

PATRICK T. FOK, MDCM, PhD, FRCPC, dABEM

CONTACT INFORMATION

Charles V. Keating Emergency & Trauma Centre

ACADEMIC AND HOSPITAL APPOINTMENTS

Assistant Professor, Division of EMS, Department of Emergency Medicine Dalhousie University Halifax, NS, Canada	2017–present
Attending Emergency Physician Halifax Infirmary, Queen Elizabeth II Health Science Centre Halifax, NS, Canada	2017–present
Transport Physician EHS LifeFlight Critical Care Transport Service Halifax, NS, Canada	2018–present
Medical Communications Centre Physician Emergency Health Services (EHS) Halifax, NS, Canada	2021–present
Associate Scientist Maritime SPOR Support Unit	2024–present
Advanced Cardiac Life Support Instructor	2010–present
Advanced Trauma Life Support Instructor	2023–present
Online Medical Oversight Physician Emergency Health Services (EHS) Halifax, NS, Canada	2017–2021
Attending Emergency Physician (locum) Halifax Infirmary, Queen Elizabeth II Health Science Centre Halifax, NS, Canada	Aug–Dec 2015

POSTGRADUATE TRAINING

Retrieval Registrar, Prehospital and Retrieval Medicine (PHARM) MedSTAR Emergency Medical Retrieval Service Adelaide, SA, Australia	Aug 2016–Feb 2017
Emergency Medicine Resident McGill University Royal College Emergency Medicine Training Program Montreal, QC, Canada	2010–2015

EDUCATION

Certificate, Program in Clinical Effectiveness T.H. Chan School of Public Health Harvard University, Boston, MA, USA	2022
Doctor of Medicine, Master of Surgery (MDCM) Joint MDCM/PhD Program Faculty of Medicine, McGill University, Montreal, QC, Canada	2002–2010
Ph.D. (Experimental Medicine) McGill University, Montreal, QC, Canada	2004–2008
Bachelor of Science (Biology) McGill University, Montreal, QC, Canada	1998–2002

ADDITIONAL COURSES

Emergency Department Echography (EDE) 2	December 2018
AIME Advanced Airway course	May 2018
Emergency Medical Services (EMS) Medical Directors Course National Association of Emergency Medical Services Physicians (NAEMSP)	January 2018

CERTIFICATIONS

Private Pilot License, Transport Canada	2023
Diplomate of the American Board of Emergency Medicine (dABEM)	2017
Fellow of the Royal College of Physicians and Surgeons, Emergency Medicine (FRCPC)	2015
Advanced Trauma Life Support (ATLS)	2010, 2015, 2023
Pediatric Advanced Life Support (PALS)	2010, 2015, 2022
Canadian Emergency Ultrasound Society (CEUS) Independent Practitioner	2011
Licentiate of the Medical Council of Canada (LMCC)	2012
Advanced Cardiac Life Support (ACLS) Instructor	2010

MEDICAL LICENSURE

College of Physicians and Surgeons of Nova Scotia, #016907	2015–present
National Provider Identifier (United States), # 1225443658	2014–present
Medical Board of Australia, #MED0002040287	Aug 2016–Aug 2017
Collège des Médecins du Québec, Educational License #R16118	2010–2015
Florida Board of Medicine, Educational License #18247	2013–2015
New Mexico Medical Board, Postgraduate Training License #RS2014-0128	July 2015

PROFESSIONAL ASSOCIATIONS AND MEMBERSHIPS

Canadian Association of the Emergency Physicians (CAEP)

Network of Canadian Emergency Researchers (NCER)

Doctors Nova Scotia

National Association of EMS Physicians (NAEMSP)

Royal College of Physicians of Canada

Canadian Ski Patrol

ACADEMIC HONOURS AND AWARDS

Leader as Gardner Scholarship Award, Department of Emergency Medicine, Dalhousie University	2021
Residency Research Competition Award, Division of Emergency Medicine, McGill University	2013
Canadian Institutes of Health Research (CIHR) MD/Ph.D. Studentship Award	2004-2010
Harry Shankman Scholarship, Faculty of Medicine McGill University	2008
Harry Shankman Scholarship, Faculty of Medicine McGill University	2002

PUBLICATIONS

Peer-Reviewed Original Research

1. Thanamyooran A, Nallbani M, Vinson AJ, Clark DA, **Fok PT**, Goldstein J, More KM, Swain J, Wiemer H, Tennankore KK. Predictors of Urgent Dialysis Following Ambulance Transport to the Emergency Department in Patients Treated With Maintenance Hemodialysis. *Can J Kidney Health Dis.* 2023 Jan 18;10:20543581221149707. doi: 10.1177/20543581221149707. PMID: 36700056; PMCID: PMC9869220.
2. Leeies M, Rosychuk RJ, Ismath M, Xu K, Archambault P, **Fok PT**, Audet T, Jelic T, Hayward J, Daoust R, Chandra K, Davis P, Yan JW, Hau JP, Welsford M, Brooks SC, Hohl CM; Canadian COVID-19 Emergency Department Rapid Response Network (CCEDRRN) investigators for the Network of Canadian Emergency Researchers, the Canadian Critical Care Trials Group. (2023). Intubation practices and outcomes for patients with suspected or confirmed COVID-19: a national observational study by the Canadian COVID-19 Emergency Department Rapid Response Network (CCEDRRN). *CJEM.* 25(4): 335-343. <http://dx.doi.org/10.1007/s43678-023-00487-1>
3. Dahn T, **Fok PT**, Wiemer H, Dutton D, Cole V, Lewis D, Liu T, Brunt K, Hanlon R, Fraser J, Vaillancourt C, Atkinson P. (2023). Emergency Department Presentation Changes Due to the COVID-19 Pandemic in Nova Scotia, Canada. *World Journal of Emergency Medicine.* 14(1): 62-64.

4. Brooks SC, Rosychuk RJ, Perry JJ, Morrison LJ, Wiemer H, **Fok P**, Rowe BH, Daoust R, Vatanpour S, Turner J, Landes M, Ohle R, Hayward J, Scheuermeyer F, Welsford M, Hohl C; Canadian COVID-19 Rapid Response Network (CCEDRRN) for the Network of Canadian Emergency Researchers (NCER) and the Canadian Critical Care Trials Group (CCCTG). (2022). Derivation and validation of a clinical decision rule to risk-stratify COVID-19 patients discharged from the emergency department: The CCEDRRN COVID discharge score. *J Am Coll Emerg Physicians Open*. 3(6): e12868. <http://dx.doi.org/10.1002/emp2.12868>
5. McRae AD, Archambault P, Fok P, Wiemer H, Morrison LJ, Herder M; Canadian COVID-19 Emergency Department Rapid Response Network Investigators. Reducing barriers to accessing administrative data on SARS-CoV-2 vaccination for research. *CMAJ*. 2022 Jul 18;194(27):E943-E947. doi: 10.1503/cmaj.211712. PMID: 35851526; PMCID: PMC9299746.
6. Davis P, Rosychuk RJ, Hau JP, Cheng I, McRae AD, Daoust R, Lang ES, Turner JP, Khangura L, **Fok PT**, Stachura M, Brar B, Hohl CM. (2022). Diagnostic Yield of Screening for SARS-CoV-2 among Patients Admitted for Alternate Diagnoses. *BMJ Open*.
7. Brooks SC, Rosychuk RJ, Perry JJ, Morrison LJ, Wiemer H, **Fok P**, Rowe BH, Daoust R, Vatanpour S, Turner J, Landes M, Ohle R, Hayward J, Scheuermeyer F, Welsford M, Hohl C; Canadian COVID-19 Rapid Response Network (CCEDRRN) for the Network of Canadian Emergency Researchers (NCER) and the Canadian Critical Care Trials Group (CCCTG). Derivation and validation of a clinical decision rule to risk-stratify COVID-19 patients discharged from the emergency department: The CCEDRRN COVID discharge score. *J Am Coll Emerg Physicians Open*. 2022 Dec 22;3(6):e12868. doi: 10.1002/emp2.12868. PMID: 36579029; PMCID: PMC9780419.
8. Vinson AJ, Zanjir W, Nallbani M, Goldstein J, Swain J, Clark DA, More KM, Manderville, JR, **Fok PT**, Wiemer H, Tennankore KK. Predictors of hyperkalemia among maintenance hemodialysis patients transported to the emergency department by ambulance. *Kidney360* Feb 2022, 10.34067/KID.0008132021; DOI: 10.34067/KID.0008132021.
9. Wheaton A, **Fok PT**, Holodinsky J, VanBerkel P, Volders D, Kamal N (2021). Optimal Transport Scenario with Rotary Air Transport for Access to Endovascular Therapy Considering Patient Outcomes and Cost: a Modeling Study. *Front. Neurol*. 12:768381. doi: 10.3389/fneur.2021.76838
10. Hohl, C. M., Rosychuk, R. J., McRae, A. D., Brooks, S. C., Archambault, P., **Fok, P. T.**, et al. (2021). Development of the Canadian COVID-19 Emergency Department Rapid Response Network population-based registry: a methodology study. *CMAJ Open*, 9(1), E261–E270. <http://doi.org/10.9778/cmajo.20200290>

11. Cole, V., Atkinson, P., Hanlon, R., Dutton, D. J., Liu, T., Fraser, J., Lewis, D., Brunt, K. R., Wiemer, H., Dahn, T., **Fok, P. T.**, Vaillancourt, C. CO-aVoID: coronavirus outbreak affecting variability of presentations to a local emergency department. *CJEM*, 23(2), 232–236. <https://doi.org/10.1007/s43678-020-00036-0>
12. **Fok, P.T.**, Teubner D., Purdell-Lewis, J., Pearce, A, Predictors of prolonged pre-hospital on-scene time in an Australian Emergency Retrieval Service. *Prehosp Disaster Med.* 2019 Jun;34(3):317-321
13. Bolduc C, Maghraby N, **Fok P**, Luong TM, Homier V., Comparison of Electronic Versus Manual Mass-Casualty Incident Triage. *Prehosp Disaster Med.* 2018 Jun;33(3):273-278
14. Huang, K-C., Zheng, L., Geng, S., **Fok P.T.**, Orfi, Z., Chen, Hui; Bernardos, A., Massie, B., Nalbantoglu, J., The Cocksackie and adenovirus receptor (CAR) modulates neurite outgrowth through interaction with cytoskeletal proteins. *J Neurochem.* Manuscript submitted.
15. Lucyk S., Vilensky D., **Fok P.T.**, Nelson, L.S., Reactivation of Plasma Butyrylcholinesterase by Pralidoxime Chloride in Patients Poisoned by WHO Class II Toxicity Organophosphorus Insecticides. *Toxicol Sci*, 2014. 138(2): 482
16. **Fok, P.T.**, et al. Identification and functional implications of beta-catenin binding with the Cocksackievirus and adenovirus receptor (CAR). Manuscript in preparation
17. **Fok, P.T.**, Huang K.C., Holland P.C., Nalbantoglu, J., The Cocksackie and adenovirus receptor binds microtubules and plays a role in cell migration. *J Biol Chem*, 2007. 282(10): p. 7512-21
18. Goldsmith, M.E., Kitazono M., **Fok, P.**, Aikou T., Bates, S., Fojo, T., The histone deacetylase inhibitor FK228 preferentially enhances adenovirus transgene expression in malignant cells. *Clin Cancer Res*, 2003. 9(14): p. 5394-401
19. Kitazono, M., Bates, S., **Fok, P.**, Fojo, T., Blagosklonny, M.V., The histone deacetylase inhibitor FR901228 (desipeptide) restores expression and function of pseudo-null p53. *Cancer Biol Ther*, 2002. 1(6): p. 665-8.

Book chapters

1. Goldstein, Judah., **Fok, P.T.**, From the Field to the Emergency Room and Beyond. In: Reznik, Jacqueline E., and Joshua Simmons. *Rehabilitation in Spinal Cord Injuries*. Elsevier Health Sciences, 2020.

AWARDED RESEARCH FUNDING

1. The impact of airway management quality improvement initiatives on the rate of first pass success without hypoxia or hypotension during critical care transport team-performed prehospital rapid sequence intubation.
Type: Operating Grant
Granting Agency: Dalhousie University Division of EMS Performance Bursary
Amount Funded: \$5,000
Role: Principal Investigator

2. QI Initiative to increase the performance of femoral nerve blocks for acute hip fracture patients in the ED
Type: Operating Grant (2021-2022)
Granting Agency: QEII Foundation
Amount funded: \$2,976
Role: Principal Investigator

3. Canadian COVID-19 Emergency Department Rapid Response Network (CCEDRRN)
Type: Operating Grant (2020-2021)
Granting Agency: CIHR
Amount funded: \$2,500,000
Role: Co-investigator

4. Atlantic Canada Together Enhancing Acute Stroke Treatment (ACTEAST): Improving Access and Efficiency of Treatment
Type: Operating Grant (2020-2023)
Granting agency: CIHR
Amount funded: \$317,476
Role: Co-investigator

5. Molecular mechanism of inhibited invasion and growth in CAR-expressing gliomas
Type: MD/PhD Studentship (2004-2009)
Granting agency: CIHR
Amount funded: \$131,250
Role: Principal Investigator

6. A Quality Improvement Initiative to Develop and Introduce a Regional Block Program into the Emergency Department.
Investigator type: Principal investigator
Status: Active

PRESENTATIONS AND LECTURES

Poster presentations

1. Holmes A, Goldstein J, Richards L, Upshaw C, Kasemets J, Renaud C, DeRosa A, MacDonald S, Fidge D, Kovacs G, **Fok PT**. Airway Management in a Critical Care Transport System: A Retrospective Analysis of First Attempt Success and Adverse Events. NAEMSP 2024.
2. Butler R, Goldstein J, **Fok PT**. A Chart Review to Assess the Use of Opioid and Non-opioid Analgesia during Emergency Medical Services (EMS) Interfacility Transfer (IFT). CAEP 2022.
3. Wheaton A, VanBerkel P, Volders D, **Fok PT**, Holodinsky JK, Kamal N. Optimal Transport Scenario for Access to Endovascular Therapy With Consideration of Patient Outcomes and Cost. International Stroke Conference, 11 March 2021.

Platform Presentations

1. Holmes A, Goldstein J, Richards L, Upshaw C, Kasemets J, Renaud C, DeRosa A, MacDonald S, Fidgeon D, Kovacs G, **Fok PT**. Airway Management in a Critical Care Transport System: A Retrospective Analysis of First Attempt Success and Adverse Events. Dalhousie University 15th Annual EMS Research Day, October 2023; Halifax, NS.
2. Butler R, Goldstein J, **Fok PT**. A Chart Review to Assess the Use of Opioid and Non-opioid Analgesia during Emergency Medical Services (EMS) Interfacility Transfer (IFT). Dalhousie University 13th Annual EMS Research Day, November 2021; Halifax, NS.
3. Wheaton A, VanBerkel P, Volders D, **Fok PT**, Holodinsky J, Kamal, N. Optimal Transport Scenario for Access to Endovascular Therapy with Consideration of Patient Outcomes and Cost. Dalhousie Emergency Medicine Research Day, 25 May 2021; Halifax, NS.
4. **Fok P.T.**, Teubner D, Purdell-Lewis J, Pearce A. Predictors of Pre-hospital On-scene Time in an Australian Emergency Retrieval Service. EMS Research Day, 30 October 2017; Halifax, NS.

Invited Lectures

1. **Fok P.T.** Hospital-based Disaster Exercises, Dalhousie University Mini-Medical School Lecture Series. 28 November 2019; Halifax, NS.
2. **Fok P.T.** To Fellowship or Not? Medical Student and Resident Track, Canadian Association of Emergency Physicians (CAEP) Annual Conference 2019. 25 May 2019; Halifax, NS.
3. **Fok P.T.** Retrieval Medicine Myth-busting. Emergency medicine: Montreal General Hospital Day, 2017 Dec 13; Montreal, QC.
4. **Fok, P.T.** Retrieval Medicine Myth-busting. A practical course in emergency medicine. McGill University Health Centre and Continuing Professional Development. 11 Dec 2017; Montreal, QC.
5. **Fok, P.T.** Are all pulmonary embolism decision rules equal? A practical course in emergency medicine. McGill University Health Centre and Continuing Professional Development. 2013 Dec; Montreal, QC.

COMMITTEES AND PROFESSIONAL ACTIVITIES

National

Royal College of Physicians and Surgeons of Canada, Examiner	2023-present
Canadian Association of Emergency Physicians, Board of Directors	2021-present

Hospital and University

Emergency Preparedness Committee, co-chair Department of Emergency Medicine, Halifax Infirmary, Queen Elizabeth II Health Centre	2017–present
Continuous Quality Improvement Committee, member Emergency Department, Halifax Infirmary, Queen Elizabeth Health Centre	2021–present

Peer Reviewer

Canadian Journal of Emergency Medicine	2017-present
Prehospital Evidence-based Practice (PEP), Dalhousie University	2017-present

SUPERVISION OF TRAINEES

Research

Primary supervisor, Undergraduate Medical Students, Research in Medicine Program

Alexander Holmes Faculty of Medicine, Dalhousie University <i>Airway Management in a Critical Care Transport System: A Retrospective Analysis of First Attempt Success and Adverse Events</i>	2023-present
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Rebecca Butler Faculty of Medicine, Dalhousie University <i>Assessing the use of opioid and non-opioid analgesia during Emergency Medical Services (EMS) Interfacility Transfers (IFTs)</i>	2022-present
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Clinical

Medical student, second-year elective

Alexander Holmes	2023-2024
Rebecca Butler	2021-2022
Gavin Lifman	2020-2021
Arun Govindapillai	2019-2020