

## Curriculum Vitae

### Personal Data

Title	Prof. Dr.
First name	Leticia
Name	Prates Roma
Current position	Professor, W2 for Biophysics
Current institution(s)/ site(s), country	Saarland university, Faculty of medicine, Department of Biophysics, ZHMB, CGBM, Germany
Identifiers/ORCID	<a href="https://scholar.google.com/citations?user=NVLnlwEAAAAJ&amp;hl=en">https://scholar.google.com/citations?user=NVLnlwEAAAAJ&amp;hl=en</a> <a href="https://orcid.org/0000-0001-9527-0529">https://orcid.org/0000-0001-9527-0529</a>

### Qualifications and Career

Stages	Periods and Details
Degree programme	Studies of Pharmacy (diploma), 2000-2003, State University of Parana, Brazil
Doctorate	18.03.2009, PhD., Mentor: Prof. Kleber Araujo de Souza, Molecular Biology/Physiology, University of Campinas, Brazil
Stages of academic/professional career	<p>Since 2023: Professor for Biophysics (W2), Saarland University, Germany.</p> <p>2017-2023: Jun.-Professor for Biophysics, Saarland University, Homburg, Germany.</p> <p>2016-2017: Post-doc at the Cardiology Department, Saarland University, (Prof. Dr. Christoph Maack), Homburg, Germany.</p> <p>2014-2016: Post-doc at the Cancer Research Center, DKFZ, (Prof. Dr. Tobias Dick), Heidelberg, Germany.</p> <p>2012-2014: Post-doc at the University of Sao Paulo, (Prof. Dr. Angelo Carpinelli), Sao Paulo, Brazil.</p> <p>2009-2011: Post-doc at the Catholic University of Louvain, (Prof. Dr. Jean-Christophe Jonas), Brussels, Belgium.</p> <p>2006 -2009: PhD at the University of Campinas, (Prof. Dr. Kleber Araujo De Souza), Campinas, Brazil.</p>

	2004 -2006: Masters study at the University of Campinas, Brazil
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### Supplementary Career Information

2 children – maternity license: June 2017- December 2017

April 2021- December 2021

### Activities in the Research System

#### Committees and Administrative tasks

2018 - 2025 Project leader in TRR219 Aachen-Homburg (first and second funding period).

2021 - 2025 Gender equality measures coordinator - TRR219, Homburg campus.

2019 - 2022 Project leader in SFB894 (third funding period).

2018 - Member of the Center for Human and Molecular Biology (ZHMB), Saarland University.

2018 - Member of several Habilitation, PhD, MD and Bachelor thesis committees.

#### Conference/meetings as invited Speaker/Chair (selected)

Redox Rheinland Meeting 2023, Seminar series Helmholtz Zentrum München 2023, FESBE 2023 (Chair), Sino-German Symposium2021, ERA/EDTA 2019, GRC/GRS 2016

#### Reviewer Activity

2018- Ad-hoc reviewer grant proposals : National Institute of Health (2020), Czech Science Foundation (2023)

2014- Ad-hoc reviewer for research articles: Redox Biology, Free Radical Biology and Medicine, AJP-Cell Physiology, Antioxidants, Diabetes, etc.

### Teaching

6 hours/week/semester

2017- Saarland University., theoretical and practical courses, module: “Structural Biology and Biophysics” (B.Sc. Biology/Human & Mol. Biology); theoretical courses: Advanced Module “Glucose Homeostasis” (M.Sc. Human & Mol. Biology)

### Supervision of Researchers in Early Career Phases

2018 - 2024: Supervision of 27 students, 2 scientific visits

Bachelor thesis: 9 (1 ongoing, 8 finished)

Master Thesis: 3 (2 finished) 1 ongoing

PhD thesis: 3 students (2 ongoing, 1 co-supervision finished)

Post-doctoral: 1 (ongoing)

Medical Thesis: 2 (ongoing)

Others: 6 exchange students from technician school in Belgium

Erasmus: 5 students (masters and PhDs)

### Scientific Results

#### Category A

1. Lin H, Suzuki K, Smith N, Li X, Nalbach L, Fuentes S, Spigelman AF, Dai XQ, Bautista A, Ferdaoussi M, Aggarwal S, Pepper AR, **Roma LP**, Ampofo E, Li WH, MacDonald PE82024) *Nat Commun.* 6;15(1):334. doi: 10.1038/s41467-023-44589-x.
2. Wollenhaupt J<sup>§</sup>, Frisch J<sup>§</sup>, Harlacher E, Wong DWL, Jin H, Schulte C, Vondenhoff S, Moellmann J, Klinkhammer BM, Zhang L, Baleanu-Curaj A, Liehn EA, Speer T, Kazakov A, Werner C, van der Vorst EPC, Selejan SR, Hohl M, Böhm M, Kramann R,

- Biessen EAL, Lehrke M, Marx N, Jankowski J, Maack C, Boor P, **Prates Roma L\***, Noels H\* (2022). Pro-oxidative priming but maintained cardiac function in a broad spectrum of murine models of chronic kidney disease. *Redox Biol.* 56:102459. doi: 10.1016/j.redox.2022.102459. (§, \*equal contribution).
3. Wrublewsky S, Glas J, Carlein C, Nalbach L, Hoffmann MDA, Pack M, Vilas-Boas EA, Ribot N, Kappl R, Menger MD, Laschke MW, Ampofo E, **Roma LP** (2022). The loss of pancreatic islet NADPH oxidase (NOX)2 improves islet transplantation. *Redox Biol.* 55:102419. doi: 10.1016/j.redox.2022.102419.
  4. Bertero E, Nickel A, Kohlhaas M, Hohl M, Sequeira V, Brune C, Schwemmlin J, Abeßer M, Schuh K, Kutschka I, Carlein C, Münker K, Atighetchi S, Müller A, Kazakov A, Kappl R, von der Malsburg K, van der Laan M, Schiuma AF, Böhm M, Laufs U, Hoth M, Rehling P, Kuhn M, Dudek J, von der Malsburg A, **Prates Roma L**, Maack C (2021). Loss of Mitochondrial Ca<sup>2+</sup> Uniporter Limits Inotropic Reserve and Provides Trigger and Substrate for Arrhythmias in Barth Syndrome Cardiomyopathy. *Circulation* 21:1694-1713. doi: 10.1161/CIRCULATIONAHA.121.053755.
  5. Vilas-Boas E, Nalbach L, Ampofo E, Lucena CF, Ortis F, Carpinelli AR, Morgan B, **Roma LP** (2021). Transient NADPH oxidase 2-dependent H<sub>2</sub>O<sub>2</sub> production drives early palmitate-induced lipotoxicity in pancreatic islets. *Free Radic Biol Med.* 162:1-13. doi: 10.1016/j.freeradbiomed.2020.11.023
  6. Vilas-Boas EA, Karabacz N, Marsiglio-Libraiz G, Valle MMR, Nalbach L, Ampofo E, Morgan B, Carpinelli R, **Roma LP** (2020). Chronic activation of GPR40 does not negatively impact upon BRIN-BD11 pancreatic  $\beta$ -cell physiology and function. *Pharm. Rep.* Apr 9, doi: 10.1007/s43440-020-00101-6.
  7. **Roma LP**, Jonas JC. Nutrient Metabolism, Subcellular Redox State, and Oxidative Stress in Pancreatic Islets and  $\beta$ -Cells (2019). *J Mol Biol.* (19) 30608-4. doi: 10.1016/j.jmb.2019.10.012.
  8. **Roma LP\***, Deponte M, Riemer J, Morgan B\* (2018). Mechanisms and Applications of Redox-Sensitive Green Fluorescent Protein-Based Hydrogen Peroxide Probes. *Antioxid Redox Signal.* doi: 10.1089/ars.2017.7449. (\*equal contribution).
  9. Cabezas-Wallscheid N, Buettner F, Sommerkamp P, Klimmeck D, Ladel L, Thalheimer FB, Pastor-Flores D, **Roma LP**, Renders S, Zeisberger P, Przybylla A, Schonberger K, Scognamiglio R, Altamura S, Florian CM, Fawaz M, Vonficht D, Tesio M, Collier P, Pavlinic D, Geiger H, Schroeder T, Benes V, Dick TP, Rieger MA, Stegle O, Trumpp A (2017). Vitamin A-Retinoic Acid Signaling Regulates Hematopoietic Stem Cell Dormancy. *Cell.* **169**, 807-823. doi: 10.1016/j.cell.2017.04.018.
  10. Fujikawa Y\*, **Roma LP\***, Sobotta MC, Rose AJ, Diaz MB, Locatelli G, Breckwoldt M, Misgeld T, Kerchensteimer M, Herzig S, Muller-Decker K, Dick TP (2016). Mouse redox histology using genetically encoded biosensors. *Science Signaling.* **9**, 419. doi: 10.1126/scisignal.aad3895. (\*equal contribution).

## Category B

### Book Chapter

Nutritional Intervention in Metabolic Syndrome. Chapter 3: Pathophysiology of Metabolic Syndrome. Part II- Influence of Inflammatory Status and Oxidative Stress. Hilton Kenji Takahashi, **Leticia Prates Roma** and Mauricio da Silva Krause. 2015. Taylor & Francis Group

## Academic Distinctions

### Honors & Prizes

2016: Waldemar e Rubens Belfort Award. Best research article published in 2015 in the Journal Arquivos Brasileiros de Oftalmologia.

2016: Cover photo of Science Signaling.

2015: DKFZ Visiting Scientist Fellowship.

2015: Travel award: Gordon Research Seminar and Conference. Oxidative Stress and Disease.

2013: Travel Award EASD- ISG, Islet study group.

2013: Research Internships Abroad (BEPE) from FAPESP- Brazil.

2012: Albert Renold Travel Fellowship: European Foundation for the Study of Diabetes (EFSD).  
 2012: Universal Grant- MCTI/ CNPq n° 14/2012 (Brazil).  
 2012: Travel Award EASD- ISG, Islet study group.  
 2011: Travel Award EASD- European Association for the Study of Diabetes.  
 2007: Travel Award EASD- ISG, Islet study group.  
 2007: Bravo Award – XXII Reunião Anual da Federação de Sociedades de Biologia Experimental.  
 2005: Research in Endocrinology Award- Sociedade Brasileira de Endocrinologia and Metabologia.

Fellowships/awards to members of the Prates Roma laboratory: 1 award: Albert Renold Fellowship, 3 Poster awards, 1 publication award, 1 thesis award.

### **Other Information**

#### Further Qualifications:

- EMBO Laboratory Leadership course for Group Leaders (July 2018, Heidelberg, Germany).
- 3R animal handling courses

#### Memberships:

European Association for the Study of Diabetes (EASD)  
 Society of Free Radical Research (SFRR)  
 The Physiological Society  
 Society for Biochemistry and Molecular Biology (GBM)

### **Data protection and consent to the processing of optional data**

If you provide voluntary information (marked as optional) in this CV, your consent is required. Please confirm your consent by checking the box below.

**I expressly consent to the processing of the voluntary (optional) information, including “special categories of personal data”<sup>1</sup> in connection with the DFG’s review and decision-making process regarding my proposal.** This also includes forwarding my data to the external reviewers, committee members and, where applicable, foreign partner organisations who are involved in the decision-making process. To the extent that these recipients are located in a third country (outside the European Economic Area), I additionally consent to them being granted access to my data for the above-mentioned purposes, even though a level of data protection comparable to EU law may not be guaranteed. For this reason, compliance with the data protection principles of EU law is not guaranteed in such cases. In this respect, there may be a violation of my fundamental rights and freedoms and resulting damages. This may make it more difficult for me to assert my rights under the General Data Protection Regulation (e.g. information, rectification, erasure, compensation) and, if necessary, to enforce these rights with the help of authorities or in court.

I may **revoke** my consent in whole or in part at any time – with effect for the future, freely and without giving reasons – vis-à-vis the DFG ([postmaster@dfg.de](mailto:postmaster@dfg.de)). The lawfulness of the processing carried out up to that point remains unaffected. Insofar as I transmit “special categories of personal data” relating to third parties, I confirm that the necessary legitimation under data protection law exists (e.g. based on consent).

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I have taken note of the DFG's Data Protection Notice relating to research funding, which I can access at [www.dfg.de/privacy\\_policy](http://www.dfg.de/privacy_policy) and I will forward it to such persons whose data the DFG processes as a result of being mentioned in this CV.