



Luc Souilla

POST-DOCTORAL FELLOW

Montréal, Canada

✉ lucsouilla@gmail.com

🏠 <https://luc-souilla.netlify.app/> | 📧 Souilla-Luc | 📞 0000-0002-5773-1440 | 📄 Luc_Souilla

About me

I am an interdisciplinary researcher driven by the main question: How will global warming shape human health across the lifespan? During my PhD, I developed strong expertise in the physiology and physical activity of child and adolescent health in clinical settings. Driven by a keen interest in climate change and strengthened through international collaborations, I began exploring the intersection of global warming and paediatric health, further deepening my focus on human adaptation to heat. I held a postdoctoral fellowship to investigate the physiological and behavioural responses to heat exposure. I intend to integrate my expertise in child health and environmental physiology to acquire novel methodologies aimed at understanding and mitigating the impact of heat on children's health at individual level with lab-based studies and population level using cohort-based studies.

Current position

Post-doctoral position

Montreal, Canada

MONTREAL HEART INSTITUTE - UNIVERSITY OF MONTRÉAL

Nov. 2024

- Physiological and perceptual responses to heat exposure
- Human Integrative Physiology Laboratory (Pr. Daniel Gagnon)

Education

PhD Fellow and Associate Lecturer

Montpellier, France

SPORT SCIENCE FACULTY

Oct. 2021 - Sept. 2024

- Evaluation and optimisation of physical fitness and physical activity in children with inherited cardiac diseases
- Supervised by Pr. Pascal Amedro, Pr. Jean-Luc Pasquie, Pr. Denis Mottet

MSc degree in Sport Sciences and Exercise

Montpellier, France

SPORT SCIENCE FACULTY

Sep. 2020 - July. 2021

- Sciences, Technology, Movement, top of the class.

BSc in Sport Sciences - Exercise and Health

Toulouse and Montpellier, France

SPORT SCIENCE FACULTY

Sep. 2018 - July. 2019

- Exercise and chronic conditions, top of the class.

Selected Publications

I have published 12 papers in peer-reviewed journal, 6th as first author, with a total of 158 citations.

- Vanos, J.K., Guardaro, M., Middel, A., Ravanelli, N., [...], **Souilla, L.**, [...], Ouazaa Y., Gagnon D. *Hot Topics: Building Capacity for Extreme Heat Adaptation Through Transdisciplinary Training*. Bull. Amer. Meteor. Soc., [link here](#)
- Dahhak, A., Pamart, N., [...], **Souilla, L.**, Deshayes, T. (2025). *Fight Fire with Fire: Is Heating Rather than Cooling the Key to Muscle Recovery?*, The Journal of Physiology. [link here](#)
- **Souilla, L.**, Shaheen, A., Nasser Mostafa, A., Abuzerr, S. (2025). *The Escalating Health Crisis in Gaza Amidst Armed Conflict and Heatwaves*, Global Health Action. [link here](#).
- **Souilla, L.**, Werner, O., Huguet, H., [...], Amedro, P., (2025). *Cardiopulmonary Fitness and Physical Activity Among Children and Adolescents With Inherited Cardiac Disease*, JAMA Open. [link here](#).
- **Souilla, L.**, Guillaumont, S., Auer, A., [...], Amedro, P., (2024). *Cardiac rehabilitation in children and adolescents with long QT syndrome: the RYTHMO'FIT pilot study*, BMC Sports Sci, Med and Rehab. [link here](#).
- **Souilla, L.**, Amedro, P., Morrison, S., (2024). *Children with cardiac disease and heat exposure: catastrophic converging consequences?*, Pediatric Exercise Science. [link here](#).
- **Souilla, L.**, Larsen, A.C., Juhl, C., Skou, S.T., Bricca, A., (2024). *Childhood and adolescence physical activity and multimorbidity later in life: A systematic review*, Journal of Multimorbidity and Comorbidity. [link here](#).

- **Souilla, L.,** Avesani, M., [...], Pasquie, J-L., Guillaumont, S., and Amedro, P., (2023). *Cardiorespiratory fitness, muscle fitness, and physical activity in children with long QT syndrome: A prospective controlled study*, Front. Cardiovasc. Med. [link here](#).
- Amedro, P., Gavotto, A., Huguette, H., **Souilla, L.,** [...], Guillaumont, S. (2024). *Early hybrid cardiac rehabilitation in congenital heart disease: the QUALIRE-HAB multicentre randomized controlled trial*, European Heart Journal. [link here](#).
- Amedro, P., Matecki, S., [...], **Souilla, L.,** [...], Gavotto, A. (2023). *Reference Values of Cardiopulmonary Exercise Test Parameters in the Contemporary Paediatric Population*, Sports Medicine. [link here](#).
- Gavotto, A., Mura, T., [...], **Souilla, L.,** [...], Amedro, P. (2023). *Reference values of aerobic fitness in the contemporary paediatric population*, European Journal of Preventive Cardiology. [link here](#).
- Amedro, P., Werner, O., [...], **Souilla, L.,** [...], Pasquie, J-L. (2021). *Health-related quality of life and physical activity in children with inherited cardiac arrhythmia or inherited cardiomyopathy: the prospective multicentre controlled QUALIMYORHYTHM study rationale, design and methods*, Health Qual Life Outcomes. [link here](#).

Professional Experiences

Workshop facilitator

ELEMENTARY AND HIGH SCHOOL

- Fresk animation for children: Cardiovascular Thermoregulation in human and impact of global warming

Montréal, Canada

March. 2025

Project manager

UNIVERSITY OF SPORT SCIENCE

- Kickoff event on Sports and Climate Change
- Organizing an awareness day on climate change and the impact of sports for students

Montpellier, France

Sept. 2023 - January. 2024

Research Mobility

SOUTHERN DENMARK UNIVERSITY - DEPARTMENT OF SPORT SCIENCES AND CLINICAL BIOMECHANICS

- ERC projet MOBILIZE
- Effect of tailored exercise program on multimorbidity / Systematic review on physical activity, childhood and multimorbidity

Odense, Denmark

May. 2023 - July. 2023

Research intern

PHYMEDEXP - INSERM U1046

- Supervised by Pascal Amedro
- Cardiorespiratory Fitness and Muscular Deconditioning in congenital Long QT syndrome children

Montpellier, France

Sep. 2020 - July. 2021

Competitive Grants

I have been involved in successful research proposals, securing €10,000 as the principal investigator and €1,117,100 as a collaborator.

Climate Fresk Welcome Day: Orientation Day on climate awareness for students of the exercise science department

EXCELLENCE PROGRAM I-SITE FROM UNIVERSITY OF MONTPELLIER

- Contributed to the conception and design of workshops and activities for the event (co-applicant)

September 2023

€17,100

RYTHMO'FIT: Interventional pilot study

FROM SAINT PIERRE FOUNDATION

- Designing exercise rehabilitation program for children with long QT syndrome (Principal investigator)

July 2022

€10,000

QUALIREHAB-ONCO: Effect of home based exercise rehabilitation program on childhood cancer survivors

FROM ARC: FOUNDATION FOR CANCER RESEARCH

- Help to design and draft the intervention, final proofreading (co-applicant)

June 2021

€450,000

QUALINEUROREHAB: Neuro-cardiac Rehabilitation in Youth With Congenital Heart Disease

EUROPEAN JOINT PROGRAMME ON RARE DISEASES

- Help to design and draft the intervention, final proofreading (co-applicant)

2021

€650,000

Fellowship & Awards

My research has been supported by over €118,490 in fellowships and awards.

CHIR PostDoctoral Fellowship

CANADIAN INSTITUTES OF HEALTH RESEARCH

- Ranked in the top 19% nationally (score: 4.40/5, rank 77/671); not funded due to international applicant funding cap)

April 2026

Unfunded

MSCA PostDoc Seal of Excellence

March 2026

EUROPEAN COMMISSION – HORIZON EUROPE

Unfunded

- Awarded the Seal of Excellence for a highly ranked MSCA Postdoctoral Fellowship application (scored 89.40/100, unfunded due to budget constraints)

PhD Scholarship

Oct.2021-2024

FROM UNIVERSITY OF MONTPELLIER

110 000€

- PhD fellowship awarded through a competitive doctoral entrance exam for three-years support

International mobility EXPLORE #4

May-June 2023

EXCELLENCE PROGRAM I-SITE FROM UNIVERSITY OF MONTPELLIER

7990€

- PhD mobility to Southern Denmark University under supervision of Prof. Søren T. Skou, working on ERC grant funded project: MOBILIZE

Call for support for national or international mobility

May 2021

FROM UNIVERSITY OF MONTPELLIER

500€

- Support for participation in the International Congress of Association for European Paediatric Congenital Cardiology in Geneva, Switzerland

Media & Outreach

I have been involved in several media and outreach activities, including interviews, video creation, and public talks, to disseminate my research findings.

School of Global Health

Copenhagen, Denmark

IN-SITU RESPONSES OF OLDER ADULTS LIVING IN SOCIAL HOUSING BEFORE, DURING AND AFTER A HEATWAVE [WATCH VIDEO 

2025

CBC/Radio Canada

Montreal, Canada

EXPERIMENTAL EXPOSURE TO EXTREME HEAT BY A JOURNALIST [WATCH VIDEO 

2025

Cardiogen

Montpellier, France


CO-CREATED PUBLIC OUTREACH VIDEO ON EXERCISE REHABILITATION BENEFITS FOR CHILDREN WITH CARDIAC DISEASES

[WATCH VIDEO 

2025

Teaching Experience

I have accumulated 132 hours of teaching involving course design and teaching using active learning strategies, creating workshops and quizzes to engage students.

| Courses | Level | Hours | Contribution |
|--|-------|-------|---|
| Exercise physiology and Cardiovascular Impairments | BSc | 50h | Delivered with provided material |
| Anatomy of Human Movement | BSc | 26h | Delivered with provided material |
| Climate change and challenges for physical activity and sports | MSc | 16h | Created course content [Watch video  |
| Neuroscience of Motor Performance | BSc | 16h | Delivered with provided material |
| Adaptations to Exercise and Health | BSc | 16h | Delivered with provided material |
| Research Methodology | MSc | 8h | Delivered with provided material |
| Exercise programs for children with inherited cardiac diseases | BSc | 4h | Created course content |

Supervision

Mentoring MSc Student

Bordeaux, France

SPORTS SCIENCE UNIVERSITY

Oct. 2023–Oct. 2024

- Trained student in cardiopulmonary exercise testing and accelerometry; assisted in designing research protocols
- Supported protocol design, dissertation writing, and funding applications

Mentoring BSc Student

Montpellier, France

SPORTS SCIENCE UNIVERSITY

Oct. 2023–Dec. 2023

- Mentored student during a kickoff event on Sports and Climate Change
- Provided individual support for developing personal projects

Mentoring MSc Student

Bordeaux, France

UNIVERSITY HOSPITAL OF PAEDIATRIC CARDIOLOGY

Jan. 2023

- Assisted in designing exercise interventions; supported dissertation writing and funding applications

Conferences & Presentations

Annual research days: School of Kinesiology and Physical Activity Sciences

Montréal, Canada

POSTER PRESENTATION

March 2026

- Souilla L. (2026). In situ responses of elderly people living in social housing before, during, and after a heatwave.

Global Health Symposium: Extreme heat and health

Copenhagen, Denmark

ORAL PRESENTATION

December, 2025

- Souilla L. (2025). In-situ responses of older adults living in social housing before, during and after a heatwave

Global School on Heat Adaptation

Montréal, Canada

SESSION ANIMATOR

July 2025

- Souilla L. (2025). Demonstration and implementation of HeatSuite to monitor physiological and perceptual responses to heat

Seminars of the EPIC Center

Montréal, Canada

ORAL PRESENTATION

September 2025

- Souilla L. (2025). Deriving indoor heat-health relationships from remote physiological and behavioural monitoring of older adults living in social housing

Annual research days: School of Kinesiology and Physical Activity Sciences

Montréal, Canada

POSTER PRESENTATION

March 2025

- Souilla L. (2025). In situ responses of elderly people living in social housing before, during, and after a heatwave.

International Congress of Association for European Paediatric Congenital Cardiology

Porto, Portugal

ORAL PRESENTATION

May 2024

- Souilla L., Guillaumont S., ..., Amedro P. (2024). Cardiac rehabilitation in children and adolescents with long QT syndrome: the RYTHMO'FIT pilot study. International Congress of Association for European Paediatric Congenital Cardiology

Heart and sport days of Cardiogen

Montpellier, France

ORAL PRESENTATION

Jan. 2024

- Souilla L.(2024). Role of adapted physical activity in pediatric cardiac rehabilitation. Heart and sport days of Cardiogen

French federatation of Cardiology

Paris, France

ORAL PRESENTATION

Sep. 2023

- Souilla L., Werner O., ..., Amedro P. (2023). Health-related quality of life and physical activity in children with inherited cardiac arrhythmia or inherited cardiomyopathy: the prospective multicentre controlled QUALIMYORHYTHM. Research days of French federation of cardiology

International Congress of Francophone Mother-Children network

Bordeaux, France

ORAL PRESENTATION

June 2022

- Souilla L. (2022). Adapted physical activity teacher: on the right track. International Congress of Francophone Mother-Children network

French society of Paediatric

Lille, France

ORAL PRESENTATION

June 2022

- Souilla L., Avesani M., Boisson A., Pasquie JL., Amedro P. (2022). Cardiorespiratory fitness and muscular deconditioning children with Long QT syndrome. French society of Paediatric

International Congress of Association for European Paediatric Congenital Cardiology

Geneve, Switzerland

POSTER PRESENTATION

May 2022

- Souilla L., Avesani M., Boisson A., Pasquie JL., Amedro P. (2022). Cardiorespiratory fitness and muscular deconditioning children with Long QT syndrome. International Congress of Association for European Paediatric Congenital Cardiology

Congress of French society of Paediatrics and congenital cardiology

Nice, France

ORAL PRESENTATION

Sept. 2021

- Souilla L.(2021). Exercise rehabilitation in heart failure. Congress of French society of Paediatrics and congenital cardiology

Training & Schools

Summer Program in Aging School

Summer 2026

CANADIAN INSTITUTES OF HEALTH RESEARCH (CIHR)

- Competitive national summer school on Impact of Climate Change on the Health of Older Persons; accepted as a local participant

Global School on Heat Adaptation


Summer 2025

GLOBAL CENTER ON HEAT ADAPTATION


- Engage students, stakeholders, and researchers from various disciplines globally involved in understanding and reducing the impacts of extreme heat (member of the team that organized the event).

Projects

PROGRAMMING PROJECTS

Core Temp App  Analyze, plot and extract data from Body Cap pills used to measure body core temperature

[R](#) 

CPET COSMED  Upload, analyze, plot result from COSMED cardiopulmonary exercise test and generate an individualized report

[Scilab](#) 

Skills

SOFT SKILLS

Teamwork

Interdisciplinary Working – Effective communication –
Autonomous writing – Management of national
clinical trials – Pedagogy with youth

Attributes

Creativity – Adaptability – Time management –
Motivation – Relationship skills

TECHNICAL SKILLS

Tools

CP Exercise testing – Climatic
chamber – In-situ heat
monitoring – Muscular
ultrasound – Accelerometer –
Force Sensor


Languages

French (native) – English (C1) –
Spanish (B1)

Other

Github – Markdown – RStudio –
Quarto – Shiny – Obsidian –
Canva – BioRender

Memberships & Leadership

| | | |
|---------------------|--|--|
| Oct. 2025-Nov. 2026 | Creation and coordination of a student scientific journal club (Crush Your Brain) | Daniel Gagnon Lab |
| Oct. 2024-Oct. 2025 | Scientific member of the international Global Center for Heat Adaptation  | Montreal Heart Institute |
| Aug. 2023-Jan. 2025 | Head of Green Researchers team working on evaluation and mitigation of the laboratory carbon footprint | Lab Euromov DHM |
| Jan. 2023-Dec. 2023 | Head of Pediatric committee of the French Society of Exercise Physiologists | French Society of Exercise Physiologists |
| Since 2022 | Scientific member of QUALINEURO-REHAB European project | Bordeaux University Hospital - INSERM |