

Curriculum Vitae

Name	Asta Lučiūnaitė
Title	Dr.
Address	Institute of Biotechnology, Life Sciences Center, Vilnius University Sauletekio av. 7, Vilnius, Lithuania e-mail: <i>asta.luciunaite@bti.vu.lt</i>
Education:	2010-2014 – BSc Biochemistry at Vilnius University 2012-2016 – MSc Biochemistry at Vilnius University 2022 PhD degree in Natural Science (Biochemistry N 004)
Employment:	05/06/2013-30/06/2017 – laboratory assistant at Institute of Biotechnology, Life Sciences Center, Vilnius University; 01/07/2018-30/11/2019 – biologist at Institute of Biotechnology, Life Sciences Center, Vilnius University; 01/07/2018-31/05/2019 – research assistant at the University Hospital Bonn (Universitätsklinikums Bonn); 01/12/2019-31/08/2022 – junior researcher at Institute of Biotechnology, Life Sciences Center, Vilnius University. From 01/09/2022 – junior researcher at Institute of Biotechnology, Life Sciences Center, Vilnius University.
Supervising activities:	Supervisor of Vilnius University bachelor students Marta Zareckaja, Kotryna Dukšaitė, Lina Ramanauskaitė.
Main research interests:	Innate immunity and inflammation, inflammasome activation pathways; Mechanisms of neurodegenerative disease, especially Alzheimer’s disease; Macrophage/microglia biology, phagocytosis of oligomeric proteins; Properties of amyloid- β aggregates; Macrophage activation by antigen and its immune complex; Viral infection, innate immune cell response to viral antigens. Methods: Cell lines (L929, J774, BV2, CHO and 7PA2, THP-1, etc.) cultivation, primary macrophage cell culture preparation, hybridoma technology; Immunochemical techniques: ELISA, WB, immunoprecipitation, immunocytochemistry (fluorescence microscopy); Affinity chromatography and basics in size exclusion chromatography; Flow cytometry (BD FACS Canto II, Partec CyFlow); Basics in animal experiments: immunisation, blood collection; FELASA C certificate (2014).
National research projects:	05/06/2013- 1/12/2015 – laboratory assistant at VP1-3.1-ŠMM-07-K-02-039 project of the European Social Fund under Global Grant Measure “New chimeric proteins with antiviral activity” 01/10/2015-12/08/2016 – laboratory assistant at SEN-04/2015 project „Investigation of human carbonic anhydrase IX as a cancer diagnostics, visualization and prognosis“ 01/03/2020- 1/12/2021 – junior researcher at. SEN-20-11 project „The Impact of Viral Antigens on Immune Cells in The Context of Inflammaging“ 09/05/2022- 31/08/2022 – junior researcher at 09.3.3.-LMT-K-712-17-0008 project „Identifying chronoepigenetic markers in schizophrenia “. 01/09/2022- current – researcher at 13.1.1-LMT-K-718-05-0031 project „Development of diagnostic antibodies against SARS-CoV-2“.
Conferences	<u>Poster presentations:</u> Lučiūnaitė, A. ; MacManus R.; Schwartz S.; Jankunec M.; Brosseron F.; Heneka MT. NLRP3 Inflammasome Activation by Amyloid-beta Oligomers in Microglia Cells. International Conference of Life Sciences „The Coins 2020“, Vilnius, Lithuania, 25-27 February, 2020. Lučiūnaitė, A. ; MacManus R.; Jankunec M.; Schwartz S.; Latz E.; Heneka MT. Soluble A β Oligomers Induce NLRP3 Inflammasome Activation in Microglia Cells. EMBO workshop Cell death in immunity and inflammation. Crete, Greece, October 6-9, 2019. Lučiūnaitė, A. ; MacManus R.; Jankunec M.; Schwartz S.; Latz E.;

	<p>Heneka MT. Soluble Aβ Oligomers Induce NLRP3 Inflammasome Activation in Microglia Cells. 6th Venusberg Meeting on Neuroinflammation. Bonn, Germany, 9-11 May, 2019.</p> <p>Luciunaite, A.; MacManus R.; Jankunec M.; Schwartz S.; Latz E.; Heneka MT. Soluble Aβ Oligomers Induce NLRP3 Inflammasome Activation in Microglia Cells. 5th BonnBrain Meeting. Bonn, Germany, 25-27 March, 2019.</p> <p>Luciunaite, A.; MacManus R., Schwartz S., Latz E., Heneka MT. Microglial NLRP3 inflammasome activation by Aβ aggregates. EMBO workshop The Inflammasome. Munich, Germany, 25-28 September, 2018.</p> <p>Luciunaite, A.; Dalgediene, I; Zvirbliene, A. Macrophage phenotype after activation with beta-amyloids and viral oligomeric proteins. EMBO EMBL symposium: Mechanism of Neurodegeneration. Heidelberg, Germany, 14-17 June, 2017.</p> <p>Luciunaite, A.; Dalgediene, I; Zvirbliene, A. Activation of macrophages with beta-amyloid oligomers and their immune complexes. 8th Conference of Lithuanian Neuroscience Association. Vilnius, Lithuania, 9 December, 2016.</p> <p>Luciunaite, A.; Dalgediene, I; Zvirbliene, A. Model system for research of the influence of oligomeric proteins and their immune complexes on the phenotype of macrophages. Vita Scientia Conference. Vilnius, Lithuania, 2016: 43-44.</p> <p>Luciunaite, A.; Dalgediene, I; Zvirbliene, A. Model system for research of the influence of oligomeric proteins and their immune complexes on the phenotype of macrophages. XIIIth International Conference of Lithuanian Biochemical Society. Birštonas, Lithuania, 17-20 June, 2014.</p> <p><u>Oral talks:</u></p> <p>17/03/2017 “The influence of oligomeric proteins and their immune complexes on the phenotype of macrophages” at the 60th Scientific Conference for Students of Physics and Natural Sciences Open Readings.</p> <p>12/12/2017 “Influence of oligomeric proteins and their immune complexes on macrophage phenotype” at the conference “Bioateitis” for young scientists held by Lithuanian Academy of Sciences.</p> <p>27/06/2016 “Activation of Macrophages with Oligomeric Proteins and Their Immune Complexes” at XIVth International Conference of Lithuanian Biochemical Society.</p> <p>15/03/2016 “Changes in GABAergic synapses induced by status epilepticus” at the 59th Scientific Conference for Students of Physics and Natural Sciences Open Readings.</p> <p>25/03/2015 “The influence of oligomeric proteins and their immune complexes on the phenotype of macrophages” at the 58th Scientific Conference for Students of Physics and Natural Sciences Open Readings.</p>
Awards	Travel grant for conference „EMBO workshop: Cell death in immunity and inflammation” from EMBO (2019) and from Research Council of Lithuania.

	<p>One year promotional doctoral scholarship from Research Council of Lithuania (2019).</p> <p>Scholarship grant for internship at University Hospital Bonn from Research Council of Lithuania, project No.: 09.3.3-LMT-K-712-14-0019 (05/2019-04/2019).</p> <p>Scholarship grant for internship at University Hospital Bonn from Lithuanian Education Exchanges Support Foundation (01/2019-09/2018).</p> <p>One-year Erasmus+ scholarship for internship at University Hospital Bonn (Universitätsklinikums Bonn) (04/2017-04/2018).</p> <p>Travel grant for conference „EMBO/EMBL symposium: Mechanism of Neurodegeneration“ attendance from EMBL Advanced Training Centre (2017).</p> <p>Winner prize of 3rd place for the best oral presentation at Lithuanian Academy of Sciences conference “Bioateitis” (2016).</p> <p>Erasmus+ scholarship for internship at University of Coimbra (09/2015-06/2015).</p>
Fellowships:	<p>04/2017 – 05/2019 – internship in research laboratory at Department of Neurodegenerative Disease and Gerontopsychiatry/Neurology, University Hospital Bonn, Prof. Dr. Michael T. Heneka’s group.</p> <p>06/2015 – 09/2015 – internship in research laboratory at CNC-Center for Neuroscience and Cell Biology, University of Coimbra, Prof. Dr. Carlos B. Duarte’s group.</p>
International collaboration:	Prof. Dr. Michael T. Heneka, University Hospital Bonn (Universitätsklinikums Bonn), Germany.
Foreign languages:	English

Publications

1. **Lučiūnaitė A**, Dalgėdienė I, Žilionis R, Mašalaite K, Norkiene M, Šinkunas A, Gedvilaite A, Kucinskaite-Kodze I, Žvirblienė A. Activation of NLRP3 Inflammasome by Virus-like Particles of Human Polyomaviruses in Macrophages. *Front. Immunol.* 2022 March; 13:831815. doi: 10.3389/fimmu.2022.831815.
2. Skerniškytė J, Karazijaitė E, **Lučiūnaitė A**, Sužiedėlienė E. OmpA Protein-Deficient *Acinetobacter baumannii* Outer Membrane Vesicles Trigger Reduced Inflammatory Response. *Pathogens.* 2021 Mar 31;10(4):407. doi: 10.3390/pathogens10040407.
3. **Lučiūnaitė A**, McManus RM, Jankunec M, Rącz I, Dansokho C, Dalgėdienė I, Schwartz S, Brosseron F, Heneka MT. Soluble A β oligomers and protofibrils induce NLRP3 inflammasome activation in microglia. *J Neurochem.* 2019 Dec 23:e14945. doi: 10.1111/jnc.14945.
4. Dalgėdienė I, **Lučiūnaitė A**, Žvirblienė A. Activation of Macrophages by Oligomeric Proteins of Different Size and Origin. *Mediators Inflamm.* 2018 Nov 18;2018:7501985. doi: 10.1155/2018/7501985.