PERSONAL INFORMATION

Ancuța - Cristina Manolică, née Raclariu



E-mail: anca raclariu@yahoo.com ancuta.manolica@incdsb.ro

Sex Female | Date of birth 25/07/1985 | Nationality Romanian | Civil status married (one child)

PROFESIONAL LINKS

orcid.org/0000-0003-1860-9984

https://www.linkedin.com/in/ancuta-cristina-raclariu-manolica-217b447b/

https://www.researchgate.net/profile/Ancuta_Raclariu

brainmap https://www.brainmap.ro/ancuta-cristina-manolica

PROFESSIONAL APPOINTMENTS

June 2022 - onwards July 2018 - May 2022 July 2010 - June 2018

Scientific Researcher Grade II Scientific Research Assistant Junior Scientific Researcher

National Institute of Research and Development for Biological Sciences (Romania)

Branch: 'Stejarul' Research Centre for Biological Sciences Alexandru cel Bun 6, Piatra Neamt, 610004, Romania https://www.incdsb.ro/en/; http://www.ccb-stejarul.ro/

Business or sector Academic - Research and Development Institute (R&D)

May 2018 - onwards

Associate Researcher

University of Oslo, Faculty of Mathematics and Natural Sciences, Natural History Museum Oslo

Sars' gate 1, 0562 Oslo, Norway

Business or sector Academic - Higher education

September 2019 -August 2020

Scientist (Fellow)

Federal Institute for Risk Assessment (BfR - Bundesinstitut für Risikobewertung)

Max-Dohrn-Str. 8-10, 10589, Berlin, Germany

Scientist within the European Food Risk Assessment Fellowship Programme (EU-FORA) organized by the European Food Safety Authority (EFSA); Work Programme title: Risk assessment of botanical preparations used in food

supplements and fortified foods **Business or sector Public Institution**

September 2009 – June 2010

Teacher of Biology

Școala cu clasele I-VIII Dumbrava Roșie

Dumbrava Roșie 1, 617185, Piatra Neamţ, România

URL: http://scldr.ro/

Business or sector Education- Public Institution

EDUCATION AND TRAINING

July 2014 – November 2017

Doctor of Philosophy (Ph.D.)

EQF level 8

University of Oslo, Faculty of Mathematics and Natural Sciences, Oslo, Norway Thesis: Molecular authentication of complex herbal food supplements for safety and efficacy

October 2010 - July 2012

Master of Science in Biology, Specialization: Molecular Genetics

EQF level 7

Alexandru Ioan Cuza University, Faculty of Biology, Iasi, Romania

October 2008 – July 2009

Master of Science, Specialization: Environmental Management

EQF level 7

Gheorghe Asachi Technical University, Faculty of Chemical Engineering and Environmental

Protection, Iasi, Romania

EOF level 6

Bachelor of Science in Biology, Specialization: Ecology and October 2004 – July 2008 **Environmental sciences**

Alexandru Ioan Cuza University, Faculty of Biology, Iasi, Romania

September 2000 – June 2004

High School, Specialization: Physics – Chemistry

EQF level 4

Calistrat Hogas High School, Piatra Neamt, Romania

PERSONAL SKILLS

Mother tongu Other language

tongue(s)	Romanian				
nguage(s)	UNDERST	ANDING	SPEA	KING	WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C2	C2	C2	C2	C2
Italian	B2	B2	B2	B2	B2
Itanan				D2	D2
German	B1	B1	B1	B1	B1

Levels: A and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user Common European Framework of Reference for Languages

Coordinator/Responsible of research projects

Project management experience METAPLANTCODE - Harmonizing plant metabarcoding pipelines in Europe to support monitoring activities in the field of plants and their functional organismic networks

April 1st 2024 - March31st 2027. EU Biodiversa+. Grant number: 216811. Total Budget Euro 3,123,030

https://www.uni-kassel.de/fb10-ag-botanik/metaplantcode/ (webpage under construction)

Role: Key researcher & Member of Supervisory Board/Progress Monitoring Officer

Integrated genetic approach and fingerprinting of botanicals for an advanced quality assessment of herbal food supplements

August 2021- July 2023, PNCDI III Romanian Ministry of Research and Innovation. Project no. PD 157/2020. Budget Ron 246,950. https://sites.google.com/view/plantcheck

Role: Project coordinator

Mobility project for researchers

2018, Supported by the Romanian Ministry of Research and Innovation, CNCS – UEFISCDI, Project no. PN-III-P1-1.1-MC-2018-0396 within PNCDI III.

Role: Project director

EEA – Mobility projects

2018, Supported by the Romanian Ministry of Research and Innovation, CNCS – UEFISCDI, Project no. EEA-MG-RO-NO-2018-015 within PNCDI III.

Role: Project director

Key researcher in national and international research projects SAFEMAPS - Integrated analytical solutions for improving the conformity and quality of products obtained from medicinal and aromatic plants in order to ensure consumer protection and sustainable exploitation of biodiversity

January 1st 2023 - December 31st 2026. PNCDI IV/ Core Program. Project no. 3020301/contract 7N/2023. https://sites.google.com/view/safemaps

ResPonSE - Monitoring and evaluation of ecosystems' status and services through assessment of insect abundance and diversity with Malaise and pitfall traps using conventional morphological identification and DNA barcoding

2023-2025. PNRR/Component 9 Support for the private sector, research, development and innovation/Investment 5. Establishment and operationalization of competence centers.

Contract no. 760010/2022

https://response.unibuc.ro/

OK Krydder 2018 - Surveillance and control program for spices 2018

January 1st – December 31st 2018. Norwegian Food Safety Authority (Mattilsynet). Project 57237/2018.

BIODIVERS 2 - Development of tools and strategies for the superior exploitation of natural resources for the improvement of their sustainable exploitation in bio-industries and the preservation of ecosystem functions - Valorization of the vegetal resources with bioactive components through integrated processes for a sustainable bioeconomy

January 1st – December 31st 2018. PNCDI III Core Program.

PhytoAuthent - Molecular authentication of complex herbal food supplements for safety and efficacy July 2014 - April 2017. Economic European Area (EEA) and Norway Grants. Grant agreement no: 2SEE/2014/RO14-0019.

AMIGA - Assessing and monitoring the impacts of genetically modified plants on agro-ecosystems December 2011 - November 2016. European Commission, Financing scheme: FP7 - KBBE.2011.3.5-01. Grant agreement no: 289706.

Assessing and monitoring the impacts of genetically modified plants on agro-ecosystems

November 2012 - November 2015. UEFISCDI Module III - Projects to support Romania's participation in international research projects, Co-financing projects of Romania's participation to FP7. Grant agreement no.: 199EU.

BIODIV - Identification, characterization and utilization of bioresources for obtaining of useful substances for capitalization and conservation of biodiversity.

July 2010 - March 2014. Romanian Ministry of Research Education and Innovation. Project no.: PN 09-360402.

VEROBIO - The Veronica genus - identification of interrelations between the biological and ecological diversity of the species identified in protected areas and at national level in order to characterize, preserve and durable use of the genetic resources

July 2010 - November 2011. Romanian Ministry of education, research, youth and sport. Grant agreement no: 32151/01.10.2008.

	ADDITIONAL INFORMATION
Travel grants	
Mobility grant (2018)	Romanian Ministry of Research and Innovation
Mobility grant (2018)	Romanian Ministry of Research and Innovation
Travel grant (2019)	International Centre for Genetic Engineering and Biotechnology (ICGEB)
Travel grant (2018)	Romanian Executive Agency for Higher Education, Research, Development and Innovation (Mobility projects
	for researchers, 2018 Call)
Travel grant (2018)	Romanian Executive Agency for Higher Education, Research, Development and Innovation Funding (Research
	Programme under EEA Financial Mechanism 2014-2021)
Travel grant (2014)	International Centre for Genetic Engineering and Biotechnology (ICGEB)
Travel grant (2014)	EU/FP7/DoReMi Project
Travel grant (2013)	European Plant Phenotyping Network
Travel grant (2013)	International Centre for Genetic Engineering and Biotechnology (ICGEB)
Travel grant (2013)	EU/FP7/DoReMi Project
Travel grant (2013)	EU/FP7/DoReMi Project
Travel grant (2012)	European Science Foundation, FroSpects Programme (EFS)
Travel grant (2011)	International Centre for Genetic Engineering and Biotechnology (ICGEB)
Travel grant (2010)	EU/FP7/AGRISAFE Project
ganisational skills and	
ther job-related skills	Certified research management for researchers (since 2022)
	Certified project manager (since 2014)
	Certified school teacher (since 2008)
	Certified train-the-trainer (since 2014) Certified on public acquisitions (since 2014)
	Certified on public acquisitions (since 2014)

Org

Reviewer for Scientific Journals

Frontiers in Pharmacology (Frontiers Media S.A; IF2021: 5,98)

PLOS ONE (Public Library of Science, IF2022: 3,75) Planta Medica (Thieme Medical Publishers, IF2021 3,007) Genome (Canadian Science Publishing, IF2022 2,44)

Member in Professional Association

European Food Safety Authority (EFSA) - European Food Risk Assessment Fellowship Programme (EU-FORA) Alumni – Member since 2020/Board Member 2021-2022

Society for Medicinal Plant and Natural Product Research (GA) - since 2017

Research School in Biosystematics (ForBio) - 2014-2018

International Union of Biochemistry and Molecular Biology (IUBMB) - since 2010

Federation of European Biochemical Societies (FEBS) - since 2010

Romanian Society of Biochemistry and Molecular Biology (RSBMB) - since 2010.

Advanced practical training and research visits Module 3 training of the European Food Risk Assessment fellowship Programme (EU-FORA) (Topics: Identification of Emerging Risks, Nanomaterials and areas of application, Adverse Outcome Pathway (AOP), Mode of Action (MoA) and the IATA approach, OMICs in Risk Assessment Risk Ranking). 24-31 August 2020, Virtual training.

Module 2 training of the European Food Risk Assessment Fellowship Programme (EU-FORA) (Topics: Risk communication, Crisis communication, Risk Perception, Survey Methodology, Media Training). 10-14 August 2020, Virtual training.

Module 1 training of the European Food Risk Assessment fellowship Programme (EU-FORA) (Topics: Overview of GMO Risk Assessment, Animal health and animal welfare risk assessment, Plant health and pesticides risk assessment, Nutritional Risk assessment, Environmental risk assessment). 25 – 29 November 2019, Vienna, Austria.

European Food Risk Assessment Fellowship Programme (EU-FORA) induction training, 2-20 September 2019, European Food Safety Authority (EFSA), Parma, Italy

Phylogeny and molecular taxonomy of some plant species with economic importance (Research stay). 11-22 March 2019, Hosted by: Prof. Dr. Christoph Oberprieler at the Institute of Plant Sciences, Evolutionary and Systematic Botany, University of Regensburg, Germany.

DNA barcoding - High Resolution Melting (Bar-HRM) for the identification and authentication of medicinal plant and the derived herbal products (Research stay). 1-20 June 2018, Hosted by: Dr. Panagiotis Madesis at the Institute of Applied Biosciences, Centre for Research & Technology, Hellas, Greece.

Introduction to Bioinformatics for Biosystematics course, 5 - 9 October 2015, Natural History Museum, University of Oslo, Norway

DNA-barcoding course. 9 – 13 March 2015, Natural History Museum, Paris, France

AMIGA Summer School on environmental risk assessment (ERA) of GM crops. 2 – 5 September, 2014, TEAGASC Crops Research, Oak Park, Carlow, Ireland

Bioinformatics: Computer Methods in Molecular and Systems Biology (training course), 22 – 29 June 2014, International Centre for Genetic Engineering and Biotechnology, Trieste, Italy

InterRad - Interdisciplinary Radiation Research (training course). 3 – 14 February 2014, Federal Office for Radiation Protection, Munich, Germany

Summer School: Plant Phenotyping. 30 June – 6 July 2013, Biological Research Centre, Szeged, Hungary

Modelling radiation effects from initial physical events (training course). 27 May – 7 June 2013, University of Pavia, Italy

Biodownstream Technology Course (training course). 15 – 19 April 2013, Marine Biology Station, Piran, Slovenia

Radiation-induced effects with particular emphasis on genetics, development, teratology, cognition as well as space-related health issues (training course). 18 February –1 March 2013, Belgian Nuclear Research Centre, Mol, Belgium

Patterns and processes of diversification and hybridization in Veronica chamaedrys (Research stay). 28 January - 4 March 2012, Hosted by: Prof. Dr. Dirk Albach, Carl von Ossietzky University, Faculty of Mathematics and Sciences, Department of Biology and Environmental Sciences, Oldenburg, Germany

Advanced Theoretical Courses and Workshops

Parma Summer School 2022 "Risk assessment of regulated products". 28-30 Septembrie 2022, European Safety Authority EFSA). Online.

ReMaT – Research Management Training for Early Career Researchers. 04-05 May, TUTECH Innovation GMBH. Online.

Risk Assessment and Risk Management of Genetically Modified Organisms (GMO). 09.07.2020, Federal Institute for Risk Assessment (BfR), Berlin, Germany

Risk Assessment – Food contamination by plasticisers, 05.05.2020, Federal Institute for Risk Assessment (BfR), Berlin, Germany

10th Berlin Workshop on Developmental Toxicology, 19–20 February 2020, Conference center Berlin Biotechpark, Germany

Ethnopharmacology. 12 – 16 September 2016, Faculty of Pharmacy, University of Oslo, Norway

DNA barcoding - from theory to applications. 22 – 26 August 2016, Gothenburg University, Sweden

Information Visualisation in Science Communication Workshop. 24 April 2016, Norwegian University of Science and Technology (NTNU) University Museum, Trondheim, Norway

Phylogenetic methods. 2 – 6 November 2015, University of Bergen, Norway

Phylogeny and Classification. 18 August – 22 September 2015, University of Oslo, Norway

Science, Ethics and Society. 18 – 22 May 2015, The Faculty of Mathematics and Natural Sciences, University of Oslo, Norway

Mouse genetics: models for human diseases. 8 – 11 April 2013, International Centre for Genetic Engineering and Biotechnology, Trieste, Italy

Francophone Summer School 'Prof. Jean Montreuil'. 4 – 9 July 2011, Vasile Goldis Western University of Arad, Romania

RNA Structure and Function. 18 – 21 April 2011, International Centre for Genetic Engineering and Biotechnology, Trieste, Italy

Climate change: Challenge for training of applied plant scientists. 25 – 29 October 2010, Agricultural Research Institute of the Hungarian Academy of Sciences, Martonvasar, Hungary

Francophone Summer School 'Molecular pathology and pharmacology. Biotechnology'. 5-17 July 2010, Vasile Goldis Western University of Arad, Romania

Talks, Posters and Conference abstracts communicated at international scientific meetings Ancuţa Cristina Raclariu-Manolică DNA barcoding and metabarcoding of herbal medicines. Invited talk at: International Bioresources Conclave and Ethnopharmacology Congress (ISE SFEC), 24-26 Februarie 2023, Imphal, Manipur, India. Congress book: https://isesfec2023.in/ibsd-sfe/web/uploads/docs/ISESFEC 2023 - Congress Book-56382638YRH.pdf

Ancuta Cristina Raclariu-Manolică, Quentin Mauvisseau, Renato Paranaiba, Hugo J. de Boer, Carmen Socaciu. *Milk thistle product authentication using LC-MS and DNA metabarcoding*. Poster presented at: 70th International Congress and Annual Meeting of the Society for Medicinal Plant and Natural Product Research (GA). 28-31 August 2022, Thessaloniki, Greece.

Abstract: Planta Med 2022; 88: 1385–1588 doi 10.1055/a-1950-7375

Ancuta-Cristina Raclariu-Manolică, Quentin Mauvisseau, Renato Paranaiba, Hugo De Boer, Carmen Socaciu *Integrated molecular approaches for advanced quality assessment of botanicals and derived herbal preparations*. 25-27 May 2022, Sofia, Bulgaria and online.

Ancuţa Cristina Raclariu-Manolică, Nadiya Bakhiya, Alfonso Lampen, Karen Ildico Hirsch-Ernst, 2020. *Risk assessment of the use of Annona muricata in food supplements*. Naunyn-Schmiedeberg's Arch Pharmacol, 393 (Suppl 1): Poster 82. Poster presented at: **5th German Pharm-Tox Summit 2020**. 2 - 5 March 2020, Leipzig, Germany.

Ancuta Cristina Raclariu-Manolica, Mihael Cristin Ichim, Hugo de Boer. *Biodiversity in complex marketed herbal products - species identification and authentication for safety and efficacy.* Poster presented at: **International Barcode of Life Conference**.15-20 June 2019, Trondheim, Norway.

Ancuta Cristina Raclariu-Manolica, Mihael Cristin Ichim, Hugo de Boer. Species identification and authentication of complex medicinal plant-based marketed products for safety and efficacy. Poster presented at: Workshop "Trends and Prospects of Med/Pharma Biotechnologies in Europe: Towards Strengthening Regional Cooperation Including CEE Countries". 3 - 4 June, 2019, Bratislava, Slovakia.

Ancuta Cristina Raclariu-Manolica, Mihael Cristin Ichim, Oana Madalina Popa, Paula Paraschiva Sosoi, Hugo de Boer *DNA metabarcoding authentication ensure the safety and efficacy of merketed herbal products and protect the human health*. Poster presented at: Workshop on Modern Biotechnological Advances for Human Health – BAHH 2019. May 28–31, 2019, in Bucharest, Romania

Ancuta Cristina Raclariu, Mihael Cristin Ichim, Carmen Elena Tebrencu, Hugo de Boer. *Molecular authentication of Echinacea herbal products*. Poster presented at: **5th International conference of FOODOMICS**. 10 – 12 January 2018, Cesena, Italia. URL: http://www.foodomics.eu/

Ancuta Cristina Raclariu, Hugo de Boer, Mihael Cristin Ichim. *Metagenomics approaches for the authentication of complex herbal products.* Poster presented at: **5th International conference of FOODOMICS.** 10 – 12 January 2018, Cesena, Italia. URL: http://www.foodomics.eu/

Ancuta Cristina Raclariu. Comparative authentication of *Hypericum perforatum* L. (St. John wort) herbal products using DNA metabarcoding, TLC and HPLC-MS. Talk/Oral presentation at: International Barcode

of Life Conference. 20 - 24 November 2017, Kruger National Park South Africa URL: https://dnabarcodes2017.org/

Peer reviewed scientific publications

Ancuța Cristina Raclariu-Manolică, Quentin Mauvisseau, Renato Paranaiba, Hugo J. de Boer, Carmen Socaciu. Authentication of milk thistle commercial products using UHPLC-QTOF-ESI + MS metabolomics and DNA metabarcoding. **BMC** Complementary Medicine and Therapies 23, https://doi.org/10.1186/s12906-023-04091-9

Ancuta Cristina Raclariu-Manolică, Quentin Mauvisseau, Hugo J. de Boer (2023). Horizon scan of DNAbased methods for quality control and monitoring of herbal preparations. Frontiers in Pharmacology 14. doi.org/10.3389/fphar.2023.1179099.

Ancuța Cristina Raclariu-Manolică, Carmen Socaciu (2023). In Search of Authenticity Biomarkers in Food Supplements Containing Sea Buckthorn: A Metabolomics Approach. Foods (Basel, Switzerland), 12(24), 4493. https://doi.org/10.3390/foods12244493

Felicitas Mück, Francesca Scotti, Quentin Mauvisseau, Ancuta Cristina Raclariu-Manolică., Audun Schröder-Nielsen, Helle Wangensteen, & Hugo De Boer (2023). Complementary authentication of Chinese herbal products to treat endometriosis using DNA metabarcoding and HPTLC shows a high level of variability. Frontiers in pharmacology, 14, 1305410. https://doi.org/10.3389/fphar.2023.1305410

Ancuta Cristina Raclariu-Manolică, Carmen Socaciu (2023). Detecting and profiling of milk thistle metabolites in food supplements: a safety-oriented approach by advanced analytics" Metabolites 13, 3: 440. doi.org/10.3390/metabo13030440

Ancuța Cristina Raclariu-Manolică, Jarl Andreas Anmarkrud, Marcin Kierczak, Nima Rafati, Lisbeth Thorbek, Audun Schrøder-Nielsen, Hugo J De Boer (2021). DNA metabarcoding for quality control of basil, oregano and paprika. Frontiers in Plant Science, 12. https://doi.org/10.3389/fpls.2021.665618

Ancuța Cristina Raclariu-Manolică, Nadiya Bakhiya, Karen Ildico Hirsch-Ernst (2020). Risk assessment regarding the use of Annona muricata in food supplements. European Food Safety Authority (EFSA) Journal 2020;18(S1):e181112, doi.org/10.2903/j.efsa.2020.e181112

Gopalakrishnan Saroja Seethapathy, Ancuta Cristina Raclariu-Manolică, Jarl Andreas Anmarkrud, Helle Wangensteen, Hugo J. de Boer (2019). Authentication of Ayurvedic herbal products available in European market using DNA metabarcoding raises quality concerns. Frontiers in Plant Science, doi: 10.3389/fpls.2019.00068

Ancuta Cristina Raclariu-Manolică, Heinrich, Mihael Cristin Ichim, and Hugo J. de Boer (2018). Benefits and limitations of DNA-based methods in herbal products authentication. *Phytochemical Analysis* 29: 123–128, doi: 10.1002/pca.2732

Hugo J. de Boer, Abdolbaset Ghorbani, Vincent Manzanilla, Ancuta Cristina Raclariu-Manolică, Anna Kreziou, Sarawut Ounjai, Maslin Osathanunkul and Barbara Gravendeel. (2017). DNA metabarcoding of orchid products reveals widespread illegal orchid trade. Proceedings of the Royal Society B: Biological Sciences, doi10.1098/rspb.2017.1182

Ancuța Cristina Raclariu-Manolică, Carmen Elena Țebrencu, Mihael Cristin Ichim, Oana Teodora Ciupercă, Anne Krag Brysting, and Hugo J. de Boer. (2018) What's in the box? Authentication of Echinacea herbal products using DNA metabarcoding and HPTLC. Phytomedicine, doi: 10.1016/j.phymed.2018.03.058

Ancuta Cristina Raclariu-Manolică, Andrei Mocan, Mădalina Oana Popa, Laurian Vlase, Mihael Cristin Ichim, Gianina Crisan, Anne Krag Brysting, and Hugo J. de Boer. (2017). Veronica officinalis product authentication using DNA metabarcoding and HPLC-MS reveals widespread adulteration with Veronica chamaedrys. Frontiers in Pharmacology, 8:378. doi.org/10.3389/fphar.2017.00378

Ancuta Cristina Raclariu-Manolică, Ramona Păltinean, Laurian Vlase, Aurélie Labarre, Vincent Manzanilla, Mihael Cristin Ichim, Gianina Crisan, Anne Krag Brysting, and Hugo J. de Boer. (2017). Comparative authentication of Hypericum perforatum herbal products using DNA metabarcoding, TLC and HPLC-MS. Scientific Reports, 7(1):1291. doi: 10.1038/s41598-017-01389-w

International Books/ Book chapter(s)

Ancuta Cristina Raclariu-Manolică, Hugo J. de Boer, Chapter 8 - DNA barcoding and metabarcoding for quality control of botanicals and derived herbal products, Editor(s): Pulok K. Mukherjee, Evidence-Based Validation of Herbal Medicine (Second Edition), Elsevier, 2022, Pages 223-238, ISBN 9780323855426, https://doi.org/10.1016/B978-0-323-85542-6.00004-4.

Ancuta - Cristina Raclariu, 2017, Molecular authentication of complex herbal products for quality and safety. University of Oslo, Norway, ISSN 1501-7710/2017. (PhD thesis)

Curriculum vitae

Ancuța - Cristina Manolică, née Raclariu April, 2024 7