

Marta Vinha Vieira

Pharmacist, Food Technologist. MSc.

PERSONAL DETAILS

Nationality: Brazilian/Italian
Born: 27.07.1987

Rua Padre Antonio Vieira, 120
1 Dir. Trás
Braga, Portugal
4710-412

M: (00351) 93 898-7881
Email: marta.vieira@inl.int

AREAS OF EXPERTISE

Bioactive extraction

Encapsulation techniques

Formulation development

Functional foods

Pharmaceutical technology

LANGUAGE PROFICIENCY

Portuguese • Native Speaker

English • Fluent

French • Intermediate

ACADEMIC QUALIFICATIONS

Master of Science – Pharmacy **2015-2017**
Laboratory of Pharmaceutical Technology • Federal University of Santa Catarina, Brazil

Dissertation: Development of polymeric nanocapsules loaded with carotenoids from *Haematococcus pluvialis* for topical cutaneous administration aiming at photoprotective and chemopreventive activities.

Major in Biochemistry (Food Technology) **2009-2011**
Federal University of Santa Catarina, Brazil

Bachelor of Science – Pharmacy **2006-2009**
Federal University of Santa Catarina, Brazil

RESEARCH EXPERIENCE

International Iberian Nanotechnology Laboratory (INL) / Research Fellow
Braga, Portugal • August 2018- present.

- Extraction of bioactive compounds from different microalgae species.
- Encapsulation of bioactive compounds through different techniques (Nano spray dryer, electrospinning, Encapsulator B-395, nanoemulsion).
- Assessment of biological activities.
- Formulation development and characterization of functional foods.

Department of Fruit, Vegetable and Plant Nutraceutical Technology / Visiting Researcher
Wroclaw University of Environmental and Life Sciences • Wroclaw, Poland • September 2020-October 2020.

- *In vitro* antioxidant, anti-aging, anti-diabetes and anti-obesity activities of different microalgae species.
- Phytochemical profile assessment through UPLC/PDA.

Laboratory of Pharmaceutical Technology / Graduate Researcher
Federal University of Santa Catarina • Florianopolis, Brazil • March 2015-March 2017.

- Development and characterization of nanocapsules suspension loaded with carotenoids extracted from a natural resource.
- Development and characterization of a polymeric thermo-sensitive hydrogel for topical administration incorporated with nanocapsules suspension.
- Research methods and techniques: HPLC, DPPH antioxidant assay, dynamic light scattering, LUMiSizer, viscometry, UV spectroscopy, Franz Cell, release studies, among others.

SCHOLARSHIPS

PROM Programme- International Scholarship Exchange of PhD Candidates and Academic Staff Scholarship by NAWA (Polish National Agency for Academic Exchange)
Wroclaw University of Environmental and Life Sciences, Poland
2020

Scholarship for Master studies by CAPES (Coordination for the Improvement of Higher Education Personnel)
Federal University of Santa Catarina, Brazil
2015-2017

Research Traineeship Scholarship by CNPq (National Council for Scientific and Technological Development)
Federal University of Santa Catarina, Brazil
2009-2010

ATTENDANCE AT COURSES AND SEMINARS

20° Gums & Stabiliser for the Food Industry Conference (Poster)
3D-printed functional cookies fortified with *A. platensis*: evaluation of its antioxidant potential and physical-chemical characterization
San Sebastian, Spain, 2019

Winter School “Nanotechnology for Therapy and Diagnostics”- 15 hours
International Iberian Nanotechnology Laboratory, Portugal, 2019

Technical Seminar of Chromatography Allcrom – 7 hours
Florianopolis, Brazil, 2018

III Malvern Workshop “Recent Advances in Characterization of Nanoparticles” – 12 hours
Florianopolis, Brazil, 2015

20° Scientific Initiation Seminar (Poster)
Extraction and characterization of carrageenan obtained from *Kappaphycus alvarezii*
Federal University of Santa Catarina, Brazil, 2010

Laboratory of Rheology and Natural Polymers / Research Trainee

Federal University of Santa Catarina • Florianopolis, Brazil • August 2009-July 2010.

- Planning and performing scientific experiments.
- Extracting carrageenan by the method of precipitation with cetylpyridinium chloride (CPC) from the seaweed *Kappaphycus alvarezii*.
- Preparation and rheological characterization of carrageenan gels.
- Characterization of carrageenan by infrared spectroscopy.

Laboratory of Antibiotics / Research Trainee (Volunteer)

Federal University of Santa Catarina • Florianopolis, Brazil • June 2008-December 2008.

- Training at laboratory routine.
- Extracting polysaccharides from fungi *Ganoderma* to future investigation of biological activities.

TEACHING EXPERIENCE

Teaching Assistant

Federal University of Santa Catarina • Florianopolis, Brazil • August 2015-November 2015.

- Planning and conducting classes in pharmaceutical technology for undergraduate students (theory and practice in the laboratory).
- Preparing and grading exams and assignments.

PROFESSIONAL EXPERIENCE

Seiva Natural Compounding Pharmacy / Laboratory Coordinator

Florianopolis, Brazil • October 2014- March 2015.

- Verifying prescriptions in regard to packaging, excipients, concentration and possible incompatibilities.
- Producing liquid, solid, and semi-solid dosage forms.
- Training and supervising pharmacy technicians.
- Managing inventory.

Project Assistant / Associate with Prof. Dr. Paschoal Felipe. M.D.

Salzburg, Austria • February 2013 – April 2014.

- Planning and developing undergraduate and graduate university courses.
- Collaborating in the administration of an NGO for the exchange of young professionals of higher education in the health area (The World Academy of Medicine).

REFERENCES

Pablo Fucinos, PhD

Staff Researcher at International Iberian Nanotechnology Laboratory-Braga, Portugal.

pablo.fucinos@inl.int

Prof. Elenara Lemos-Senna, PhD

Full Professor at Federal University of Santa Catarina- Florianopolis, Brazil.

lemos.senna@ufsc.br

Prof. Pedro Luiz Manique Barreto, PhD

Associate Professor at Federal University of Santa Catarina- Florianopolis, Brazil.

pedro.barreto@ufsc.br

Perfecta Compounding Pharmacy / Supervisor Pharmacist

Florianopolis • Santa Catarina, Brazil • January 2012- December 2012

- Verifying prescriptions in regard to packaging, excipients, concentration and possible incompatibilities.
- Developing and reviewing laboratory procedures, reports and instructions.
- Managing company documentation.
- Pharmaceutical caring and drug dispensing.
- Supervising staff members.

Capitão Gourmet Food Company and Trading / Trainee - Quality Control

Palhoça • Santa Catarina, Brazil • March 2011- July 2011

- Analyzing operational processes with PDCA cycle and other quality management tools.
- Establishing improvements in hygiene procedures aiming at staff productivity and food safety.
- Measuring costs for improvements in production line cleaning.
- Revising and updating existing operational processes (SOP's, GMP).

Pinheiro Pharmacy / Pharmacist

Florianopolis • Santa Catarina, Brazil • August 2010- December 2010

- Pharmaceutical caring and drug dispensing.
- Managing inventory.
- Managing controlled medicines.

PUBLICATIONS

- **Vieira, M. V.**; Derner, R. B.; Lemos-Senna, E. Preparation and characterization of *Haematococcus pluvialis* carotenoid-loaded PLGA nanocapsules in a gel system with antioxidant properties for topical application. *J Drug Deliv Sci Technol.* 2020, 102099. <https://doi.org/10.1016/j.jddst.2020.102099>.
- **Vieira, M. V.**; Oliveira, S. M.; Amado, I. R.; Fasolin, L. H.; Vicente, A. A.; Pastrana, L. M.; Fuciños, P. 3D printed functional cookies fortified with *Arthrospira platensis*: Evaluation of its antioxidant potential and physical-chemical characterization. *Food Hydrocoll.* 2020, 105893. <https://doi.org/10.1016/j.foodhyd.2020.105893>.
- Oliveira, S. M.; Gruppi, A.; **Vieira, M. V.**; Matos, G. S.; Vicente, A. A.; Teixeira, J. A. C.; Fuciños, P.; Spigno, G.; Pastrana, L. M. How additive manufacturing can boost the bioactivity of baked functional foods. *J. Food Eng.* 2020, 110394. <https://doi.org/10.1016/j.jfoodeng.2020.110394>.
- **Vieira, M. V.**; Pastrana, L. M.; Fuciños, P. Microalgae Encapsulation Systems for Food, Pharmaceutical and Cosmetics Applications. *Mar. Drugs* 2020, 18, 664. <https://doi.org/10.3390/md18120644>.