

Candidate supervisor's information summary form
maximum 2 pages – it should be a summary of most important achievements

Name and surname, degree, title:	Prof. Grzegorz Bartoszewski
Discipline/ disciplines of science	biological sciences
Professional development (degrees and titles) in chronological order	2018 – professor, plant genetics 2007 – habilitation, biotechnology 2000-2002 – postdoc, University of Wisconsin, Madison, USA 1997 – PhD in agriculture 1995 – Research Fellow, CPRO Wageningen, The Netherlands 1993 – MSc, plant genetics
Most important publications/patens over the last 3 years (maximum 10)	<p>Słomnicka R, Olczak-Woltman H, Sobczak M, Bartoszewski G (2021) Transcriptome profiling of cucumber (<i>Cucumis sativus</i> L.) early response to <i>Pseudomonas syringae</i> pv. <i>lachrymans</i>. Int J Mol Sci 22:4192 DOI:10.3390/ijms22084192</p> <p>Dostatny DF, Korzeniewska A, Bartoszewski G, Rawski R, Kaźmińska K, Gelvonauskis B (2021) The evaluation and conservation of plant genetic resources collected in Lithuania. Agronomy 11:1586 DOI:10.3390/agronomy11081586</p> <p>Kaźmińska K, Hallmann E, Korzeniewska A, Niemirowicz-Szczytt K, Bartoszewski G (2020) Identification of fruit-associated QTLs in winter squash (<i>Cucurbita maxima</i> Duchesne) using recombinant inbred lines Genes 11:419 DOI:10.3390/genes11040419</p> <p>Tańska M, Oгородowska D, Bartoszewski G, Korzeniewska A, Konopka I (2020) Seed lipid composition of new hybrids of styrian oil pumpkin grown in Poland. Agronomy 10:1104 DOI:10.3390/agronomy10081104</p> <p>Holz S, Kube M, Bartoszewski G, Huettel B, Büttner C (2019) Initial studies on cucumber transcriptome analysis under silicon treatment. Silicon 11:2365-2369 DOI:10.1007/s12633-015-9335-2</p>
Experience in work with doctoral students (defended doctoral dissertations, doctoral programmes opened) in chronological order	Finished PhD thesis: 2021 K. Kaźmińska: Evaluation of the diversity of recombinant inbred lines and accessions of winter squash (<i>Cucurbita maxima</i>) 2019 R. Słomnicka: Molecular and phenotypic evaluation of cucumber plants in response to <i>Pseudomonas syringae</i> pv. <i>lachrymans</i> infection awarded by the Faculty Council 2017 T. Mróz: Structural analysis of line B mitochondrial genome and identification of differentially expressed genes in MSC mitochondrial mutants of cucumber – awarded by Faculty Council 2015 M. Oskiera: Molecular identification and genetic diversity of <i>Trichoderma</i> strains potentially useful in biological plant protection – Distinction of Institute of Horticulture, Emil Chroboczek's Award 2010 M. Czarny: Functional analysis of tomato genes involved in secondary metabolism and induced by potato cyst nematode

	<p>Open Doctoral Works:</p> <p>2020 – 2024 E. Olechowska: Evaluation of tolerance to cold stress in cucumber and identification of cold stress response genes.</p>
Project/grants achievements (from the last 10 years)	<p>Principal Investigator:</p> <p>2021-2025 “Identification of genes controlling growth habit in cucumber” in the framework of basic research for crop improvement, funded by the Ministry of Agriculture and Rural Development</p> <p>2018-2021 "Regeneration and valorization of Polish genetic resources of cucurbits" in the framework of Polish GenBank activities, funded by the Ministry of Agriculture and Rural Development</p> <p>2015-2019 “Improving cucumber resistance to angular spot disease” in the framework of basic research for crop improvement, funded by the Ministry of Agriculture and Rural Development</p> <p>2011-2015 "Dynamics of the cucumber transcriptome on the example of mitochondrial MSC mutants" funded by the Ministry of Science and Higher Education</p> <p>2009-2014 “Polish <i>Trichoderma</i> strains in plant protection and organic waste management” in the frames of European Regional Development Fund within the Innovative Economy Operational Programme of EU</p>
Topic – research problem – for which the candidate supervisor seeks a doctoral student	<p>Proposals of PhD thesis:</p> <p>Topic 1: Identification of genes responsible for growth habit in cucumber (<i>Cucumis sativus</i> L.). Research will be focused on genetic and molecular basis of plant architecture in cucumber. Molecular genetics and transcriptomic approaches will be used. The study will be done within Ministry of Agriculture and Rural Development project.</p> <p>Topic 2: The role of tRNA expression and modification in chloroplast translation during stress. The research will aim to analyse the expression and identify post-transcriptional modifications of tRNAs using next-generation sequencing in <i>Arabidopsis thaliana</i>. Dr. Piotr Gawroński will be co-supervising this research. The study will be done within NCN SONATA-BIS 11 project granted to Piotr Gawroński.</p>
Requirements	<p>Master's degree with high academic standing in biotechnology, biology, horticulture or similar</p> <p>Skills in molecular genetics and/or bioinformatics</p> <p>Good self-organization and work planning</p> <p>High motivation to pursue research</p> <p>Good knowledge of English</p>
<u>Contact details:</u>	<p>Department of Plant Genetics Breeding and Biotechnology Institute of Biology, Warsaw University of Life Sciences mailto:grzegorz_bartoszewski@sggw.edu.pl phone. +48 22 5932177</p>