

Dr. Stefanache Camelia-Paula

Current position: Scientific Researcher 3rd degree in the National Institute of Research and Development for Biological Sciences Bucharest / „Stejarul” Biological Research Centre Piatra Neamt.

Education: PhD in Biology (2015), Master degree in Microbial and Cellular Biotechnologies (2011), Bachelor degree in Biology (2009), within „Alexandru Ioan Cuza” University of Iasi, Faculty of Biology.

Experience in research projects:

- Project leader for 1 international doctoral scholarship project (SCIEX PhD fellowship, 2012-2013) implemented at the Zurich University of Applied Sciences, Switzerland;
- Project team leader for 1 international project (Program SCOPES, 2014-2017);
- Project coordinator for 1 national project (Program PNCDI 2, Ctr. 74/2014, ARMOREC, 01.05 – 30.09.2017);
- Team member in 2 international and 10 national projects.

Publications:

- 2 books: Ciocarlan N., Ghendov V., Izverscaia T., **Stefanache C.**, Carlen C., Simonnet X., “*Medicinal Artemisia L. species (A. annua, A. absinthium and A. lerchiana) in Republic of Moldova*”, P.P. Mediul Ambient, Chisinau, 2017, ISBN: 978-9975-53-798-8; Gille E., Cretu R.M., **Stefanache C.P.**, Gavril G.L., Sidoroff M.E., „*Medicinal and Aromatic Plants from the Wild Flora of Dobrogea (Romania)*”. Tipografia Autograf, Piatra Neamt, 2020. Print ISBN 978-973-0-33115-8, Online ISBN 978-973-0-33284-1.
- 11 articles;
- over 50 scientific publications (short communications and abstracts).

Patents: 2 national patent applications.

Internships and training courses:

- “Summer school 2012: Cell expansion and protein expression – An introduction for standard and single-use bioreactors”, Institute of Biotechnology, Zurich University of Applied Sciences (14-31.08.2012);
- Project management (2010).

National and International Awards:

- **2014 - Best poster presentation prize** (1st Place) of the Phytochemical Society of Europe, International Conference „Phytochemicals in Medicine and Pharmacognosy”, 27 – 30 April 2014, Piatra Neamt, Romania (Presenting author).
- **2017 - Best poster presentation prize** (2nd Place) of the “First International Congress of Danube Region Botanical Gardens”, 7 – 9 September 2017, Arad, Romania (Co-author)
- **2018 - Bronze medal** at “Traian Vuia” International Exhibition of Inventions and Innovations, Timisoara, Romania, 15 June 2018, for the Monography: Ciocarlan N., Ghendov V., Izverscaia T., **Stefanache C.**, Carlen C., Simonnet X., *Medicinal Artemisia L. species (A. annua, A. absinthium and A. lerchiana) in Republic of Moldova*, P.P. Mediul Ambient, Chisinau, 2017, ISBN: 978-9975-53-798-8.

Expertise: development of extraction methods for plant samples, quantification of bioactive compounds from plant samples by chromatographic methods (HPTLC and HPLC analysis), collection, conditioning and preservation of plant material, *in vitro* plant cell and tissue cultures, *in vitro*. animal cell cultures.

BrainMap link <https://www.brainmap.ro/camelia-paula-stefanache>

Publications (selection)

- Stefanache C. P., Peter S., Meier B., Danila D., Tanase C., Wolfram E, 2015, Phytochemical composition of *Arnicae flos* from wild populations in the northern area of the Romanian Eastern Carpathians. *Revista de Chimie*, 66(5): 784-787.
- Mardari C., Birsan C., Stefanache C., Schiopu R., Grigoras V., Balaes T., Danila D., Tanase C., 2019, Population structure and habitat characteristics of *Arnica montana* L. in the NE Carpathians (Romania). *TUEXENIA Journal*, 39:401-421.
- Camelia STEFANACHE, Doina DANILA, Radu NECULA, Elvira GILLE, 2010, Studies regarding *in vitro* regeneration of *Arnica montana* L. from natural populations - Bistrita Valley (Eastern Carpathians), *Analele Stiintifice ale Universitatii "Al. I. Cuza" Iasi*, Tomul LVI, Fasc. 1, S. II A. *Biologie Vegetala*, p. 33-42.
- Stefanache C.P., Danila D., Necula R., Vantu S., Gille E, 2012, *In vivo* and *in vitro* phytochemical studies of *Arnica montana* L. species from Romanian Eastern Carpathians, *Acta Horticulturae*, 955: 143-148.
- Danila D., Stefanache C., Drutu C., Trotus E, 2012, Conventional and unconventional techniques for *in situ* conservation and capitalization in agro-systems of *Veronica officinalis* L., *Acta Horticulturae*, 955: 137-142.
- Stefanache C.P., Tanase C, 2015, The influence of biotic interactions on the distribution and abundance of *Arnica montana* L. species in natural habitats, *Acta Horticulturae*, 1099(2): 603 – 608.
- Stefanache C.P., Tanase C., Wolfram E., Danila D, 2014, *In situ* and *in vitro* comparative study on the bioproductivity of *Arnicae folium et caulis* from the northern area of the Romanian Eastern Carpathians, *Journal of Plant Development*, 21: 3–12.
- Constantin Mardari, Doina Danila, Ciprian Birsan, Tiberius Balaes, Camelia Stefanache, Catalin Tanase, 2015, Plant communities with *Arnica montana* in natural habitats from the central region of Romanian Eastern Carpathians, *Journal of Plant Development*, 22: 95-105.
- Camelia Paula Stefanache, Oana-Crina Bujor, Radu Necula, Doina Danila, Nina Ciocarlan, Veaceslav Ghendov, Christoph Carlen, Xavier Simonnet, 2016, Phenolic content of *Artemisia annua* L. from natural habitats in Republic of Moldova, *Journal of Plant Development*, 23: 61-69.
- Gille E., Tebrencu C.E., Necula R., Grigoras A.V., Stefanache C.P., Cretu R.M. 2018. Phytobiological testing of some bioactive complexes extracted from *Scirpoides holoschoenus* (L.) Soják and *Helichrysum arenarium* (L.) Moench. *Analele Stiintifice ale Universitatii „Al. I. Cuza” Iasi s. II a. Biologie vegetala*, 64: 25-38.

Projects (selection)

Project coordinator / project team leader

- 2014 – 2017** SCOPES (Scientific co-operation between Eastern Europe and Switzerland) – SCOPES 2013-2016: Joint Research Projects, *Capitalization of the natural potential of several medicinal and aromatic species in the Artemisia genus with economic and ecological value in Moldova*, REART;
- 2014 – 2017** Program Partnership in Priority Areas, Applicative Research Collaborative Projects, (PCCA-2013), *Development of a functional model for sustainable capitalization of genetic and phytochemical diversity of Arnica montana L. wild populations in the Northern area of the Romanian Eastern Carpathians*, ARMOREC;
- 2012 – 2013** Scientific Research Programme between Switzerland and the New Member States of the European Union Research Program (SCIEX), *The development of a cell culture system in order to obtain biological active principles and indirect regeneration for Arnica montana species*, ArnicaActiveCell.

Team member

- 2022 – ongoing** National Research, Development and Innovation Plan 2015-2020, PNIII, P2 - Increasing economic competitiveness through RDI Romanian, Competition 2021, *Hybrid bio-systems enriched with biotechnological extracted oils and applicability in skin tissue engineering*, HYTECHSKIN;

- 2020 – 2022** Program PN III Program 1 – Development of the national research-development system, Subprogram 1.1 – Human resources. Research projects to stimulate young independent teams, Competition 2019, *Plant-derived compounds with potential use in onychomycosis: strategies based on synergies and nanoformulations*, PLANTSYNAN;
- 2018 – 2020** Program 1 – Development of the National R&D System, Subprogram 1.2 – Institutional Performance - Projects for Excellence Financing in RDI, Contract no. 22PFE/2018
- 2017 – 2018** National Research, Development and Innovation Plan 2015-2020, PNIII, P2 - Increasing economic competitiveness through RDI Romanian, Competition 2016, *Advanced and emergent technologies to obtain vegetal extracts used in innovator food supplements*, TEVIS;
- 2013 – 2014** Program Capacity / Sub-Program “Bilateral Cooperation Romania – Republic of Moldavia”, *Identification and characterization of several Nepeta, Agastache, Perilla and Lamium species in the spontaneous flora, collections and experimental cultures from the biological and ecological point of view*, EGRE-LAIC;
- 2013 – 2014** Program Capacity / Sub-Program “Bilateral Cooperation Romania – Republic of Moldavia”, *The analysis of intraspecific genetic polymorphism to elaborate the molecular markers of some medicinal and aromatic plant chemotypes*, GECOMAP;
- 2012 – 2013** Program Innovation, Sub-Program “Innovation Checks”, *Technological transfer and assistance for the implementation of the micropropagation technology for selected lavender bio-forms (Lavandula ssp.)*, BIOLAV.

<https://ccb-stejarul.ro/projects.html>