



**Curriculum vitae
Europass**

Personal information

Name / Surname CALINA PETRUTA CORNEA

Address Str.Musat Constantin nr.1, bloc 16, sc.2, ap.25, Sector 5; București

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Mobile: 0723980432

E-mail pccornea@yahoo.com

Nationality Romanian

Date of birth 10.01.1959

Sex F

Experience

Period 2003-present

Occupation or position held Professor

Main activities and responsibilities Holder disciplines of genetic engineering, Genetics, Plant Molecular Biology, coordinating activities and teaching research

Name and address of employer University of Agricultural Sciences and Veterinary Medicine Bucharest, Faculty of Biotechnologies, Bd.Marasti, nr.59, Sector 1, Bucharest

Type of business activity or sector Education- Research

Period 2003-present

Occupation or position held Researcher, Head of the Department of Molecular Biology and Genetic Engineering

Main activities and responsibilities Coordinating research

Name and address of employer Centre for Applied Biochemistry and Biotechnology Bucharest (BIOTEHNOL) Bd.Marasti, nr.59, Sector 1, Bucharest

Type of business activity or sector Research activity

Period 2001-2003

Occupation or position held Associate Professor

Main activities and responsibilities Holder disciplines of genetic engineering, genetics, coordinating activities and teaching research

Name and address of employer University of Agricultural Sciences and Veterinary Medicine Bucharest, Faculty of Biotechnologies, Bd.Marasti, nr.59, Sector 1, Bucharest

Type of business activity or sector Education- Research

Period 1997-2001

Occupation or position held Lecturer

Main activities and responsibilities Holder discipline of genetic engineering, coordination activities, teaching and research

Name and address of employer University of Agricultural Sciences and Veterinary Medicine Bucharest, Faculty of Biotechnologies, Bd.Marasti, nr.59, Sector 1, Bucharest

Type of business activity or sector Education- Research

Period 1984-1997

Occupation or position held Scientific researcher

Main activities and responsibilities Research Scientific

Name and address of employer Institute of Biology of Romanian Academy, Splaiul Independentei 296, Sector 6, Bucharest

Type of business activity or sector Research activity

Period	1982-1984					
Occupation or position held	Professor of Biology					
Main activities and responsibilities	Educational Activities					
Name and address of employer	Secondary School Predeal, Jud.Brasov					
Type of business activity or sector	Education					
Education and training						
Period	1977-1981					
Qualification awarded	Diploma of the license, field biology					
Disciplines Principal subjects / occupational skills acquired	Cytology, Cell Biology, General Chemistry, Biochemistry, Microbiology, Genetics, Plant Physiology, Animal Physiology, Anatomy, Plant systematic, Zoology, Ecology, Fundamentals of Agriculture, Hydrobiology Oncobiology, Geology and palaeontology					
Name and type of organization providing education and training	University of Bucharest, Faculty of Biology					
Level in national or international classification	License (bachelor)					
Period	1981-1982					
Qualification awarded	Certificate in Biology Medical Specialization					
Disciplines Principal subjects / occupational skills acquired	Immunology, Medical Microbiology, Parasitology, Endocrinology					
Name and type of organization providing education and training	University of Bucharest, Faculty of Biology					
Level in national or international classification	Specialization (Masters)					
Period	1989-1996					
Qualification awarded	PhD Diploma, de doctor, field biology					
Name and type of organization providing education and training	University of Bucharest, Faculty of Biology					
Level in national or international classification	PhD					
Maternal language						
Romanian						
Languages known						
English and French						
Self evaluation	Understanding		Speech		Writing	
<i>European level (*)</i>	Listening	Reading	Participation oral conversation	Speech	Written Expression	
Language	1. English	C1	C1	B2	C1	
Language	2. French	C1	B2	B2	B2	
(*) <i>The Common European Framework of Reference for Languages</i>						
Skills and social skills						
team spirit, good communication skills gained from the experience of teacher-class master at a school in a small town						
Skills and organizational competences						
Experience in coordinating the activities of groups of pupils or students; organizational abilities developed during the previous research leadership (carrying on many years of the function of Scientific Secretary and then Vice Dean of the Faculty of Biotechnologies in Bucharest; today Head of Department in BIOTEHNOL)						

Technical skills and competences	Utilization of specific scientific equipments
Skills and competences to use the high level of computer	High level of using Microsoft Office™ tools (Word™, Excel™ and PowerPoint™) acquired in the context of professional and leisure
Other information	
List of published scientific works	Books published: 11(8 published in recognized publishers and university textbooks 3) Total scientific papers - 178 of which: - publications in ISI listed journals - 27 - papers published in journals indexed in international databases - 37 - papers published in journals recognized CNCSIS - 62 - volumes of scientific events in the country and abroad - 55
Membership in professional associations and organizations	- Vice President of the Romanian Commission for Biological Safety (2008-present) - Member in the Romanian Society of Biochemistry and Molecular Biology (SRBBM) - Member of the Federation of European Societies of Plant Biology - Member of the editorial committee of the journal Romanian Journal of Genetics - State College editorial of the magazine series Scientific papers USAMV F. Biotechnologies - Reviewer to journals "Romanian BIOTECHNOLOGICAL Letters" (2004-present); "Proceedings of the Institute of Biology" vol.VII, Supplement of the journal "Revue Roumaine de Biologie (2005); African Journal of Microbiology Research, Journal of Plant Breeding and Crop Science, International Research Journal of Plant Science and Journal of Microbiology and Antimicrobials (starting 2010)
Awards and prizes	-Golden Medal at Geneva Invention Salon in 2009 for the invention Biotechnological procedure for PHAS production. -Silver medal at the Geneva Inventions Fair of 2000 for the invention «Probiotics dairy products and protection» - Medal "Merit for Education" (2004) - Prize for best poster "MSc-PHA accumulation in <i>Pseudomonas putida</i> P5 (wild type and mutants) in lipid containing media (author CPCornea, I. Lupescu, C. Voaides, D. Constantinescu, M. Ciuca, I. penknife, A. Pop: International Conference on Industrial Biotechnology and Applied Microbiology, Galati 2008
Other information	PhD coordinator in biology (starting 2009) and in Biotechnology (starting 2011) Scientific and technical expert in National Research Programs (CNCSIS, BIOTECH, AGRAL, RELANSIN, CEEEX and PNCDI II) and international (Bulgarian Research Program) Scientific and monitoring activities in National Programs BIOTECH și CEEEX. Vice Dean of Faculty of Biotechnologies (2004-2008) Scientific Secretary of Faculty of Biotechnologies (1998-2004) Head of Department of Biotechnology, Faculty of Biotechnology Bucharest (starting 2011) Member of various committees of the contest and promotion for the posts of lecturer and professor in USAMV and other universities in the country (the University of Craiova, University "Ovidius" of Constanta, USAMV of Banat Timișoara) Official referee for more than 25 doctoral theses

01. wrt. 2011

SELECTIVE LIST OF PUBLICATIONS

BOOKS

1. INGINERIE GENETICA, 2010, C, Autor: **Cornea,C.P.**, ISBN 973-8400-97-X, 406 pag.
2. GHID PENTRU DIAGNOZA BOLILOR PLANTELOR, 2009, Edit.Ceres București, Autori: Severin,V., **Cornea,C.P.**, 2009, ISBN 978-973-40-0821-6
3. TRATAT DE BIOTEHNOLOGIE, Volumul 2, 2007, Editura Tehnică București, Autori: S.Jurcoane, **C.P.Cornea**, T.Vassu ș.a., ISBN 973-31-2279-3
4. GENETICĂ, 2005, Edit.Ceres, Autor: **C.P.Cornea**, ISBN 973-40-0689-4, 302 pagini
5. BAZELE MICROBIOLOGICE ALE BIOTEHNOLOGIILOR, 2005, Edit.Printech, Bucuresti, Autori: **C.P.Cornea**, P.Niculiță, ISBN 973-718-313-4, 394 pagini
6. BIOLOGIE GENERALĂ ȘI EVOLUȚIONISM, 2004, Edit.Arta Grafică, Autor: **C.P.Cornea**, ISBN 973-0-03374-9, 277 pagini
7. INGINERIE GENETICĂ. Principii de realizare. Aplicații. Aspecte economice și etice, 2002, Edit.Printech București, Autor : **C.P.Cornea**, ISBN 973-652-694-1, 291 pag.
8. GENETICĂ MOLECULARĂ, 2001, Editura Alma Mater Sibiu, Autori: I.Vătafu, **C.P.Cornea**, ISBN 973-8371-08-2, 365 pagini
9. ELEMENTE DE INGINERIE GENETICĂ, 1999, Editura ALL București, Autori: **C.P.Cornea**, I.Vătafu, A.Barbu, ISBN 973-9431-08-9, 185 pagini

10. Mecanisme moleculare si celulare ale interactiunilor dintre microorganisme si plante, 2011, **Cornea,C.P.**, in Complexitatea biologica sun aspect macro, micro, nano, Editura Academiei Romane, p.51-70, ISBN 978-973-27-2063-9
11. METSCHNIKOWIA PULCHERRIMA, A NEW YEAST WITH POTENTIAL FOR BIOCONTROL OF POSTHARVEST FRUIT ROTS, 2008, I. Grebenisan, **P. Cornea**, R. Mateescu, C. Cimpeanu, V. Olteanu, GH. Campenu, L.A. Stefan, F. Oancea, C. Lupu, în ISHS Acta Horticulturae vol.767, Edit. R.K. Prange, S.D. Bishop , p.355-360, ISBN 978-90-66051-77-5
12. BIOCONTROL OF ALTERNARIA TENUIS DAMPING-OFF OF TOMATO AND PEPPER WITH BACILLUS SPP. STRAINS, 2007, R. Mateescu, **C.P. Cornea**, I. Grebenișan, G. Câmpeanu, V. Popescu în ISHS Acta Horticulturae vol.761, Editor D.J. Cantliffe, p.163-170 , ISBN 978-90-66055-70-4
1. Vasilica Stan, **Calina Petruta Cornea**, Eugenia Gament, Catalina Voaides, Aneta Pop, 2011, Heavy metal resistant *Rhizobium leguminosarum* biovar *trifolii* isolates: characterization and use in rhizoremediation of polluted soils, Current Opinion in Biotechnology, Vol.22, supl.1, p. S74
2. **Calina Petruta Cornea**, Catalina Voaides, Vasilica Stan, Eugenia Gament, 2011, Genetic diversity of romanian *Rhizobium leguminosarum* biovar.*trifolii* strains isolated from root nodules of clover grown in heavy metal polluted soil, Current Opinion in Biotechnology, Vol.22, supl.1, p.S77
3. **Călina Petruța CORNEA**, Cătălina VOAIDEȘ, Matilda CIUCA, Vasilica STAN, Eugenia GAMENT, Iosif RAZEC, Mirela DUȘA, 2011, Molecular Methods for Assesment the Bacterial Communities from Different Type of Soils in Romania, Notulae Botanicae Horti Agrobotanici Cluj-Napoca, Vol 39, No 1, p.64-70
4. Vasilica STAN, Eugenia GAMENT, **Călina Petruța CORNEA**, Cătălina VOAIDEȘ, Mirela DUȘA, Georgiana PLOPEANU, 2011, Effects of Heavy Metal from Polluted Soils on the Rhizobium Diversity, Notulae Botanicae Horti Agrobotanici Cluj-Napoca, Vol 39, No 1, p.88-95
5. Olteanu V., Siciua,O., Ciuca,M., Carstea,MD., Voaides,C., Campeanu,G., **Cornea,CP.**, 2011, Production of biosurfactants and antifungal compounds by new strains of *Bacillus spp.* isolated from different sources, Rom.Biotechnol.Letts. (vol.16. supliment), nr.1, p. 84-91

6. Voaides,C., Groposila,D., Ciuca,M., Lupescu,L., Pop,A., **Cornea,CP.**, 2010, PHAs Accumulation in *P.putida* P5 (wild type and mutants) in lipid containing media, Rom.Biotechnol.Letts. vol.15, nr.4, p.5467-5473
7. **Cornea,C.P.**, M.Ciucă, C.Voaides, V.Gagiu, M.Oprea, A.Pop, 2011, Incidence of *Aspergillus* species in Romanian bakeries: a molecular approach, Rom.Biotechnol.Letts.,vol.16, nr.1., p.5863-5871
8. **Cornea,C.P.**, A.Pop, S.Matei, M.Ciuca, C.Voaides, M.Matei, G.Popa, A.Voicu, M.Stefanescu, 2009, Antifungal action of new *Trichoderma spp.* Romanian isolates on different plant pathogens, BIOTECHNOL.& BIOTECHNOL.EQ. 23/2009/SE SPECIAL EDITION/ON-LINE 45, p.766-770
9. Voicu,A., M.Stefanescu, **P.Cornea**, A.Gheorghe, 2009, Microorganisms with biotechnological potential isolated from natural environments, BIOTECHNOL. & BIOTECHNOL. EQ. 23/2009/SE SPECIAL EDITION/ON-LINE 45, p.747-750
10. **C.P.Cornea**, S.Matei, M.Ciuca, C.Voaides, M.Matei, G.Popa, A.Pop, 2008, Molecular polymorphism in Romanian isolates of *Trichoderma spp.*with antifungal properties, Rom.Biotechnol.Letts, vol, 13, nr.6
11. **Cornea,C.P.**, Voaides,C., Ciuca,M., Dinu,S., Costache,M., Draganoiu,M., Severin,V., Oancea,F., 2008, In vitro inhibition of *Erwinia amylovora* romanian isolates by new antagonistic bacterial strains, Rom.Biotechnol.Letts, vol.13, p.3737-3746
12. Narcisa Babeanu, O. Popa, Niculina Gheorghita, Catalina Voaides, **Petruta Cornea**, Marina Pamfil, A. Vamanu, Nela Zambila, E. Vamanu, 2008, The influence of various microbial bio-products, for bean crop, on biological activity of the red preluvosol soil, 2008, *Romanian Biotechnological Letters*, Vol. 13, (2), 3623 – 3630
13. **Cornea, C.P.**, Popa,G., Ciuca,M., Pop,A., Voaides,C., 2008, Plant – pathogen interaction and induction of gene expression in tomato, in FEBS Journal, 275 (suppl.1), p.268
14. Monica Carasan, **Petruta Cornea**, Florenta Helepciuc, Catalina Voaides, Aurelia Brezeanu, Aneta Pop, 2008, Influence of antagonistic microorganisms treatment on the antioxidant system of plant cells, in FEBS Journal, 275 (suppl.1), p.274
15. Csutak,O., Vassu,T., **Cornea,C.P.**, Grebenisan,I., 2007, Genetic characterization of two new *Metschnikowia* strains with antifungal activity, Roum.Biotechnol.Letts, vol, 12, nr.2, p.3175-3182
16. **Cornea,C.P.**, Mateescu,R., Voaides,C., Popa,G., Babeanu,N., 2007, Use of *Bacillus licheniformis* based biopreparates for plant growth stimulation and protection against fungal pathogens, Journal of Biotechnology, vol. 131, Issue 2S, sept 2007, S.41
17. Băbeanu,N., O. Popa, **Cornea,C.P.**, A. Vamanu, 2007, Plant growth-promoting microbial agents, Journal of Biotechnology, vol. 131, Issue 2S, sept 2007, S.34
18. Popa,G., **Cornea,C.P.**, Brezeanu,A., 2007, Influence of different *Agrobacterium rhizogenes* strains on hairy roots induction in *Eustoma grandiflorum*, Roum.Biotechnol.Letts., vol.11, p.2587-2592
19. Voaides C., **Cornea P.**, Tezel R., Babeanu N., 2010, Use of bacterial bioproduct for plant growth stimulation and protection against phythopathogenic fungi, Journal of Horticulture, Forestry and Biotechnology, vol.14,nr.2, p.299-303
20. Oancea,F., **C.P. Cornea**, G. Popa, O.Sicuia, M.Draganoiu, S.Dinu, 2009, *Bacillus amyloliquefaciens* strain antagonistic to *Erwinia amylovora* and elicitor of tomato defense response, in **IOBC/wprs Bulletin, Vol. 43, 2009**, Working Group “Integrated Control of Plant Pathogens”, Proceedings of the meeting “Molecular Tools for Understanding and Improving Biocontrol” at Interlaken (Switzerland), 9-12 September, 2008. Edited by Yigal Elad, Monika Maurhofer, Christoph Keel, Cesare Gessler & Brion Duffy (ISBN 978-92-9067-217-3) p.172
21. Ittu,M., Cana,L., Ciuca,M., Voaides,C., **Cornea,P.**, 2010, Phenotypic and marker assisted evaluation for pathogenicity and aggressiveness of Romanian *Fusarium* isolates vs. Wheat, 11th European Fusarium Seminar „Fusarium – Mycotoxins, Taxonomy, Pathogenicity and

- Host Resistance" 20-23 sept.,Radzikow, Polonia, Book of abstracts, p.175, ISBN 83-891172-44-5 (http://dl.dropbox.com/u/3234649/PDF1/Book_of_Abstracts_11th_EFS.pdf)
22. Pop, A., **Cornea, C.P.**, Bianu, E., Voaides, C., Tudoreanu, L., 2009, Water lead and cadmium decontamination by glutaraldehyde immobilized bacterial strains, PROCEEDINGS OF THE 16th INTERNATIONAL SYMPOSIUM ON ANALYTICAL AND ENVIRONMENTAL PROBLEMS, Szeged, 28 September 2009. p.277-281, ISBN 978-963-482-975-1
 23. Popa,G., Brezeanu,A., **Cornea,C.P.**, Boe,J.P., 2009, Peroxidase activity in *Eustoma grandiflorum* plants transformed by *A.rhizogenes*, Romanian J.Biol. – Plant Biol., vol.54, nr.1., p.41-46
 24. **Cornea,C.P.**, Dinu,S., Ciuca,M., Voaides,C., Oancea,F., 2008, Molecular characteriyation of some Azospirillum spp. And Rhizobium spp. Strains useful for plant protection, *Lucrări Stiintifice. Biotehnologii. Seria F, vol.13, p.38-44.*
 25. Pop A., Togoe I., **Cornea C.P.**, Cotor G., Tudor L., 2007, Interaction of some plant lectins with poultry gastrointestinal pathogenic bacteria – an alternative to antibiotic therapy, *Proceedings of the 16th European Symposium on Poultry Nutrition*, Strasbourg, France, p.373-376
 26. **Cornea,C.P.**, Tezel,R., Voaides,C., Popa,G., Babeanu,N., Popa,O., Boie,J.F., 2007, *Bacillus licheniformis* based biopreparates useful for planth growth stimulation and protection against fungal pathogens, *Lucrari stiintifice - Biotehnologii*, 2007, seria F, vol., 12, p.5-12
 27. **Cornea C.P.**, Ciuca M., Voides C., Popa G., Babeanu N., Pop A., Natural Products with antifungal properties produced by *Pseudomonas spp.* Strains, 2007, *Annals of West University of Timisoara, Series of Chemistry*, 16, p.82-84
 28. **Cornea,C.P.**, Ciuca,M., Voaides,C., Popa,G., Babeanu,N., Pop,A., 2007, Molecular detection of the genes involved in the antifungal properties of some *Pseudomonas spp.* Strains, *Bul.USAMV-CN*, 63-64, p.350-355
 29. **Cornea,C.P.**, Dragos,S., Rosu,A., 2006, Peroxidase production in *Armoracia sp.*transformed hairy roots, *Roum.Biotechnol.Letts.*, vol.11, p.2619-2625
 30. **Cornea,C.P.**, M.Ciuca, C.Voaides, F.Constantinescu, S.Kupferberg, A.Voicu, M. Stefanescu, N.Băbeanu, 2006, Genetic diversity for some bacterial strains with biotechnological importance, *Lucrări științifice USAMVB Seria F, Biotehnologii*, vol.X, p.39-46
 31. **Cornea,C.P.**, C.Voaides, M.Ciuca, G.Popa, R.Toma, M.Stefanescu, A.Voicu, E.Dumitrescu, 2006, New bacterial strains with antifungal activity, *Lucrări științifice USAMVB Seria F, Biotehnologii*, vol.X, p.31-38
 32. Mateescu,R., **Cornea,C.P.**, Grebenișan,I., Babeanu,N., Bogdan,T., 2005, In vivo action of new *Bacillus spp.* based biopreparates, *Roum.Biotechnol.Lett.*, vol 10, nr.6, p.2425-2434, ISSN 1224 – 5984.
 33. Mateescu,R., Pop,A., **Cornea,C.P.**, Grebenișan,I., Câmpeanu,G., 2002, Microbial enzymes-lectins interactions: applications for glycoproteins purification, *Roum.Biotechnol. Lett.*, vol.7, no.3, p.745-752
 34. **Cornea,C.P.**, Mateescu,R., Ciucă,M., Grebenișan,I., Iuoraș,M., 2004, Variabilitatea genetică a unor izolate virulente de *Tilletia sp.*, *Lucrări științifice USAMVB, Biotehnologii*, seria F, vol.8/9, p.98-106, ISSN 1224-7774

GRANTS – PROGRAMS
2006 – 2010

1. PN II 32147/2008 - Effects of pollution on natural population size, distribution and genetic diversity of species from *Rhizobium* genus, in different agricultural areas in Romania and their role in soil remediation (acronym ECODIVERGEN) –Responsible (partner)
2. PN II 31-078/2007 - Natural product based on fungal elicitors used for plant immunization by vaccination against phytopathogens (acronym PEFIMVAF) – Responsible (partner)
3. PN II 51 040/2007 - Managing risks of wheat contamination with fusariotoxins during vegetation (acronym GRIFOX) – Responsible (partner)
4. PN II 51 - 005/ 2007 - Integrated system to reduce contamination by fungi and mycotoxins in the bakery industry, in order to increase food security (acronym MYCREDPAN) – Responsible (partner)
5. CEEEX 88/2006 - Integrated system to limit damage caused by pathogenic bacteria through the sustainable use of antagonistic strains of microorganisms (acronym POMONA) – Responsible (partner)
6. P-CD 87/2006 - Development of a preventing system for toxinogenic moulds contamination of food products by the predictive microbiology and the molecular biology technique – team member
7. CNCSIS 1099/2006 - Study of mechanisms of action of antifungal and plant growth promoting bacteria – Project coordinator
8. CEEEX 132/2006 - Alternative system of agriculture based on biocomposite mulch with multiple actions (acronym ASTARTE) – Responsible (partner)
9. CEEEX 59/2006 - Biotechnology-based processes of fermentation and renewable resources to produce biodegradable polyesters with multiple applications (acronym BIOEST) – project coordinator
10. CEEEX 52/2006 - Advanced biotechnologies for obtaining bioproducts to combat diseases of plants of horticultural interest and provide quality products in accordance with EU requirements (acronym BIOCOMB) – project coordinator
11. CEEEX 38/2005 - Conversion products from the manufacture of biofuels in bioproducts for nutrition and plant protection (acronym CONVERTOL) – Responsible (partner)

