



Prof. Paweł Ciężczyk

SUMMARY OF PROFESSIONAL ACHIEVEMENTS

Personal details, education and employment

I was born in the year 1976 in Goleniów (Poland). In 1995 I started studying at the Department of Natural Sciences of the University of Szczecin. I graduated in physical education in 2000 obtaining master's degree title. In the meantime I studied Computer Science and Econometrics at the Department of Economics and Management, University of Szczecin (master's degree in 2003).

In 2002 I began working as an assistant at the Faculty of Natural Sciences of the University of Szczecin. In subsequent years I was promoted to the position of assistant professor (2007) and associate professor (2014) and full professor (2018).

In 2012 I took the position of head of the Department of Biological Basis of Physical Culture and vice-dean for research at the Department of Physical Culture and Health Promotion of the University of Szczecin. Currently I'm head of the Department of Molecular Biology and vice-rector for students of the University of Physical Education and Sport in Gdańsk.

Academic record

My academic record contains more than 140 articles published in journals of so-called Philadelphia list (with Impact Factor), 3 monographs, 3 academic textbooks, 6 chapter in international monograph and 6 chapters in monograph on a national scale.

The overall Impact Factor of the above works is 214,575 rating scale. The number of citations of my works from Web of Science is 825, h-index = 17 (day: 07.12.2019).

The number of scientific publications as the first author – 34; the number of articles as the second author – 8; the number of works as so-called *head researcher* – 38.

Original papers are mostly research works on widely understood use of genetic testing in sport – mainly genetic background of predisposition to practice specific sports discipline and genetic background of an increased risk of soft tissue injuries.

The results of my research have been presented during numerous congresses, conventions and conferences, both national and international.

The vast majority of my scientific works that have been published is the result of research grants. The most important projects financed by way of national and international competitions, which I was **the project manager** are as follows:

- Research grant awarded by the National Center for Science as the result of competition OPUS11 that took the second place in the ranking of the competition OPUS 11.
Project title: **"Genotypic and haplotype analysis and the level of methylation of selected genes in the context of dopaminergic theory of motivation for activity and looking for thrills in athletes practicing various sports"**.
Project manager: **Paweł Ciężczyk**
Research project: **UMO-2016/21/B/ NZ7/01068**
Total grant awarded: **437 810 PLN**
Funding: **National Science Centre, Opus 11, NZ7.**

- Research grant awarded by the National Center for Science as the result of competition OPUS17 that took the first place in the ranking of the competition OPUS 17.
Project title: **"Search for new genes determining the predispositions of physical performance"**.
Project manager: **Paweł Ciężczyk**
Research project: **UMO-2017/27/B/NZ7/00204**
Total grant awarded: **1.513.400 PLN**
Funding: **National Science Centre, Opus 17, NZ7.**

- Research grant awarded by the National Center for Science as the result of competition OPUS17 that took the first place in the ranking of the competition OPUS 17.

Project title: " **The impact of exercise-induced muscle damage, inflammation and oxidative stress on the intestinal microbiota in athletes**".

Supervisor: **Paweł Ciężczyk**

Project manager: **Kinga Humińska-Lisowska**

Research project: UMO-2018/29/N/NZ7/02800

Total grant awarded: **209.760 PLN**

Funding: **National Science Centre, Preludium 29, NZ7.**

I gained experience in managing project teams financed by way of national competitions while carrying out the investment project.

Project title: " **Structural and Functional Human Research Center** "

Project manager: **Paweł Ciężczyk**

Investment project: **UDA-RPZP.01.02.02-32-001/14-00**

Amount of funding awarded: **6.8 million PLN (total project value: 12.4 million PLN)**

Additionally I was the main contractor in few projects financed by Polish Government:

2008-2011 MNiSW: grant N404166334. "Polymorphism of selected genes in highly skilled athletes as the basis for genetic profiles used in the pre-selection of players". University of Szczecin,

2013-2016 NCN: grant UMO-2012/07/B/N27/01155. "The influence of polymorphisms of selected genes (*ACE, AMPD1, ATP1A2, HIF1, PPARC, NRF1, VEGF, PPARG, ACTN3, IGF1, IL5, TNF*) on the character and range of post-exercise adaptation response". University of Szczecin,

2015 MSIT: research task 2015.058/40/BP/DWM. "Genetic determinants of sport training progress". Institute of Sport,

2015 -2017 MNiSW: grant 0018/RS3/2015/53. "Coordination capacities and their determinants in achieving championship level in sports gymnastics," Academy of Physical Education and Sport,

Achievements in academic supervision

As a supervisor of doctoral dissertations:

1. On the basis of the dissertation entitled "Evaluation of the impact of birth weight, time of pregnancy termination and the number of points in the Apgar score on the physical development in early phase of human body stabilization" Anna Pędzik-Krajewska, MSc, was granted a title of Doctor of Medical Sciences on 15th of October 2014 at the Pomeranian Medical University in Szczecin.

2. On the basis of dissertation entitled "Polymorphism of selected marker genes in highly qualified swimmers" Agata Grenda, MSc, was granted a title of Doctor of Physical Culture on 14th of September 2016 at the Academy of Physical Education and Sport in Gdańsk.

3. On the basis of dissertation entitled "Selected polymorphisms of *COL5A1* gene as potential markers for genetic predisposition to the occurrence of anterior cruciate ligament injuries in football" Monika Michałowska-Sawczyn, MSc, was granted a title of Doctor of Physical Culture on 14th of September 2016 at the Academy of Physical Education and Sport in Gdańsk.

4. On the basis of dissertation entitled "Investigations on the genetic variability of the *COL1A1*, *COL3A1*, *COL5A1* genes in patients with Achilles tendon rupture as a starting point for the development of early prevention methods for physically active persons" Ewelina Maculewicz's, MSc, was granted a title of Doctor of Medical Sciences on 6th of December 2018 at the Military Institute of Hygiene and Epidemiology in Warsaw.

As a reviewer:

1. Reviewer of Alison September's, PhD, scientific achievements in the procedure of obtaining professorial degree. University of Cape Town, 2014, South Africa.
2. Reviewer of Ewa Jówko's, PhD, scientific achievements in the procedure of obtaining professorial degree. University of Physical Education in Warsaw, 2019, Poland.
3. Reviewer of Jacek Bogucki's, PhD, scientific achievements in the procedure of obtaining professorial degree. Medical University in Lublin, 2019, Poland.
4. The doctoral dissertation of Mariliza Burger, the candidate for the doctoral degree in Biological Sciences, entitled "Genetic risk factors for Carpal tunnel syndrome". Supervisor: professor Malcolm Collins. University of Cape Town, 2014r, South Africa.
5. The doctoral dissertation of Ewa Siwec, MSc, for a doctoral degree in health sciences entitled "Conjugated linoleic acid (CLA) as modulators of energy homeostasis regulated by FoxO1 and PGC-1 alpha in the liver - molecular mechanism." Supervisor: professor Ewa Stachowska. Pomeranian Medical University, 2015.
6. The doctoral dissertation of Grażyna Szmyt, MSc, for a doctoral degree in physical culture entitled "The effectiveness of the pro-health training in giving up tobacco addiction in women depending on their genetic profile of the dopamine receptor." Supervisor: Piotr Gronek, DSc, Academy of Physical Education in Poznań, 2015.
7. The doctoral dissertation of Agnieszka Popadowska, MSc, for a doctoral degree in health sciences entitled "Analysis of the relationship between the polymorphism -13 910 C> T of LCT gene with selected antropomotorics parameters in the population of West Pomeranian Province. Supervisor: professor Małgorzata Milkiewicz. Pomeranian Medical University, 2017.
8. The doctoral dissertation of Sabina Rzepka, MSc, for a doctoral degree in physical culture entitled "Predictive model of sport results in triathlon." Supervisor: associate professor Adam Maszczyk. Academy of Physical Education in Katowice, 2017.
9. The doctoral dissertation of Ewelina Latosik, MSc, for a doctoral degree in physical culture entitled "The influence of diet modification for effort metabolism of women and men". Supervisor: professor Adam Zajac. Academy of Physical Education in Katowice, 2017.
10. The doctoral dissertation of Dawid Golinski, MSc, for a doctoral degree in physical culture entitled "The influence of diet modification for effort metabolism of women and men". Supervisor: associate professor Eugenia Murawska-Ciałowicz. Academy of Physical Education in Wrocław, 2017.

11. The doctoral dissertation of Mariliza Burger, the candidate for the doctoral degree in Biological Sciences, entitled "Identification of factors modulating risk and severity of a sport-related concussion". Supervisor: professor Alison September. University of Cape Town, 2017r, South Africa.