alternative to ICD-based surveillance. iii) Trajectory-aware diagnostics (2.3–2.4): I developed the Platelet Variability Index (PVI) and the Predict-ITP tool to improve the diagnosis of immune thrombocytopenia (ITP) through converting noisy longitudinal labs into actionable, interpretable signals. The PVI index has been copyrighted and is currently being tested by international pharmaceutical companies. iv) Sepsis case-definition validity (2.5): In collaboration with national critical care and sepsis experts, I contributed to expert-consensus adjudication of administrative codes for identifying sepsis, strengthening the validity of population-level sepsis surveillance and multi-site research using routinely collected data. v) Perioperative anticoagulation and bleeding-risk prediction (2.6–2.7): I contributed methodological expertise to PAUSE-2 and related perioperative anticoagulation studies, including evaluation of residual direct oral anticoagulant levels, postoperative bleeding, thrombin generation markers, and causal mediation pathways in high-bleed-risk surgical settings.

2.1 **Li N**, Riazi K*, Pan J*, Thavorn K, Ziegler J, Rochwerg B, Quan H, Prescott HC, Dodek P, Li B, Gervais A, Garland A. (2025). Unsupervised Clustering for Sepsis Surveillance in Large-scale Patient Data: A Model Development and Validation Study. Intensive Care Medicine Experimental. 13(37): 1-12.

2.2 Pan J*, Lee S, Cheligeer, Elliot MA, Riazi K*, Quan H, **Li N**. (2025). Integrating Large Language Models with Human Expertise for Disease Detection in Electronic Health Records. Artificial Intelligence In Medicine. 191(110161): 1-14.

2.3 **Li N**, Heddle NM, Nazy I, Kelton JG, Arnold DM. (2021). The platelet variability index: A novel measure of platelet count fluctuations in patients with immune thrombocytopenia. Blood Advances. 5(20): 4256-4264.

2.4 **Li N**, Mahamad S, Parpia S, Iorio A, Foroutan F, Heddle NM, Hsia CC, Sholzberg M, Rimmer E, Shivakumar S, Sun HL, Refaei M, Hamm C, Arnold DM. (2022). The development and internal validation of a clinical prediction model for the diagnosis of immune thrombocytopenia in specialist outpatient clinics. Journal of Thrombosis and Haemostasis. 20(12): 2988-2997.

2.5 Garland A, **Li N**, Sligl W, Lane A, Thavorn K, Wilcox ME, Rochwerg B, Keenan S, Marrie TJ, Kumar A, Curley E, Ziegle J, Dodek P, Loubani O, Gervais A, Murthy S, Neto G, Prescott H. (2024). Adjudication of Codes for Identifying Sepsis in Hospital Administrative Data by Expert Consensus. Critical Care Medicine. 52(12): 1845-55.

2.6 Douketis JD, **Li N**, St John M, Nixon J, Moffatt K, Shaw J, Syed S, Schulman S, Gross PL, Spyropoulos AC. (2025). Perioperative Management of Direct Oral Anticoagulants in Patients having a High-Bleed-Risk Surgery or Neuraxial Procedure: the PAUSE-2 Pilot Study. Journal of Thrombosis and Haemostasis. 23(7): 2226-2234.

2.7 Shaw JR, **Li N**, Grussé M, Dreden PV, St John M, Nixon J, Spyropoulos AC, Schulman S, Levy JH, Carrier M, Douketis JD. (2025). Preoperative Residual DOAC Levels are Associated with Postoperative Bleeding and Effects are Mediated by Thrombin Generation Parameters: A Nested Case-Control Study and Causal Mediation Analysis. Thrombosis and Haemostasis. 2025: 1-20.

3) Federated learning as an emerging infrastructure for Canadian healthcare. I have been a leading contributor to advancing federated learning (FL) for Canadian healthcare (3.1–3.3), enabling statistical and ML models to be trained across institutions without moving patient data. With Alberta Innovates and CIHR Project Grant support, my team developed *FedEMR.ai*, a zero-code federated learning research software platform with role-based access and audit logs, demonstrated at scale with up to 50 simulated sites and now being extended toward multi-site demonstrations and cross-provincial evaluation pathways. By directly addressing barriers of privacy, governance, and data heterogeneity, this work establishes FL as a foundation for privacy-preserving disease surveillance and multi-jurisdictional AI in Canada.

3.1 **Li N**, Lewin A, Ning S, Waito M, Zeller M, Tinmouth A, Shih AW, Canadian Transfusion Trials Group. (2025). Privacy-Preserving Federated Data Access and Federated Learning: Improved Data Sharing and AI Model Development in Transfusion Medicine. Transfusion. 65(1): 22-28.

3.2 Zhu H*, Bai J*, **Li N**, Li X, Li D, Buckeridge D, Li Y. (2025). FedWeight: Mitigating Covariate Shift of Federated Learning on Electronic Health Records Data through Patients Re-weighting. npj Digital Medicine. 8(286): 1-19.

3.3 Wei L*, Wu J*, **Li N**, Zhou J, Drew S. (2023). Federated Blood Supply Chain Demand Forecasting: A Case Study. International Workshop on Federated Learning for Distributed Data Mining. KDD 2023 Conference: 1-6.

4) Tools for data science methods and applications to strengthen health-system resilience. I have developed several interactive platforms to translate data science methods into practical tools for research and decision-making. One of these, *IN-TRUST*, supports visualization of blood utilization patterns, generation of descriptive analysis reports, detection of trend changes, and construction of univariate demand-forecasting models (4.1–4.2). Through a simple menu-based interface, the platform produces figures, tables, and analyses, enabling CBS and researchers to better understand blood utilization in clinical practice. It allows nontechnical users to apply model outputs for decision making, overcoming barriers of data accessibility and programming expertise. This work complements my broader contributions to transfusion research, including big-data approaches in transfusion

medicine (4.1–4.2), large-scale clinical trials (4.3), and data-informed systems for scarce blood product allocation (4.4).

4.1. Ning S, **Li N**, Barty R, Arnold D, Heddle N. (2022). Database-driven research and big data analytic approaches in transfusion medicine. Transfusion. 62(Commentary): 1427-1434.

4.2 Ning S, **Li N**, Liu Y, Kim D, Acker JP, Arnold D, Hadzi-Tosev M, Hillis C, Kauffman A, Lucier KJ, Liauw P, Rochwerg B, Syed S, Travis G, Zeller M, Heddle NM. (2025). Transfusion-related immunomodulatory (TRIM) outcomes and blood production changes: a hypothesis generating, data-mining study. Transfusion. Revision Requested.

4.3 Bégin P, Callum J, Heddle N, Cook, Zeller MP, Tinmouth A, Fergusson DA, Cushing MM, Glesby MJ, Chassé M, Devine DV, Robitalle N, Bazin R, Shehata N, Finzi A, McGeer A, Scales DC, Schwartz L, Turgeon AF, Zarychanski R, Daneman N, Carl R, Amorim L, Gabe C, Ellis M, Sachais B, Loftsgard K, Jamula E, Carruthers J, Duncan J, Lucier K, **Li N**, Liu Y, Armali C, Kron A, Modi D, Auclair MC, Cerro S, Avram M, Arnold DM. (2021). Convalescent plasma for hospitalized patients with COVID-19 and the effect of plasma antibodies: a randomized controlled trial. Nature Medicine. 27(11):2012-2024.

4.4 **Li N**, Zeller MP, Shih AW, Heddle NM, St. John M, Bégin P, Callum J, Arnold DM, Akbari-Moghaddam M, Down DG, Jamula E, Devine DV, Tinmouth A. (2022). A Data-Informed System to Manage Scarce Blood Product Allocation in a Randomized Controlled Trial of Convalescent Plasma. Transfusion. 62(12): 2525-2538.

5) Develop theory-driven approaches to reducing emergency department wait times. Long waiting times are a critical problem in Canadian healthcare systems, especially in the emergency departments (EDs). It is a complicated problem caused by many reasons, such as limited resources, unpredictable demands, disconnected clinical networks, complicated medical guidelines and policies. Since 2012, I have published three first-author papers and my PhD thesis on managing healthcare wait times using advanced queuing theory (5.1–5.3). We developed a multi-class multi-server queuing model with heterogeneous servers under the accumulating priority queuing (APQ) discipline, and presented a conservation law for the mean waiting time in M/Mi/c system (5.3). We established the minimization of the mean number of patients present in the system who are in excess of their time limits based on the Canadian Triage and Acuity Scale (CTAS), and used APQ to evaluate the waiting time performance of such a system using numerical experiments (5.1). We extended the analysis of a linear APQ to characterize the class of nonlinear APQs for which an equivalent linear APQ can be found (5.2). We showed that for identical sample paths of the arrival and service processes, the ordering of all customers is always identical in both the linear and nonlinear systems.

5.1. **Li N**, Stanford DA, Sharif AB, Caron RJ, Pardhan A. Optimising key performance indicator adherence with application to emergency department congestion. European Journal of Operational Research. 2019. 272(1): 313323.

5.2. **Li N**, Stanford DA, Taylor P, Ziedins I. Nonlinear accumulating priority queues with equivalent linear proxies. Operations Research. 2017. 65(6): 17121721.

5.3. **Li N**, Stanford DA. Multi-server accumulating priority queues with heterogeneous servers. European Journal of Operational Research. 2016. 252(2): 866878.

F. Current Trainees

YEAR BEGAN	DEGREE	STUDENT
2025	MSc	Abdulkadir Katibi (Dept. Community Health Sciences, UCalgary)
2026	PhD	Sawsan AlMukdad (Dept. Community Health Sciences, UCalgary) *Awarded Canada Impact+ Research Training Awards*
2025	PhD	Eshleen Kaur Grewal (Dept. Community Health Sciences, UCalgary) *Awarded Canada Graduate Research Scholarship - Doctoral (CGRS D) Program*
2024	PhD	Maryam Akbari Moghaddam (Dept. Computing and Software, McMaster)
2022	PhD	Kiarash Riazi (Dept. Community Health Sciences, UCalgary) *Awarded Achievers in Medical Science Doctoral Scholarship*

2022	PhD	Zhaleh Rahimi (Dept. Computing and Software, McMaster) *Awarded Ontario Graduate Scholarship*
2026	Postdoc	Saifur R. Chowdhury (Dept. Community Health Sciences, UCalgary) *Awarded Canada Postdoctoral Research Award (CPRA)*
2025	Postdoc	Morteza Zangeneh Soroush (Dept. Community Health Sciences, UCalgary)
2025	Postdoc	Ana Carolina da Cruz (Dept. Medicine and Community Health Sciences, UCalgary)
2022	Postdoc	Jie Pan (Dept. Community Health Sciences, UCalgary) *Awarded Cumming School of Medicine Postdoctoral Fellowship and AI4PH Summer Institute 2023 Travel Awards*

G. Selected Professional Service

- Grant review and national research assessment: Reviewer for CIHR Project Grant committees, including the Health Services Evaluation & Interventions Research Committee (2023) and Tri-Agency Interdisciplinary Committee (2026); reviewer for CIHR Health Research Training Awards, Post-PhD (2021, 2024, 2025); CFI John R. Evans Leaders Fund expert reviewer (2025); external reviewer for New Frontiers in Research Fund, Exploration (2022), and Population Data BC Research Proposal Peer Review (2024).
- National clinical and research network leadership: Committee member, Sepsis Canada Identifying Sepsis Committee (2021–present); Steering Committee member, Canadian Transfusion Trials Group (2023–present); member, National Immunoglobulin Shortages Management Plan ethical framework discussion, Canadian Blood Services/National Advisory Committee on Blood and Blood Products (2023).
- Journal and international peer review: Reviewer for *Transfusion* (2017–present), *Health Care Management Science* (2020–present), *Blood* (2023–present), *The Lancet Regional Health* (2023–present), *Digital Health* (2023–present), *Journal of Thrombosis and Haemostasis* (2023–present), *Computer Methods and Programs in Biomedicine* (2024–present), *Artificial Intelligence in Medicine* (2025–present), and other journals.
- University and institute service: Internal peer reviewer, O'Brien Institute for Public Health (2021–present) and Libin Cardiovascular Institute (2023–present); member, Libin Precision Medicine Initiative Data Resource Advisory Group (2024–present); member, Assistant Professor search committees across UCalgary departments (2024–2026).