



## Courses/Workshops/Congress/Internships

- “8<sup>th</sup> Annual Conference of the Swiss Metabolomics Society’, Lausanne, Switzerland, 29 September 2022. Poster **L Quiros-Guerrero**, JL Wolfender, A Gaudry, A Rutz, L Marcourt, B David, A Grondin, LF Nothias, E Ferreira Queiroz, PM Allard. “Inventa: a workflow for discovering chemical novelty in natural products extracts libraries”. *Planta Medica* 2022, 88(15): 1545-1546.
- Congress: “70<sup>th</sup> International Congress and Annual Meeting of the Society for Medicinal Plant and Natural Product Research (GA)”, Thessaloniki, Greece 28-31 August, 2022. Poster **L Quiros-Guerrero**, JL Wolfender, A Gaudry, A Rutz, L Marcourt, B David, A Grondin, LF Nothias, E Ferreira Queiroz, PM Allard. “Inventa: a workflow for discovering chemical novelty in natural products extracts libraries”. *Planta Medica* 2022, 88(15): 1545-1546.
- Presentation: ‘Preparación y tratamiento de datos CL-EM para estudios metabolómicos con MZmine’. Centro de investigación en Productos Naturales (CIPRONA) & Centro Nacional de Ciencia y Tecnología de Alimentos (CITA), Universidad de Costa Rica, San Jose, Costa Rica. 3 Agosto 2022. **Instructor: Luis Quirós-Guerrero, M.Sc**
- Presentation: ‘Guías y recomendaciones para el desarrollo de estudio metabolómicos con CL-EM: preparación de muestras, condiciones cromatográficas y control de calidad’. Centro de investigación en Productos Naturales (CIPRONA) & Centro Nacional de Ciencia y Tecnología de Alimentos (CITA), Universidad de Costa Rica, San Jose, Costa Rica. 26 Julio 2022. **Instructor: Luis Quirós-Guerrero, M.Sc**
- Workshop ‘Desarrollo y optimización de protocolos de medición en CL-EM (Orbitrap) con aplicaciones metabolómicas en Productos Naturales’. CENIBiot, Centro de investigación en Productos Naturales (CIPRONA) & Centro Nacional de Ciencia y Tecnología de Alimentos (CITA), Universidad de Costa Rica, San Jose, Costa Rica. 3 Agosto 2022 **Instructor: Luis Quirós-Guerrero, M.Sc**
- Congress “67<sup>th</sup> International Congress and Annual Meeting of the Society for Medicinal Plant and Natural Product Research (GA)”, Innsbruck, Austria, September 1-5, 2019. **Participant** (poster Exposition at Main Congress and Oral presentation at Young Researchers Workshop).
- Workshop “Data Treatment and Molecular Networking”, Université Paris-Décartes, France. **Instructors:** Jean-Luc Wolfender, Ph.D y **Luis Quirós-Guerrero, M.Sc**. June 6, 2019.
- Congress “12<sup>ème</sup> Journées Scientifiques RFMF”, Clermont-Ferrand, France, May 21-23, 2019. France. **Participant** (Poster Exposition)
- Course “Phyton for Life Sciences”, Swiss Institute of Bioinformatics (SIB), University of Bern, March 4-5, 2019. Bern, Switzerland. **Participant**.
- Course “Data Visualization with Cytoscape”, Swiss Institute of Bioinformatics (SIB), Université de Lausanne, November 1, 2018. Lausanne, Switzerland. **Participant**.
- Workshop “NMR–Based Metabolomis”, Red de Investigación en Metabolómica, University of Costa Rica (RIM-UCR). Instructor: Clemens Anklin, Ph.D. (NMR applications group Bruker Biospin, USA), March 2016. **Participant**.
- Congress “32° Latin American Congress of Chemistry, XXI Jornadas Chilenas de Química”. Concepción, Chile, January 2016. **Participant** (oral presentation)

- **Internship** at Institut für Analytische Chemie, Fakultät für Chemie und Mineralogie, Leipzig University, Germany (Supervisors: Isaac Céspedes-Camacho Ph.D and Prof. Dr. Jörk Matysik), Training in NMR spectroscopy (liquid, solid and gas phase). December 16th 2014–March 4th 2015.
- **Internship** at Phytochemistry and Bioactive Natural Products, Université de Genève, Geneve (Prof. Jean-Luc Wolfender). Training in LC-MS data mining. January 19th – January 28th, 2015.
- Spring School, “Theory of NMR”, Colditz, Organizer: Jörg Matysic, Universität Leipzig, Germany, from February 22 to February 28th. 2015. **Participant.**
- Workshop “Topics in Solid Nuclear Magnetic Resonance Spectroscopy”, Programa Regional de Posgrado en Química, University of Costa Rica. Instructor: Jorn Schmedt auf der Gönne, Ph.D. (Siegen University, Germany), September 2014. **Participant.**
- Workshop “Modelling and reaction kinetics of phytochemicals and functional compounds during processing or storage of food products”, Centro Nacional de Ciencia y Tecnología de Alimentos (CITA), University of Costa Rica. Instructor: Martinus von Boeckel Ph.D. April 2014. **Participant.**
- Workshop “Alkaloids of Amaryllidaceae Family”, Centro de Investigación en Productos Naturales (CIPRONA), University of Costa Rica. Instructor: Jaume Bastida Ph. D. (University of Barcelona), Setiembre 2013. **Participant**
- **Volunteer** at Bioprospecting unit, Instituto Nacional de la Biodiversidad (INBio), Costa Rica, June-September 2013.
- Workshop “Introduction to Metabolomics”, Centro de Investigación en Productos Naturales (CIPRONA), Programa Regional del Posgrado en Química, University of Costa Rica. Instructor: Jean-Luc Wolfender, Ph. D. January 2013. **Participant.**
- **Internship** at Instituto de Química Avanzada de Cataluña (IAQC), CSIC. (Supervisor: Josep-Lluís Torres, Ph.D) Training in structural determination of polyphenol by MS/MS spectrometry. Barcelona, Spain, October 2012
- Workshop “Structure elucidation of natural products using NMR”, Chemistry School, Programa Regional de Posgrado en Química, University of Costa Rica and INBio. Instructor: Shugeng Cao, Ph. D. June 2010. **Participant.**
- Workshop “Structure elucidation of natural products using NMR”, Chemistry School, Programa Regional de Posgrado en Química, University of Costa Rica and INBio. Instructor: Shugeng Cao, Ph. D. June 2010. **Participant.**