

EUROPEAN
CURRICULUM VITAE
FORMAT



PERSONAL INFORMATION

Name	Miranda Mladinić Pejatović
Address	University of Rijeka, Department of Biotechnology, Radmile Matejčić, 51000 Rijeka, Croatia
Telephone	+385 51 584 567
Fax	+385 51 584 599
E-mail	mirandamp@uniri.hr
Nationality	Croatian, Italian
Date of birth	12.7.1967.

WORK EXPERIENCE

- Dates (from – to)
 - Name and address of employer
 - Type of business or sector
 - Occupation or position held
 - Main activities and responsibilities
- 2013-**
University of Rijeka, Department of Biotechnology
High Education
Associate Professor
Teaching and Research:
- Tutor in Pharmacology and Molecular Neurobiology
- Research: Molecular Neurobiology (studying molecular and cellular mechanisms underlying pathophysiology of spinal cord injuries)
- Dates (from – to)
 - Name and address of employer
 - Type of business or sector
 - Occupation or position held
 - Main activities and responsibilities
- 2009-2013**
Spinal Persons Injury Neurorehabilitation Applied Laboratory (SPINAL), Institut of Fisical Medicine and Rehabilitation (IMFR) Udine, in collaboration with SISSA (Scuola Internazionale Superiore di Studi Avanzati/International School for Advanced Studies, SISSA/ISAS) Trieste, Italy
Research (Neurobiology of spinal cord injury)
Researcher
Research project “Molecular mechanisms of cell death after spinal cord injury” (including supervision of undergraduate students, PhD students and Post-Doctoral researchers)
- Dates (from – to)
 - Name and address of employer
 - Type of business or sector
 - Occupation or position held
- 2009**
University of Trieste, Medical School, Department of Biotechnology, Trieste
Professor – external collaborator
Virtual laboratory of Molecular Biology (e-learning)

• Main activities and responsibilities

• Dates (from – to)

- Name and address of employer
 - Type of business or sector
 - Occupation or position held

• Main activities and responsibilities

• Dates (from – to)

- Name and address of employer
 - Type of business or sector
 - Occupation or position held

• Main activities and responsibilities

• Dates (from – to)

- Name and address of employer
 - Type of business or sector
 - Occupation or position held

• Main activities and responsibilities

EDUCATION

• Dates (from – to)

- Name and type of organization providing education and training
 - Title of qualification awarded

• Dates (from – to)

- Name and type of organization providing education and training
 - Title of qualification awarded

PERSONAL SKILLS AND COMPETENCIES

MOTHER TONGUE

OTHER LANGUAGES

- Reading skills
- Writing skills
- Verbal skills

SOCIAL SKILLS AND COMPETENCIES

ORGANIZATIONAL SKILLS AND COMPETENCIES

Teaching

1993-2008

SISSA Trieste, Neurobiology Department, Trieste, Italy

Research (Molecular Neurobiology)

Researcher (2001-2008)

Post-doctoral fellow (1998-2000)

PhD student (1993-1997)

Research

1992-1993

University of Zagreb, Faculty of Natural Sciences and Math, Department of Molecular Biology

Education

Teaching Assistant

Asistent of Genetics, Population Genetics and Mutagenesis and Cancerogenesis

1990-1991

University of Ljubljana, Medical School, Institut of Biochemistry, Ljubljana, Slovenia

Research

Undergraduate student

Research project "Recombinant DNA technology in prenatal diagnostics of genetic diseases"

1993-1997

SISSA/ISAS, Trieste, Italy

Doctor of Philosophy in Biophysics

1986-1992

University of Zagreb, Faculty of Natural Sciences and Math

Bachelor of Science in Molecular Biology

Croatian

English, Italian

Excellent (both)

Excellent (both)

Excellent (both)

I was living and working for almost 20 years in the international and multicultural environment of the International School for Advanced Studies (SISSA), Trieste, interacting successfully with senior and junior colleges.

Project management, international collaborations and presentation

Currently, I am leading the research group at the Departement of Biotechnology, University of

TECHNICAL SKILLS
AND COMPETENCIES

Rijeka, made of undergraduate and PhD students.

During my previous scientific work I was leading, organising and supervising, together with Prof. John Nicholls and Prof. Andrea Nistri, two international research groups made of B.Sc. and Ph.D. students, post-doctoral researchers and visiting professors, studying regeneration and cell death after spinal cord injury.

I have developed international collaborations (with University of San Paolo, Brasil and University of Melbourne, Australia), that ended up with the joint scientific publications.

Also, I was presenting my work at the numerous international scientific congresses.

Molecular biology (cloning, sequencing and expression of genes, construction and screening of cDNA libraries with oligonucleotides and full-length probes, RFLP, RNA expression detecting techniques: PCR-based subtractive hybridization, RNase protection assay, Real-Time PCR, cDNA microarrays, etc.)

Cell biology (*In situ* hybridization using oligonucleotides and full-length DNA and RNA radioactive and non radioactive probes, immuno-fluorescence and immuno-cytochemistry on mammalian central nervous system tissue)

Electrophysiology (functional expression and characterization of mammalian genes in *Xenopus* oocytes using double electrode voltage clamp technique)

Tissue culture (dissected neonatal opossum or rat central nervous system, with or without experimental lesions maintained in culture)

ARTISTIC SKILLS
AND COMPETENCIES

Playing piano

OTHER SKILLS
AND COMPETENCIES

Didactical Skills:

University lecturing

- **University of Zagreb, 1992 – 1993**, Teaching Assistant for B.Sc. Molecular Biology students: *Genetics, Population Genetics, Mutagenesis and Cancerogenesis*;
- **SISSA, Trieste, 2001 – 2002**, Co-lecturer with Prof. A. Cattaneo for Ph.D. students: *Methods in Molecular Biology*,
- **University of Trieste, 2009**, Lecturer (external collaborator): *Laboratory of Molecular Biology (virtual laboratory, e-learning)* for the 1st year Biotechnology students
- **University of Rijeka, 2012 - date**, Lecturer: *Molecular Neurobiology, Pharmacology* for the students of Biotechnology and Drug Research

Mentorship

- **2002, Marie Wintzer** “*Genes differently expressed in neonatal opossum spinal cord in animals that can or can not regenerate after injury*”, SISSA, **Ph.D. degree** (Co-mentor with Prof. J.G. Nicholls)

- **2009, Chiara Mattioli** "*Studies of spinal locomotor networks in vitro: lessons from experimental damage and neuroprotection*", University of Trieste in collaboration with SISSA, **M.Sc. degree** (Co-mentor with Prof. A. Nistri)
- **2011, Anujaianthi Kuzhandaivel**, "*Molecular mechanisms underlying cell death after spinal cord injury*" SISSA, **Ph.D. degree** (Co-mentor with Prof. A. Nistri)
- **2013, Sohely Ashraf**, "*Study of developmental stages of microglia in spinal cord explants and organotypic culture*" SISSA, **M.Sc. degree** (Co-mentor with Prof. A. Nistri)
- **2013, Elena Bianchetti** "*Cell death neuroprotection and repair mechanisms in a model of rat spinal cord injury in vitro*", SISSA, **Ph.D. degree** (Co-mentor with Prof. A. Nistri)
- **2014, Nina Jurčić** "*Investigating role of microglia activation in pathology of spinal cord injury*", Department of Biotechnology, University of Rijeka, **M.Sc. degree**
- **2014, Renato Čargonja** „*HSP70 antagonizes parthanatos in motoneurons after experimental spinal cord injury in vitro*“, Department of Biotechnology, University of Rijeka, **M.Sc. degree**

Currently or recently supervising the following young scientists:

Ana Dekanić, PhD student (UniRI, SISSA)

Nina Jurčić, PhD student (UniRi)

Renato Čargonja, PhD student (UniRi)

Graziela Mazzone, post-doctoral fellow (SISSA)

Cynthia Samano, post-doctoral fellow (SISSA)

Dario Olivieri, PhD student (SISSA)

Džejla Bajrektarević, young researcher (SISSA)

DRIVING LICENCE(S)

Yes

ADDITIONAL INFORMATION

Financial awards and grants

2014-17 ICGEB - CRP Research Grant CRP/CRO14-03

2013-15 European Social Fund – DIANET (FP1328788001; fellowship for A Dekanic)

2011-13 IBRO Return Home Program Grant

2001 Young Researcher Grant A.AC.BIOF.136, Italian Ministry of Science and Technology

1993-97 UNIDO International Ph.D. fellowship

Editor for International Journal

Journal of Spine

BioMed Research International

Asian Journal of Neuroscience

Reviewer for International Journals

Neurosignals

PloS ONE

Frontiers in Neuroscience

African Journal of Traditional, Complementary and Alternative Medicines (AJTCAM)

Journal of Neurological Sciences

Neuroscience

Neural Regeneration Research

Reviewer for International Grants

2011 Catalan Agency for Information, Assessment and Quality, CAHIAQ, AATRM Cahta Research, TV3 Marató Foundation, Barcelona, Spain

2006 ALW Open Programme, Earth & Life Sciences Council, Hague, Netherlands

INVITED SPIKER

2014 Croatian Academy of Science and Art and University of Rijeka, Department of Clinical and Transplantation Immunology and Molecular Medicine in Rijeka, University of Rijeka, Department of Biotechnology, July 7, Rijeka, Symposium: Temeljna i translacijska neurokemija: glia i neuroni u zdravlju i bolesti / Basic And Translational Neurochemistry:Glia And Neurons In Health And Disease

2014 Croatian Academy of Science and Art and University of Rijeka, March 7, Rijeka, Symposium: Personalized medicine: a new medical and social Challenge, „Personalised medicine and neuroscience“.

2013 Society for Neuroscience, Nov 9-13, San Diego, California, IBRO Alumni Symposium „Locomotor network activity after acute spinal cord injury in vitro: insight into basic cell death mechanisms“

2013 7th Croatian Congress of Pharmacology with International Participation, Zagreb. 18-21 Sept "Molecular and cellular mechanisms involved in the early phase of the spinal cord injury."

2013 XVII Young Neuroscientists Meeting, 13th June, SISSA, Trieste – Chairman

2013 Workshop on Recent advances in the pathophysiology and neurorehabilitation of spinal lesions – Recenti sviluppi nella fisiopatologia e neuroriabilitazione delle lesioni spinali, SISSA Trieste, April 13. „Molecular mechanisms for cell death after acute spinal injury in vitro“

2012 XVI Young Neuroscientists Meeting, 28th June, Medical School, University of Ljubljana, - Chairman

2012 Traumatic brain injury and neurological diseases: From bench to bedside. Faculty of Medicine, University of Rijeka, March 1-2 „Molecular mechanisms of cell death triggered by spinal injury“

- 2010 6th Croatian Congress of Pharmacology with International Participation, Opatija, September 15-18 „Molecular mechanisms underlying neuronal death after spinal cord injury“
- 2009 Seconda Giornata di Aggiornamento in Scienza dell'Animale da Laboratorio, Trieste, 21-22 maggio „Molecular changes in developing opossum spinal cord at stages when regeneration can and cannot occur after injury '
- 2008 Recent advances in spinal cord injury research, February 16-17, 2009, SISSA, Basovizza Campus, Trieste and IMFR, ASS4, Udine „Cell death and survival in experimentally lesioned neonatal rat spinal cord“
- 2001 The Segerfalk Symposium on Principles of Spinal Cord Function, Plasticity and Repair, Ystad, Sweden, 22-25th September „Changes in mRNA content of developing opossum spinal cord at stages when regeneration can and cannot occur“
- 1996 The First ICGEB Symposium, Trieste, Italy 25-26th June „Molecular characterization of a novel GABA receptor present in the neonatal hippocampus“
- 1995 Human Capital & Mobility Programme; GABA Network Meeting, Trieste, Italy, 8th April 19 „A new GABA receptor transiently expressed in hippocampus of neonatal rats“

PUBLICATIONS

1. **Mladinic M**, Becchetti A, Didelon F, Bradbury A, Cherubini E. (1999) Low expression of the ClC-2 chloride channel during postnatal development: a mechanism for the paradoxical depolarizing action of GABA and glycine in the hippocampus. Proc R Soc Lond B Biol Sci 266: 1207-1213.
2. **Mladinic M**, Didelon F, Cherubini E, Bradbury A. (2000) “Specific” oligonucleotides often recognise more than one gene: the limits of in situ hybridization applied to GABA receptors. J Neurosci Methods 98: 33-42.
3. Didelon F, **Mladinic M**, Cherubini E, Bradbury A. (2000) Early expression of GABAA receptor delta subunit in the neonatal rat hippocampus. J Neurosci Res 62: 638-643.
4. Didelon F, Sciancalepore M, Savic N, **Mladinic M**, Bradbury A, Cherubini E. (2002) γ -Aminobutyric acidA α receptor subunits in the developing rat hippocampus. J Neurosci Res 67: 739-744.

5. **Mladinic M**, Wintzer M. (2002) Changes in mRNA content of developing opossum spinal cord at stages when regeneration can and cannot occur after injury. *Brain Res Brain Res Rev* 40: 317-324.

6. Wintzer M, **Mladinic M**, Lazarevic D, Casseler C, Cattaneo A, Nicholls J. (2004) Strategies for identifying genes that play a role in spinal cord regeneration. *J Anat* 204: 3-11.

7. **Mladinic M**, Wintzer M, Del Bel E, Casseler C, Lazarevic D, Crowella S, Gustincich S, Cattaneo A, Nicholls J. (2005) Differential expression of genes at stages when regeneration can and cannot occur after injury to immature mammalian spinal cord. *Cell Mol Neurobiol* 25: 407-426.

8. **Mladinic M**, Del Bel E, Nicholls J. (2007) Increase of annexin 1 immunoreactivity in spinal cord of newborn opossum (*Monodelphis domestica*) at the time when regeneration after injury stops being possible. *Histol Histopathol* 22: 1205-1211.

9. **Mladinic M**. (2007) Changes in cAMP levels in the developing opossum spinal cord at the time when regeneration stops being possible. *Cell Mol Neurobiol* 27: 883-888.

10. Taccola G, Margaryan G, **Mladinic M**, Nistri A. (2008) Kainate and metabolic perturbation mimicking spinal injury differentially contribute to early damage of locomotor networks in the in vitro neonatal rat spinal cord. *Neuroscience* 155: 538-555.

11. **Mladinic M**, Muller KJ, Nicholls JG. (2009) Central nervous system regeneration: from leech to opossum. *J Physiol* 587(Pt 12): 2775-2782.

12. Margaryan G, **Mladinic M**, Mattioli C, Nistri A. (2009) Extracellular Mg²⁺ enhances the damage to locomotor networks produced by metabolic perturbation mimicking spinal injury in the neonatal rat spinal cord in vitro. *Neuroscience* 163: 669-682.

13. Del Bel EA, da Silva CA, **Mladinic M**. (2009) O trauma raquimedular/The spinal cord injury/EI trauma raquimedular. *COLUNA/COLUMNNA*, 8:1-9.

14. Taccola G, **Mladinic M**, Nistri A. (2010) Dynamics of early locomotor network dysfunction following a focal lesion in an in vitro model of spinal injury. *Eur J Neurosci*, 31: 60-78.

15. Margaryan G, Mattioli C, **Mladinic M**, Nistri A. (2010) Neuroprotection of locomotor networks after experimental injury to the neonatal rat spinal cord in vitro. *Neuroscience*, 165:996–1010.

16. Nistri A, Taccola G, **Mladinic M**, Margaryan G, Kuzhandaivel A. (2010) Deconstructing locomotor networks with experimental injury to define their membership. *Ann. N.Y. Acad. Sci.*, 1198:242-251.

17. Mazzone GL, Margaryan G, Kuzhandaivel A, Ebrahimi Nasrabady S, **Mladinic M**, Nistri A. (2010) Kainate-induced delayed onset of excitotoxicity with functional loss unrelated to the extent of neuronal damage in the in vitro spinal cord. *Neuroscience*, 168:451-462.

18. Kuzhandaivel A, Margaryan G, Nistri A, **Mladinic M**. (2010) Extensive occurrence of glial apoptosis develops early after hypoxic-dysmetabolic insult to the neonatal rat spinal cord in vitro. *Neuroscience*, 169:325-338.

19. Kuzhandaivel A, Nistri A, **Mladinic M**. (2010) Kainate-mediated excitotoxicity induces neuronal death in the rat spinal cord in vitro via a PARP-1 dependent cell death pathway (parthanatos). *Cell Mol Neurobiol*, 30:1001–1012.

20. **Mladinic M**, Lefevre C, Del Bel E, Digby M. (2010) Developmental changes of gene expression after spinal cord injury in neonatal opossums. *Brain Res*, 1363:20-39.

21. Nasrabady SE, Kuzhandaivel A, **Mladinic M**, Nistri A. (2011) Effects of 6,5-(H)phenanthridinone, an inhibitor of poly(ADP-ribose)polymerase-1 activity (PARP-1), on locomotor networks of the rat isolated spinal cord. *Cell Mol Neurobiol*, 31:503-508.

22. Kuzhandaivel A, Nistri A, Mazzone GL, **Mladinic M**. (2011) Molecular mechanisms underlying cell death in spinal networks in relation to locomotor activity after acute injury in vitro. *Front Cell Neurosci* 5:9.

23. Cifra A, Mazzone GL, Nani F, Nistri A and **Mladinic M**. (2012) Postnatal developmental profile of neurons and glia in motor nuclei of the brainstem and spinal cord, and its comparison with organotypic slice cultures. *Developmental Neurobiology*, 72:1140-1160.

24. **Mladinic M**, Andrea N. (2013) Microelectrode arrays in combination with in vitro models of spinal cord injury as tools to investigate pathological changes in network activity: facts and promises. *Frontiers in Neuroengineering*, 6:2.

25. Bianchetti E, **Mladinic M**, Nistri A. (2013) Mechanisms underlying cell death in ischemia-like damage to the rat spinal cord in vitro. *Cell Death Dis.* 4:e707.

26. Mazzone GL, **Mladinic M**, Nistri A. (2013) Excitotoxic cell death induces delayed proliferation of endogenous neuroprogenitor cells in organotypic slice cultures of the rat spinal cord. *Cell Death Dis.* 4:e902.

27. **Mladinic M**, Bianchetti E, Dekanic A, Mazzone GL, Nistri A. (2014) ATF3 is a novel nuclear marker for migrating ependymal stem cells in the rat spinal cord. *Stem Cell Res.* 12:815-27

28. **Mladinic M**, Nistri A. (2014) The differential intracellular expression of the novel marker ATF-3 characterizes the quiescent or activated state of endogenous spinal stem cells: a tool to study neurorepair? *J Spine*, 3:3 (Editorial)

29. Shabbir A, Bianchetti E, Cargonja R, Pilipović K, Nistri A. Motoneuron survival after excitotoxic stress is related to HSP70 expression in a rat spinal cord injury model in vitro. *J Neurochem*, in revision.

CHAPTER IN THE BOOK

Mladinic M, Nistri A, Taccola G. "Acute spinal cord injury in vitro: insight into basic mechanisms" Chapter 3 (pg 39-63) in the book: *Animal Models in Spinal Cord Repair* (ed. Aldskogius H), *Neuromethods*, vol.76, Springer Science+Business Media, LLC, Humana Press, 2013.

CITATION INDICES

Citations	305
h-index	11
i10-index	13

WEB SITES

GOOGLE SCHOLAR: <http://scholar.google.it/citations?user=rNLILOAAAAJ&hl=en>

CROSBI: <http://bib.irb.hr/lista-radova?autor=195093&period=2007>