Curriculum Vitae of Guilherme A. F. Fregonezi, PhD

Introduction

I'm Full Professor, Department of Physical Therapy, Universidade Federal do Rio Grande do Norte (UFRN) - Brazil and actually Visiting Professor at Blanquerna University - Universitat Ramon Llull Barcelona, Spain. My actual main research interests include three areas: Respiratory Assessment and Rehabilitation; Respiratory and cardiovascular Physiology and Healthy Technology Assessment-HTA. Our hypotheses/projects are designed to produce evidence in rehabilitation techniques especially in the field of respiratory and cardiovascular diseases.

Disciplines: Physiotherapy , Respiratory Physiology - Rehabilitation and Respiratory Medicine

Skills and expertise: Ventilation, Lung Diseases, Respiration Disorders, Respiratory Physiology, Respiratory Mechanics, Chronic Obstructive Pulmonary Disease, Pulmonology, Pulmonary Function Test.

Languages: Portuguese - Spanish - English - Italian

Position

- Full Professor, Department of Physical Therapy, Universidade Federal do Rio Grande do Norte (UFRN)
- Actually Visiting Professor at Blanquerna University - Ramon Llull University (Universitat Ramon Llull) in Barcelona, Spain

Specialization: Respiratory and Cardiovascular Physiotherapy, Health Technology Evaluation, Innovation in Rehabilitation

Academic Background

- Undergraduate Degree: B.Sc. in Physiotherapy, Universidade Estadual de Londrina (UEL), 1999.

Postgraduate Degrees and Postdoctoral Training

- Specialization in Respiratory and Cardiovascular Kinesitherapy, Université Paris Descartes, 2004.
- M.Sc. and Ph.D. in Neurosciences, Autonomous University of Barcelona/Hospital de Sant Pau (2003, 2005).
- Postdoc fellowships at Politecnico di Milano (2011, 2014), University of Toronto (2018-2019) and a national postdoctoral program with CAPES at UFPE in CardioPulmonary Physical Therapy.

Professional Experience

- Full Professor at UFRN, Department of Physical Therapy. PI of the PneumoCardioVascular Lab at Hospital Universitário Onofre Lopes.
- Researcher at the Laboratory of Technological Innovation in Rehabilitation, UFRN.
- Visiting Professor at the University of Toronto and Universidad de Concepción (Master program).
- Leadership: Former Coordinator of UFRN's Doctorate in Biotechnology (RENORBIO) a
- Consulting and Review Roles: Consultant for research bodies such as CNPq, CAPES, and international organizations. Permanent collaborator of the Cochrane Collaboration in systematic reviews for respiratory, cardiovascular, and neuromuscular conditions.

- Research Focus and Contributions: Professor Fregonezi's research is highly specialized in respiratory physiology, non-invasive respiratory muscle evaluation, and rehabilitation technologies. He has extensively studied chronic respiratory diseases, muscular dystrophies, and the impact of innovative rehabilitation techniques.

Funding

Academic Mentorship

Over 24 undergraduate and 20 graduate students supervised (Pós-Doctoral, Ph.D, MS.C) contributing to the training of future researchers in the field of respiratory and cardiovascular physiotherapy.

Article publication list (138 article records since 2004) - List of 2024 and 2025

1. OTTO-YÁÑEZ, MATÍAS; JIMÉNEZ-ZÚÑIGA, SEBASTIÁN; PÉREZ, ALEJANDRA; DE FREITAS FREGONEZI, GUILHERME AUGUSTO et al.. Reliability and Feasibility of the One-Leg Sit-To-Stand Test, a Measurement Tool for Unilateral Lower Limb Strength in Healthy Adults. MEASUREMENT IN PHYSICAL EDUCATION AND EXERCISE SCIENCE. v.1, p.1 - 10, 2025.
2. BARRAL-FERNÁNDEZ, M.; JÁCOME PUMAR, M.A.; SOUTO-CAMBA, S.; FREGONEZI, G.A. et al.. Análisis comparativo de los valores de las presiones respiratorias máximas con los valores de referencia en una población pediátrica española sana. FISIOTERAPIA (MADRID. ED. IMPRESA). v.xx, p.1, 2025.
3. CARDOSO, NATÁLIA L.; DE SÁ, JOCELINE F.; DO NASCIMENTO, LARISSA F.E.; FREGONEZI, GUILHERME A.F. et al.. Psychometric properties of the sit-to-stand test for patients with pulmonary hypertension: A systematic review. Brazilian Journal of Physical Therapy. v.29, p.101223, 2025.
4. NASCIMENTO, ELIZANE POQUIVIQUI DO; NASCIMENTO, LARISSA FERNANDA ESTEVAM DO; CASTRO, LHARA DE FREITAS; Fregonezi, Guilherme Augusto de Freitas et al.. Cardiac Hemodynamics, Tissue Oxygenation, and Functional Capacity in Post-COVID-19 Patients. Medicina-Lithuania. v.61, p.124, 2025.
5. LIMA, THIAGO BEZERRA WANDERLEY E; FONSECA, JESSICA DANIELLE MEDEIROS DA; SILVA, ANA ALINE MARCELINO DA; Fregonezi, Guilherme Augusto de Freitas et al.. Methods to normalize surface electromyography in respiratory muscles: Is it similar between amyotrophic lateral sclerosis and healthy people?. PLoS One. v.19, p.e0315846 - 1, 2024.
6. DA SILVA, LAILANE SATURNINO; VIEIRA, RAYANE GRAYCE DA SILVA; WANDERLEY E LIMA, THIAGO BEZERRA; Fregonezi, Guilherme Augusto de Freitas et al.. Effect of Body Position on Electrical Activity of Respiratory Muscles During Mouth and Nasal Maximal Respiratory Pressure in Healthy Adults: A Pilot Study. Journal Of Functional Morphology And Kinesiology. v.9, p.241, 2024.
7. ARAUJO, P. R. S.; MEDEIROS, J. D.; MARCELINO, ANA ALINE; FREGONEZI, GAF et al.. Reference values for respiratory muscle strength and maximal voluntary ventilation in the Brazilian adult population: A multicentric study. PLoS One. v.21, p.e0313209, 2024.
8. BENAVIDES, VICENTE; TORRES-CASTRO, RODRIGO; FREGONEZI, GUILHERME A.F. et al.. Evidence-based practice in respiratory healthcare professionals in Latin America:. Colombia Medica. v.55, p.e2005884, 2024.

9. BRITO, OZANA; Fregonezi, Guilherme et al.. Assessment of the Clinical and Functional Health Status of Patients with Amyotrophic Lateral Sclerosis during the COVID-19 Pandemic in Brazil Using Telemedicine. Healthcare. v.12, p.627, 2024.