Curriculum Vitae

PERSONAL INFORMATION

Family name, Given names: Kaczmarek, Monika Marzena (Maiden family name: Zaleska) Researcher unique identifiers: Scopus Author ID: <u>10243382600</u>; Google Scholar: <u>Monika M.</u>

Kaczmarek; ResearchGate: Monika M Kaczmarek

Office address: Tuwima 10 Str., 10-748 Olsztyn, Poland Phone: +48 5393112 (office) or +48 5393163 (laboratory)

e-mail: m.kaczmarek@pan.olsztyn.pl
URL for web site: www.kaczmareklab.pl

EDUCATION

January 2018 Full Professor (Agriculture Science) President of the Republic of Poland

June 2010 D.Sc. (Reproductive Endocrinology) Institute of Animal Reproduction and Food Research, Polish Academy of Sciences (IARFR, PAS), Olsztyn, Poland / THESIS: Role of vascular endothelial growth factor in a regulation of secretion activity of the porcine endometrium

July 2004 Ph.D. (Reproductive Endocrinology) IARFR, PAS, Olsztyn, Poland / DISSERTATION: Effect of Hecate- $CG\beta$ conjugate on the development of mammary gland tumor in rat / Supervisor: Prof. Adam J. Ziecik

July 2002 Postgraduate Studies in Informatics, College of Computer Science and Economics, Olsztyn June 2001 MSc (Biotechnology) University of Warmia & Mazury, Olsztyn / Thesis: Effect of Hecate-βLH conjugate on the viability of two cancer cell lines, KK-1 and BLT-1, and granulosa and luteal cells in vitro

PROFESSIONAL EXPERIENCE

- 2015 Associate Professor, Department of Hormonal Action Mechanisms, IARFR, PAS, Olsztyn, Poland
- 2013 2017 Associate Professor, Department of Large Animal Diseases with Clinic, Faculty of Veterinary Medicine, University of Life Science, Warsaw, Poland
- 2011 Associate Professor, Head of Molecular Biology Laboratory, IARFR, PAS, Olsztyn, Poland
 2004 2011 Assistant Professor, Department of Hormonal Action Mechanisms, IARFR, PAS, Olsztyn, Poland
- 2001 2004 Assistant, Department of Hormonal Action Mechanisms, IARFR, PAS, Olsztyn, Poland

FELLOWSHIPS

- **Research fellowship PAS,** The Hebrew University of Jerusalem, Rehovot-Jerusalem, Israel, *1 month*
- **Research fellowship PAS**, Epigenetics and Obesity, Pennington Biomedical Research Center, LSU, Baton Rouge, LA USA, *1 month*
- 2009 2010 Fulbright Advance Research Fellowship, Molecular Genetics and Thermogenesis, Pennington Biomedical Research Center, LSU, Baton Rouge, LA, USA, 6 months
- 2006 Return Fellowship from Alexander von Humboldt and Hertie Foundations, 12 months
- 2004 2005 Research Fellowship from Alexander von Humboldt and Hertie Foundations Institute of Physiology, Technical University Munich, Germany, *6 months*
- 2002 2003 Research Fellowship from International Atomic Energy Agency, Veterinary Faculties, Complutense University of Madrid & University of Murcia, Spain, *3 months*

MAJOR CURRENT & PAST GRANTS (for full list of past and present grants see <u>lab web site</u>)

- 2020 2026 Welcoming ERA Chair to Centre of Excellence in Nutrigenomics to optimise health and wellbeing / PI: Mariusz K. Piskuła / Role: WP5 Leader
- 2019 2025 Milky Way to reproductive success: role of leptin in the programming of reproductive functions over generations / National Science Centre/ Role: PI
- 2018 2021 Role of microRNAs and prostaglandins in regulation of extracellular vesicles biogenesis in porcine trophoblast cells: in vitro studies / National Science Centre / PI: Maria M. Guzewska / Role: Honorary supervisor

- 2017 2020 Extracellular vesicles as an element of maternal-embryo communication during early pregnancy in pig- impact of carried miRNA on recipient cells / National Science Centre/ PI: Joanna Najmula / ROLE: Honorary supervisor
- 2015 2019 Autocrine, juxtacrine and paracrine actions of miRNAs in early stages of pregnancy in pigs / National Science Centre/ Role: PI
- 2015 2018 Development of Personalized Diagnostic of Malignant Tumors based on tumor heterogeneity and integrated genomic, transcriptomic, metabolomic and imaging PET/MRI analysis. Getting Ready for Individualized Therapy / STRATEGMED, The National Centre for Research and Development / PI: Marek Krętowski / Role: Coordinator at Partner Institution, WP2, WP7
- 2014 2016 Embryonic/endometrial exosomes as a new component of embryo-maternal interaction in the pig / Diamond Grant, Ministry of Science and Higher Education / PI: Joanna Najmula / ROLE: Honorary supervisor
- 2011 2015 Nutrition and ambient temperature during early development can reduce susceptibility to obesity / Welcome Grant, Foundation for Polish Science / PI: Leslie P. Kozak / ROLE: Senior Investigator/Mentor
- 2011 2015 Global proteomic profiling of pregnancy specific miRNA targets in primary endometrial cells in vitro / National Science Centre/ PI: Kamil Krawczynski / ROLE: Honorary supervisor
- 2010 2014 Identification of microRNAs participating in the embryo-maternal communication in the pig / National Science Centre/ ROLE: PI
- **2009 2012** *Modernization of integrated laboratories of Centre of Excellence BIOANIREP* / EU Innovative Economy Programme / **ROLE: Coordinator**
- 2006 2009 Role of seminal plasma in regulation of prostaglandin synthesis in the porcine oviduct and uterus / Ministry of Science and Higher Education National Science Centre/ Role: Pl

SUPERVISION OF GRADUATE STUDENTS & POSTDOCTORAL FELLOWS

- 2013 Number of Postdocs: 2 / Molecular Biology Laboratory, IARFR, PAS, Olsztyn, Poland
- 2008 Number of Ph.D. students: 7 / Molecular Biology Laboratory & Dept. Hormonal Action Mechanisms, IARFR, PAS, Olsztyn, Poland
- 2005 Number of Master & Bachelor students: 12 / IARFR, PAS, Olsztyn, Poland; University of Warmia and Mazury, Olsztyn, Poland; University of Life Science, Warsaw, Poland

ACADEMIC/TEACHING EXPERIENCE

- 2013 2017 Associate Professor, Faculty of Veterinary Science, Warsaw University of Life Science, Warsaw / TOPICS: Andrology, Biotechnology of gametes and embryos, Reproductive Immunology, Animal reproduction, Biotechniques in reproduction
- 2008 Associate Professor, Institute of Animal Reproduction and Food Research, Polish Academy of Science, PhD Program, Olsztyn / TOPICS: Cell biology, Animal physiology, Molecular biology, Experimental planning
- **2003 2004 Guest Lecturer**, Faculty of Biology, University of Warmia and Mazury, Olsztyn / TOPIC: Cryoconservation of porcine embryos: from superovulation to embryo transfer

POPULARIZATION OF SCIENCE (selection from the last 10 years)

- 2014-2018 European Researchers' Night & FUSION2NIGHT (Olsztyn, Poland)
- 2018 Food for Thought: The Relationship Between Food, Gut and Brain (MOOC) https://www.futurelearn.com/courses/food-for-thought
- 2019 Extracellular Vesicles in Health and Disease, Lecture 2.5 Pregnancy (ISEV MOOC II) https://www.coursera.org/learn/extracellular-vesicles-health-disease
- 2019 Preserving health of future generations changing diet. TEDx Talks, TEDxFulbrightWarsaw https://www.youtube.com/watch?v=g7VH259E5hk&t=3s
- **2019-2020** *Molecular Biology Discovering Genes and Searching for DNA*, Childrens' University (Olsztyn, Poland)
- 2020-2021 Nutritional Programming, EIT Food Classroom and Science SOS lectures for high schools (on-site and on-line; Olsztyn, Biała Podlaska, Maków Mazowiecki, Poland)
- The Role of Gender Balance and Mentoring in Science + The Role of Experiences in Shaping Physiological Traits, Podcast FulbrightTalks available at Spotify and YouTube https://www.youtube.com/watch?v=51cVVg3guxg

ORGANISATION OF SCIENTIFIC MEETINGS

- VIII Conference of Polish Society for Biology of Reproduction (September 7-9) national meeting / Head of the Organizing Committee and member of the Scientific Committee / Number of participants: 160 / Poland / URL: TBR2017
- **2016** Extracellular Vesicles: Friends and Foes symposium (June 7-9) international meeting / Member of the Organizing Committee / Number of participants: 70 / Israel / URL: EVFF2016
- 2016 Polish Scientific Networks conference (June 30-July 2) international meeting / Member of the Organizing & Scientific Committees / Expected number of participants: 200 / Poland / URL: PSN2016: Science & Business
- 2015 Polish Scientific Networks conference (June 18-20) international meeting / Head of the Organizing Committee & Scientific Committee member / Number of participants: 170/ Poland / URL: PSN2015
- **2013 9th International Conference on Pig Reproduction** (June 9-12) international meeting / Member of the Organizing Committee/ Number of participants: 180 / Poland

COMMISSIONS OF TRUST

- 2021 Executive Academic Council / TopMinds Programme / Poland
- 2020 NCN Council / National Science Centre / Poland (Head of Life Science Commission 2023-2024)
- 2018 Review panel member / The Polish National Agency for Academic Exchange / Poland
- 2017 –2022 Board of Directors / Polish-U.S. Fulbright Commission / Poland
- 2016 2018 Scientific Board / National Science Congress / Poland
- 2016 –2020 Review panel member / National Science Centre / Poland
- 2015 –2021 Editorial Board, Associate editor / Reproductive Biology / ELSEVIER
- **2014 Review panel member /** Polish-U.S. Fulbright Commission / Poland
- 2007 2011 Scientific Evaluation Commission / IARFR PAS/ Poland
- **2007 Scientific Advisory Board / IARFR PAS/ Poland (presidium member 2012-2018, 2023-)**

SELECTED AD HOC REVIEWS

BBA - General Subjects; Biofactors; BMC Genomics; British Journal of Cancer; Communications Biology; FASEB J; Journal of Clinical Endocrinology & Metabolism; Molecular and Cellular Endocrinology; Molecular Genetics and Genomics; Molecular Reproduction and Development; Proteomics; Reproduction; Reproduction, Fertility & Development; Reproductive Biology & Endocrinology.

MEMBERSHIPS OF SCIENTIFIC SOCIETIES & ORGANIZATIONS

- **2019** Polish Society for Extracellular Vesicles (**Founder**, **Board member** 2019-2023)
- 2015 Society for the Study of Reproduction (Public Affairs Committee 2019-2022)
- 2011 2016 Academy of Young Scholars, Polish Academy of Science (vice-chair 2014-2016)
- 2007 2016 European Society for Domestic Animal Reproduction
- **2005** Polish Society for Biology of Reproduction (vice-chair 2017-2021; chair 2021-)

MAJOR INVITED INTERNATIONAL PRESENTATIONS

- 2023 From trash bin to gold mine: implications of extracellular vesicles in early pregnancy. Visegrád Group Society for Developmental Biology 3rd Meeting, Warsaw, Poland
- 2023 Role of extracellular vesicles in early pregnancy. 11th International Conference on Pig Reproduction, Ghent, Belgium
- 2021 Understanding the role of non-coding RNAs in corpus luteum during early pregnancy. Society for the Study of Reproduction 54th Annual Meeting, St. Louis, USA
- 2018 Extracellular vesicles: small particles with unique properties for pregnancy success. Assisted Reproduction Technologies long term perspectives, Cracow, Poland
- 2017 Combined large scale proteomic and target prediction studies show direct and indirect effects of miR-26a and miR-125b on porcine luminal epithelium function during early pregnancy. 10th International Conference on Pig Reproduction, Columbia, Missouri, USA
- 2016 Large-scale analysis of protein expression changes evoked by miR-26a & miR-125b in luminal epithelium of pregnant porcine uterus. 18th International Congress on Animal Reproduction, Tours, France
- **2016** Embryo-maternal interactions: lessons from phylogenetically distant species. Extracellular vesicles: friends and foes, Rehovot, Israel

- 2015 Circulating miRNAs in the maternal serum during early pregnancy in the pig. 48th Annual Conference of Physiology and Pathology of Reproduction/40th Joint Congress of Veterinary and Human Medicine, Zurich, Switzerland
- **2011** Early malnutrition: programming of fertility by maternal diet. GEMINI's Periconceptional Developmental Programming Workshop, Jerusalem, Israel
- 2011 Malnutrition during critical stages of development and reproductive performance of progeny. TUM Tierwissenschatlichen Seminar, Technical University Munich, Germany

MAJOR HONORS & AWARDS

- 2013 Bronze Cross of Merit for scientific merits awarded by the President of Poland
- **2010** Scholarship for an Outstanding Young Researcher from the Polish Ministry of Science and Higher Education (36 months)
- 2007 Award for an Active Young Scientist from Pro Scientia et Vita Foundation
- **2006 Team Scientific Award** from the Director of IARFR, PAS for research on the role of LH/hCG receptors in physiology and pathology of the reproductive tract
- 2005 Young Researcher Scholarship START from the Foundation for Polish Science (24 months)
- 2004 Individual Scientific Award for PhD thesis from the Director of IARFR, PAS

TRAININGS (selection from the last 10 years)

- 2015 Polish Laboratory Animal Science Association (PolLASA) training for persons responsible for the planning, performing, and execution of procedures and experiments with animals used in research or for educational purposes (Olsztyn, Poland)
- 2016 EMBO Laboratory Management Course "The art of Leadership fewer conflicts, more results" (Heidelberg, Germany)
- 2017 "I am Mentor" training for mentors organized by Collegium Wratislaviense during TopMinds program (Warsaw, Poland)
- 2020 Good Laboratory Practice for Specialists organized by Pure Quality (on-line)
- 2022 Good Laboratory Practice in theory and practice. Preparing a research unit for implementation and certification organized by Hamilton (on-line)

MAJOR COLLABORATIONS

Ajduk Anna, Ph.D., Warsaw University, Faculty of Biology, Warsaw, Poland

Blachnio-Zabielska Agnieszka, Ph.D., Department of Hygiene, Epidemiology, and Metabolic Disorders, Medical University of Bialystok, Poland

Dymkowska Dorota, Ph.D., Laboratory of Cellular Metabolism, Nencki Institute of Experimental Biology PAS, Warsaw, Poland

Heifetz Yael, Ph.D., Department of Entomology, The Hebrew University of Jerusalem, Israel

Kozak Leslie P., Ph.D., Maine Medical Center Research Institute, Scarborough, USA

Meidan Rina, Ph.D., Department of Animal Science, The Hebrew University of Jerusalem, Israel

Meshorer Eran, Ph.D., Department of Genetics, The Hebrew University of Jerusalem, Israel

Skup Małgorzata, Ph.D., Group of Restorative Neurobiology, Nencki Institute of Experimental Biology PAS, Warsaw, Poland

Śliwowska Joanna H., Ph.D., Laboratory of Neurobiology, Poznań University of Life Science, Poland Ulbrich Susanne E., Ph.D., Department of Environmental Systems Science, ETH Zürich, Switzerland Wu Li-Hui Kay, Ph.D., Institute for Translational Research in Biomedicine, Kaohsiung Chang-Gung Memorial Hospital, Taiwan

Zabielski Piotr, Ph.D. Department of Physiology Medical University of Bialystok, Poland