

Curriculum Vitae

Sylwester Kujach

Assistant Professor, Department of Physiology
Gdansk University of Physical Education and Sport
Kazimierza Gorskiego 1
80-336 Gdańsk, Poland
Tel: +48585547211
kujachsylwester@gmail.com
sylwester.kujach@awf.gda.pl



1. PERSONAL DATA

Nationality: Poland

Major: Exercise Physiology, Sports Neuroscience

2. ACADEMIC EDUCATION

M.Sc. **2009**: Gdansk University of Physical Education and Sport, Faculty of Physical Education, Physical Education - Coaching - Sport Physiology, thesis: "Effect of interval training on the aerobic and anaerobic exercise capacity in humans"

Ph.D. **2016**: Gdansk University of Physical Education and Sport, Faculty of Physical Education, Department of Physiology, dissertation: "The effect of interval training on the neurotrophic factors concentration and human cognitive functions"

M.Sc. **2018**: University of Gdansk, Medical Biology, Faculty of Animal and Human Physiology, Laboratory of Neurobiology, thesis: "The effect of dimethyl fumarate on the number of microglia cells in the forebrain structure in the streptozotocin-induced rat model of Alzheimer's disease"

3. SCIENTIFIC INTERSHIPS

2011 - Japan, Tsukuba University, Laboratory of Exercise Biochemistry and Neuroendocrinology,

2013 - Italy, University of Camerino, School of Pharmacy,

2014 - Japan, Tsukuba University, Laboratory of Exercise Biochemistry and Neuroendocrinology,

2015 - Denmark, Academy of Physical Education and Sport in Gerlev,

2018 - Hungary, University of Physical Education Budapest, Research Institute of Sport Science, Research Center for Molecular Exercise Science.

2019 - Hungary, University of Physical Education Budapest, Research Institute of Sport Science, Research Center for Molecular Exercise Science

4. SCIENTIFIC CONFERENCES (selected)

2020 Advance Research Initiative for Human High Performance International Forum, Tsukuba Japan 16-17 February 2020, "High Intensity Interval Exercise and Cognitive Function"

2019 International Sport Neuroscience Conference (IBRO satellite meeting), Tsukuba Japan 18-19 September 2019, "JUDO a Gentle-Way to smarter brain – The effect of JUDO-based exercise program on physical fitness and cognitive function in older people (+65)"

2018 17th International Biochemistry of Exercise Conference (IBEC), Beijing, China 23-25 October 2018, "Oxidative phosphorylation in response to high intensity interval training"

2018 23th Congress of the European College of Sport Science, Dublin, Ireland, 4-7 July 2018, “Four hours of acute normobaric hypoxia induced the prolonged rise of pro-inflammatory IL-1 beta in young physically active men”

2017 13th International Congress Polish Neuroscience Society, Warsaw, Poland, August 27-30, 2017, “Effect of sprint interval exercises on peripheral level of neuroprotective proteins and human cognitive abilities”

2017 27th International Congress of the Polish Physiological Society, Bialystok, Poland, September 21-22, 2017, “Effect of two interval exercises protocol on peripheral neuroprotective-like proteins and human cognitive abilities”.

5. GRANTS AND AWARDS

1. Grant no:- 2019/33/B/NZ7/01980 Title: The impact of aerobic and resistance interval training on structural as well as functional brain changes among the elderly - the role of myokines, cytokines and trophic factors, Funding source: *Polish National Science Centre-director*

2. Grant no:-2012/07/N/NZ7/01902 Title: The effect of interval training on the neurotrophic factors concentration and human cognitive functions, Funding source: *Polish National Science Centre-director*

3. Grant no: N RSA1 002851 Title: The effectiveness of interval training programs in selected sports disciplines-physiological evaluation of adaptive changes, Funding source: *Polish Ministry of science and higher education-main collaborator*

4. Grant no: MN_WF/7/2017 Title: The effect of physical exercise on the adaptive changes in the physical capacity and human cognitive function, Funding source: *Polish Ministry of science and higher education-director*

2019 Travel award for Poster Presentation Recipient- International Sport Neuroscience Conference (IBRO) -Japan

2009 Scholarship for outstanding achievements in scientific research University of Physical Education and Sport

2009 Award of the "Red Rose" association, for the best student of the Pomeranian region

2007/2008 Scholarship of the Polish Minister of Science and Higher Education

6. SCIENTIFIC ACHIEVEMENTS (selected)

1. **Kujach S**, Olek RA, Byun K, Suwabe K, Sitek E, Ziemann E, Laskowski R and Soya H, Acute sprint interval exercise increases both cognitive functions and peripheral neurotrophic factors in humans: the possible involvement of lactate *Frontiers in Neuroscience*, doi: 10.3389/fnins.2019.01455, Year of publication, impact factor: 2020, IF 3,648

2. **Kujach S**, Byun K, Hyodo K, Suwabe K, Fukuie T, Laskowski R, Dan I, Soya H, A transferable high-intensity intermittent exercise improves executive performance in association with dorsolateral prefrontal activation in young adults *Neuroimage*, Volume 169, Pages 117-125, Year of publication, impact factor: 2018, IF 7,079,

3. **Kujach S**, Ziemann E, Grzywacz T, Luszczyc M, Smaruj M, Dzedzej A, Laskowski R
Muscle oxygenation in response to high intensity interval exercises among high trained judokas, *Isokinetics and Exercise Science*, Volume 24, Pages 263-275, Year of publication, impact factor: 2016, IF 0,568

4. Olek RA, **Kujach S**, Ziemann E, Ziolkowski W, Waz P and Laskowski R, Adaptive Changes after 2 weeks of 10-s sprint interval training with various recovery times, *Frontiers in Physiology*, Volume 9, Pages 392, Year of publication, impact factor: 2018, IF 4,134

5. Olek RA, **Kujach S**, Wnuk D, Laskowski R, Single Sodium Pyruvate Ingestion Modifies Blood Acid-Base Status and Post-Exercise Lactate Concentration in Humans, *Nutrients*, Volume 6, Pages 1981-1992, Year of publication, impact factor: 2014, IF 4,187

6. Olek RA, Luszczyc M, **Kujach S**, Ziemann E, Pieszko M, Pischel I, Laskowski R, Single pyruvate intake induces blood alkalization and modification of resting metabolism in humans, *Nutrition*, Volume 31, Pages 466-474, Year of publication, impact factor: 2015, IF 3,312

7. Gmiat A, Micielska K, Kozłowska M, Fils DJ, Smaruj M, **Kujach S**, Jaworska J, Lipinska P, Ziemann E, The impact of a single bout of high intensity circuit training on myokines' concentrations and cognitive functions in women of different age, *Physiology & Behavior*, Volume 179, Pages 290-297, Year of publication, impact factor: 2017, IF 2,835