

EMANUELE PORRU

CHEMIST / Analytical Chemistry



Address:

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Email:

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Sex Male

Date of birth 22/12/1990

Birth Place Cagliari

Nationality Italian

Fiscal code: PRRMNL90T22B354F

Education

From October 2016

Ph.D student in "Analytical Chemistry"

Department of Chemistry "Giacomo Ciamician", University of Bologna.

PhD project: Development of analytical methods in liquid chromatography and mass spectrometry field.

From January 2014
to March 2016

Master's degree in "Analytical Chemistry"

Final Degree Mark **110/110**

Department of Chemistry "Giacomo Ciamician", University of Bologna.

Thesis Internship in analytical chemistry:

Development and validation of an HPLC-ESI/MS method for the pharmacokinetic study of berberine and berberrubine in rats.

From October 2009
to December 2013

Bachelor's degree in "Chemistry",

Final Degree Mark **108/110**

Department of Chemistry,
University of Cagliari.

Thesis Internship in Physical Chemistry:

Excess volumes of non-reactive binary mixtures of carboxylic acids and aliphatic ethers.

Experiences

From May 2019
to August 2019

Visiting PhD student

Research period at Karolinska Institute,
Division of clinical Chemistry.

From March 2016
to September 2016

Researcher

Develop and validation of analytical
method.

Company: RD PHARMADVICE S.R.L.

Keywords:

Hardworking

Responsible

Collaborative

Goal setting

Honest

Self-motivated

Organized

Planner

Team worker

Independent worker

June 2009

Technical Skill

Other Skills

Responsibilities

From January 2017
To January 2019

From January 2018
To June 2018

Internship in Analytical Chemistry Laboratory (40 hours)

Company: S.G.S. Italia S.p.A.

Analytical techniques:

- Mass spectrometry, spectrophotometry, chromatography and theoretical knowledge of most used analytical techniques.

- Chemometric analysis techniques

- Extraction methods for analytes in complex matrix (SPE, SPME, Soxhlet)

Others:

- Franz Diffusion Cell system for skin permeation assay in topical formulation development.

Computer skills:

Good command of Microsoft Office, Waters MassLynx, The Unscrambler X, ChemDraw, GraphPad Prism and photo editing software.

Management and organization:

Management of several projects and collaborations, planning work to achieve goals and targets on time.

Communication:

Coaching and collaboration with other scientists, outlining objectives, methodology, and conclusions.

Good communication/presentation skills: presented data clearly and confidently to both small and large groups.

Teaching:

Supervising of students in chemistry laboratory during thesis projects, internship periods and university courses.

Elected representative of the Ph.D. students of the Department of Chemistry.

Named auxiliary technical advisor for criminal proceeding in environmental pollution field.

Achievement

Publications:

- Serum Bile Acids Profiling in Inflammatory Bowel Disease Patients Treated with Anti-TNFs. Roda G, Porru E, Katsanos K, Skamnelos A, Kyriakidi K, Fiorino G, Christodoulou D, Danese S, Roda A. *Cells*. 2019 Aug 2;8(8). Pii: E817.
- Identification and quantification of oxo-bile acids in human faeces with liquid chromatography–mass spectrometry: a potent tool for human gut acidic sterolbiome studies. Franco P*, Porru E*, Fiori J, Gioiello A, Cerra B, Roda G, Caliceti C, Simoni P, Roda A. *J Chromatogr A*. 2019 Jan 25;1585:70-81.
- Suppression of Hepatic Bile Acid Synthesis by a non-tumorigenic FGF19 analogue Protects Mice from Fibrosis and Hepatocarcinogenesis. Gadaleta RM, Scialpi N, Peres C, Cariello M, Ko B, Luo J, Porru E, Roda A, Sabbà C, Moschetta A. *Sci Rep*. 2018 Nov 21;8(1):17210.
- Role of bile acids in inflammatory bowel disease. Tiratterra E, Franco P, Porru E, Katsanos KH, Christodoulou DK, Roda G. *Ann Gastroenterol*. 2018 May-Jun; 31(3):266-272.
- Combined analytical approaches to define biodistribution and biological activity of semisynthetic berberrubine, the active metabolite of natural berberine. Porru E, Franco P, Calabria D, Spinozzi S, Roberti M, Caliceti C, Roda A. *Anal Bioanal Chem*. 2018 Jun;410(15):3533-3545.
- Long-term Administration of Nuclear Bile Acid Receptor FXR Agonist Prevents Spontaneous Hepatocarcinogenesis in Abcb4^{-/-} Mice. Cariello M, Peres C, Zerlotin R, Porru E, Sabbà C, Roda A, Moschetta A. *Sci Rep*. 2017 Sep 11;7(1):11203.

Communication at congress:

- (Oral) Serum bile acid quantification in antiTNF alpha treatment for inflammatory bowel disease combined to multivariate chemometric data analysis. Porru E, Franco P, Katsanos K, Christodoulou D, Roda A, Roda G. Merck Elsevier Young Chemist Symposium, Rimini 19/11/2018
- (Oral) HPLC-ES MS/MS method for the identification and quantification in human faeces of gut microbiota products: oxo-bile acids. Porru E, Franco P, Fiori J, Gioiello A, Cerra B, Roda G, Caliceti S, Simoni P, Roda A. XXVII National Congress of the Italian Chemical Society, Bologna 16 – 20/09/2018
- (Poster) HPLC-ESI-MS/MS qualitative/quantitative serum bile acid analysis in patients with Ulcerative Colitis and Crohn disease combined to multivariate chemometric data analysis. 42° ISCC: Riva del Garda, 29 – 03/06/2018
- (Poster) Transdermal and mucoadhesive film preparations for the controlled release of pharmaceutical active ingredients. Ronchi C, Roda A, Porru E, Franco P, Ronchi F. 50° Symposium AFI Rimini, 07 – 09/06/2017
- (Poster) Development and validation of an HPLC-ES-MS/MS method for the study of pharmacokinetics and mass balance of berberine and berberrubine in rat. Porru E, Franco P, Spinozzi S, Cont M, Roberti M, Caliceti C, Roda A. 40° ISCC: Riva del Garda, 29 – 03/06/2016
- (Poster) Obeticholic Acid biodistribution and metabolism in cirrhotic rats by means of liquid chromatography-tandem mass spectrometry analysis. Caliceti C, Calabria D, Guardigli M, Porru E, Tacchini E, Bernardi E, Massi A, Sacchetti G, Mirasoli M, Roda A. 40° ISCC: Riva del Garda, 29 – 03/06/2016

Teaching activity	
AY 2016/2017	Tutor and teaching assistant for chemistry laboratory of university course:
AY 2017/2018	Analytical chemistry of pollutants. Pharmacy and Biotechnology Department, University of Bologna
Awards	
20/09/2018	Best oral presentation at XXVII National Congress of the Italian Chemical Society.
Language	
Mother tongue	Italian
Other language	English
<ul style="list-style-type: none"> • Writing • Listening • Speaking 	B2 B2 B2
	<small>Common European Framework of Reference for Languages</small>