

Ryan Chuang

Senior Managing Scientist | Health Sciences Denver

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Professional Profile

Dr. Chuang has expertise in emergency medicine and medical toxicology.

Dr. Chuang earned his M.D. from the Health, Science & Technology program from Harvard Medical School and Massachusetts Institute of Tehcnology in 2004. He subsequently did his emergency medicine residency at the University of Cincinnati and medical toxicology fellowship at Denver Health. Most recently, Dr. Chuang was a Clinical Associate Professor at the University of Calgary and currently works full time as an emergency physician at the Veteran Affairs Rocky Mountain Regional Hospital in Aurora, Colorado.

Academic Credentials & Professional Honors

M.D., Medicine, Harvard Medical School, 2004

B.Sc., Biological Sciences, Stanford University, 1999

Associate Dean's Letter for of Excellence for Clerkship Teaching – Platinum (40+ hours) 2021-2022

Visual Diagnosis Contest Winner, Society Academic Emergency Medicine - May 2003

John and Virginia Kaneb Scholarship, Harvard Medical School – 2002-2003

American Society of Hematology Summer Research Fellowship – 2000

Paul C. Withington Scholarship, Harvard Medical School – 199-2000

Beottcher Scholar, University of Colorado, Boulder - 1995-1997

Academic Appointments

07/2020 - Present University of Calgary, Calgary, AB, Clinical Associate Professor, Departments of **Emergency & Internal Medicine**

07/2016 - 06/2020, University of Calgary, Calgary, AB, Clinical Assistant Professor, Departments of **Emergency & Internal Medicine**

07/2004 - 07/2008, University of Cincinnati, Cincinnati, OH, Clinical Instructor, Resident, Dep. of **Emergency Medicine**

Prior Experience

04/2022 - Present Hospital for Sick Children, Toronto, ON Consultant, Ontario Poison Centre

07/2020 – Present University of Calgary, Calgary, AB Clinical Associate Professor, Departments of Emergency & Internal Medicine

07/2016 – 06/2020 University of Calgary, Calgary, AB Clinical Assistant Professor, Departments of Emergency & Internal Medicine

07/2016- Present VA Eastern CO Health Care System, Aurora, CO Attending Emergency Physician

04/2012 – 07/2017 Alberta Health Services, Calgary, AB Associate Medical Director, Medical Toxicology Consultant, Poison and Drug Information Service

04/2012 – 05/2023 Alberta Health Services, Calgary, AB Attending Emergency Physician at Foothills Medical Centre, Peter Lougheed Centre and Rockyview Hospitals

08/2010 – Present Rocky Mountain Poison and Drug Center, Denver, CO Volunteer Attending, Medical Toxicology

09/2008 - 03/2012 St. Joseph's Hospital, Denver, CO Attending Emergency Physicia

06/2012 - 07/2012 Northern CO Medical Center, Greeley, CO Attending Emergency Physician

06/2010 - 08/2011 St. Anthony's Central and North Hospitals, CO Attending Emergency Physician

07/2008 – 06/2010 Rocky Mountain Poison and Drug Center, Denver, CO Fellow in Medical Toxicology

11/2007 – 06/2008 Ft. Hamilton Hospital, Hamilton, OH Attending Emergency Physician

01/2008 - 06/2008 Cincinnati Children's Hospital, Cincinnati, OH Pediatric Transport Team Physician

07/2005 – 07/2008 University Hospital, Cincinnati, OH Air Care Flight Physician

07/2004 – 07/2008 University of Cincinnati, Cincinnati, OH Clinical Instructor, Resident, Dep. of Emergency Medicine

Professional Affiliations

2008 - Present American College of Medical Toxicology

2012 - Present Alberta Medical Association

2012 - Present Canadian Medical Association

2008 - Present American Academy of Clinical Toxicology

2010 – 2011 Denver Medical Society / Colorado Medical Society

2005 – 2008 American College of Emergency Physicians

2005-2008 Society of Academic Emergency Medicine

Publications

MacLeod-Glover, N and Chuang R. Chronic Lithium Toxicity. Canadian Family Physician, Apr. 2020, 66 (4) 258-261. https://www.cfp.ca/content/66/4/258

Yang SL, Lin YL, Masur J, Barby S, Chuang R, Johnson DW, Lucyk SL, Sivilotti MLA, Yarema MC. Outcomes After Recurrent Intentional Methanol Exposures Not Treated with Alcohol Dehydrogenase Inhibitors or Hemodialysis. J Emerg Med. 2020 Apr 16; S0736-4679 (20) 30160-8. https://www.jem-journal.com/article/S0736-4679(20)30160-8/pdf

Al Fawaz S, Al Deeb M, Huffman JL, Al Kholaif NA, Garlich F, Chuang R. A Case of Status Epilepticus and Transient Stress Cardiomyopathy Associated with Smoking the Synthetic Psychoactive Cannabinoid, UR-144, Am J Case Rep. . 2019 Dec 20, 2019: 1902-1906, DOI: 10.12659/AJCR.918918. https://www.ncbi.nlm.nih.gov/pubmed/31857571

Chuang R, Saleh F & Alyahya B (2018) Pediatric cardiac toxicity associated with fentanyl ingestion, Toxicology Communications, 2:1, 39-41, DOI: 10.1080/24734306.2018.1459108 https://www.tandfonline.com/doi/full/10.1080/24734306.2018.1459108

Shams TA, Gosselin S, Chuang R. Unintentional ingestion of black henbane: two case reports. Toxicology Communications. Vol. 1 Issue 1. 2017 Dec: 37-40.01. 1 Issue 1. 2017 Dec: 37-40. http://www.tandfonline.com/doi/full/10.1080/24734306.2017.1408876

Mithani S, Dong K, Wilmott A, Podmoroff H, Lalani N, Rosychuk R, Chuang R, Yarema MC. A cohort study of unstable overdose patients treated with intravenous lipid emulsion therapy. CJEM. 2016

Besserer F, Chuang R, Mink M, Massey L, Cload B. Tilmicosin toxicity: a case of accidental human tilmicosin injection managed with calcium, high-dose insulin and intravenous lipid emulsion therapy. Clin Toxicol (Phila). 2016 Sep;54(8):812-3.

MacLeod-Glover N, Mink M, Yarema M, Chuang R. Digoxin toxicity: Case for retiring its use in elderly patients? Can Fam Physician. 2016 Mar;62(3):223-8.

Levine M, Hoffman RS, Lavergne V, Stork CM, Graudins A, Chuang R, Stellpflug SJ, Morris M, Miller-Nesbitt A, Gosselin S; Lipid Emulsion Workgroup. Systematic review of the effect of intravenous lipid emulsion therapy for non-local anesthetics toxicity. Clin Toxicol (Phila). 2016 Mar;54(3):194-221.

Gosselin S, Morris M, Nesbitt-Miller A, Hoffman RS, Hayes BD, Turgeon AF, Gilfix BM, Grunbaum AM, Bania TC, Thomas SHL, Morais JA, Graudins A, Bailey B, Megarbane B, Calello DP, Levine M, Stellpflug SJ, Hoegberg LCG, Chuang R, Stork C, Bhalla A, Rollins CJ, Lavergne V as part of the AACT Lipid Emulsion Therapy Workgroup. "AACT Evidence-Based Recommendations on the use of Lipid Emulsion Therapy in Poisoning Methodology," Clinical Toxicology, Vol 53, Issue 6, pgs. 557-564, July 2015.

Wang GS, Narang SK, Wells K, R Chuang. "A case series of marijuana exposures in pediatric patients less than 5 years of age", Child Abuse &Neglect, Vol. 35, No, 7, pgs. 563-565, July 2011.

Monte AA, Chuang R, Bodmer M. "Dextromethorphan, Chlorpheniramine, and Serotonin Toxicity: Case Report and Systemic Literature Review", British Journal of Pharmacology, Vol. 70, Issue 6, pgs. 794-798, Dec. 2010.

Chuang, R. and KJ Heard. "Types of Studies Used to Support Treatment Recommendations in Medical Toxicology" J. of Medical Toxicology, April 2010.

Chuang, R. and AW Bernard. "A 31-Year-Old Woman Found Unresponsive with Tachycardia" Hospital Physician, May/June 2009: p. 29-32

Presentations

PADIS Conference, Alberta Health Services & University of Calgary – Beyond Good Supportive Care, Planning Committee Member, Simulation Session Developer and Supervisor, Lecturer "Double, Double Toil & Trouble: Gastric Decontamination", Nov. 15th, 2014

Advanced HAZMAT Life Support, 3rd Edition, Planning Committee Member, Simulation Session Developer and Supervisor, Lecturer "Cholinesterase Inhibitors: Organophosphates, etc.," "Antidotes in Detail," "Intro to CBRN," "Botulism," Jan. 27-28, 2014

University of Calgary, Rural CME Videoconference Program – "New Treatments and Considerations in Toxicology," September 11, 2012

Longmont United Hospital, Hospital CME, "Evaluation of the Tox Patient," Jan. 8, 2010

Lowry Clinic Medical Staff, Denver, CO, Lead Presentation, Feb. 2nd 2009

Editorships & Editorial Review Boards

2021 - Present Decision Editor, Canadian Journal of Emergency Medicine

Peer Reviews

2011 - Present Reviewer, Journal of Medical Toxicology

2012 - Present Reviewer, Clinical Toxicology

2017 - Present Reviewer, Canadian Journal of Emergency Medicine