

**Curriculum Vitae**  
Sauwaluk Dacha, PT, PhD

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**Date of Birth:** 16 September 1982  
**Place of Birth:** Nakhonsawan, Thailand  
**Nationality:** Thai

**Address:**

Work: Faculty of Associated Medical Sciences, Chiang Mai University  
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**Education/Degree**

11/2019	Doctor of Biomedical Sciences (PhD), Faculty of Movement and Rehabilitation Sciences; Research Group of Cardiovascular and Respiratory Rehabilitation KU Leuven, Belgium Thesis title: Effects of respiratory muscle training on psychological and physiological aspects of dyspnea perception and exercise tolerance in patients with COPD Promotor Prof. Dr. Daniel Langer Co-promotors Prof. Dr. Rik Gosselink, Prof. Dr. Andreas Von Leupoldt
06/2011	Master of Health Service Administration, Strayer University, VA, United States
03/2004	Bachelor of Science (Physical Therapy), Chiang Mai University, Chiang Mai, Thailand

**Position**

10/2012-Present	Lecturer at Department of Physical Therapy, Chiang Mai University, Chiang Mai, Thailand
06/2008-03/2009	Physical Therapist at Department of Physical Therapy, Sawanpracharak Hospital, Nakhonsawan, Thailand
04/2004-02/2006	Physical Therapist at Department of Physical Therapy, Srisawan Hospital, Nakhonsawan, Thailand

**Training and Courses**

04/2017	ERS (European Respiratory Society) Pulmonary rehabilitation course, Athens, Greece
03/2017	Spike 2 program; CED (Cambridge Electronic Design Limited), Cambridge, United Kingdom

## Publications

1. **Dacha S**, Janssens L, Rodrigues A, Louvaris Z, Janssens L, Gosselink R, et al. Comparison Between Manual and (Semi-)Automated Analyses of Esophageal Diaphragm Electromyography During Endurance Cycling in Patients With COPD. *Front Physiol.* 2019;10(885). **[Published: 10 July 2019] Q2 –This paper is based on chapter 4 of my Ph.D. dissertation**
2. Charususin N, **Dacha S**, Gosselink R, Decramer M, Von Leupoldt A, Reijnders T, et al. Respiratory muscle function and exercise limitation in patients with chronic obstructive pulmonary disease: a review. *Expert Rev Respir Med.* 2017;1-13. **[Published: 06 Nov 2017] Q2-- This paper is based on chapter 2 of my Ph.D. dissertation**
3. Langer D, Ciavaglia C, Faisal A, Webb KA, Neder JA, Gosselink R, **Dacha S**, Topalovic M, Ivanova A, O'Donnell D. E. Inspiratory muscle training reduces diaphragm activation and dyspnea during exercise in COPD. *J Appl Physiol (1985).* 2018;125(2):381-92. **[Published: 1 Aug 2018] Q2**
4. Caleffi Pereira M, **Dacha S**, Testelmans D, Gosselink R, Langer D. Assessing the effects of inspiratory muscle training in a patient with unilateral diaphragm dysfunction. *Breathe.* 2019;15(2):e90-e6. **[Published: 01 June 2019] Q3**

-----**PhD Graduation 03 Oct 2019**-----

5. Radtke T, Crook S, Kaltsakas G, Louvaris Z, Berton D, Urquhart S. D, Kampouras K, Rabinovich A. R, Verges S, Kontopidis D, Boyd J, Tonia T, Langer D, De Brandt J, Goërtz V, Burtin C, Spruit A. M, Braeken C. W. D, **Dacha S**, Franssen M. E. F, Laveneziana P, Eber E, Troosters T, Neder J.A, Puhan A. M, Casaburi R, Vogiatzis\* I, Hebestreit H. ERS Statement on Standardisation of Cardiopulmonary Exercise Testing in Chronic Lung Diseases. *Eur Respir Rev.* 2019;28(154). **[Published: 31 Dec 2019] Q1**
6. Rodrigues A, Louvaris Z, **Dacha S**, Janssens W, Pitta F, Vogiatzis I, et al. Differences in Respiratory Muscle Responses to Hyperpnea or Loaded Breathing in COPD. *Med Sci Sports Exerc.* 2020;52(5):1126-34 **[Published: 01 May 2020] Q1**
7. Louvaris Z, Rodrigues A, **Dacha S**, Gojevic T, Janssens W, Vogiatzis I, et al. High-intensity exercise impairs extradiaphragmatic respiratory muscle perfusion in patients with COPD. *J Appl Physiol.* 2020; doi:10.1152/jappphysiol.00659.2020 **[Published: 29 Oct 2020] Q2**
8. **Dacha S**, Chuatrakoon B, Sornkaew K, Sutthakhun K, Weeranorapanich P. Effects of wearing different facial masks on respiratory symptoms, oxygen saturation, and functional capacity during six-minute walk test in healthy subjects. *Can J Respir Ther.* 2022 Jun 22;58:85-90. doi: 10.29390/cjrt-2022-014. PMID: 35800851; PMCID: PMC9212081. **[Published: 22 June 2022] Q2**
9. **Dacha S**, Chaiwong W, Tajarerntmuang P. Association of cardiovascular disease with COPD: cardiac function and structure evaluation. *J Bras Pneumol.* 2022 Nov 14;48(5):e20220388. English, Portuguese. doi: 10.36416/1806-3756/e20220388. PMID: 36383782. **[Published: 14 Nov 2022] Q3**
10. Khamtue K, Sitalertpisan P, **Dacha S**. Comparative effects of wearing N95, surgical, cloth, and PM2.5 masks during six-minute walk test on dyspnea, breathing effort, oxygen saturation, and functional capacity in pre-aging individuals. *Journal of Associated Medical Sciences.* 2023;56(2):8-17. **[Published: 5 Jan 2023] Scopus database**
11. Chaiut W, Sapbamrer R, **Dacha S**, et al. Characteristics of Respiratory Syncytial Virus Infection in Hospitalized Children Before and During the COVID-19 Pandemic in Thailand. *J Prev Med Public Health.* 2023;56(3):212-220. doi:10.3961/jpmph.23.019. **[Published: 23 Mar 2023] Q2**
12. Chaiut W, Sapbamrer R, **Dacha S**, Sudjaritruk T, Malasao R. Epidemiology and associated factors for hospitalization related respiratory syncytial virus infection among children less than 5 years of age in Northern Thailand. *Journal of Infection and Public Health.* 2023;16(10):1659-65. **[Published: 3 Aug 2023] Q1**

## Participation at international meetings

1. **Dacha S**, Langer D, Ciavaglia C, Webb K, Preston M, O'Donnell DE. Effect of Inspiratory Muscle Training on Respiratory Muscle Function and Diaphragm Activation in Patients with COPD. A109. HIGHLIGHTS IN PULMONARY REHABILITATION: ILD, ADJUNCTS, AND INSPIRATORY MUSCLE TRAINING. American Thoracic Society International Conference Abstracts: American Thoracic Society; 2017. p. A2860-A.
2. **Dacha S**, Langer D, Ciavaglia C, Webb K, Preston M, O'Donnell DE. Effect of inspiratory muscle training (IMT) on static and dynamic respiratory muscle function in patients with COPD. Eur Respir J. 2017;50(suppl 61):OA2923. **[Oral presentation]**
3. **Dacha S**, Janssens L, Louvaris Z, Janssens L, Gosselink R, Langer D. Comparison between manual and automated analyses of esophageal diaphragm electromyography during endurance cycling in patients with COPD. Eur Respir J. 2018;52(suppl 62):PA1714.
4. Janssens L, Langer D, **Dacha S**, Louvaris Z, Brumagne S, Goossens N, et al. Inspiratory muscle training decreases ankle proprioceptive use during balance control in patients with COPD. Eur Respir J. 2018;52(suppl 62):PA1708.
5. Louvaris Z, **Dacha S**, Janssens L, Gosselink R, Vogiatzis I, Langer D. Inspiratory muscle effort, perfusion and oxygenation responses to inspiratory muscle training (IMT) with Tapered Flow Resistive Loading (TFRL) and Normocapnic Hyperpnea (NH) in COPD. Eur Respir J. 2018;52(suppl 62):OA3634.
6. **Dacha S**, Louvaris Z, Janssens L, Testelmans D, Gosselink R, Langer D. Effect of an Inspiratory Muscle Training (IMT) Program on Respiratory Muscle Function, Symptoms of Dyspnea, Respiratory Muscle Activation and Tissue Oxygen Delivery During Exercise Breathing in a Patient with Idiopathic Unilateral Diaphragmatic Paralysis: A Case Report. B60. PULMONARY REHABILITATION: GENERAL. American Thoracic Society International Conference Abstracts: American Thoracic Society; 2019. p. A3744-A.
7. **Dacha S**, Rodrigues A, Louvaris Z, Janssens L, Janssens W, Gosselink R, et al. Effects of inspiratory muscle training (IMT) on dyspnea, respiratory muscle function and respiratory muscle activation in patients with COPD during endurance cycling. 2019;54(suppl 63):PA2199.
8. Caleffi Pereira M, **Dacha S**, Rodrigues A, Testelmans D, Gosselink R, Langer D. Diaphragm function during exercise in unilateral diaphragmatic dysfunction. 2019;54(suppl 63):PA2191.
9. Caleffi Pereira M, **Dacha S**, Testelmans D, Gosselink R, Langer D. Inspiratory muscle training (IMT) in unilateral diaphragmatic dysfunction: case reports. 2019;54(suppl 63):PA1150.
10. Rodrigues A, Louvaris Z, **Dacha S**, Janssens W, Gosselink R, Langer D. Respiratory muscle activation, breathing pattern and respiratory muscle oxygen availability during Tapered Flow Resistive Loading and Normocapnic Hyperpnea in COPD. 2019;54(suppl 63):PA2205.
11. Louvaris Z, Rodrigues A, Dierckx S, **Dacha S**, Janssens W, Gosselink R, et al. Late Breaking Abstract - Heterogeneity of metabolism and activation in lower limb muscles during exercise in COPD: a preliminary data analysis. 2019;54(suppl 63):OA3565.
12. Louvaris Z, **Dacha S**, Rodrigues A, Janssens W, Gosselink R, Langer D. Respiratory muscle perfusion limitations and dyspnoea during cycling in chronic obstructive pulmonary disease. 2020;56(suppl 64):2557.
13. Gojevic T, Caleffi Pereira M, **Dacha S**, Louvaris Z, Testelmans D, Gayan-Ramirez G, et al. Mechanisms of exertional dyspnea in unilateral diaphragmatic dysfunction. 2020;56(suppl 64):2965.
14. Janssens L, Langer D, **Dacha S**, Louvaris Z, Brumagne S, Goossens N, et al. Enhanced balance strategy after inspiratory muscle training in patients with COPD, an interim analysis. 2020;56(suppl 64):2967.

15. **Dacha S**, Chuatrakoon B, Sornkaew K, Sutthakhun K, Weeranorapanich P. Impact of wearing different facial masks on respiratory symptoms, oxygen saturation, and functional capacity during six-minute walk test (6MWT) in healthy young adults. 2021;58(suppl 65):OA1183. **“ERS Best Abstract Grant in Physiotherapy 2021” [Oral presentation]**
16. Janssens L, Jacobs N, Langer D, **Dacha S**, Louvaris Z, Brumagne S, et al. Does the diaphragm contribute to balance control in patients with COPD? 2021;58(suppl 65):PA2211.
17. **Dacha S**, Chuatrakoon B, Parameyong A, Chalermboon C, Thumpunya N. Physical therapists' opinions on the effect of the COVID-19 pandemic on physical therapy management in government and private hospitals in Thailand: Preliminary results of a survey. 2022;60(suppl 66):2372. **ERS 32<sup>nd</sup> International Congress Barcelona, Spain, 5 September 2022.**
18. Rodrigues A, Janssens L, **Dacha S**, Louvaris Z, Gojevic T, Janssens W, et al. Timing of inspiratory muscle activity in patients with unilateral diaphragm dysfunction. 2022;60(suppl 66):1299.

### **Supervision of Master students**

2015-2017

1. Effects of inspiratory muscle training on shortness of breath (dyspnea) in patients with COPD.
2. Lung volume specificity of two different inspiratory muscle training protocols.
3. Effects of inspiratory muscle training on exercise capacity, blood flow distribution and peripheral muscle fatigue in COPD.

2016-2018

1. Effects of inspiratory muscle training on blood flow distribution between respiratory and locomotor muscles during exercise in patients with COPD.
2. Effects of inspiratory muscle training on dyspnea and respiratory muscle activity in patients with COPD.
3. Prevalentie van spierdysfunctie en symptomen van dyspneu bij borstkankerpatiënten.

2017-2019

1. Effects of inspiratory muscle training on exertional breathlessness in patients with unilateral diaphragm paralysis.
2. Effects of inspiratory muscle training on shortness of breath (dyspnea) in patients with COPD.

2018-2020

1. Effects of inspiratory muscle training on the symptoms of dyspnoea in patients with chronic obstructive pulmonary disease.

2019-2023

1. Comparative Effects of Wearing N95, Surgical, Cloth, and PM2.5 Masks During Six-Minute Walk Test on Dyspnea, Breathing Effort, Oxygen Saturation, and Functional Capacity in Pre-Aging Individuals

### **Experience**

03/2006-01/2008 Thai- American Cultural exchanged Student, American Institute for Foreign Study (AIFS), VA, United States

**Research Interest:**

Respiratory muscle training/ Cardiopulmonary rehabilitation/ Dyspnea mechanism/ COPD/  
Neural Respiratory Drive (NRD)/ Diaphragm paralysis/ Electromyogram (EMG)

**Research Experience:**

- Healthy Khun Chan Khian: An Epidemiological Study of Health Status in a Hmong Village
- Effects of Inspiratory Muscle Training on respiratory muscle activation, locomotor muscle function, and affective dyspnea response related brain activation patterns during exercise in patients with COPD
- Prevalence and factors associated with frailty in the community dwelling aging in Chiang Mai
- Inspiratory muscle strength after COVID-19 severe pneumonia admitted to medical ICU

**Memberships:**

Member of Thailand Physical Therapy Council  
Member of BVP-SBP (Belgian Society for Pneumology)  
Member of European Respiratory Society (ERS)  
Member of American Thoracic Society (ATS)