

PROFESSIONAL SUMMARY

Luísa Teixeira Santos is an Invited Assistant Professor at NOVA Medical School (NOVA University of Lisbon, Portugal) and a researcher at iNOVA4Health – Advancing Precision Medicine and the Clinical Academic Center of Lisbon (CCAL), working at the interface of experimental and clinical pharmacology, with expertise across *in vitro* and *in vivo* models as well as clinical studies. Holding a PharmD and a PhD in Experimental and Clinical Pharmacology and Toxicology (University of Porto), her research spans renal and cardiovascular pharmacology and peritoneal membrane-targeted therapeutic strategies, with a particular focus on biomarker discovery, precision medicine, and translational approaches to disease. She is co-founder of PDial® and is currently establishing Portugal's first peritoneal dialysis biobank, aiming to advance clinical outcomes in this population. Her work encompasses externally funded projects, first-author publications, student supervision, and science communication. She is also actively involved in pharmacology education research at an international level, contributing to initiatives within the IUPHAR Education Section. She serves on the Young Pharmacologists Committee of the Portuguese Society of Pharmacology (SPF) and is the Portugal representative at the EPHAR Early Career Research Group.

CURRENT POSITIONS

Invited Assistant Professor | Sep 2022 – Present

NOVA Medical School - Faculdade de Ciências Médicas da Universidade NOVA de Lisboa, NOVA University of Lisbon, Portugal
Pharmacology I & II (Integrated Master's in Medicine); Aging and Age-Related Disease: From Molecular Mechanisms to Therapies and Dissertation Project (International Master's in Biomedical Research). Chronic Inflammation and Thesis Project Development (PhD in Health Sciences, PhD in Biomedicine)

Researcher | Aug 2023 – Present

iNOVA4Health – Advancing Precision Medicine & Clinical Academic Center of Lisbon (CCAL), Portugal
Renal, Cardiovascular and Metabolic Pharmacology research group (PI Sofia A Pereira).

EDUCATION

PhD in Experimental and Clinical Pharmacology and Toxicology | 2016–2023

Faculty of Medicine, University of Porto, Portugal | Department of Biomedicine - Pharmacology and Therapeutics Unit
Thesis: "Oxidative dysfunction and neuroinflammation as therapeutic targets for neuropathic pain"
PhD Fellow (NORTE-08-5369-FSE-000011) | FCT / ESF

Integrated Master's in Pharmaceutical Sciences (PharmD) | 2008–2013

Faculty of Pharmacy, University of Porto, Portugal

Selected Additional Training

Teaching and Learning in Higher Education (University of Évora, 2025) | Curriculum Development of Human Clinical Trials for the Next Generation (multi-institution, 2024) | Extracellular Vesicles in Clinical Applications Summer School (NMS, 2024) | Data Science with R in Healthcare (ENSP-NOVA, 2023) | The Essentials of Research Data Management (NAU Platform, 2021) | Statistics for Experimental Life Scientists (FMUP, 2019) | Advanced Laboratory Animal Science - FELASA Category C (i3S, 2017)

SELECTED PUBLICATIONS

14 articles published, 8 of them as first, or co-first, author

First Author Publications

Teixeira-Santos L *et al.* Defining core concepts in pharmacokinetics for undergraduate medical education through a multidisciplinary approach. *European Journal of Pharmacology* (2025). doi:10.1016/j.ejphar.2025.177926

Pimpão AB*, Teixeira-Santos L* *et al.* Biotransformation of ketamine in terminal *in vivo* experiments under chronic intermittent hypoxia conditions and the role of AhR. *Archives of Toxicology* (2025). doi:10.1007/s00204-025-04044-w

Teixeira-Santos L *et al.* The pro-resolving lipid mediator Maresin 1 ameliorates pain responses and neuroinflammation in the spared nerve injury-induced neuropathic pain: A study in male and female mice. *PLOS ONE* 18:e0287392 (2023). doi:10.1371/journal.pone.0287392

- Teixeira-Santos L *et al.* Effects of NADPH Oxidase Isoform-2 (NOX2) Inhibition on Behavioral Responses and Neuroinflammation in a Mouse Model of Neuropathic Pain. *Biomedicines* 11:416 (2023). doi:10.3390/biomedicines11020416
- Teixeira-Santos L *et al.* An alternative method for oral drug administration by voluntary intake in male and female mice. *Laboratory Animals* 55:76–80 (2021). doi:10.1177/0023677220950782
- Teixeira-Santos L *et al.* Neuroinflammation, oxidative stress and their interplay in neuropathic pain: Focus on specialized pro-resolving mediators and NADPH oxidase inhibitors. *Pharmacological Research* 162:105280 (2020). doi:10.1016/j.phrs.2020.105280
- Leal J*, Teixeira-Santos L* *et al.* L-proline supplementation improves nitric oxide bioavailability and counteracts the blood pressure rise induced by angiotensin II in rats. *Nitric Oxide*. 82:1-11 (2019). doi:10.1016/j.niox.2018.10.007

* co-first authorship

Selected Co-Authored Publications

- Silva-Pereira C, *et al.* Annexin A1 and dexamethasone treatment in hospitalized COVID-19 patients: impact on disease recovery and evidence for an interplay between proresolving mediators. *Biomolecules*. 16(4):508 (2026). doi:10.3390/biom16040508
- Reina-Couto M, *et al.* Endocan as a marker of endotheliitis in COVID-19 patients: modulation by veno-venous extracorporeal membrane oxygenation, arterial hypertension and previous treatment with renin-angiotensin-aldosterone system inhibitors. *Inflammation Research* 74(1):26 (2025). doi:10.1007/s00011-024-01964-8
- Silva-Pereira C, *et al.* Resolvin E1-Chemerin receptor 1 axis is dysregulated in critical COVID-19 patients. *International Immunopharmacology* 167:115669 (2025). doi:10.1016/j.intimp.2025.115669
- Mollet IG, *et al.* Identification of human circulating factors following remote ischemic conditioning (RIC): Potential impact on stroke. *Free Radical Biology & Medicine*. 224:23–38 (2024). doi:10.1016/j.freeradbiomed.2024.08.017
- Baltazar P, *et al.* Oxalate (dys)Metabolism: Person-to-Person Variability, Kidney and Cardiometabolic Toxicity. *Genes*. 14(9):1719 (2023) doi:10.3390/genes14091719
- Reina-Couto M, *et al.* Evaluation of urinary cysteinyl leukotrienes as biomarkers of severity and therapeutic targets in COVID-19. *Inflammation Research* 72:475–491 (2023). doi:10.1007/s00011-022-01682-z

GRANTS & PROJECTS

As Principal Investigator / Co-Principal Investigator

- 2025–present **Peritoneal Dialysis with Future: Creation of Biobank** (FF-CCAL 09/2025) – Principal Investigator | CCAL
- 2024 **Mass Spectrometry & Machine Learning pipeline for CKD & Resistant Hypertension** (FCT 2022.06292.PTDC) – Co-PI | FCT
- 2018–2019 **Oxidative Dysfunction and Neuroinflammation as Therapeutic Targets in Neuropathic Pain: Pro-resolving Inflammatory Mediators** - Young Investigators in Pain Grant 2018 award | Grünenthal Foundation Portugal

As Researcher / Team Member

- 2026-present **A Metabolic Link Between Sleep Apnea and Kidney Stones** (2025.08350.CBM) – Investigator | FCT – Portugal–France Bilateral Cooperation Call 2025 (PESSOA Programme)
- 2025–present **Magnesium as a Klotho Inducer in the Control of Cardiovascular and Bone Complications in Peritoneal Dialysis** (FF-CCAL 05/2025) – Investigator | CCAL
- 2025–present **Iron Metabolism–Based Profiles for Risk Stratification of Postoperative Neurocognitive Disorders: The role of hepcidin** (FF-CCAL 08/2025) – Investigator | CCAL
- 2021 **Resolution of Inflammation: A Missing Key to Improve Acute Heart Failure Treatment and Prognosis?** (PTDC/MEC-CAR/32188/2017) – Investigator | FCT/FEDER via COMPETE
- 2020–2021 **Unresolved Inflammation and Endotheliitis in Severe COVID-19 Patients: Identification of Risk Stratification Biomarkers and Therapeutic Targets** (ref. 613690173) – Investigator | FCT – RESEARCH4COVID19
- 2019 - 2021 **Redox Dysfunction as a Therapeutic Target in Neuropathic Pain: Selective Inhibition of NADPH Oxidase isoform-2 (NOX2)** – Investigator | Grünenthal Foundation Portugal

AWARDS & DISTINCTIONS

- 2025 **Erasmus+ Staff Mobility for Training** – University College Cork | NOVA University of Lisbon
- 2024 **Top 10 – NOVA impACT! Challenges 2024** | Team PDCare: Advancing Sustainable Care Practices in Peritoneal Dialysis. Selected from dozens of competing applications; awarded seed funding for proof-of-concept development.
- 2018 **Young Investigators in Pain award** – Basic research (€10,000) | Grünenthal Foundation Portugal
- 2012/2013 **Sociedade Farmacêutica Lusitana** award | Portuguese Pharmacists Association (“Ordem dos Farmacêuticos”)
- 2012/2013 **Cofanor – Dr. Luís Rainha Foundation** Award 2012/2013 | Luís Rainha Foundation

STUDENT SUPERVISION

Ongoing | Currently serving as supervisor or co-supervisor for **4 postgraduate students**: 2 at **MSc level** (Biochemistry for Health, NMS; Biomedical Engineering, IST) and 2 at **PhD level** (Biomedicine and Health Sciences, NMS).

Completed | **7 projects at BSc and MSc levels** have been successfully completed under her supervision.

ACADEMIC JURIES

Examiner in **3 MSc thesis juries** – NOVA Medical School (2025), Instituto Superior de Engenharia de Lisboa (2024), and NOVA School of Science and Technology (2023).

SCIENTIFIC EVENT ORGANIZATION

Member of Organizing Committee | **NOVA Medical School Research Symposium 2025**

NOVA Medical School, Lisbon, Portugal | October 6-7, 2025

Member of the Scientific and Organizing Committee | **54th Meeting of the Portuguese Society of Pharmacology, 42nd Meeting of Clinical Pharmacology and 23rd Meeting of Toxicology**

NOVA Medical School, Lisbon, Portugal | February 7-9, 2024

INTERNATIONAL NETWORKS, INITIATIVES & MOBILITY

Networks and initiatives

Member | **Core Concepts of Pharmacology Education Project** | Aug 2023 – present

IUPHAR (International Union of Basic and Clinical Pharmacology), Education Section

Member | **EU-Resolution Biology Network (EU-RESOLVE)** (COST Action CA24138) | 2026 – present

Invited Mentor | **EUTOPIA Doctoral Summer School** – 3rd Edition | Jul 17–22, 2025

NOVA Doctoral School, within the EUTOPIA Alliance (10 European universities and 6 global partners), Arrábida, Portugal

Erasmus + Staff Mobility for Training

University of Malta, Faculty of Medicine & Surgery – Malta | May 5–8, 2026

Supervised by Prof. Janet Mifsud, Head of Clinical Pharmacology & Therapeutics

University College Cork – Ireland | Jun 16–18, 2025

Supervised by Prof. Roisin Kelly-Laubscher, Lecturer in Pharmacology & Therapeutics

SELECTED CONFERENCE PRESENTATIONS

Presenter and/or co-author of **50+ oral and poster** presentations at national and international meetings, including the European Society of Intensive Care Medicine (ESICM), World Congress of Basic & Clinical Pharmacology (WCP), European Renal Association Congress (ERA), International Meeting on Cellular and Molecular Peritoneal Dialysis Research.

International (selected)

Teixeira-Santos L, *et al.* From Cell Lines to Organoids: Building Human-Relevant Models for Peritoneal Dialysis Research. The 3Rs Framework for Intelligent Use of In Vitro, In Vivo, and NAMs, Lisbon, Portugal, **2026**.

Anão S, ..., Teixeira-Santos L. Multi-thiol assessment upon the Peritoneal Equilibration Test (PET) reveals solute-specific membrane transport profiles. 1st International Meeting on Cellular and Molecular Peritoneal Dialysis Research, Kiel, Germany, **2025**

Sequeira D, Teixeira-Santos L, *et al.* The thiolomic profile of peritoneal membrane fibrosis: a hypothesis-driven research. European Renal Association (ERA) Congress, Viena, **2025**. *Published:* Nephrology Dialysis Transplantation. 2025; 40(Suppl 3):gfaf116.0715; doi:10.1093/ndt/gfaf116.0715

Teixeira-Santos L, *et al.* Chronic intermittent hypoxia and ketamine metabolism: implications for precision medicine in sleep apnea. European Respiratory Society (ERS) Research Seminar – Sleep Apnoea and its consequences, Lisbon, Portugal, **2024**.

Silva-Pereira C, *et al.* Proinflammatory and endothelial activation profiles in hospitalized COVID-19 patients: impact of arterial hypertension and previous treatment with renin-angiotensin-aldosterone inhibitors. World Congress of Basic & Clinical Pharmacology, Glasgow, **2023**. *Published:* British Journal of Pharmacology. 2023;180 Suppl 1, 198; doi: 10.1111/bph.16105

Reina-Couto M, *et al.* Lipoxins Profile and FPR2/ALX Receptor Expression In Human Acute Heart Failure And Cardiogenic Shock. World Congress of Basic & Clinical Pharmacology, Glasgow, **2023**. *Published:* British Journal of Pharmacology. 2023;180 Suppl 1, 813; doi:10.1111/bph.16110

Teixeira-Santos L *et al.* NADPH oxidase isoform-2 inhibitor GSK2795039 attenuates mechanical allodynia and transiently decreases microglial activation in a mouse model of peripheral nerve injury. 12th Congress of the European Pain Federation (EFIC), Dublin, Ireland, **2022**

Teixeira-Santos L, *et al.* Oral treatment with the pro-resolution mediator Maresin 1 ameliorates mechanical allodynia and reduces glial activation in a neuropathic pain mouse model. 8th European Virtual Congress of Pharmacology (EPHAR 2021), online edition, December 6–8, **2021**

PEER REVIEW ACTIVITY

Ad hoc reviewer for 10+ international journals, including European Journal of Pharmacology (15+ reviews since 2024), Frontiers in Immunology, Scientific Reports, Annals of Medicine, Revista Portuguesa de Cardiologia, The FASEB Journal, and others.

INTELLECTUAL PROPERTY

2025 **PDial® – Innovate Peritoneal Dialysis** (Registered trademark, Portugal). Co-founder.

MEMBERSHIPS & SERVICE

2026–Present **EPHAR Early Career Research Group** – Portugal Representative

2026–Present **European Society for Clinical Investigation (ESCI)** – Active Member

2026–Present **Portuguese Society of Nephrology (SPN)** – Member n. 6616 | Associated Member of the Translational Nephrology working group

2025–2026 **Postdoctoral Researchers Committee** - NOVA Medical School – Elected member

2024–Present **Young Pharmacologists Committee of the Portuguese Society of Pharmacology (SPF)** – Member

2020–Present **Portuguese Society of Pharmacology (SPF)** – Member

Portuguese Pharmacists Association | Registered Pharmacist (“Ordem dos Farmacêuticos”), Professional License No. 22392

Updated May 2026

