

Vasiliki C. Laschou, M.S.

Ph.D. Candidate

Education

I graduated from Department of Biochemistry and Biotechnology, University of Thessaly, Larissa, Greece in October 2013. My thesis “Biochemical characterization of mutant Poly(A) specific ribonuclease R99A”, took place in Structural and Functional Biochemistry Lab in group of Assistant Professor N. Balatsos. Then, continued for postgraduate (Master) Degree in “Applications of Molecular Biology, Molecular Genetics - Diagnostic markers”, at Department of Biochemistry and Biotechnology, University of Thessaly, Larissa, Greece from October 2013 to July 2015. My thesis “The impact of Arg99 and Gln109 on poly(A)-specific ribonuclease structure, activity and biological role” took place in Structural and Functional Biochemistry Lab, group of Assistant Professor N. Balatsos. After that, I studied in supplementary Program, distance (e-learning) Training of KEK the National and Kapodistrian University of Athens (UOA) in “Safety (HACCP) & Quality Food: Standards ISO22000:2005 & ISO9001:2008” from February 2016 to November 2016. Alongside, have the Certificate i-skills for excellent command of Microsoft Office™ tools.

Professional Experience/Background

Biochemist in Biochemistry Lab, in University Hospital of Thessaly for Vocational Training Program (VTP) from July 2011 to August 2011. Laboratory Assistant in Structural and Functional Biochemistry Lab in group of Assistant Professor A.M. Psarra, Department of Biochemistry and Biotechnology, University of Thessaly from December 2015 to November 2016.

Research Interests

I am PhD student in Exercise of Biochemistry, Physiology and Nutrition Laboratory, department of Physical Education and Sports Science, University of Thessaly. My project is “The Evaluation of Cell-Free Plasma DNA and Oxidative Stress Indices as biomarkers for the Diagnosis and Prevention of Overtraining”. Athletic training aims to increase and improve physical performance. Enhancement of physical performance is achieved through training overload (intensity, duration, frequency and total volume) combined with periods of rest and recovery according to the periodization model to allow optimal adaptations. Overtraining syndrome (OTS) is associated with an imbalance between training and recovery, is characterized by performance decrements, fatigue, and symptoms such like insomnia, change in appetite, irritability, restlessness, excitability, anxiousness, loss of body weight, loss of motivation, lack of mental concentration, and depression. It appears that overtraining syndrome represents a systemic inflammatory process with diffuse effects on the neurohormonal axis affecting host immunology and mood. Increased concentrations of cf-DNA have been detected in numerous clinical conditions, including trauma, sepsis, cancer, stroke, pregnancy, and myocardial infarction. Markers of oxidative stress like plasma protein carbonyls, glutathione and many others can be determined noninvasively and may reflect inflammatory responses after training. Although OTS is well-established in the literature, there are no available biomarkers to aid towards its diagnosis and/or prevention except that of the persistence of unexplained underperformance despite an extensive recovery of the athlete. The purpose of this

study is to evaluate the potential of cell-free plasma DNA (cf-DNA) and selected oxidative stress variables as diagnostic biomarkers of OTS.

Articles in Refereed Scientific Journals

Maria Papasporou¹, **Vasiliki C. Laschou**², Paraskevi Partsiopoulou³, Evangelos C. Fradelos⁴, Christos F. Kleisiaris⁵, Malamati A. Kalota⁶, Anna Neroliatsiou⁷, Ioanna V. Papathanasiou⁸. Fears and Health Needs of Patients with Diabetes: A Qualitative Research in Rural Population. *Med Arh.* 2015 Jun; 69(3): 190-195
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Paraskevi Partsiopoulou¹, Maria Papasporou², Aspasia Giannou¹, Maria Spyropoulou³, **Vasiliki C. Laschou**⁴, Areti Tsaloglidou⁵, Evangelos C. Fradelos⁶, Konstantinos Tsaras⁷, Ioanna V. Papathanasiou⁷. Quality of Life: Perspectives of Patients Undergoing Hemodialysis. *International Journal of Health Sciences & Research* Vol.7; Issue: 4; April 2017

Vyron A. Gorgogietas¹, Natalie Sotiriou¹, Ioannis Tsialtas, **Vasiliki C. Laschou**, Evagelia Protopapa², Demetres D. Leonidas¹, Anna-Maria G. Psarra^{1*}. Aluminum chlorohydrate interferes with estrogen receptor signaling in breast cancer cells. (in writing)

Membership of Professional Bodies/Associations

Helper Member of the Greek Society for Biochemistry and Molecular Biology (HSDMB)
