Curriculum Vitae LIGIA RUSU



PERSONAL INFORMATION

LIGIA RUSU



PARCUL CAMPUL LIBERTATII 1848 NR 22 VILA E 37, CRAIOVA, DOLJ, ROMANIA

0040251563755 (004)0723867738

Sex: F | Date of birth 24/02/1967 | Nationality Romanian

JOB APPLIED FOR POSITION PREFERRED JOB STUDIES APPLIED FOR

ABILITARE - DOMENIUL STIINTA SPORTULUI SI EDUCATIEI FIZICE

WORK EXPERIENCE

1.10.2007-present

Professor, M.D.Ph.D /Head of Sports Medicine and Rehabilitation Department University of Craiova

Academic activity in field of physical therapy, sports medicine, anatomy and biomechanics 1.10.2004-1.10.2007

Assoc. Prof./Medical and Sports Department/University of Craiova

Academic activity in field of physical therapy, sports medicine, anatomy and biomechanics 1.10.2000-1.10.2004

Lector/Medical and Sports Department /University of Craiova

Academic activity in field of physical therapy, sports medicine, anatomy and biomechanics 1.10.1998-1.10.2000

Assisstant/Medical and Sports Department/University of Craiova

Academic activity in field of physical therapy, sports medicine, anatomy and biomechanics 15.04.2000-present

Medical Doctor-Sports Medicine Physician/ Ultrasound Competence/Emergency Hospital Sports Medicine and Rehabilitation Department/Craiova Specific medical activity

EDUCATION AND TRAINING

1981-1985

Nicolae Balcescu College-Physics and Mathemathics, Craiova

1985-1991

Bachelor degree-Medical Doctor;

University of Craiova-Faculty of General Medicine

1995-1999

Sports Medicine and Rehabilitation Pysician Resident Doctor

Institute of Sports Medicine, Bucharest

2000- Ultrasound Course - UMF Craiova

Ultrasound competence

2003- PhD degree-University of Craiova-Anatomy

2007- Course TMG, Ljubljana, Slovenia



Other courses:

- 1. Myelodysplastic and Myeloproliferative Disease: Biology and Treatment, with the aim of integrating this new knowledge into present work in oncology-curs organizat de European School of Oncology.-Patras, Grecia, 1997. Chairman of the Scientific Committee-Prof. Umverto Veronesi M.D.; chairman of the Course-N.C. Zoumbos; A. Bacigalupo.
- 2. Formation Professionelle Medicale/A.N.F.O.R.M.E.S-F.I.M.S, 4-5.12. 2000, Paris, France.
- 4. Course Medicină Sportivă, / Comitetul Olimpic Român, 8-12.10.2000.
- 5. Symposia- Actualities in ultrasound, UMF, Craiova, 30.03.2002.
- 6. Course*Electrocardiografie teoretică și practică*, UMFCraiova, 1-31.05.2002.
- 7. Course F.I.M.S-în cadrul XXVII FIMS World Congress of Sports Medicine, 5-9.06.2002, Budapesta, Hungary
- 8. Course-Efficency of physical therapy, 21-22.11. 2003, Bucharets.
- 9. Course National Congress of Reumatology 15-18.09. 2004
- 10. Course Doppler ultrasound, UMF Craiova, march-may 2006
- 11. Course "Electromyography in rehabilitation", U.M.F Carol Davila, Bucharest, Hospital ELIAS, 2007.
- 12. Symposia "Rehabilitation in ambulatory", Hospital ELIAS Bucharest 7-8.12. 2006.
- 13. Rehabilitation course Bad Ragz Method-Klinic Valens, Swiss, May 2008
- 14. Sport Rehab Course Lower Limb/Thesalonik, Grece, 14-16 May2010
- 15.3rd Summer Course Sports Medicine-24-29August 2015, Marathonas, Greece
- 16. 15. Iternational Ultrasound Course Euro-Musculus VII, 15-18November 2016, Ghent, Belgia
- 17. Course US-guided PRP infiltration techniques, 18November2016, Ghent , Belgia
- 18. Course Sports Cardiology, Romanian Society of Cradiology, 3.03.2017, Bucuresti

PERSONAL SKILLS

Mother tongue(s) Romanian
IVIOLITO LOTIGACIO) I (Orrianian

Other language(s)	UNDERSTANDING		SPEAKING		WRITING	
	Listening	Reading	Spoken interaction	Spoken production		
English	B2	B2	B2	B2	B2	
	Replace with name of language certificate. Enter level if known.					
French	A1	A1	A1	A1	A1	

Communication skills

Good communication skills gained through my experience as teacher to university and medical activity

Organisational / managerial skills

- Leadership Head of Sports Medicine and Rehabilitation Department, University of Craiova
- Scientific dean-Faculty of Physical Education and Sport, University of Craiova
- Director of Research Center-Center of Study the Human Body Motricity, University of Craiova
- Chief of Bionegineering Department, INCESA, (Institute for Applied Science) University of Craiova

Job-related skills

- Good command of quality control processes in filed of educational and research
- Skills in filed of clinical and functional assessment

Computer skills

■ Good command of Microsoft Office™ tools, PPT, Excel, Internet

Other skills

Carpentry, coordinate the volunteers activity in field of rehabilitation the disabilities people

Driving licence

В

Publications

Curriculum Vitae LIGIA RUSU

Relevant publications:

1. M.C.Neamţu, Ligia Rusu, Petre Florinel Rusu,Oana Neam, D. Georgescu, Maria lancău, Neuromuscular assessment in the study of structural changes of

striated muscle in multiple sclerosis, Romanian Journal of Morphology and Embryology 2011, 52(4):1299–1303 (ISSN (on-line) (2066-8279).

- 2.M.C. Neamtu, Ligia Rusu, Mihnea Marin, Taina Avramescu, Rusu Petre Florinel, O.M. Neamtu, Maria lancău, Morphofunctional aspects of lower limb in multiple sclerosis, *Romanian Journal of Morphology and Embryology* 2012, 53(1): pag. 117–120 (ISSN (on-line) 2066-8279).
- 3.M.C.Neamtu, Ligia Rusu, Rusu Petre Florinel, Mihnea Marin, O.M. Neamtu, Biomechanical disorders of foot in multiple sclerosis, *Romanian Journal of Morphology and Embryology* 2012, 53(3)suppl: pag. 841-845 (ISSN (on-line) 2066-8279).
- 4.Ligia D Rusu, Germina GH Cosma, Sorina M Cernaianu, Mihnea N Marin, Petre Florinel Rusu, Daniel P Ciocănescu, Florin N Neferu Tensiomyography method used for neuromuscular assessment of muscle training *Journal of NeuroEngineering and Rehabilitation* 2013, 10:67 doi:10.1186/1743-0003-10-67
- 5.E.I .Paun, L.Rusu, Rusu Petre Florinel, Role of electric stimulation in gait rehabilitation after stroke, *European Journal of Neurology* 2010, 17 (Suppl. 3), 585
- 6.L Rusu, M. Dragomir, Rusu Petre Florinel, M.Marin, Ankle foot rehabilitation in stroke using biomechanical assessment, *Cerebrovasc Dis* 2011;31(suppl 2):1–322
- 7.Copilusi C., Marin M., Rusu L., Geonea I., Design Considerations regarding a New Knee Orthosis. *Journal of Applied Mechanics and Materials* Vol. 162 (2012) pp 276-285. Online available since 2012/Mar/27 at www.scientific.net (2012) Trans Tech Publications, Switzerland doi:10.4028/www.scientific.net/AMM.162.276 ISI PROCEEDINGS
- 8.C. Copilusi, M. Marin, N. Dumitru, L. Rusu, Locomotion System Dynamic Analysis with Application on Children Orthotics and Prostheses Devices. *World Congress on Engineering. 2012*. Londra. Marea Britanie. pp1663-1668
- 9.Copiluşi C., Marin M., Rusu L., "A New Knee Prosthesis Design Based on Human Lower Limb Cinematic Analysis" *World Congress on Engineering. 30 June 2 July 2011.* London, U. K. Pp. Published by International Association of Engineers. ISBN 978-988-18210-7-2. ISSN 2078-0958
- 10.Copilusi C., Dumitru N., Marin M., Rusu L., "Human Lower Limb Kinematic Analysis with Application on Prosthesis Mechanical Systems". *13th World Congress in Mechanism and Machine Science, Guanajuato, México. IMD-123. IfTOMM-2011.* Paper ID: A22-343. ISBN 978-607-441-131 BDI
- 11..Copiluşi C., Marin M.,Rusu L.: "Design of a New Human Knee Prosthesis Based on Cam Mechanism". The 21th INTERNATIONAL DAAAM SYMPOSIUM "Intelligent Manufacturing & Automation: Focus on Interdisciplinay Solutions". pp. 709-711.20-23th October 2010, Zadar, Croatia. 12..Copiluşi C., Marin M., Rusu L., "A New Knee Prosthesis Design Based on Human Lower Limb Cinematic Analysis" World Congress on Engineering. 30 June 2 July 2011. London, U. K. Pp. Published by International Association of Engineers. ISBN 978-988-18210-7-2. ISSN 2078-0958
- 13..Copilusi C., Dumitru N., Marin M., Rusu L., "Human Lower Limb Kinematic Analysis with Application on Prosthesis Mechanical Systems". 13th World Congress in Mechanism and Machine Science, Guanajuato, México. IMD-123. *IfTOMM-2011*. Paper ID: A22-343. ISBN 978-607-441-131-7
- 14..Copiluşi C., Dumitru N., Rusu L., Marin M.,: " Cam Mechanism Kinematic Analysis used in a Human Ankle Prosthesis Structure". *World Congress on Engineering*. 30 June 2 July 2010. London, U. K. Pp. 1316-1320. Published by International Association of Engineers. ISBN 978-988-18210-7-2. ISSN 2078-0958
- 15.Copiluşi C., Dumitru N., Marin M., Rusu L.: "Design of a new prosthetic mechanical system used in human ankle joint disarticulation", *Medical Physics and Biomedical Engineering World Congress* 2009, 7-12 September, Munchen Germany. Published as IFMBE Proceedings Dossel-Schleggel Eds. Springer Berlin Heidelberg Publishing house. ISBN 978-3-642-03888-4. Volume 25/9.
- 16. Vasilescu M, Rusu L, Nestianu V et al (2011). Complex method for localized muscle fatigue evaluation. International *Journal of Chemical and Biological Engineering*; 53: 795-798.
- 17. Vasilescu M, Balseanu AT, Balasoiu M, Rusu L et al (2010). The effects of continuous versus intermittent aerobic exercises on lipid profile and anthropometrical parameters at young with Metabolic Syndrome. *Medicina Sportiva*; 6(1): 1304-1311.
- 18. Mihai Marian Dragomir, Ligia Rusu, Mirela Vasilescu, Petre Florin Rusu, 2010, Gait analysis using Footscan force platform, Sport Medicine Journal, supplement 3, ISSN 1841-0162
- 19.Mihai Marian Dragomir, Ligia Rusu , Petre Florin Rusu, 2010, Psychosocial Impact in Stroke Rehabilitation , *Sport Medicine Journal*, supplement 3, ISSN 1841-0162
- 20.Paun Elvira, Rusu Ligia, Popescu Roxana, Copilusi Petre Cristian, Cernaianu Sorina, Dragomir Mihai, Study concerning the importance of complex assessment in stroke rehabilitation, *Medicina Sportivă* nr. 20/2009, jurnalul Societății Române de Medicină Sportivă, ISSN 1841-0162
- 21.Rusu L., Vasilescu M., Cernăianu S., Dragomir M., PĂUN E., Proprioceptive training in rehabilitation of knee stability in soccer players XVI Congress on Sport Rehabilitation and Traumatology, Health prevention and rehabilitation in soccer, Milano, 14-15 aprilie, 2007, ISBN 978-88-6028-107-4.
- 22...M.M. Dragomir, L. Rusu, E. Paun, E. Rosulescu, M. Zavaleanu. Monitoring the rehabilitation program after stroke using the myotonometric assessment. Poster presentation. *16th Congress of EFSN, Stockholm, Sweden.* 2012 EFNS European Journal of Neurology 19 (Suppl. 1), 582.

© European Union, 2002-2013 | http://europass.cedefop.europa.eu



- 23. Daniela Tarnita, Boborelu C., Popa D., Rusu Ligia- The three dimensional modeling of the complex virtual human elbow joint, *Romanian Journal of Morphology and Embryology*, volume 51: issue:3, p.489-495, 2010
- 24.Rusu Ligia, Paun E., Fortan C., Cernaianu S., Conplex assessment and rehabilitation programm in thoracic outlet syndrome in athletes, *5th International Scientific Conference, Univ. Ljubljana*, book-p.133-137, 200
- 25.Mihnea Marin, Cristian Copilusi, Ligia Rusu, Experimental Approach Regarding the Analysis of Human Complex Motions, Current Solutions in Mechanical Engineering; ISBN-13: 978-3-03835-566-3; Selected, peer reviewed papers from the International Conference of Mechanical Engineering Periodical: *Applied Mechanics and Materials* Vol. 823; p119-125,2016
- 26. Rusu, L; Neamtu, MC Rosulescu, E; Cosma, G Dragomir, M; Marin, MI
 - Analysis of foot and ankle disorders and prediction of gait in multiple sclerosis rehabilitation; *Eropean Journal of Medical Research*, Volume: 19 Article Number: 73 DOI: 10.1186/s40001-014-0073-5 Published: DEC 24 2014
 - 27. Ligia Rusu, Mihnea Marin, Germina Cosma, Denisa Enescu Bieru, Cristian Petre Copilusi, Mirela Maria Vasilescu Correlation between neuromuscular assessment and evoked potential in the prediction of the multiple sclerosis evolution, *Int J Clin Exp Med* 2016;9(9):17245-17257
- Neamţu Marius Cristian,,Neamţu Oana Maria, Marin Mihnea Ion, Rusu Ligia, Prediction of motor disorders in multiple sclerosis usingmuscle change structure assessment, Rom J Morphol Embryol 2016, 57(4):1331–1335

Projects

Director of research grants

National grants:

Director at 3 national research programs from 2006-present: « Algorithm of implementation and monitoring of physical exercises in neuromuscular diseases", « Contributions in physical exercise applications with progressive resistance for post stroke spasticity patients", "Algorithm for complex assessment and rehabilitation of gait using physical exercises after stroke".

International grants proposal

European projects:

- 1.EAHC Call 2009 IRIDE-life style coordinator Associazione Italiana Cultura Sport;
- 2.FP 7- 244951 ISCOR FP7 AN INTERCULTURAL STUDY OF CHILDHOOD OBESITY RISK FACTORS AND MEDIATORS:
- 3. Program Health EAC/21/2009/038 C/D3/AH/bb/ARES/2009 SPORT&GO;
- 4. Program EUROCORES- NR. PROIECT 09-ETHEME-25 EUROCORES AN INTERCULTURAL STUDY OF CHILDHOOD OBESITY RISK FACTORS
- 5. ALGORITHM FOR ASSESSMENT AND PREVENTION OF MUSCULOSKELETAL DISORDERS IN OBESITY, FP7-HEALTH-2011-single stage-call, 2011, Coordinator UCV.
- 6.LDV NR.ROIECT- 20009-I-IE1-LE005-00741, AGREEMENT LLP/LdV/TOI/2009/IRL-
- 519 Life Long Learning Readiness in SMEs- ReadiSME
- 7.Program Erasmus Curriculum Development 503754-LLP-1-2009-1-FR-ERASMUS International Master In Sports Tourism Engineering (IMISTE)" coordonator UNIVERSITÉ
- 8. "Sports tourism and disability"," International Master in Sports Tourism Engineering (http://imiste.univ-lille2.fr) 503754-LLP-1-2009-1-FR-ERASMUS Erasmus Curriculum Development Continuing Education
- 9. UCV Coordinator-DIMENSAAI Project, LLP-TOI, 2012-2014
- 10. Coordinator Project-TAKE HEART-Erasmus+ 2015-2017
- 11.Swiss and Romanian obese and overweight children: Profiles and cross-cultural differences for tailor-strategies. Swiss and Romanian obese and overweight children Profiles and cross-cultural differences for tailor-made strategies. IZERZ0_142307 Romanian-Swiss Research Programme (RSRP)
- 12. Specific Programme "Cooperation" Theme 1 "Health"; Call identifier: H2020-PHC-2015-two-stage; Proposal No: 667143-1; Acronym: IELBT
- 13. Dissemination and valorisation of open innovative learning for companies in Communities of Practice in SMEs from medical sector-EAC/49/2010; KA4 Multilateral projectsnuméro de référence 518877-LLP-1-2011-1-RO-KA4-KA4MP.





14. Specific Programme "Cooperation" – Theme "Health";Call identifier: FP7-HEALTH-2011-single-stage Proposal No: 282516 Acronym: AAPMO- ALGORITHM FOR ASSESSMENT AND PREVENTION OF MUSCULOSKELETAL DISORDERS IN OBESITY

Member national grants

- 1.Member: National Research project CEEX Module I -M-C2-2358, "Individualized management for motor revalidation of patients with neurological and orthopaedic pathology by interdisciplinary research methodologies";
- 2.Project PN II- IDEAS- "Research regards effects of physical exercises in prophylaxis and treatment of metabolic syndrome at younger people",
- 3. Project PN II- Partners "Explore of biologic system in maximal muscle effort"
- 4. Manage the International Conferences" Physical Exercises A Complex And Modern Way To Promote Healthy Living 2008, 2009, 2010.

<u>Director of research center: "Center for study human body motricity"</u>, University of Craiova, recognised by CNCSIS 2005.

<u>Director of Laboratory of Tehniques and Innovative process in bioengineering-INCESA-Craiova</u>

Scientific papers-more then 120 papers presented to national and international conferences and more then 30 article published in national and international journals.

Editor manager from 2005-2013 Revista Medicina Sportivă-Journal of Romanian Sports Medicine Society

Editorial board of Journal of Physical Education and Sport, University of Pitesti, Romania; Journal of Physical Therapy Timisoara-Romania; Montenegrin Journal of Sport Science and Medicine; Turkish Journal of Physiotherapy and Rehabilitation; BMC Research Notes, Romanian Journal of Sport Medicine

Reviewer of Journal-Diabetes Research and Clinical Practice, Journal of International Federation of Diabetes; American Journal of Sports Science and Medicine; PlosOne; International Sport Med Journal; Journal of Sports Sciences; Service Science and Management Research; Journal of Sport Rehabilitation;

Member of scientific committee of World Academy of Science and Engineering Journal

Member of research committee - European College of Sports and Exercise Physicians, http://www.ecosep.eu/research-committee/(ECOSEP)

Member of malpraxis national committee, sports medicine

Expert Program CORDIS 2010,2011,2012

ERASMUS mobility program, staff training, 4-16.08.2010, Pamukkale University, Denizli, Turkey; VIA College Denamrk.RUHR Bochum University, Germany, 2015 Mobility SEE Grants-Nesna University College, Norway 2014-2015.

Professional society appartenance:

1995-International Federation of Sport Medicine

1995-Romanian Sport Medicine Society

1995-Balkan Sport Medicine Society

1995-European Sport Medicine Association

1998-European Haematology Association

2000-Romanian Society of Rehabilitation

2000-European Society of Rehabilitation

2000-European College of Sport Science

2009- European College of Sports and Exercise Physicians(ECOSEP)

Speaker:

- 1. 2nd CONGRESS ECOSEP 2TH CONFERENCE SEM, London, 8-11September 2010
- 2. XVIII International Congress of Sport Rehabilitation and Thraumatology April 25th 26th



- 2009- Assessment of knee stability using neuromuscular measurement to soccer players , Bologna, Italy
- 3. Biomechanic Workshop-biomechanic movement in sport, Zurich 7-9june 2009-Prediction of foot instability and inbalance using biomechanical measurements
- 4.Balkan Congress Bucharest october 2008- *Therapeutic exercises in healing-* Balkan Congress Bucharest october 2008- *Plyometrics, neuromuscular based, indications, contraindications*
- 5. 13th Balkan Sports Medicine Congress, 7th International Congress of Sports Medicine Association of Greece, Drama Grecia, 29april-2may 2004 *The Importance of closed kinetic chain training rehabilitation of knee after ACL reconstruction*
- 6. 4th Congress Physical Education Sport and HEALTH, Pitesti, Noiembire 2011, Romania
- 7. "International Conference & Exhibition on Neurology and Therapeutics", Prediction of Rehabilitation Potential in Multiple Sclerosis by Neuromuscular Assessment, Lasa Vegas, USA, 14-16 May 2012
- 8. "International Conference & Exhibition on Neurology and Therapeutics" *Biomechanical Assessment of Gait in Multiple Sclerosis*, 17-19 June 2013, Chicago, USA
- 9. 3rd ECOSEP Congress, *Neuromuscular assessment, what is new?*, Frankfurt am Main, April, 2013
- 10. Chair and speaker TMG; today and future, workshop, Rome, 24.October 2014
- 11. Summer Course ISMULT-ECOSEP- Marathons, Greece, 24-29August 2015
- 12. World Congress & Expo on Dementia & Neuroscience, Septmeber26-28, 2016, Los Angeles, USA

Patent:

"System for monitoring and assessment of foot functional", nr. Inregistrare OSIM: 104628/19.08.2009. Publicat in Buletinul Oficial de Proprietate Industriala-Sectiunea Inventii nr. 9/2009.