

CURRICULUM VITAE

Personal information

First names /Surname
Address
Telephone/Fax
E-mails
Nationality
Date of birth
Gender
Civil status

Mihael Cristin ICHIM

Borzoghean St, 4, Piatra Neamt, 610091, Romania
Professional: +40 / 233 / 210809 Private: +40 / 333 / 801909
Mobile: +40 / 723 / 077714
cichim@hotmail.com mccichim@gmail.com
Romanian
28/07/1975
Male
Married (one child)

Work experience

| Dates / Positions held | |
|--------------------------------------|---|
| February 2024 - onwards | Senior Researcher (I st grade) |
| November 2021 – January 2024 | Senior Researcher (II nd grade) |
| May 2021 - onwards | Director (Branch: "Stejarul" Research Centre for Biological Sciences) |
| June 2017 - onwards | Founder & responsible of the DNA barcoding laboratory Registry of European Research Infrastructures System (https://eeri.eu/ERIF-2000-000W-3136) |
| July 2010 - onwards | Group leader: Molecular Biology and Ecology (http://molbioecogroup.webs.com) |
| May 2005 - onwards | Scientific Researcher |
| January 2002 – April 2005 | Young Scientific Researcher |
| August 1998 – December 2001 | Scientific Research Assistant |
| Name and address of employer | National Institute Research and Development for Biological Sciences / (www.incdsb.ro) "Stejarul" Research Centre for Biological Sciences (www.ccb-stejarul.ro) Alexandru cel Bun St., 6, Piatra Neamt, 610004, Romania |
| Main activities and responsibilities | Group and laboratory management, scientific research activities; initiation and preparation of research project proposals for national, European and international funding bodies; establish national and international partnerships; guidance and training of undergraduate, graduate and postgraduate students. |
| Type of business or sector | Public R&D institute |
| Dates / Position held | March 2002 - February 2005 Postgraduate Marie Curie Fellow |
| Name and address of employer | European Commission DG Joint Research Centre Institute for Health and Consumer Protection Molecular Biology and Genomics Unit Via E. Fermi, 2749, I-21027, Ispra (VA), Italy (https://ec.europa.eu/jrc/en/about/jrc-site/ispra) |
| Main activities and responsibilities | Scientific research activities; preparation of doctoral thesis; participation to training courses, workshops and seminars. |
| Type of business or sector | European institution |

Education

Postgraduate

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| Dates | October 2005 – October 2009 |
| Title of qualification awarded | PhD - Doctorate in Biological Sciences (specialization: Genetics) |
| Principal subjects | Thesis title: "The dynamics of some T-DNA integration sites in the genome of the <i>Arabidopsis thaliana</i> (L.) Heynh. species, under oxidative stress conditions" |

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| Name of organisation providing education | "Alexandru Ioan Cuza" University / Faculty of Biology (Iasi, Romania) (www.bio.uaic.ro) |
| Graduate | |
| Dates | November 2008 – July 2009 |
| Title of qualification awarded | MSc - Master of Science in Agriculture (specialization: Biosafety in Plant Biotechnology) |
| Principal subjects | Thesis title: "Development of GM freezing-tolerant oilseed rape and the application for field trial release in Romania" |
| Name of organisation providing education | Marche Polytechnic University (Ancona, Italy) United Nations Industrial Development Organization (UNIDO) (http://binas.unido.org/moodle/mod/resource/view.php?id=197) |
| Dates | October 1999 – February 2001 |
| Title of qualification awarded | MSc - Master of Science in Biology (specialization: Molecular Genetics) |
| Principal subjects | Thesis title: "Genetically Modified Plants (GMPs) – achievements, economic and environmental impact (case study: Romania)" |
| Name of organisation providing education | "Alexandru Ioan Cuza" University / Faculty of Biology (Iasi, Romania) (www.bio.uaic.ro) |
| Undergraduate | |
| Dates | October 1994 – June 1998 |
| Title of qualification awarded | BSc - Bachelor of Science in Biology (specialization: Biochemistry) |
| Principal subjects | Thesis title: "Study on the biosynthetic capacity of <i>Peganum harmala</i> L. tissue cultures for pharmacological active compounds" |
| Name of organisation providing education | "Alexandru Ioan Cuza" University / Faculty of Biology (Iasi, Romania) (www.bio.uaic.ro) |
| Advanced training | |
| Dates / Place | December 3-5, 2011 / Zagreb, Croatia |
| Title of the course | Field trials and post-release and post-market monitoring of GMOs |
| Name of organisations providing training | International Centre for Genetic Engineering and Biotechnology (ICGEB) |
| Dates / Place | February 20-26, 2011 / Yerevan, Armenia |
| Title of the course | Genomic instability and pathways of response (FEBS Advanced Lecture Course) |
| Name of organisations providing training | Federation of European Biochemical Societies (FEBS) |
| Dates / Place | March 23-27, 2009 / Martonvasar, Hungary |
| Title of the course | Biotic and abiotic stresses |
| Name of organisations providing training | Agrosafe Project (EU/FP7) Agricultural Research Institute of the Hungarian Academy of Sciences |
| Dates / Place | August 20-25, 2007 / Vilnius, Lithuania |
| Title of the course | Biotechnology Ethics |
| Name of organisations providing training | BioTethed Consortium (EU/FP6) Lithuanian Bioethics Committee |
| Dates / Place | February 20-24, 2006 / Izmir, Turkey |
| Title of the course | Electrophoretic methods and PCR-techniques for variety verification and GMO detection |
| Name of organisations providing training | International Seed Testing Organization (ISTA) Food and Agriculture Organisation (FAO) |
| Dates / Place | January 12, 2005 / Milan, Italy |
| Title of the course | Introduction into the ENSEMBL genomics webservices |
| Name of organisations providing training | ENSEMBL (UK) Universita' degli Studi di Milano-Bicocca (Italy) |
| Dates / Place | April 19-23, 2004 / Trieste, Italy |
| Title of the course | Introduction to biosafety and risk assessment for the environmental release of Genetically Modified Organisms (GMOs): theoretical approach and scientific background |
| Name of organisation providing training | International Centre for Genetic Engineering and Biotechnology (ICGEB) |

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| Dates / Place | April 7-10, 2003 / Trieste, Italy |
| Title of the course | RNA structure and function |
| Name of organisation providing training | International Centre for Genetic Engineering and Biotechnology (ICGEB) |
| Dates / Place | September 2-7, 2001 / Bucharest, Romania |
| Title of the course | Recombinant DNA technology(FEBS Theoretical and Practical Course) |
| Name of organisation providing training | Federation of European Biochemical Societies (FEBS) |
| Dates / Place | May 15-19, 1998 / Iasi, Romania |
| Title of the course | Immunology - Genetics - Pharmacology |
| Name of organisations providing training | European Foundation for Education (Tempus - Phare) CNRS, INSERM, Paris-Sud University (France) |
| Dates / Place | July 7-19, 1997 / Iasi, Romania |
| Title of the course | Glycobiology - Glycotechnology |
| Name of organisations providing training | French Ministry of Foreign Affairs French Ministry of High Education and Research French Embassy (Bucharest (Romania)) |

Award/travel grant (year)

| Award/travel grant (year) | Name of the awarding institution |
|------------------------------------|--|
| Mobility grant (2019) | Romanian Ministry of Research and Innovation |
| Mobility grant (2018) | Romanian Ministry of Research and Innovation |
| Mobility grant (2017) | Romanian Ministry of Research and Innovation |
| Travel Grant (2011) | International Centre for Genetic Engineering and Biotechnology (ICGEB) |
| Youth Travel Fund (2011) | Federation of European Biochemical Societies (FEBS) |
| Young Scientists Fellowship (2010) | International Union of Biochemistry and Molecular Biology (IUBMB) |
| Travel Grant (2010) | European Commission / DG Joint Research Centre (EC/DG JRC) |
| Youth Travel Fund (2009) | Federation of European Biochemical Societies (FEBS) |
| Travel Grant (2009) | EU/FP7/Afrisafe Project |
| Travel Grant (2008) | Food and Agriculture Organization of the United Nations (FAO) |
| FEBS Bursary (2007) | Federation of European Biochemical Societies (FEBS) |
| Travel Grant (2007) | EU/FP6/Biotethed consortium |
| Travel Grant (2006) | Food and Agriculture Organization of the United Nations (FAO) |
| Travel Grant (2004) | International Centre for Genetic Engineering and Biotechnology (ICGEB) |
| Travel Grant (2003) | International Centre for Genetic Engineering and Biotechnology (ICGEB) |
| Travel Grant (2002) | Federation of European Biochemical Societies (FEBS) |

Research fellowships

Doctoral Fellowship for Young Doctoral Students (2005-2008)
Romanian Ministry for Education and Research /
National University Research Council (CNCSIS)

Marie Curie Postgraduate Research Fellowship(2002–2005)
European Union / Framework Programme 5 (FP5)

Director /responsible of national / international research projects

"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" (SAFEMAPS) (project no. 3020301 / contract 7N/2022)
PNCDI IV / Core Program (2023 – 2026)
<https://sites.google.com/view/safemaps>

"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" (contract no. 760010/2022)
PNRR / Component 9 Support for the private sector, research, development and innovation / Investment 5. Establishment and operationalization of competence centers/ Project "Integrated research and sustainable solutions for the protection and restoration of ecosystems in the lower Danube basin - Black Sea coastal area" (ResPonSE) (2023 – 2025)

“Molecular authentication of complex herbal food supplements for safety and efficacy”(Phytoauthent)
EEA Financial Mechanism 2009 - 2014 / Research within Priority Sectors (2014-2017)
Partners: University of Oslo/Natural History Museum (Oslo, Norway), University for Medicine and Pharmacy (Cluj Napoca, Romania), Plantavorel SA (Piatra Neamt, Romania)
(www.eeagrants.org/project-portal/project/RO14-0019)

„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”
Romanian Ministry for Education and Research / National Centre for Program Management (CNMP) / Partnerships in Priority Fields (2008-2011)
Partners: University for Medicine and Pharmacy (Targu Mures, Romania), University for Medicine and Pharmacy (Cluj Napoca, Romania), University of Mainz (Mainz, Germany)
(<http://verobio.webs.com/>)

„The dynamics of some T-DNA integration sites in the genome of the *Arabidopsis thaliana* (L.) Heynh. species, under oxidative stress conditions”
Romanian Ministry for Education and Research / National University Research Council (CNCSIS)
Research Grant for Young Doctoral Students (2007-2008)

“Isolation of aluminium (Al³⁺) tolerant germplasm from Romanian wheat cultivars (*Triticum aestivum* L.)”
Romanian Academy of Sciences (2000–2001)

Responsible / Participant in international research projects

International Barcode of Life Consortium (iBOL)
<https://ibol.org/about/ibol-consortium>
Full member – Science Committee (SC)
<https://ibol.org/about/ibol-consortium/science-committee>
BIOSCAN Research Program (2019-2026) – Project partner
<https://ibol.org/programs/bioscan>

“Genome editing in plants - a technology with transformative potential” (PlantEd) (COST Action CA18111) (2019-2023)
(Role: Romanian Team coordinator & member of the Management Committee)
(Chair of the Action: Dr. Dennis Eriksson)
(www.cost.eu/actions/CA18111)

“Assessing and monitoring the impacts of Genetically modified plants on agro-ecosystems” (AMIGA) (project no. 289706 / FP7-KBBE-2011-5-CP) (2011-2015) (Role: Project Responsible of the Romanian project partner) (Project coordinator: Dr. Salvatore Arpaia)
(www.amiga.enea.it)

“Modifying plants to produce interfering RNA” (iPLANTA) (COST Action CA15223) (2016-2020)
(Role: Member of the Romanian team)
(Romanian Team coordinator: Dr Ioan Zagrai)
(Chair of the Action: Prof Bruno Mezzetti)
(http://www.cost.eu/COST_Actions/ca/CA15223)

“Development of methods for the detection, identification and quantification of genetically modified organisms” (DIQGMO) (project no. 18687-2001-11 F1ED ISP BE, EC-JRC) (2003-2005) (Role: researcher EC-JRC team) (Project coordinator: Dr. Marc De Loose)

National (1998-2002; 2005-onwards)

24 research projects funded by different Romanian financing institution: Ministry for Education and Research; National Agency for Science, Technology and Innovation.

Professional membership

International Society for Biosafety (ISBR)
International Union of Biochemistry and Molecular Biology (IUBMB)
Federation of European Biochemical Societies (FEBS)
Federation of European Societies of Plant Biology (FESPB)
European Federation of Biotechnology (EFB)
Romanian Society of Biochemistry and Molecular Biology (RSBMB)
Romanian Society of Bioengineering and Biotechnology (RSBB)

Expert & evaluator

Full member of the Romanian National Commission for Biological Safety (CBS) (2012-2015) (2016-2019) (2019-2022) (<http://www.anpm.ro/comisia-pentru-securitate-biologica>)

Reviewer / Rapporteur European Commission: H2020-MSCA-RISE-2020, HORIZON-MSCA-2021-PF-01

Reviewer for the Polish-Norwegian Research Programme (EEA and Norway Grants) / National Centre for Research & Development (NCBiR) (www.ncbr.gov.pl)

Reviewer for the European Science Foundation / Life, Earth and Environment Section (www.esf.org)

Reviewer for scientific research projects for the Bulgarian National Science Fund/ (www.nsfb.net)

National reviewer for scientific research projects for the Romanian National Authority for Scientific Research (NASR)

Subject Editor: Metabarcoding and Metagenomics Journal (<https://mbmg.pensoft.net>)

Scientific editor**Personal skills and competences**

Mother tongue

Other languages

Self-assessment

European level (*)

English

Italian

French

Linguistic competences**Romanian**

| Understanding | | | | Speaking | | | | Writing | |
|---------------|-----------------|---------|------------------|--------------------|------------------|-------------------|------------------|---------|-----------------|
| Listening | | Reading | | Spoken interaction | | Spoken production | | | |
| C2 | Proficient User | C2 | Proficient User | C2 | Proficient User | C2 | Proficient User | C2 | Proficient User |
| C1 | Proficient User | B2 | Independent user | C1 | Independent user | B2 | Independent user | B1 | Basic user |
| A2 | Basic user | A2 | Basic user | A2 | Basic user | A2 | Basic user | A2 | Basic user |

Publications:

Ichim M.C. (2024) The Citizens' Awareness and Concerns During the Transition from Genetically Modified to Genome Edited Plants in Europe About Their Use in Agriculture and Food Production. In: Ricroch, A., Eriksson, D., Miladinović, D., Sweet, J., Van Laere, K., Woźniak-Gientka, E. (eds) A Roadmap for Plant Genome Editing . Springer, Cham.

https://doi.org/10.1007/978-3-031-46150-7_31

Ichim MC, Scotti F., Booker A. (2022) Quality evaluation of commercial herbal products using chemical methods, Critical Reviews in Food Science and Nutrition, DOI: 10.1080/10408398.2022.2140120

<https://doi.org/10.1080/10408398.2022.2140120>

Ichim MC, Booker A (2021) Chemical authentication of botanical ingredients: A eview of commercial herbal products. *Front. Pharmacol.* 12:666850.

<https://doi.org/10.3389/fphar.2021.666850>

Ichim MC, de Boer HJ 2021. A Review of authenticity and authentication of commercial ginseng herbal medicines and food supplements. *Front. Pharmacol.* 11:612071.

<https://doi.org/10.3389/fphar.2020.612071>

Ichim MC 2021. The more favorable attitude of the citizens toward GMOs supports a new regulatory framework in the European Union. *GM Crops & Food.* 12(1):18-24.

<https://doi.org/10.1080/21645698.2020.1795525>

Ichim MC, Häser A, Nick P. 2020. Microscopic authentication of commercial herbal products in the globalized market: potential and limitations. *Front. Pharmacol.* 11:876.

<https://www.frontiersin.org/articles/10.3389/fphar.2020.00876/full>

Grosu E, **Ichim MC** 2020. Turning meadow weeds into valuable species for the Romanian ethnomedicine while complying with the environmentally friendly farming requirements of the European Union's Common Agricultural Policy. *Front. Pharmacol.* 11:529.

<https://doi.org/10.3389/fphar.2020.00529>

Ichim MC 2019. The DNA-based authentication of commercial herbal products reveals their globally widespread adulteration. *Frontiers in Pharmacology* 10:1227.

<https://doi.org/10.3389/fphar.2019.01227>

Ferrante M, Lövei GL, Magagnoli S, Minarcikova L, Tomescu EL, Burgio G, Cagan L, **Ichim MC**. 2017 Predation pressure in maize across Europe and in Argentina: an intercontinental comparison. *Insect Science* 26(3): 545-554.

<https://doi.org/10.1111/1744-7917.12550>

Ichim MC 2019. The Romanian experience and perspective on the commercial cultivation of genetically modified crops in Europe. *Transgenic Research* 28(1):1-7.

<https://doi.org/10.1007/s11248-018-0095-9>

Raclariu AC, Heinrich M, **Ichim MC**, de Boer HJ 2018. Benefits and limitations of DNA barcoding and metabarcoding in herbal product

authentication. *Phytochemical Analysis* 29(2):123–128.

<https://onlinelibrary.wiley.com/doi/full/10.1002/pca.2732>

Raclariu AC, Tebrencu CA, **Ichim MC**, Ciuperca OT, Brysting AK, de Boer HJ 2018. What's in the box? Authentication of Echinacea herbal products using DNA metabarcoding and HPTLC. *Phytomedicine* 44:32-38.

<https://doi.org/10.1016/j.phymed.2018.03.058>

Ichim MC, Crisan G, Tebrencu C, de Boer H 2017. PhytoAuthent: Molecular authentication of complex herbal food supplements for safety and efficacy. *Research Ideas and Outcomes* 4: e26986.

<https://doi.org/10.3897/rio.4.e26986>

Raclariu AC, Mocan A, Popa MO, Vlase L, **Ichim MC**, Crisan G, Brysting AK, de Boer HJ 2017. Veronica officinalis product authentication using DNA metabarcoding and HPLC-MS reveals widespread adulteration with Veronica chamaedrys. *Frontiers in Pharmacology* 19:378.

<http://journal.frontiersin.org/article/10.3389/fphar.2017.00378/full>

Raclariu AC, Paltinean R, Vlase L, Labarre A, Manzanilla V, **Ichim MC**, Crisan G., Brysting AK, de Boer HJ 2017. Comparative authentication of Hypericum perforatum herbal products using DNA metabarcoding, TLC and HPLC-MS. *Scientific Reports* 7(1):1291.

<https://www.nature.com/articles/s41598-017-01389-w>

de Boer HJ, **Ichim MC**, Newmaster SG 2015. DNA barcoding and pharmacovigilance of herbal medicines. *Drug Safety* 38:611-620.

<http://link.springer.com/article/10.1007/s40264-015-0306-8>

February 6th, 2024

Mihael Cristin ICHIM, *PhD*