

Carolina Silva Nodari

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EDUCATION BACKGROUND

Post-Doctoral Researcher

Institut Pasteur

Paris, France

Nov 2020 — Jun 2023

- Project: Emergence of antimicrobial-resistant populations of Enteropathogenic *Escherichia coli* (EPEC) during the 1950s to the 1970s.
- Supervisor: François-Xavier Weill.

PhD in Sciences - Translational Medicine

Universidade Federal de São Paulo (UNIFESP)

São Paulo, Brazil

Apr 2016 — May 2020

- Thesis: Molecular characterization of polymyxin resistance mechanisms among multidrug resistant *Acinetobacter baumannii*.
- Advisor: Ana Cristina Gales.

Master in Pharmaceutical Sciences

Universidade Federal do Rio Grande do Sul (UFRGS)

Porto Alegre, Brazil

Apr 2014 — Mar 2016

- Dissertation: Resistome analysis of carbapenemase-producing Enterobacteriaceae using Next-Generation Sequencing.
- Advisor: Afonso Luís Barth.

Bachelor in Pharmacy

UFRGS

Porto Alegre, Brazil

Mar 2008 — Dec 2013

- Project: Frequency of imipenem heteroresistance among KPC-producing Enterobacteriaceae.
- Advisor: Afonso Luís Barth.

WORK EXPERIENCE

Deputy Director

French National Reference Centre for *E. coli*, *Shigella* and *Salmonella* (CNR-ESS), Institut Pasteur

Jul 2023 — present

Paris, France

Research assistant (postdoc)

Enteric Bacterial Pathogens Unit, Institut Pasteur

Nov 2020 — Jun 2023

Paris, France

Research assistant (PhD student)

Laboratório ALERTA, Universidade Federal de São Paulo (UNIFESP)

Apr 2016 — Sep 2020

São Paulo, Brazil

Research assistant (student helper)

Laboratório de Pesquisa em Resistência Bacteriana (LABRESIS), Universidade Federal do Rio Grande do Sul (UFRGS)

Aug 2011 — Mar 2016

Porto Alegre, Brazil

GRANTS AND SCHOLARSHIPS

- IMMEM XIV Travel Grant, provided by the ESCMID Food- and Waterborne Infections Study Group (EFWISG), 2025.
- ESCMID Individual Research Grant, funded by the European Society of Clinical Microbiology and Infectious Diseases (ESCMID), 2024.
- ECCMID Travel Grant, provided by the European Society of Clinical Microbiology and Infectious Diseases (ESCMID), 2023.
- Attendance support grant at the 12th International Symposium on the Biology of *Acinetobacter*, provided by the Federation of European Microbiological Societies (FEMS), 2019.
- PhD scholarship for studying abroad, provided by the Coordination of Superior Level Staff Improvement (CAPES), 2018-2019.
- Attendance support grant at the 16th ESCMID Summer School, provided by ESCMID, 2017.
- ASM Student and Postdoctoral Travel Award - ASM Microbe, provided by the American Society for Microbiology, 2016.
- PhD scholarship, provided by the Coordination of Superior Level Staff Improvement (CAPES), 2016-2020.
- DAAD-Hochschulwinterkursstipendium 2013/2014, granted by the Deutsche Akademische Austauschdienst (DAAD), 2013.

PARTICIPATION IN SCIENTIFIC PROJECTS

Only ongoing projects are listed here. The complete list and description of current and finished projects is available at carolina-nodari.org/research-projects/.

- AMRrules – Organism-specific interpretation of AMR genotypes. Project supported by ESCMID and EUCAST. Role: Collaborating investigator, member of the *E. coli/Shigella* subgroup. Groups leaders: Kat Holt and Natacha Couto. 2024-present.
- Evaluation of the potential use of intimin and flagellar antigen types as molecular markers of enteropathogenic *Escherichia coli* (EPEC) population diversity. Project funded by ESCMID. Role: Principal Investigator. 2024-present.
- Development and improvement of genomic typing tools for *Shigella* spp. and enteric *E. coli* populations. Role: Collaborating investigator. Principal investigator: François-Xavier Weill. 2023-present.
- Surveillance of emerging extremely drug resistant (XDR) populations of *Shigella* spp.. Role: Principal Investigator. 2023-present.
- Evolution of enteropathogenic and enterohemorrhagic populations of *E. coli* in Europe and emergence of antimicrobial resistance among these pathotypes. Role: Principal Investigator. 2020-present.

PUBLICATIONS

Journal articles

Total: 36

In the last 3 years (2024 – 2026): 4

Total citations: 584 (as of 07 Feb 2026 on Google Scholar)

Conference poster and oral presentations

Total: 41

In the last 3 years (2024 – 2026): 2

Presenting author: 15

Selected publications

For a complete list see carolina-nodari.org/publications/.

- **Nodari CS**, Bai Q, Cayô R, Streling AP, Alberto-Lei F, Wille J, C Pignatari AC, Seifert H, Gales AC, Higgins PG. ISAbal-mediated *bla*_{ADC} disruption restores third-generation cephalosporin susceptibility in a clinical *Acinetobacter baumannii* isolate. *Antimicrob Agents Chemother*. 2025 Dec 10;69(12):e0070725. doi: [10.1128/aac.00707-25](https://doi.org/10.1128/aac.00707-25). Epub 2025 Nov 18.
- Jones G, **Nodari CS**, Fabre L, de Valk H, Noel H, Cointe A, Bonacorsi S, Weill FX, Le Strat Y. Lessons from 5 Years of Routine Whole-Genome Sequencing for Epidemiologic Surveillance of Shiga Toxin-Producing *Escherichia coli*, France, 2018-2022. *Emerg Infect Dis*. 2025 May;31(13):117-128. doi: [10.3201/eid3113.241950](https://doi.org/10.3201/eid3113.241950).
- Hawkey J, Frézal L, Tran Dien A, Zhukova A, Brown D, Chattaway MA, Simon S, Izumiya H, Fields PI, De Lappe N, Kaftyreva L, Xu X, Isobe J, Clermont D, Njamkepo E, Akeda Y, Issenhuth-Jeanjean S, Makarova M, Wang Y, Hunt M, Jenkins BM, Ravel M, Guibert V, Serre E, Matveeva Z, Fabre L, Cormican M, Yue M, Zhu B, Morita M, Iqbal Z, **Silva Nodari C**, Pardos de la Gandara M, Weill FX. Genomic perspective on the bacillus causing paratyphoid B fever. *Nat Commun*. 2024 Dec 10;15(1):10143. doi: [10.1038/s41467-024-54418-4](https://doi.org/10.1038/s41467-024-54418-4).
- **Nodari CS**, Fuchs SA, Xanthopoulou K, Cayô R, Seifert H, Gales AC, Dilthey A, Higgins PG. *pmrCAB* Recombination Events among Colistin-Susceptible and -Resistant *Acinetobacter baumannii* Clinical Isolates Belonging to International Clone 7. *mSphere*. 2021 Dec 22;6(6):e0074621. doi: [10.1128/msphere.00746-21](https://doi.org/10.1128/msphere.00746-21). Epub 2021 Dec 1.
- **Nodari CS**, Cayô R, Streling AP, Lei F, Wille J, Almeida MS, de Paula AI, Pignatari ACC, Seifert H, Higgins PG, Gales AC. Genomic Analysis of Carbapenem-Resistant *Acinetobacter baumannii* Isolates Belonging to Major Endemic Clones in South America. *Front Microbiol*. 2020 Nov 30;11:584603. doi: [10.3389/fmicb.2020.584603](https://doi.org/10.3389/fmicb.2020.584603). eCollection 2020.

EVENT ATTENDANCES

- IMMEM XIV. Porto, Portugal, 2025.
- 35th ESCMID Global. Vienna, Austria, 2025.
- 34th European Congress of Clinical Microbiology and Infectious Diseases. Barcelona, Spain, 2024.
- 33rd European Congress of Clinical Microbiology and Infectious Diseases. Copenhagen, Denmark, 2023.
- 32nd European Congress of Clinical Microbiology and Infectious Diseases. Lisbon, Portugal, 2022.
- VI Congresso Acadêmico da UNIFESP - Ciência e Universidade: Transformações para a Sociedade. Online only event, 2020.
- 12th International Symposium on the Biology of *Acinetobacter*. Frankfurt, Germany, 2019.

- 29th European Congress of Clinical Microbiology and Infectious Diseases. Amsterdam, Netherlands, 2019.
- 28th European Congress of Clinical Microbiology and Infectious Diseases. Madrid, Spain, 2018.
- 29º Congresso Brasileiro de Microbiologia. Foz do Iguaçu, Brazil, 2017.
- 16th ESCMID Summer School. Borstel, Germany, 2017.
- ASM Microbe 2016. Boston, USA, 2016.
- 25th European Congress of Clinical Microbiology and Infectious Diseases. Copenhagen, Denmark, 2015.
- 28º Congresso Brasileiro de Microbiologia. Florianópolis, Brazil, 2015.
- IV Simpósio Internacional de Microbiologia Clínica. João Pessoa, Brazil, 2014.
- III Congresso Latino-Americano de Resistência Bacteriana. Gramado, Brazil, 2013.

EVENT ORGANIZATION

- “Séquençage génomique pour la surveillance de l’antibio-résistance: théorie et pratique”. Course organized by Institut Pasteur de Paris and Institut Pasteur de Dakar, Dakar, Senegal, 2023.
- “Panorama da Resistência Bacteriana”. Continuous education course by Laboratório Especial de Microbiologia Clínica, Sao Paulo, Brazil, 2019.
- “Novas Tecnologias e Stewardship em Microbiologia Clínica”. Continuous education course by Laboratório Especial de Microbiologia Clínica, Sao Paulo, Brazil, 2016.
- “Teste de Sensibilidade de A a M”. Pre-congress course at the 4th International Symposium of Clinical Microbiology, Joao Pessoa, Brazil, 2014.

INVITED TALKS

- “The use of bacterial genomics for the epidemiological surveillance of enteric bacterial pathogens and the development of molecular tools for bacterial typing”. Talk during “International Forum ‘Global Health in Tropical Regions: Perspectives from Latin America and West Africa in a Changing World’”, Sao Paulo, Brazil, 2025.
- “Gene-by-gene approach Part 2: cgMLST applications using Enterobase”. Lecture during “GenEpi-BioTrain – Interdisciplinary Workshop FWD”, Paris, France, 2024.
- “Biology and genomics of diarrheagenic *E. coli* and *Shigella*”. Lecture during “GenEpi-BioTrain – Interdisciplinary Workshop FWD”, Paris, France, 2024.
- “The use of genomic approaches for population studies and outbreak surveillance of diarrheagenic *Escherichia coli*”. Webinar organized by ESCMID study groups EFWISG and ESGEM, online, 2023.
- “Typage des *Escherichia coli* et *Shigella* spp.: Les concepts de sérotypes et pathotypes”. Lecture (in French) during “Séquençage génomique pour la surveillance de l’antibio-résistance: théorie et pratique”. Dakar, Senegal, 2023.
- “Surveillance génomique d’*E. coli* et *Salmonella*: l’outil Enterobase”. Lecture (in French) during “Séquençage génomique pour la surveillance de l’antibio-résistance: théorie et pratique”. Dakar, Senegal, 2023.
- “Panorama Atual e Mecanismos de Resistência em *Neisseria gonorrhoeae*”. Lecture (in Brazilian Portuguese) during “VIII Curso LEMC/ALERTA – Resistência bacteriana de A a Z: da biologia molecular à prática clínica”, São Paulo, Brazil, 2017.

TEACHING/ADVISORY EXPERIENCE

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| Advisor | Nov 2025 — present |
| Institut Pasteur | <i>Paris, France</i> |
| <ul style="list-style-type: none"> • M2 internship of Menel Mohamedi, at Institut Pasteur. Research Topic: Benchmarking of the Nanopore sequencing technology for the genomic surveillance of STEC in France. | |
| Advisor | May 2025 — Jun 2025 |
| Institut Pasteur | <i>Paris, France</i> |
| <ul style="list-style-type: none"> • Master’s internship of Laura-Diana Caprioara, at Institut Pasteur. Research Topic: Genomic diversity of contemporary EPEC circulating in Europe. | |
| Co-advisor | Jan 2023 — Jun 2023 |
| Institut Pasteur | <i>Paris, France</i> |
| <ul style="list-style-type: none"> • M1 internship of Nataliya Baschinski. Research topic: Genomic analysis of historical ampicillin-resistant enteropathogenic <i>E. coli</i> (EPEC). • Advisor: Francois-Xavier Weill. | |
| Co-advisor | Aug 2018 — Dec 2020 |
| Federal University of São Paulo | <i>São Paulo, Brazil</i> |
| <ul style="list-style-type: none"> • Master’s dissertation of Felipe Alberto Lei. Research topic: Diversity of carbapenemases among clinical isolates belonging to <i>Pseudomonas putida</i> group. | |

- Advisor: Ana Cristina Gales.

Co-advisor

Mar 2018 — Dec 2018

Federal University of São Paulo

São Paulo, Brazil

- Bachelor's final project of Larissa Akie Natsumeda. Research topic: Azithromycin resistance mechanisms among *Neisseria gonorrhoeae* clinical isolates.
- Advisor: Ana Cristina Gales.

Co-advisor

Mar 2015 — Dec 2015

Federal University of Rio Grande do Sul

Porto Alegre, Brazil

- Bachelor's final project of Lisiane Rech Pancotto. Research topic: Rapid phenotypic detection of carbapenemases among Enterobacteriaceae clinical isolates.
- Advisor: Afonso Luís Barth.

Assistant professor

Aug 2014 — Dec 2014

Federal University of Rio Grande do Sul

Porto Alegre, Brazil

- Clinical Bacteriology course, offered to Pharmacy students. Teaching hours: 30 hours.

EXPERIENCE AS PEER REVIEWER

- **Peer reviewer for international scientific publications** since 2016. Over 150 revised manuscripts submitted in more than 20 international scientific journals in the fields of clinical microbiology, microbial genomics, and antibiotic resistance, such as *Microbial Genomics* (since 2023), *Microbiology Spectrum* (since 2022), *Antimicrobial Agents and Chemotherapy* (since 2019) and *Journal of Antimicrobial Chemotherapy* (since 2018).
- **Research Topic editor** at *Frontiers in Cellular and Infection Microbiology* (2022).
- **Peer reviewer of applications to the National Reference Centres** for food- and waterborne pathogens (2024).

MEMBERSHIP IN ACADEMIC SOCIETIES

- Federation of European Microbiological Societies (FEMS) – 2019-present
- Deutsche Gesellschaft für Hygiene und Mikrobiologie (DGHM) – 2019-present
- European Society of Clinical Microbiology & Infectious Diseases (ESCMID) – 2014-present
- ESCMID Food- and Water-borne Infectious Study Group (EFWISG) – 2023-present
- ESCMID Study Group for Epidemiological Markers (ESGEM) – 2023-present
- ESCMID Study Group for Antimicrobial Resistance Surveillance (ESGARS) – 2023-present
- Sociedade Brasileira de Microbiologia (SBM) – 2014-2018

OTHER ACTIVITIES

- **Member of the working group designated by the Haute Autorité de Santé** for “Intérêt des TAAN dans la prise en charge médicale des personnes de retour de voyage en zone endémique”, 2025-present.
- **Member of the Animation Committee** of the Global Health Department at Institut Pasteur, 2024-present.
- **Deputy Officer for Copy-Editing and Translation** of Piplettes, the science popularization blog of Institut Pasteur, Feb/2023-Jun/2023.
- **Graduate students' representative** at the Unity Conseil, Faculty of Pharmacy, Federal University of Rio Grande do Sul, 2015.
- **Mentoring** and support of Brazilian students interested in pursuing an academic career in Europe, 2021-present.

INTERNATIONAL EXPERIENCE**Visiting researcher**

Sep 2018 — Aug 2019

Institute for Medical Microbiology, Immunology and Hygiene, University of Cologne

Cologne, Germany

Visiting student

Sep 2010 — Feb 2011

Faculty of Pharmacy, University of Tübingen

Tübingen, Germany

PRIZES

- 2^o Lugar no Prêmio Melhor Tema Livre do XI Sul Encontro de Controle de Infecção (2nd Place in the Best Free Theme Prize at XI Southern Meeting for Infection Control), 2015.
- Menção Honrosa no IV Simpósio Internacional de Microbiologia Clínica (Honorable Mention at IV International Symposium of Clinical Microbiology), 2014.
- Láurea Acadêmica (Magna Cum Laude) and Alfredo Leal Prize, granted to the best student in the 2013/2 Pharmacy Class at Universidade Federal do Rio Grande do Sul (Federal University of Rio Grande do Sul), 2014.

- Outstanding Presentation in the Clinical Pathology Session and Nomination to the Young Scientist Prize at XXIV Salão de Iniciação Científica da UFRGS (XXIV Undergraduate Research Meeting), 2012.

LANGUAGES

- Brazilian Portuguese: native speaker
- English: Level C1
- French: Level B2
- German: Level B2