



Larry C. Lands, MD, PhD

Director, Pediatric Respiratory Medicine, Pediatric Cystic Fibrosis Clinic, and Pediatric Pulmonary Function Laboratory

Fun fact about me

I have a comic book collection.

I love working with children and their families because

I enjoy listening to all the giggling.

Academic appointments

Professor, Department of Pediatrics, Faculty of Medicine, McGill University

Other current appointments

Canadian Thoracic Society Chair Research Committee

Cystic Fibrosis Canada Chair Scientific Advisory Council

CF Canada's clinical research network, CFCanACT, Executive Committee member and co-chair, protocol review committee

Associate Editor, Paediatric Respiratory Reviews

Associate Editor, Pediatric Pulmonology

Research interests

Children with lung diseases, such as asthma and cystic fibrosis, have excessive inflammation in their lungs. This often limits their ability to be physically active. I study how to calm down lung inflammation, boost immune defences, and improve physical performance. In our laboratory we are attempting to increase natural immunity to respiratory viral infections, to prevent people with chronic lung disease from becoming sicker when they catch a cold. In clinical research we are examining a new technique to measure lung function in young infants known as oscillometry. We continue to study exercise ability and the factors limiting exercise in children with chronic disease.

Research foci

Chronic lung disease; Anti-viral defense; Innate immunity; Exercise physiology; Nutrition

Keywords

Cystic fibrosis (CF), asthma, immune modulation, physical activity, translational research

Selected Publications

Dauletbaev N, Cammisano M (S), Herscovitch K (S), **Lands LC**. Targeted stimulation of antiviral interferon-beta in airway epithelial cells and macrophages with minimal concomitant inflammation. *J Immunol* 195(6):2829-41, 2015.

Dauletbaev N, Das M (S), Cammisano M (S), Koi C, Leigh R, Beaudoin T, Rousseau S, **Lands LC**. Viral load is high despite preserved interferon-beta response in rhinovirus-infected CF cells. *PLoS ONE* November 23; 10(11):e0143129. 2015.

Mak, DYF, Sykes J, Stephenson AL, **Lands LC**. The benefits of newborn screening for cystic fibrosis:

The Canadian Experience. J CF 2016 May;15(3):302-8.

Hebestreit H, Hulzebos EH, Schneiderman JE, Karila C, Boas SR, Kriemler S, Dwyer T, Sahlberg M, Urquhart DS, **Lands LC**, Ratjen F, Takken T, Varanistkaya L, Rücker V, Hebestreit A, Usemann J, Radtke T. Cardiopulmonary exercise testing provides additional prognostic information in cystic fibrosis. Am J Respir Crit Care Med 2019;199(8):987-995.

Middleton PG, Mall MA, Dřevínek P, **Lands LC**, McKone EF, Polineni D, Ramsey BW, Taylor-Cousar JL, Tullis E, Vermeulen F, Marigowda G, McKee CM, Moskowitz SM, Nair N, Savage J, Simard C, Tian S, Waltz D, Xuan F, Rowe SM, Jain R; VX17-445-102 Study Group. Elexacaftor-Tezacaftor-Ivacaftor for Cystic Fibrosis with a Single Phe508del Allele. N Engl J Med. 2019 Nov 7;381(19):1809-1819.