

Jonathan Parra-Villalobos

Education

PhD Pharmacy and Biomedical Sciences, 2018-2022, University of Strathclyde

Title: Biogeographical and phylogenetic boundaries of the specialised metabolism of *Pseudonocardia* from marine origin.

Supervisor: Dr Katherine R Duncan.

Projects: Whole-genome sequencing and phenotypical characterisation of novel rare actinomycetes isolated from marine environments. Metabolomics and genomics analysis of the specialised metabolism of the new species. Identification and chemical characterisation of bioactive compounds with antimicrobial activity.

MSc Chemistry, 2012-2017, University of Costa Rica

Title: Molecules with novel structures related to cytotoxic activity from endemic Costa Rican plants.

Supervisor: Dr Renato Murillo.

Projects: Isolation and structural determination of novel compounds related to cytotoxic activity.

Pharmacy degree (B. Pharm), 2005-2011, University of Costa Rica

Dissertation Project: Physicochemical and chromatographic method of characterization of *Matricaria recutita* tinctures.

Supervisor: Dr Pedro García-Barrantes.

Modules studied include: Organic Chemistry, Analytical Chemistry, Medicinal Chemistry, Pharmacognosy, Biochemistry and Pharmacology.

Research Experience

Teaching Assistant, Pharmacy Faculty, University of Costa Rica, CR.

2011-2017

Lecturer in Medicinal Chemistry and Pharmacognosy. Supervision and teaching of undergraduates in their practical classes.

Research Assistant, Natural Products Research Centre, University of Costa Rica, CR.

2016-2017

Isolation and characterization of natural products by applying techniques such as preparative liquid chromatography, NMR, mass spectrometry and X-Ray diffraction spectroscopy.

Postgraduate Researcher, Strathclyde Institute of Pharmacy and Biomedical Sciences, University of Strathclyde, Scotland, UK.

2018-2022

General microbiology and molecular biology techniques. Whole-genome sequencing. Mass spectrometry. Genome mining and metabolomics analysis of specialised metabolisms of actinomycetes.

Referees

Dr Katherine R Duncan

University of Strathclyde, Strathclyde Institute of Pharmacy and Biomedical Sciences
141 Cathedral Street, Glasgow G4 0RE, United Kingdom
katherine.duncan@strath.ac.uk

Dr Renato Murillo

University of Costa Rica, Chemistry School
Ciudad Universitaria Rodrigo Facio, San José 11501-2060, Costa Rica
renato.murillo@ucr.ac.cr

Dr Pedro García-Barrantes

Vertex Pharmaceuticals
50 Northern Avenue, Boston, MA 02210, United States of America
pedgar85@gmail.com

Last publications

- van Santen JA, Poynton EF, Iskakova D, McMann E, Alsup TA, Clark TN, Fergusson CH, Fewer DP, Hughes AH, McCadden CA, **Parra J**, Soldatou S, Rudolf JD, Janssen EML, Duncan KR, Linington RG, The Natural Products Atlas 2.0: a database of microbially-derived natural products. *Nucleic Acids Research* **2022**; 50(D1): D1317–D1323.
- Parra J**, Soldatou S, Rooney L, Duncan K. *Pseudonocardia abyssalis* sp. nov. and *Pseudonocardia oceani* sp. nov., two novel actinomycetes isolated from the deep Southern Ocean. *International Journal of Systematic and Evolutionary Microbiology* **2021**; 71: 005032.
- Undabarrena A, Camila F Pereira C, Kruasuwan W, **Parra J**, Sélem-Mojica N, Kristiina Vind K, Schniete J. Integrating perspectives in actinomycete research: an ActinoBase review of 2020-21. *Microbiology* **2021**; 167: 00108.
- Parra J**, De Ford C, Murillo R. Phytochemical study of endemic Costa Rican Annonaceae species *Annona pittieri* and *Cymbopetalum costaricense*. *Journal of the Chilean Chemical Society* **2021**; 65(1): 5047-5050.

Complete list: <https://orcid.org/0000-0001-7273-0406>