



## Curriculum vitae Europass

### Personal information

Nume / Prenume Butiuc-Keul Anca-Livia  
Adresă(e) Cluj-Napoca, Mehedinți str., No. 27, ap. 6, 400679 Cluj-Napoca, Romania  
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Naționalitate(-tăți) Romanian

Data nașterii 20.11.1968

Sex Female

Desired employment /  
Occupational field Biology/Biotechnology

### Work experience

2003-2014  
Occupation or position held Lecturer

2014-present

Associate professor

Main activities and  
responsibilities

**Teaching activity:** teaching Biotechnology courses, laboratory work;  
coordination of BSc and MSc diploma works

**Research activity:** analysis of intra and interpopulation genetic variability by  
molecular markers in different valuable plant species; molecular genotyping  
of plant species or cultivars; cloning of plant species, in vitro cultures;  
analysis of genetic stability in preserved plants; molecular characterization  
of soil bacterial community, molecular identification of bacterial resistance to  
antibiotics and biocides; identification of class I integrons and resistance  
cassettes in bacteria from soil and water.

**Managerial activity:** 2012-2016-head of department of Molecular Biology  
and Biotechnology, Faculty of Biology and Geology, 2008-2017-member in  
faculty board, students coordinator.

Name and address of employer Babeș-Bolyai University, 1 Kogalniceanu Street, 400084 Cluj-Napoca,  
Romania

Type of business or sector	Universitary education and scientific research
Dates	1995-2003
Occupation or position held	Research assistant: 1995-1999 Researcher: 1999-2002 Researcher III: 2002-2003
Main activities and responsibilities	<b>Research activity:</b> cloning of plant species, in vitro cultures; analysis of genetic stability in preserved plants. <b>Taching activity:</b> teaching Plant Hystology and laboratory work;
Name and address of employer	The Institute of Biological Research, 48 Republicii street, Romania
Type of business or sector	Scientific research
<b>Education and training</b>	
Date	1990-1996
Title of qualification awarded	Doctor in biology
Principal subjects/occupational skills covered	Studies regarding in vitro organogenesis of some endangered plants from Romania
Name and type of organisation providing education and training	The Babeş-Bolyai University, Cluj-Napoca, Faculty of Biology and Geology /Universitary education and scientific research
Level in national or international classification	Level 6 Postuniversity
Date	1997-1998
Title of qualification awarded	Postgraduate diploma
Principal subjects/occupational skills covered	International Training Course on Molecular Biology
Name and type of organisation providing education and training	Biological Research Center, Szeged, Hungary
Level in national or international classification	Level 6 Postuniversity
Date	23.08-01.09.1998
Title of qualification awarded	Certificate of achievement
Principal subjects/occupational skills covered	ESF Summer School on Structure and Dynamics of Photosynthetic Membrane
Name and type of organisation providing education and training	Biological research Centre, Josef Attila University, Szeged, Ungaria/Unitate de cercetare științifică
Level in national or international classification	Level 6 Postuniversity
Date	20-22.06.2013
Title of qualification awarded	Certificate of achievement
Principal subjects/occupational skills covered	Viral vaccines in the medical practice
Name and type of organisation providing education and training	Universitatea de Medicină și Farmacie Iuliu Hațieganu, Cluj-Napoca/Unitate de învățământ superior și cercetare științifică

Level in national or international classification Nivel 6 - Invatamant postuniversitar

Date 15.10-15.12.2016

Title of qualification awarded Certificate of achievement

Principal subjects/occupational skills covered DAAD fellowship

Name and type of organisation providing education and training Institute for Breeding Research on Horticultural Crops (Julius Kühn-Institut, Federal Research Centre for Cultivated Plants), Quedlinburg, Germany.

Level in national or international classification Level 6 Postuniversity

Date 1995-1996

Title of qualification awarded MSc diploma

Principal subjects/occupational skills covered Disciplines of the Biology domain: Molecular Biology and genetics, Advanced biochemistry,

Name and type of organisation providing education and training Babeş-Bolyai University, Cluj-Napoca, Faculty of Biology and Geology /University education and scientific research

Level in national or international classification Level 6 Postuniversity

Date 1991-1995

Title of qualification awarded BSc diploma

Principal subjects/occupational skills covered Disciplines of the Biology domain

Name and type of organisation providing education and training Babeş-Bolyai University, Cluj-Napoca, Faculty of Biology and Geology /University education and scientific research

Level in national or international classification Level 5 University education

Date 1994-1995

Title of qualification awarded Graduate diploma

Principal subjects/occupational skills covered University pedagogic module; disciplines of the didactic domain: pedagogy, methodics and general psychology.

Name and type of organisation providing education and training Babeş-Bolyai University, Cluj-Napoca, Faculty of Biology and Geology/University education and scientific research

Level in national or international classification Level 5 University education

**Personal skills and competences**

Mother tongue(s) Romanian

Other language(s)

Self-assessment

**European level (\*)**

Understanding		Speaking		Writing
Listening	Reading	Spoken interaction	Spoken production	

<b>Language: English</b>	C2	Proficient user	C2	Proficient user	C2	Proficient user	C2	Proficient user	C2	Proficient user
<b>Language: French</b>	C2	Proficient user	C2	Proficient user	B2	Independent user	B2	Independent user	B2	Independent user
<b>Language: German</b>	B1	Independent user	B1	Independent user	A2	Independent user	A2	Independent user	A2	Independent user

(\*)[Common European Framework of Reference for Languages](#)

Social skills and competences	Good capacity o socializing: establishing cooperant relations with colleagues, both in Romania, and abroad
Organisational skills and competences	Good organizer of work in classes and laboratory; coordination of over 20 BSc diploma work; good organisation of laboratory equipment; coordination of a staff's reasearch activity in laboratory, developed through years of research activity
Computer skills and competences	Good competence in PC utilization: Microsoft Office: Excel, Word, Power Point
<b>Additional information</b>	
Afiliation	<ul style="list-style-type: none"> <li>• Member in National Society of Celular and Molecular Biology</li> <li>• Member in Romanian Society of Biochemistry and Molecular Biology</li> <li>• Member in Romanian Society of Plant Tissue and Organ Cultures</li> <li>• Member in International Society of Plant Tissue and Organ Cultures</li> </ul>
Cooperation	<ul style="list-style-type: none"> <li>• 2003-2004: Long term preservation of several endangered plants from Romanian and Belgium Flora: <i>Arnica montana</i>, <i>Drosera rotundifolia</i> și <i>Lilium martagon</i>. Project of bilateral colaboration with Haute Ecole Charlemagne, Belgia. Coordi nator: Lecturer. Dr. Anca Keul.</li> <li>• 2009-2010: Analysis of expression of several genes involved in branching in plants. Project of bilateral colaboration with University of Pisa, Italia. Coordinator: Reader Dr. Cristina Dobrotă.</li> </ul>

## Research projects

1996-1998- Plant cell culture for pharmaceutical compounds production (member).  
1995-1998- Somatic embryogenesis and artificial seeds production (member).  
1999-2000- Characterization of the in vitro morphogenesis by molecular markers (member).  
1999-2000-Grant CNCSIS- Studies on the molecular mechanism of photosynthesis in vitro and in vivo (coordinator).  
2000-2001-Production of valuable biological active compounds by biotransformation reactions with in vitro plant cell suspension (member).  
2001-2002: Grant CNCSIS T 138/2000-Studies concerning the influence of environmental stresses on the biomass production and on ontogenetic processes in *in vitro* cultures of algal cells and of tissues of some rare plants (member).  
2001-2004-National Program BIOTECH, 01 – 2 - CPD – 4: Preservation of regeneration capacity of potato apices in order to their preservation in gene banks (member).  
2002-2004-Grant CNCSIS, 441-Synthesis and accumulation of tropane alkaloids in induced tissue and cell cultures of *Scopolia carniolica* (member).  
2002-2004- National Program BIOTECH, 02-2-PED-397: In vitro propagation and genetic variability of apricot (coordinator).  
2003-2004-Grant A<sub>T</sub> CNCSIS-Biochemical characterisation of in vitro plantlets of *Atropa belladonna* obtinute in vitro (coordinator).  
2003-2005- National Program CERES, Contract nr. 3-46: Study of photoinhibition and photoprotection of photosynthetic apparatus at molecular level in plants (coordinator).  
2003-2005-Program Biostar, Nr. 29.05.05/2003. II/4: Growth, development and biosynthesis of primary and secondary metabolites in medicinal plants cultivated in vivo and in vitro under the influence of some physico-chemical factors (member).  
2004-2006-Biotech 04–2–PED– 4527/ 3.12.2004 Evaluation of genetic stability by molecular markers of strawberry plantlets after cryoconservation (partner coordinator).  
2005-2008-CEEX, 19/2005: Identification of genetic variability by molecular markers and cryopreservation of valuable germplasm resources of grapevine (coordinator).  
2005-2008- CEEX, BIOTECH, Contract Nr. 8/07.10.2005: Evaluation of *Peucedanum* species (fam. Apiaceae) from Transylvania in order to their durable usage in phytotherapy (partner coordinator).  
2006-2008-CEEX, Contract Nr. 98/01.08.2006: Biological, biochemical, chorological and bioproductive studies of some wild species of *Epilobium* (fam. Onagraceae) from Transylvania, in order to obtaine pharmaceutical extracts for treatment of prostate adenoma (partner coordinator).  
2006-2008-CEEX, CERES, Contract 61/2006: Evaluation of ecophysiological and cytotoxic effects of some xenobiotics in polluted aquatic ecosystems (partner coordinator).  
2006-2008- Grant A CNCSIS 1338/2006: In vitro multiplication and clonal selection of some species of *Echinacea*, for biomass production for pharmaceutical industry (coordinator).  
2007-2010-PNII Partnerships 61-067/2007, Biodiversity conservation and characterization of genetical resources of apple in order to their preservation in gene banks (partner coordinator).  
2007-2010-PNII Partnerships 51-029/2007, Evaluation and mapping of genetic diversity of native species of oak from Romania for durable administration of forest ecosystems and dinamic conservation of genetical resources (partner coordinator).  
2007-2010-PNII Partnerships 61-005/2007, Morpho-biochemical and genetic evaluation of some populations of *Hypericum* from Transylvania for identification and conservation of high productive genotypes and their durable usage in phytotherapy (partner coordinator).  
2007-2010-PNII Partnerships 51-085/2007, Molecular biotechnologies used for amelioration of valuable economical plants (member).  
2007-2010-PNII Partnerships 61-007/2007, Study of the variability of some genes involved in multiple resistance against antibiotics of main bacterial agents involved in noyocomial infections in order to develop and clinical implementation of the methods of molecular diagnostic (member).  
2007-2010-PNII Partnerships 31-008/2007, Consolidation of biodiversity by ex situ conservation and evaluation of somaclonal variability by genomic analysis of endemic or endangered taxa from NATURA 2000 sites (member).  
2007-2010-PNII Partnerships 31-015/2007, Study of biodiversity of fir and spruce forests from Natura 2000 sites by modern, pluridisciplinary methods (member).  
2008-2011-PNII Partnerships 52-1725/2008, Conservation of native cultivars of ornamental plants with floricol significance (member).

**Participation to scientific meetings:** several **national symposia** of Industrial Microbiology and Biotechnology; Vegetal Cell and Tissue Cultures;

**International symposia;** IX-th Conference on Grape Genetics and Breeding, july, 2006, Udine, Italy; 5 Plant Genomics European Meeting, october 2006, Venice, Italy; 3rd International Symposium Acclimatization and Establishment of Micropropagated Plant, september, 2007, Faro, Portugal; 6 European Meeting of Plants Genetics, octomber, 2007, Tenerife, Spain; International Symposium on Soiless Culture and Hydroponics, 24-28.08.2008, Lima, Peru; International Congress of Mycology, 5-9.08. 2008, Istanbul, Turkie; Third International Meeting on Environmental Biotechnology and Engineering, 21-25.09.2008, Palma de Mallorca, Spain

**Editorial activity:** Editor from 2009 at journal: Extreme Life, Biospeology & Astrobiology, International Journal of the Bioflux Society, Cluj-Napoca, <http://www.elba.bioflux.com.ro/board/>.

**Reviewer:** Journal "Analele Univ. Oradea – Fascicula Biologie", <http://www.bioresearch.ro/bioresearch/revistaen.html>; Journal Contribuții Botanice, Cluj-Napoca, [http://contributii\\_botanice.reviste.ubbcluj.ro](http://contributii_botanice.reviste.ubbcluj.ro); Journal Extreme Life, Biospeology & Astrobiology, International Journal of the Bioflux Society, Cluj-Napoca, <http://www.elba.bioflux.com.ro/board/>; Journal of Plant Breeding and Crop Science, [www.academicjournals.org/JPBCS](http://www.academicjournals.org/JPBCS).

**Books:**

**Butiuc-Keul, A.L,** 2006, Molecular markers for plant genetics and biotechnology, Ed. Mega ISBN: 973-7867-61-0.

Halmagyi, A., **Butiuc-Keul, A.,** 2007, Conservation of plant genetic resources, Ed. Todesco, ISBN 978-973-7695-36-9.

**Book chapters:**

Hegedus, A., Nagy-Szoke, T., **Butiuc-Keul, A,** 2016, Identificarea microorganismelor rezistente la antibiotice și a genelor ce conferă rezistență. In: Coman, C. (Ed.) Ghid metodologic de monitorizare a antibioticelor și a rezistenței la antibiotice în mediul înconjurător. Editura Accent, Cluj-Napoca, România, pp. 105-136 / Identification of microorganisms resistant to antibiotics and antibiotic resistance genes. In: Coman C. (Ed). Methodological guide for monitoring antibiotics and antibiotic resistance in the environment. Accent Publisher, Cluj-Napoca, Romania, pp. 277-306.

- 96 papers as main author and coauthor.

-ISI quoted papers: 20.

-ISI indexed papers: 9.

Courses of University management and Quality management in universities; Course of evaluator of competencies; Course of formative

**Others**

**Anex**

**CNCSIS Prizes**

1. PN-II-RU-PRECISI-2012-6-0755: Physico-chemical and biological studies on water from Aries River (Romania).
2. PN-II-RU-PRECISI-2012-6-1287: DNA-based diagnostic tests for Salmonella strains targeting hliA, agfA, spvC and sef genes.
3. PN-II-RU-PRECISI-2013-7-3939: Microbiological contamination and resistance genes in biofilms occurring during the drinking water treatment process.
4. PN-II-RU-PRECISI-2015-9-9870: Characterization of halophilic bacterial communities in Turda Salt Mine (Romania), Orig. Life Evol. Biosph., 44(3): 223-230.

5. PN-III-P1-1.1PRECISI-2016-13409: Exploring the role of coliform bacteria in class 1 integron carriage and biofilm formation during drinking water treatment, *Microb. Ecol.*, 72(4): 773-782.

Date: 30.03.2017

Associate professor Dr. Anca Butiuc-Keul