

**ISCRIZIONE** all'albo dei biologi dal 2014, AA\_070002

## **FORMAZIONE**

- 2019-2020 Master interuniversitario di II livello in **Psicobiologia della Nutrizione e del Comportamento Alimentare**, Università di Roma Tor Vergata e Campus Bio-Medico, Roma;
- 2019 Corso di perfezionamento in "**Scienza dell'alimentazione: nutrigenetica, nutrigenomica, nutraceutica, epigenetica**", Università di Firenze;
- 2013 Corso di perfezionamento in **alimentazione e nutrizione pediatrica**, Nutrimedifor s.r.l.;
- 2013 Corso di formazione professionale in **nutrizione umana e dietoterapia**, Nutrimedifor s.r.l.;
- 2010-2013 Dottorato di ricerca (Ph.D.), Dipartimento di scienze biomediche sperimentali e cliniche, Università di Firenze (studio sul ruolo dello **stress ossidativo nelle patologie dermatologiche** psoriasi e vitiligine);
- 2007-2010 Dottorato di ricerca, Università Statale di Mosca M.V.Lomonosov e Istituto di chimica bioorganica Shemyakin-Ovchinnikov, Accademia Russa delle Scienze, Mosca, Russia (studio sul **ruolo del mercurio inorganico** sulla funzionalità e mobilità proteica nelle cellule umane);
- 2002-2007 Laurea in FISILOGIA (specializzazione in biologia cellulare e istologia), Università Statale di Mosca M.V.Lomonosov, Mosca, Russia (Studio sul ruolo del mercurio inorganico sullo **stato redox nelle cellule umane**).

## **ESPERIENZA LAVORATIVA**

- 2014-oggi Biologo-nutrizionista, studio privato, Firenze, Italia.
- 2014 – 2019 Assegnista di ricerca presso Dipartimento di scienze biomediche sperimentali e cliniche, Università di Firenze.

## **INOLTRE**

- 2 brevetti
- 30 pubblicazioni scientifiche internazionali
- 4 capitoli sui libri di nutrizione, stress ossidativo e dermatologia
- vincitore di premi e grant internazionali
- attività di docenza in nutrizione e biologia cellulare
- attività editoriale per riviste scientifiche internazionali
- organizzazione di convegni scientifici nazionali e internazionali

1. **Barygina V**, Becatti M, Lotti T, Prignano F, Taddei N, Fiorillo C. Fibroblasts to Keratinocytes Redox Signaling: The Possible Role of ROS in Psoriatic Plaque Formation. *Antioxidants* 2019, 8(11), 566.
2. **Barygina V**, Becatti M, Lotti T, Moretti S, Taddei N, Fiorillo C. ROS-challenged keratinocytes as a new model for oxidative stress-mediated skin diseases. *J Cell Biochem.* 2019 Jan;120(1):28-36.
3. **Barygina V**, Di Nardo V, França K, Tirant M, Valle Y, Lotti T. Functional nutrition as integrated approach in vitiligo management. *Dermatol Ther.* 2019 Jul;32(4):e12625.
4. Fioranelli M, Sepehri A, Rocchia MG, Linda C, Rossi C, Dawodo A, Vojvodic P, Lotti J, **Barygina V**, Vojvodic A, Wollina U, Tirant M, Thuong NV, Lotti T. Clinical Applications of System Regulation Medicine. *Open Access Maced J Med Sci.* 2019;7(18):3053–3060.
5. Fioranelli M, Sepehri A, Rocchia MG, Linda C, Rossi C, Dawodo A, Vojvodic P, Lotti J, **Barygina V**, Vojvodic A, Wollina U, Tirant M, Thuong NV, Lotti T. Recovery of Brain in Chick Embryos by Growing Second Heart and Brain. *Open Access Maced J Med Sci.* 2019;7(18):3085–3089.
6. Fioranelli M, Sepehri A, Rocchia MG, Rossi C, Vojvodic P, Lotti J, **Barygina V**, Vojvodic A, Wollina U, Tirant M, Thuong NV, Dimitrijevic S, Sijan G, Peric-Hajzler Z, Matovic D, Vlaskovic-Jovicevic T, Lotti T. In Ovo Sexing of Chicken Eggs by Virus Spectroscopy. *Open Access Maced J Med Sci.* 2019;7(18):3106–3109.
7. Fioranelli M, Sepehri A, Rocchia MG, Rossi C, Lotti J, Vojvodic P, **Barygina V**, Vojvodic A, Vlaskovic-Jovicevic T, Peric-Hajzler Z, Matovic D, Vojvodic J, Dimitrijevic S, Sijan G, Wollina U, Tirant M, Thuong NV, Lotti T. DNA Waves and Their Applications in Biology. *Open Access Maced J Med Sci.* 2019;7(18):3096–3100.
8. Fioranelli M, Sepehri A, Rocchia MG, Rossi C, Lotti J, Vojvodic P, **Barygina V**, Vojvodic A, Vlaskovic-Jovicevic T, Peric-Hajzler Z, Matovic D, Vojvodic J, Dimitrijevic S, Sijan G, Wollina U, Tirant M, Thuong NV, Lotti T. A Mathematical Model for the Signal of Death and Emergence of Mind Out of Brain in Izhikevich Neuron Model. *Open Access Maced J Med Sci.* 2019;7(18):3121– 3126.
9. Fioranelli M, Sepehri A, Rocchia MG, Linda C, Rossi C, Vojvodic P, Lotti J, **Barygina V**, Vojvodic A, Wollina U, Tirant M, Thuong NV, Lotti T. A Black Hole at the Center of Earth Plays the Role of the Biggest System of Telecommunication for Connecting DNAs, Dark DNAs and Molecules of Water on 4+N- Dimensional Manifold. *Open Access Maced J Med Sci.* 2019;7(18):3073–3080.
10. Fioranelli M, Sepehri A, Rocchia MG, Linda C, Rossi C, Dawodo A, Vojvodic P, Lotti J, **Barygina V**, Vojvodic A, Wollina U, Tirant M, Thuong NV, Lotti T. Formation of Neural Circuits in an Expanded Version of Darwin's Theory: Effects of DNAs in Extra Dimensions and within the Earth's Core on Neural Networks. *Open Access Maced J Med Sci.* 2019;7(18):3113–3117.
11. Becatti M, Urban ML, Taurisano G, Mannucci A, **Barygina V**, Pescitelli L, Prignano F, Silvestri E, Taddei N, Lotti T, Fiorillo C, Emmi G. Secukinumab reduces plasma oxidative stress in psoriasis: A case-based experience. *Dermatol Ther.* 2018 Sep;31(5):e12675.
12. Addabbo, T., Fort, A., Kapita, P., **Barygina V.**, (...), Fiorillo, C., Taddei, N. A Compact System for Blood Impedance Measurements for ROS Evaluation. 2018 MeMeA, IEEE International Symposium on Medical Measurements and Applications, Proceedings.
13. **Barygina V**, Becatti M, Lotti T, Taddei N, Fiorillo C. Commentary to the review article: Subedi S, Yu Q, Chen Z, Shi Y. Management of pediatric psoriasis with acitretin: A review. *Dermatol Ther.* 2018 Jan;31(1).
14. Nardo VD, Gianfaldoni S, Tchernev G, Wollina U, **Barygina V**, Lotti J, Daaboul F, Lotti T. Use of Curcumin in Psoriasis. *Open Access Maced J Med Sci.* 2018 Jan 21;6(1):218-220.
15. **Barygina V**, Becatti M, Mannucci A, Emmi G, Prisco D, Lotti T, Fiorillo C, Taddei N. Sirt1 Protects against Oxidative Stress-Induced Apoptosis in Fibroblasts from Psoriatic Patients: A New Insight into the Pathogenetic Mechanisms of Psoriasis. *Int J Mol Sci.* 2018 May 25;19(6). pii: E1572.
16. Becatti M, Fucci R, Mannucci A, **Barygina V**, et al. A Biochemical Approach to Detect Oxidative Stress in Infertile Women Undergoing Assisted Reproductive Technology Procedures. *Int J Mol Sci.* 2018 Feb 16;19(2). pii: E592.
17. Becatti M, Mannucci A, **Barygina V**, et al. Redox status alterations during the competitive season in elite soccer players: focus on peripheral leukocyte-derived ROS. *Intern Emerg Med.* 2017 Sep;12(6):777-788.

18. Becatti M, **Barygina V**, Emmi G, Silvestri E, Taddei N, Lotti T, Fiorillo C. SIRT1 activity is decreased in lesional psoriatic skin. *Intern Emerg Med*. 2016 Sep;11(6):891-3.
19. **Barygina V**, Becatti M, Lotti T, Taddei N, Fiorillo C. Low dose cytokines reduce oxidative stress in primary lesional fibroblasts obtained from psoriatic patients. *J Dermatol Sci*. 2016 Sep;83(3):242-4.
20. **Barygina V**, Becatti M, Mannucci A, et al. Rapid communication: a vegetable oil extract restores redox status in fibroblasts from psoriatic patients. *J Biol Regul Homeost Agents*. 2016 Apr-Jun;30(2 Suppl 3):129-31.
21. **Barygina V**, Becatti M, Lotti T, Moretti S, Taddei N, Fiorillo C. Treatment with low-dose cytokines reduces oxidative-mediated injury in perilesional keratinocytes from vitiligo skin. *J Dermatol Sci*. 2015 Aug;79(2):16370.
22. Becatti M, Fiorillo C, **Barygina V**, et al. SIRT1 regulates MAPK pathways in vitiligo skin: insight into the molecular pathways of cell survival. *J Cell Mol Med*. 2014 Mar;18(3):514-29.
23. **Barygina VV**, Becatti M, Soldi G, et al. Altered redox status in the blood of psoriatic patients: involvement of NADPH oxidase and role of anti-TNF- $\alpha$  therapy. *Redox Rep*. 2013;18(3):100-6.
24. Kapsokalyvas, D., **Barygina, V.**, Cicchi, R., Fiorillo, C., Pavone, F.S. Evaluation of the oxidative stress of psoriatic fibroblasts based on Spectral Two-photon Fluorescence Lifetime imaging. 2013. *Progress in Biomedical Optics and Imaging - Proceedings of SPIE*.
25. **Barygina VV**, Veiko VP, Zatssepina OV. *Biochemistry (Mosc)*. Analysis of nucleolar protein fibrillar mobility and functional state in living HeLa cells. 2010 Aug;75(8):979-88. PMID: 21073418

#### NATIONAL REFEREED PUBLICATIONS

26. **Barygina VV**, Mironova AA, Zatssepina OV. Parameters which affect the estimation of protein mobility by method FRAP in living cells on the example of protein fibrillar. *Tsitologia*. 2012;54(1):17-24. Russian. PMID: 22567896
27. **Barygina, V.V.**, Mironova, A.A., Zatssepina, O.V. Parameters that affect estimation of nucleolar proteins' mobility in living cells by the FRAP method with the example of protein fibrillar. 2012. *Cell and Tissue Biology*.
28. **Barygina, V.V.**, Aref'Eva, A.S., Zatssepina, O.V. The role of mercury in the processes of vital activity of the human and mammalian organisms. 2010. *Russian Journal of General Chemistry*.
29. Chissov V.I., Tychinskij V.P., Volchenko N.N., Reshetov I.V., Kretushev A.V., Vyshenskaya T.V., Slavnova E.N., **Barygina V.V.**, Klemeshov I.V. The coherent phase microscopy of the tumors on the breast cancer model. (2006) *Russian Journal of Oncology*, 2, 11-15.
30. Arefieva AS, **Barygina V.V.**, Zatssepina O.V. Current view on the role of mercury on cellular and organismal level. (2010) *Human ecology*, 8: 35-41. [review in russian]
31. **Barygina V.V.**, Arefieva A.S, Zatssepina O.V. The role of the mercury in the life- sustaining processes in human and mammal organisms. (2009) *Ecological chemistry*, 18(4): 189-201. [review in russian]

#### BOOK CHAPTERS

1. Lotti J., **Barygina V.**, Tirant M. "Integrated Therapies" in *Textbook and Atlas of Dermatology*; Eds M.Tirant, T.Lotti D.Parsad. Tree Life Media, Maharashtra, India; 2018.
2. **Barygina V. V.** "Introduction: historical background of the redox system in dermatology" in "Natural Antioxidants in General Medicine and in Dermatology"; Eds T. Lotti, J. Hercogova, D. Turini, L. Tognetti, V. Barygina, Y. Valle, J. Hercogova, D. Turini, L. Tognetti, V. Barygina, Y. Valle. World Health Academy, Zurich, Switzerland; 2013.
3. **Barygina V. V.** Chapter "The redox System: selected concepts in general medicine and in dermatology" in "Natural Antioxidants in General Medicine and in Dermatology"; Eds T. Lotti, J. Hercogova, D. Turini, L. Tognetti, V. Barygina, Y. Valle, J. Hercogova, D. Turini, L. Tognetti, V. **Barygina**, Y. Valle. World Health Academy, Zurich, Switzerland; 2013.
4. Fiorillo C., **Barygina V.** "Vitiligo: biochemical clues" in "Vitiligo: What's new, What's true"; Eds T. Lotti, J. Hercogová, R.A. Schwartz. World Health Academy, Zurich, Switzerland / Vitiligo Research Foundation, New York, USA; 2013.