

## Curriculum vitae

Name and family name	<b>Aušra SASNAUSKIENĖ</b>		
ORCID ID	0000-0003-3261-7622		
Date of birth	1975-12-12		
Scientific degree and titles	Doctor		
<b>Higher Education</b>			
University	Year of graduation	Qualification obtained	
Vilnius University	1997	Bachelor degree in Biochemistry	
Vilnius University	1999	Master degree in Biochemistry	
<b>Postgraduate studies</b>			
University	Title of thesis	Date	Degree obtained
Vilnius University	On the processes of cell death induced by photodynamic treatment <i>in vitro</i> : impact of the photosensitiser localisation	2011	Doctor
<b>Work experience</b>			
Year (from/to)	Workplace	Position	
1998-1999	Department of Biochemistry and Biophysics, Vilnius University	Laboratory Assistant	
1999-2011	Department of Biochemistry and Biophysics, Vilnius University	Junior Researcher	
2011-2012	National Cancer Institute, Vilnius	Researcher, Project Leader	
2011-2015	Department of Biochemistry and Biophysics, from October of 2012 Department of Biochemistry and Molecular Biology, Vilnius University	Researcher, Lector	
2015-2021	Department of Biochemistry and Molecular Biology, Vilnius University	Researcher, Associate Professor	
From 2021	Department of Biochemistry and Molecular Biology, Vilnius University	Senior researcher, Associate Professor	
<b>Teaching activities</b>			
“Cell Biology” for students of Biochemistry Bachelor`s Program, Vilnius University (from 2015)			
“Molecular Cell Biology” for students of Molecular Biology Master`s Program, Vilnius University (from 2017)			
<b>Visiting positions, qualification improvement</b>			
Place (country)			Year
Institute for Cancer Research, Norwegian Radium Hospital (Oslo, Norway)			1999-2000
Digital Image Analysis Workshop (Vilnius, Lithuania)			2003
Workshop on Dynamic Imaging (Wurzburg, Germany)			2004
TATAA Biocenter training in Real-time quantitative PCR (Goteborg, Sweden)			2005
Training course on “Concepts and methods in Programmed Cell Death” (Stockholm, Sweden)			2011
Workshop on Confocal Microscopy “Advanced techniques for modern biology” (Warsaw, Poland)			2013
Training course “Preparation of project proposals “Horizon 2020” and principles of project management” (Vilnius, Lithuania)			2019

Workshop on BioImage Analysis for High Content Screening (University of Porto, Portugal)	2021
<b>Complete list of publications</b>	
<ol style="list-style-type: none"> <li>1. Lysosome-targeted photodynamic treatment induces primary keratinocyte differentiation. Daugelaviciene N, Grigaitis P, Gasiule L, Dabkeviciene D, Neniskyte U, <b>Sasnauskiene A</b>. J Photochem Photobiol B. 2021 May;218:112183. doi: 10.1016/j.jphotobiol.2021.112183. Epub 2021 Mar 29. PMID: 33831753</li> <li>2. Notch and Endometrial Cancer. Jonusiene V, <b>Sasnauskiene A</b>. Adv Exp Med Biol. 2021;1287:47-57. doi: 10.1007/978-3-030-55031-8_4. PMID: 33034025 Review.</li> <li>3. vB_EcoS_NBD2 bacteriophage-originated polytubes as a carrier for the presentation of foreign sequences. Špakova A, Dalgėdienė I, Insodaitė R, <b>Sasnauskienė A</b>, Žvirblienė A, Petraitytė-Burneikienė R. Virus Res. 2020 Dec;290:198194. doi: 10.1016/j.virusres.2020.198194. Epub 2020 Oct 12. PMID: 33058966.</li> <li>4. Grigaitis P, Jonusiene V, Zitkute V, Dapkunas J, Dabkeviciene D, <b>Sasnauskiene A</b>. Exogenous interleukin-1<math>\alpha</math> signaling negatively impacts acquired chemoresistance and alters cell adhesion molecule expression pattern in colorectal carcinoma cells HCT116; Cytokine 2019;114:38-46.</li> <li>5. Kukcinaviciute E, Jonusiene V, <b>Sasnauskiene A</b>, Dabkeviciene D, Eidenaitė E, Laurinavicius A. Significance of Notch and Wnt signaling for chemoresistance of colorectal cancer cells HCT116. J Cell Biochem. 2018 Jul;119(7):5913-5920.</li> <li>6. Strainiene E, Binkis M, Urnikyte S, Stankevicius V, <b>Sasnauskiene A</b>, Kundrotas G, Kazlauskas A, Suziedelis K. Microenvironment dependent gene expression signatures in reprogrammed human colon normal and cancer cell lines. BMC Cancer. 2018 Feb 27;18(1):222.</li> <li>7. Kukcinaviciute E, <b>Sasnauskiene A</b>, Dabkeviciene D, Kirveliėne V, Jonusiene V. Effect of mTHPC-mediated photodynamic therapy on 5-fluorouracil resistant human colorectal cancer cells. Photochem Photobiol Sci. 2017 Jul 1;16(7):1063-1070.</li> <li>8. Dabkeviciene D, Jonusiene V, Zitkute V, Zalyte E, Grigaitis P, Kirveliėne V, <b>Sasnauskiene A</b>. The role of interleukin-8 (CXCL8) and CXCR2 in acquired chemoresistance of human colorectal carcinoma cells HCT116. Med Oncol. 2015;32(12):258.</li> <li>9. Dabkeviciene D, <b>Sasnauskiene A</b>, Leman E, Kvietkauskaitė R, Kirveliėne V. Differential expression of VEGF and IL-1<math>\alpha</math> after photodynamic treatment in combination with doxorubicin or taxotere. Anticancer Res. 2014; 34 (10): 5295-302.</li> <li>10. <b>A. Sasnauskiene</b>, V. Jonusiene, A. Krikštaponienė, S. Butkyte, D. Dabkeviciene, D. Kanopiene, Kazbariene, J. Didziapetriene. Expression of Notch signaling proteins: NOTCH1, NOTCH3, NOTCH4 and JAG2 in human endometrial cancer. <u>Medicina</u>; 2014; 50(1):14-8</li> <li>11. Jonusiene V, <b>Sasnauskiene A</b>, Lachej N, Kanopiene D, Dabkeviciene D, Sasnauskiene S, Kazbariene B, Didziapetriene J. Down-regulated expression of Notch signaling molecules in human endometrial cancer. Med Oncol. 2013 ;30(1):438.</li> <li>12. Klionsky DJ, ..., <b>Sasnauskiene A</b>, et al., Guidelines for the use and interpretation of assays for monitoring autophagy. Autophagy. 2012;8(4):445-544.</li> <li>13. Dabkeviciene D, <b>Sasnauskiene A</b>, Leman E, Kvietkauskaitė R, Daugelaviciene N, Stankevicius V, Jurgelevicius V, Juodka B, Kirveliėne V. mTHPC-mediated photodynamic treatment up-regulates the cytokines VEGF and IL-1<math>\alpha</math>. Photochem Photobiol. 2012;88(2):432-9.</li> <li>14. <b>Sasnauskiene A</b>, Kadziauskas J, Vezelyte N, Jonusiene V, Kirveliėne V. Damage targeted to the mitochondrial interior induces autophagy, cell cycle arrest and, only at high doses, apoptosis. Autophagy. 2009;5(5):743-4.</li> <li>15. <b>Sasnauskiene A</b>, Kadziauskas J, Vezelyte N, Jonusiene V, Kirveliėne V. Apoptosis, autophagy and cell cycle arrest following photodamage to mitochondrial interior. Apoptosis. 2009;14(3):276-86.</li> <li>16. Kirveliėne V, <b>Sadauskaite A</b>, Kadziauskas J, Sasnauskiene S, Juodka B. Correlation of death modes of photosensitized cells with intracellular ATP concentration. FEBS Lett. 2003;553(1-2):167-72.</li> </ol>	
<b>Most important presentations at conferences</b>	
<p><b>A. Sasnauskienė</b> (2015) Autophagy and cytokines as targets for anticancer therapy. Conference "Current Trends in Cancer Theranostics", Jena, Germany, oral presentation.</p> <p><b>A. Sasnauskienė</b>, N. Daugelavičienė, E. Kukcinavičiūtė, V. Kirveliėnė (2014). Autophagy induced by</p>	

organelle-targeted photodynamic treatment. Gordon *Research Conference "Autophagy in Stress, Development & Disease"*, Lucca (Barga), Italy, March 16-21, 2014

**A. Sasnauskienė**, N. Vėželytė, J. Kadziauskas, V. Kirvelienė (2011). Cell death induced by photodamage to different cellular compartments // 19th Euroconference on Apoptosis "Metabolism, Epigenetics and Cell Death", Stockholm, Sweden, September 14-17, 2011, Programme & Abstract book, p. 223.

**A. Sasnauskienė**, N. Vėželytė, J. Kadziauskas, V. Kirvelienė (2008). Photodynamic damage to mitochondrial interior induces cell growth inhibition followed by extensive apoptosis // *Apoptosis World 2008. From mechanisms to applications*, Luxembourg, January 23-26, Proceedings and Program, p. 488.

#### **Most important projects**

Self-assembling Phage Proteins for Targeted Nanomedicine, Research Council of Lithuania, 2020-2021, participant.

Novel Biomarkers for Individualized Therapy of Colon Cancer: Proteomics, microRNomics and Clinics, Research Council of Lithuania, 2015-2018, participant.

Carcinoma cells resistance to chemotherapy in vitro: autophagy, cytokines and oxidative stress, Research Council of Lithuania, 2014-2016, participant.

The expression of Notch signaling pathway genes in endometrial cancer and the prognostic value, Research Council of Lithuania, 2011-2013, The project leader in 2012-2013.

Prognostic and predictive markers in oncology, Norwegian Funds, 2008-2011, participant.

Molecular diagnostics for cancer therapy individualization. Research Council of Lithuania, 2007-2008, participant.

Determination of VEGF expression stimulating factor by gene silencing, Research Council of Lithuania, 2007, participant.

The role of p21 in cell death: the methods of gene silencing, Research Council of Lithuania, 2006, participant.

Therapeutic treatment stimulated expression of cytokines in carcinoma cells in vitro. Research Council of Lithuania, 2005, participant.

Cell biology and lasers: towards new technologies. Europe Commission, 2001-2004, participant.

The light in biomedicine: diagnostics and therapy. Research Council of Lithuania, 2000-2004, participant.