

Dr. sc. Antonija Jurak Begonja

Odjel za biotehnologiju
Sveučilište u Rijeci
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OBRAZOVANJE

- Doktor znanosti** **2004-2007**
Institut za kliničku biokemiju i patobiokemiju
Julius Maximillian Sveučilište u Würzburgu, Njemačka
Dizertacija: "NO/cGMP and ROS Pathways in Regulation of Platelet Function and Megakaryocyte Maturation"
- Diplomirani inženjer medicinske biokemije** **1994-2000**
Farmaceutsko-biokemijski fakultet
Sveučilište u Zagrebu, Hrvatska
Diplomski rad: "Utjecaj ohratoksina A na apoptozu i citoskelet renalnih staničnih linija RK-13 i LLC-PK1"

ISTRAŽIVAČKO I PROFESIONALNO ISKUSTVO

- Odjel za biotehnologiju** **2013-**
Sveučilište u Rijeci, Hrvatska
Docent, 2019 – Izv. profesor
- Odsjek translacijske medicine** **2007-2013**
Brigham and Women's Hospital
Harvard Medical School, Boston, SAD
Poslijedoktorsko usavršavanje (postdoc), istraživanje citoskeletnih mehanizama uključenih u razvoj megakariocita u laboratoriju prof. John-a Hartwig-a.
- Institut za kliničku biokemiju i patobiokemiju** **2004-2007**
Julius Maximillian Sveučilište u Würzburgu, Njemačka
Doktorand, istraživanje signalnih puteva cikličkih nukleotida i reaktivnih kisikovih vrsta u regulaciji trombocita, mentori prof. Ulrich Walter i dr. Stepan Gambaryan.
- Odsjek molekularne dijagnostike** **2001-2003**
Klinički zavod za kemiju
Sveučilišna bolnica "Sestre milosrdnice", Zagreb, Hrvatska
Znanstveni novak, istraživanje uloge genskih polimorfizama određenih koagulacijskih faktora kao genetskih markera u bolestima krvožilja, mentor dr. Elizabeta Topić.
- Klinički zavod za kemiju** **2000**
Sveučilišna bolnica "Sestre milosrdnice", Zagreb, Hrvatska
Stož iz medicinske biokemije.
Državni ispit, prosinac 2001.
- Zavod za medicinsku biokemiju** **1999**
Farmaceutsko-biokemijski fakultet
Sveučilište u Zagrebu, Hrvatska

Diplomant, istraživanje citotoksičnih učinaka ohratoksina A i njegove uloge u apoptozi na bubrežnim staničnim linijama, mentor prof. Karmela Barišić.

NAGRADE I PRIZNANJA

Nagrada za najbolju usmenu prezentaciju (Ivana Bertović) 1 st Italian-UK Platelet meeting, Bath, Velika Britanija	7-8. rujna 2017.
Nagrada za najbolji poster (Ivana Bertović) 3 rd EUPLAN Conference (European Platelet Network Meeting), Bad Homburg, Njemačka	23. rujna 2016.
NEWFELPRO stipendija (Marie Curie FP7-PEOPLE-2011-COFUND)	2014-2016
American Society of Hematology Travel Award 52 nd American Society of Hematology Meeting, Orlando, USA	2010
Abstract Achievement Award, ISTH (Top Third by Score) International Society of Thrombosis and Hemostasis XXII Congress, Boston, MA, USA	2009
CEEPUS stipendija Odjel za biokemiju, Fakultet farmacije Karlovo Sveučilište, Republika Češka	Travanj-svibanj 2001
Rektorova nagrada, Sveučilište u Zagrebu	1999
CEEPUS stipendija Institut kliničke kemije, Sveučilišna bolnica, Pečuh, Mađarska	ožujak 1999
Stipendija Sveučilišta u Zagrebu	1997
Stipendija grada Zadra	1995 - 1999

PROJEKTI

Voditelj:

American Society of Hematology Global Research Award Grant	2019-2022
Istraživački projekt, UniRi potpore	2019-2021
Projekt razvoja karijera mladih istraživača – izobrazba novih doktora znanosti, HRZZ, voditelj	2018-2022
Projekt razvoja karijera mladih istraživača – izobrazba novih doktora znanosti, HRZZ, voditelj	2016-2020
Uspostavni istraživački projekt, HRZZ, voditelj	2016-2019
International Centre for Genetic Engineering and Biotechnology-CRP Starting grant, voditelj	2016-2018
NEWFELPRO, Marie Curie FP7-PEOPLE-2011-COFUND, voditelj	2014-2016

Uspostavni projekt Sveučilišta u Rijeci, voditelj	2014-2018
Suradnik:	
H2020-MSCA-ITN-2017, "Targeting Platelet Adhesion Receptors in Thrombosis", suradnik	2018 - 2021
NIH RO1 HL59561 „Mechanisms of thrombocytopenia in WASP and WIP null mice“, voditelj prof. John H. Hartwig	2012-2013
NIH RO1 HL104145 „Filamin A-Syk interactions modulate platelet ITAM-based signaling“, voditelj prof. John H. Hartwig	2007-2011
DFG/SFB 688, „Cardiovascular cell-cell interactions“, voditelj prof. Ulrich Walter	2004-2007
MZOS 0134019 „Molekularno biokemijski poremećaji u akutnih, kroničnih i degenerativnih bolesti“, voditelj prof. Elizabeta Topić	2002-2003

TEČAJEVI I USAVRŠAVANJA

- Engleski kao znanstveni jezik, Harvard Medical School, Boston, SAD	2010
- BD tečaj za FACS kompenzaciju, Heidelberg, Njemačka	rujan 2006
- Laboratorij dr. Harald Schulze-a, Sveučilište Charité, Berlin, Njemačka	15-30 svibanj 2005

PODRUČJE ISTRAŽIVANJA I KOMPETENCIJE

Iskustvo i kompetencije na području hematologije, s naglaskom na biologiju trombocita, signalne puteve koji kontroliraju funkciju trombocita, razvoj megakariocita i trombopoezu. Poseban interes za stanične i molekularne mehanizme uključene u dinamiku citoskeleta, filamin A, promet membrana, receptor za trombopoetin.

PROFESIONALNA ČLANSTVA

- American Society of Hematology (ASH), 2018
- International Society on Thrombosis and Haemostasis (ISTH), 2019
- European Hematology Association (EHA), 2015
- Hrvatsko društvo biokemije i molekularne biologije (HDBMB)

PUBLIKACIJE (Web of Science: h-index 13, ukupni citati 616)

20. Bertovic I, Kurelic R, Milosevic I, Bender M, Krauss M, Haucke V, **Jurak Begonja A**. Vps34 derived phosphatidylinositol 3-monophosphate modulates megakaryocyte maturation and proplatelet production through late endosomes/lysosomes. **J Thrombosis Haemostasis**. 2020, doi: 10.1111/jth.14764.
19. Developmental differences in platelet inhibition response to PGE1. Palma-Barqueros V, Torregrosa JM, Caparrós-Pérez E, Mota N, Bohdan N, Llanos MC, **Jurak Begonja A**, Sola-Visner M, Vicente V, Teruel-Montoya R, Rivera J, Ferrer Marin F. **Neonatology**. 2019, Nov 29:1-9. doi: 10.1159/000504173.
18. **(WoS)** Marecic V, Shevchuk O, Ozanic M, Mihelcic M, Steinert M, **Jurak Begonja A**, Abu Kwaik Y, Santic M. Isolation of F. novicida-containing phagosome from infected human monocyte derived macrophages. **Frontiers in Cellular and Infection Microbiology**. 2017 Jul 5;7:303. doi: 10.3389/fcimb.2017.00303. eCollection 2017. **IF 4.3**
17. **(WoS, CC)** **Jurak Begonja A**, Pluthero FG, Suphamongmee W, Giannini S, Christensen H, Leung R, Lo RW, Nakamura F, Lehman W, Plomann M, Hoffmeister KM, Kahr WH, Hartwig JH, Falet H. FlnA binding to PACSIN2 F-BAR domain regulates membrane tubulation in megakaryocytes and platelets. **Blood**. 2015 Apr 2. pii: blood-2014-07-587600. **IF 11.8, citati: 12**
16. **(WoS, CC)** Grozovsky R, **Begonja AJ**, Liu K, Visner G, Falet H, Hartwig JH, Hoffmeister KM. The Ashwell-Morell receptor regulates hepatic thrombopoietin production via JAK2-STAT3 signaling. **Nat Med**, 2015 Jan; 21(1):47-54. **IF 30.3, citati: 57**
15. **(WoS, CC)** **Begonja AJ**, Gambaryan S, Schulze H, Patel-Hett S, Italiano JE, Hartwig JH, Walter U. Differential roles of cAMP and cGMP in megakaryocyte maturation and platelet biogenesis. **Exp Hematol**, 2013 Jan;41(1):91-101. **IF 2.8, citati: 5**
14. **(WoS, CC)** Thon JN, Devine MT, **Jurak Begonja A**, Tibbitts J, Italiano JE Jr. High-content live cell imaging assay used to establish mechanism of trastuzumab emtansine (T-DM1)-mediated inhibition of platelet production. **Blood** 2012 Sep 6; 120(10): 1975-84. **IF 9.0, citati: 42**
13. **(WoS, CC)** Thon JH, Macleod H, **Begonja AJ**, Zhu J, Lee KC, Mogilner A, Hartwig JH, Italiano JE Jr. Microtubule and cortical forces determine platelet size during vascular platelet production. **Nat Commun** 2012 May 22;3:852. **IF 10.0, citati: 49**
12. **(WoS, CC)** **Jurak Begonja A**, Hoffmeister K, Hartwig JH, Falet H. FlnA-null megakaryocytes prematurely release large and fragile platelets that circulate poorly. **Blood** 2011; 118(8):2285-95. **IF 9.8, citati: 37**
11. **(WoS, CC)** Patel-Hett S, Wang H, **Begonja AJ**, Thon JN, Alden EC, Wandersee NJ, An X, Mohandas N, Hartwig JH, Italiano JE Jr. The spectrin-based membrane skeleton stabilizes mouse megakaryocyte membrane systems and is essential for proplatelet and platelet formation. **Blood** 2011; 118(6):1641-52. **IF 9.8, citati: 28**
10. **(WoS, CC)** Falet H, Pollitt AY, **Begonja AJ**, Weber SE, Duerschmied D, Wagner DD, Watson SP, Hartwig JH. A novel interaction between FlnA and Syk regulates platelet ITAM-mediated receptor signaling and function. **J Exp Med**. 2010; 207(9):1967-79. **IF 14.7, citati: 58**
9. **(WoS, CC)** Rukoyatkina N, **Begonja AJ**, Geiger J, Eigenthaler M, Walter U, Gambaryan S. Phosphatidylserine surface expression and integrin alpha IIb beta 3 activity on thrombin/convulxin stimulated platelets/particles of different sizes. **Br J Haematol**. 2009; 144:591-602. **IF 4.6, citati: 139**
8. **(WoS, CC)** **Begonja AJ**, Geiger J, Rukoyatkina N, Rauchfuss S, Gambaryan S, Walter U. Thrombin stimulation of p38 MAP kinase in human platelets is mediated by ADP and thromboxane A2 and inhibited by cGMP/cGMP-dependent protein kinase. **Blood**. 2007; 109:616-618. **IF 10.9, citati: 29**
7. **(WoS, CC)** Zahedi RP, **Begonja AJ**, Gambaryan S, Sickmann A. Phosphoproteomics of human platelets: A quest for novel activation pathways. **Biochim Biophys Acta**. 2006; 1764:1963-1976. **IF 3.3, citati: 26**

6. **(WoS, CC) Begonja AJ**, Teichmann L, Geiger J, Gambaryan S, Walter U. Platelet regulation by NO/cGMP signaling and NAD(P)H oxidase-generated ROS. **Blood Cells Mol Dis.** 2006; 36:166-170. **IF 2.6, citati: 32**
5. **(WoS, CC) Begonja AJ**, Gambaryan S, Geiger J, Aktas B, Pozgajova M, Nieswandt B, Walter U. Platelet NAD(P)H-oxidase-generated ROS production regulates alphaIIb beta3-integrin activation independent of the NO/cGMP pathway. **Blood.** 2005; 106:2757-2760. **IF 10.1, citati: 107**
4. **(WoS, CC) Simundic AM, Basic V, Topic E, Demarin V, Vrkic N, Kunovic B, Stefanovic M, Begonja A.** Soluble adhesion molecules in acute ischemic stroke. **Clin Invest Med.** 2004; 27:86-92. **IF 1, citati: 36**
3. **(WoS, CC) Gambaryan S, Geiger J, Schwarz UR, Butt E., Begonja A, Obergfell A, Walter U.** Potent inhibition of human platelets by cGMP analogs independent of cGMP-dependent protein kinase. **Blood.** 2004;103:2593-2600. **IF 9.78, citati: 71**
2. **(WoS, CC) Zuntar I, Topic E, Vukosavic D, Vukovic V, Demarin V, Begonja A, Antoljak N, Simundic AM.** Croatian population data for the C677T polymorphism in methylenetetrahydrofolate reductase: frequencies in healthy and atherosclerotic study groups. **Clin Chim Acta.** 2003; 335:95-100. **IF 1.63, citati: 14**
1. **(WoS) Topic E, Turek-Cubrilo M, Begonja A, Simundic AM, Demarin V, Stancic V, Zuntar I.** MTHFR polymorphism in patients with cerebrovascular insult and deep venous thrombosis. *Atherosclerosis: Risk factors, diagnosis and treatment.* 2002; 481-487. **Proceedings at: 73th Congress of the European Atherosclerosis Society, Salzburg, Austria, July 7-10, 2002. ISBN: 88-323-2707-4.**

OSTALE PUBLIKACIJE

5. Bertović I, **Jurak Begonja A.** Regulacija megakariopoeze i trombopoeze. **Bilten KroHema**, studeni 2018, vol. 10, br. 2, 31-33. *ISSN tisak 1847-2273; ISSN online 2584-7244.*
4. **Begonja AJ.** Molecular mechanisms of megakaryocyte and platelet development. **RAD, Hrvatska akademija znanosti umjetnosti.** 2015; 524:42, 35-47.
3. **(WoS) Simundic,AM, Basic V, Topic E, Demarin V, Vrkic N, Kunovic B, Stefanovic M, Begonja A.** Soluble adhesion molecules in acute stroke. *Advances in Critical Care Testing.* 2004; 111-112. **Proceedings at: 18th International Congress of Clinical Chemistry and Laboratory Medicine (ICCC), Kyoto, Japan, October 20-25, 2004.**
2. **Begonja A, Simundic AM, Stefanovic M, Topic E.** PCR-SSCP genotyping of the plasminogen activator inhibitor-1 4G/5G polymorphism. **Biochemia Medica.** 2002; 12: 1-5.
1. Drzata J, Bousova I, Sobotkova J, **Begonja A, Beranek M, Palicka V.** Factors influencing in vitro stability of aminotransferases as model proteins for glycation experiments. 2002; 49-50. **Proceedings at: 11th International Pharmaceutical Technology Symposium, Istanbul, Turkey, September 9-11, 2002.**

POZVANA PREDAVANJA

Begonja AJ. Tiny lipids in the big cells: The role of PI3P in megakaryocyte development and platelet production.

St. Cloud State University, Department of Biology, St. Cloud, MN, SAD. 25.11.2019.

Begonja AJ. Vesicular trafficking in megakaryopoiesis and platelet production: the role of PI3P and late endosomes/lysosomes.

FEBS3+ "From Molecules to living systems", Siofok, Mađarska, 2-5.09.2018.

Begonja AJ. Presentacija karijere i uspostavnog projekta HRZZ #2400: "The role of phosphoinositides in platelet formation"

HRZZ i HAZU, *Presentacija Tenure Track Pilot Programa (u suradnji s EPFL, Švicarska)*, Zagreb, 15.5.2018.

Begonja AJ. Molekularni mehanizmi produkcije trombocita: uloga citoskeleta i fosfoinozitida.

KroHem – Hrvatska kooperativna grupa za hematološke bolesti, Vukovar, 11.5.2018.

Begonja AJ. Molecular mechanisms governing platelet production: the role of PI3P and late endosomes/lysosomes.

Leibniz – Institut für Analytische Wissenschaften - ISAS, Dortmund, Njemačka, 19.4.2018.

Begonja AJ. Greasing up megakaryocytes: the role of PI3P in platelet production.

Institute of Cardiovascular Sciences, University of Birmingham, Birmingham, UK, 10.1.2018.

Begonja AJ. Platelet function, thrombopoiesis and immune thrombocytopenia.

Ljetna škola "Javno zdravstvo i patofiziologija" Saint Cloud State Sveučilište/USA & Odjel za biotehnologiju/Sveučilište u Rijeci. Rijeka, Hrvatska, 16.6.2017.

Begonja AJ. Platelet function, thrombopoiesis and immune thrombocytopenia.

Ljetna škola "Javno zdravstvo i patofiziologija" Saint Cloud State Sveučilište/USA & Odjel za biotehnologiju/Sveučilište u Rijeci. Rijeka, Hrvatska, 17.6.2016.

Begonja AJ. Filamin A u regulaciji nastanka megakariocita.

Dani Medicinskog fakulteta u Rijeci: HAZU 8. znanstvena tribina: biologija i patologija trombocita. Rijeka, 17.12.2015.

Begonja AJ. From the biggest to the smallest: Filamin A regulates differentiation of megakaryocytes into platelets.

International Centre for Genetic Engineering and Biotechnology (ICGEB). Trst, Italija. 17.11.2015.

Begonja AJ. Platelet function, thrombopoiesis and immune thrombocytopenia.

Ljetna škola "Javno zdravstvo i patofiziologija" Saint Cloud State Sveučilište/USA & Odjel za biotehnologiju/Sveučilište u Rijeci. Rijeka, Hrvatska, 23.6.2015.

Begonja AJ. Molekularni mehanizmi razvoja megakariocita i trombocita.

6. simpozij Hrvatske akademije znanosti i umjetnosti: Razvojna biologija trombocita, trombocitopenije i mijeloproliiferativne neoplazme. Rijeka, Hrvatska, 12.3.2015.

Begonja AJ. Sva lica trombocita.

Tribina Hrvatske akademije znanosti i umjetnosti: Novija postignuća u imunologiji i hematologiji. Rijeka, Hrvatska, 15.10.2014.

Begonja AJ. The Many Faces of Filamin A in Megakaryocytes.

Institute for Clinical Biochemistry and Pathobiochemistry, University of Würzburg, Njemačka. 9. 12.2013.

Begonja AJ. New Insights on Mechanisms of Platelet Production.

3rd Congress of Croatian Physiological Society and 1st Regional Congress of the Physiological Societies, Rijeka, Croatia. 13-15, rujna 2013.

Begonja AJ. Razvojni put trombocita.

Odjel za biotehnologiju, Sveučilište u Rijeci, Hrvatska. 14.2.2013.

Begonja AJ. Filamin A and Thrombopoiesis.

Center for Thrombosis and Haemostasis, Mainz, Germany. 27.2.2012.

Begonja AJ. Differential role of cAMP and cGMP in megakaryocyte differentiation from mouse fetal liver stem cells.

Children's Hospital Boston, Harvard Medical School, Boston, USA. 8.12.2008.

Begonja AJ. Uloga cikličkih nukleotida u razvoju megakariocita.

Hrvatsko društvo medicinskih biokemičara, Split, Hrvatska. 18.4.2007.

Begonja AJ, Gambaryan S, Walter U. cGMP/cAMP Signaling in Megakaryocyte and Platelet Production.

SFB 688 Meeting, Würzburg, Germany. 14.12.2006.

Begonja AJ, Gambaryan S, Walter U. Platelet Regulation by NAD(P)H Oxidase-Generated ROS and NO/cGMP Signaling.

Brigham and Women's Hospital, Harvard Medical School, Boston, USA. 21.9.2006.

Begonja AJ, Gambaryan S, Walter U. **Function of ROS in Platelets.**

14th Virtual Platelet Meeting Club, Würzburg, Germany. 14.12.2005.

Begonja A, Bilopavlovic N, Petrik J, Barisic K, Juretic D. **Effect of Ochratoxin A on Cell Death and Intracellular ATP in Kidney RK-13 and LLC-PK1 Cells.**

Ljetna svučilišna škola biokemije, Zadar, Croatia. 15-25, srpnja 1999.

ODABRANA KONFERENCIJSKA PRIOPĆENJA

Bertović I, Kurelić R, **Begonja Jurak A. Early endosomal GTPase Rab5 mediates GPIb trafficking and platelet formation *in vitro*. (Poster, predavanje)**

HDBMB congress: Crossroads in Life Sciences. 25.-28.9.2019. Lovran, Hrvatska

Tomović E*, Bertović I*, **Jurak Begonja A. Characterization of Sorting nexin 9 (SNX9) in DAMI megakaryocytic cell line and primary mouse megakaryocytes.** *Autori su jednako kontribuirali. (Poster)

HDBMB congress: Crossroads in Life Sciences. 25.-28.9.2019. Lovran, Hrvatska

Bura A, Bertović I, **Jurak Begonja A. The role of PI(4,5)P2 and its phosphatase OCRL on actin cytoskeleton during platelet activation. (Poster)**

HDBMB congress: Crossroads in Life Sciences. 25.-28.9.2019. Lovran, Hrvatska- **A.B. NAGRADA ZA NAJBOLJU POSTERSKU PREZENTACIJU**

Marcelic M, Mahmutefendic Lucin H, **Jurak Begonja A**, Blagojevic Zagorac G, Karleusa Lj, Jug Vucko N, Lukanovic Juric S, Pavisic V, Lucin P. **Role of PI3P in the remodeling of the intracellular compartments during MCMV infection. (Poster)**

EMBO Workshop: Lipid function in health and disease. 27.-30.09.2019. Dresden, Germany

Marcelic M, Mahmutefendic Lucin H, **Jurak Begonja A**, Blagojevic Zagorac G, Karleusa Lj, Jug Vucko N, Lukanovic Juric S, Pavisic V, Lucin P. **PI3P is involved in the remodeling of the membranous system during MCMV infection. (Poster)**

13th Annual Meeting of Croatian Physiological Society with International Participation. 18.-19.09.2019. Osijek, Croatia

Neagoe RAI, Stegner D, **Jurak Begonja A**, Nieswandt B, Watson SP, Poulter NS. **The effect of Rac1 inhibitor EHT1864 on aggregation, spreading and GPVI clustering in human platelets. (Poster)**

The 1st Platelet Society Meeting. 12-13.9.2019. Cambridge, UK

Bertović I, Kurelić R, **Jurak Begonja A. Early endosomal GTPase Rab5 regulates platelet production. (Poster, predavanje)**

FEBS Advanced Course: Biochemistry of membrane proteins – Structure, Trafficking, Regulation. 25-30.8.2019. Budimpešta, Mađarska – **I.B. NAGRADA ZA NAJBOLJU POSTERSKU PREZENTACIJU, FEBS Youth Travel grant**

Bura A, Bertović I, **Jurak Begonja A. The role of PI4P and its phosphatase SACM1L in primary megakaryocytes. (Poster)**

FEBS Advanced Course: Molecular Organization, Function and Dynamics of Biomembranes. 10.-20.6.2019. Cargese, Francuska - **A.B. FEBS Youth Travel grant**

Bura A, Bertović I, **Jurak Begonja A. Expression and localization of SACM1L phosphatase and PI4P in Dami cell line and primary mouse megakaryocytes. (Poster)**

The 2018 FEBS Special Meeting on Golgi: Membrane trafficking in cell organization and homeostasis. 15-19.10.2018. Sorrento, Italija

Ivana Bertović, Roberta Kurelić, Michael Krauss, Volker Haucke, **Antonija Jurak Begonja. PI3P modulates**

megakaryocyte maturation and proplatelet production through late endosomes/lysosomes. (Poster)
FEBS Advanced Course "Lipid dynamics and membrane contact sites", Spetses, Grčka, 31.08.-7.9.2018.

Bura A, Bertović I, Boscher J, **Jurak Begonja A. Characterization of SACM1L phosphatase and PI4P in Dami cell line and primary mouse megakaryocytes. (Poster)**
FEBS3+ "From Molecules to living systems", Siofok, Mađarska, 2-5.09.2018.

Ivana Bertović, Roberta Kurelić, Michael Krauss, Volker Haucke, **Antonija Jurak Begonja. PI3P modulates megakaryocyte maturation and proplatelet production *in vitro*. (Poster) I.B. -EHA Travel grant**
European Hematology Association (EHA) 23rd Congress. Stockholm, Švedska, 14-17.6.2018.

Cokarić Brdovčak M, Djaković L, Bertović I, Lončarić M, **Jurak Begonja A, Malatesti N, Jurak I. Several mechanisms contribute to photodynamic inhibition of HSV-1 infection. (Poster)**
31st International Conference on Antiviral Research (ICAR), Porto, Portugal, 11-15.6.2018.

Cokarić Brdovčak M, Djaković L, Bertović I, Lončarić M, **Jurak Begonja A, Malatesti N, Jurak I. A novel cationic amphiphilic porphyrin-based photosensitizer effectively inhibits replication of HSV-1 by several different mechanisms. (Poster)**
Power of Viruses, FEMS. Poreč, Croatia, 16-18.5.2018.

Bertović I, Kurelić R, Krauss M, Haucke V, **Jurak Begonja A. PI3P modulates megakaryocyte maturation and platelet production through late endosomes/lysosomes. (Predavanje, poster)**
Keystone Symposia: Phosphoinositide Biology: New Therapeutic Targets Beyond Class I PI3K, Taos, NM, SAD, 11-15.2. 2018.

Marcelic M, Mahmutefendic H, **Jurak Begonja A, Blagojevic Zagorac G, Karleusa Lj, Jug N, Lukanovic Juric S, Pavisic V, Lucin P. PI3P is important for early phase endosomal retention compartment (EPERC) formation in MCMV infected fibroblasts. (Predavanje, poster)**
4. kongres hrvatskog fiziološkog društva, Dubrovnik, Croatia, 21-24. rujna, 2017.

Cokarić Brdovčak M, Djaković L, Bertović I, Knežević K, Jurak Begonja A, Malatesti N, Jurak I. **Efficient photodynamic inhibition of hsv-1 replication using a novel cationic amphiphilic porphyrin. (Poster)**
7. kongres slovenskog mikrobiološkog društva, Bled, Slovenija, 20-22. rujna 2017.

Bertović I, Krauss M, Haucke V, **Jurak Begonja A. Bertović I, Krauss M, Haucke V, Jurak Begonja A. Membrane traffic modulating lipid PI3P regulates platelet production. (Predavanje) – I.B. NAGRADA ZA NAJBOLJU USMENU PREZENATCIJU**
1st Italian-UK Platelet Meeting, Bath, Velika Britanija, 7-8. rujna 2017.

Bertović I, Krauss M, Haucke V, **Jurak Begonja A. Membrane traffic modulating lipid PI3P regulates platelet production. (Poster)**
2nd International Advances in Biomedical Research conference, MedILS, Split, Hrvatska, 3 -7. srpnja 2017.

Bertović I, Krauss M, Haucke V, **Jurak Begonja A. Phosphatidylinositol 3-monophosphate (PI3P) regulates megakaryocyte maturation and proplatelet formation. (Poster)**
FEBS/EMBO Advanced Lecture Course: Molecular Architecture, Dynamics and Function of Biomembranes, Cargèse, Corsica, Francuska, 12-21.6.2017. – **FEBS Youth Travel Fund fellowship I. Bertović**

Bertović I, Krauss M, Haucke V, **Jurak Begonja A. Differential levels and localization of PI3P in immature and mature megakaryocytes. (Poster)**
Gordon Research Conference: Cell biology of megakaryocytes and platelets. Barga, Italija, 26.2. – 3.3. 2017.
– **invited discussion leader**

Bertovic I, Banovic M, Paskvan P, Hartwig JH, **Jurak Begonja A. Phosphatidylinositol 3-monophosphate (PI3P) regulates proplatelet formation *in vitro*. (Poster) - SCIENTIFIC AWARD FOR THE BEST POSTER**
3rd EUPLAN (European Platelet Network) Conference, Bad Homburg, Njemačka. 21-23. rujna, 2016.

Bertovic I, Jurak Begonja A. **Phosphatidylinositol 3-monophosphate (PI3P) is required for platelet production in vitro. (Poster)**

Croatian Academy of Sciences and Arts 14th Symposium: Translation of basic immunology and neuroscience tools to therapies; Rijeka, Croatia; July 4th 2016.

Bertovic I, Banovic M, Hartwig JH, Jurak Begonja A. **Expression of PI3P binding phox (PX) domain inhibits megakaryocyte development into proplatelets. (Poster)**

Biochemical Society UK & FEBS, Signalling 2015: Cellular Functions of Phosphoinositides and Inositol Phosphates; Cambridge, UK; September 1-4 2015.

Giannini S, Adelman M, Jurak Begonja A, Hoffmeister KM. **Beta galactosyltransferase (B4GALT1) is a key regulator of hematopoietic stem cell function and thrombopoiesis. (Predavanje)**

International Society of Thrombosis and Hemostasis Congress, Toronto, Kanada; 20-25.6. 2015.

Giannini S, Adelman M, Begonja AJ, Mullally A, Hoffmeister KM. **Beta 1,4 Galactosyltransferase 1 is a key regulator of hematopoietic stem cell function and thrombopoiesis. (Poster)**

Gordon Research Conference, Barga, Italy, April 19-24, 2015.

Grozovsky R, Begonja AJ, Hartwig JH, Falet H, Hoffmeister KM; **The Ashwell-Morell Receptor Regulates Hepatic Thrombopoietin Production Via JAK2-STAT3 Signaling in Vivo and in Vitro.** Blood 2014 vol. 124, issue 21, 2. **(Plenarno predavanje)**

56th American Society of Hematology Meeting, San Francisco, CA, USA, December 6-9, 2014.

Jönsson T, Pluthero F, Begonja AJ, Kormann J, Demers M, Wagner DD, Plomann M, Hartwig JH, Kahr WH, Falet H; **The F-BAR Protein PACSIN2 Regulates Platelet Intracellular Membrane Architecture and in Vivo Hemostatic Functions.** Blood 2014 vol. 124, issue 21, 4154. **(Poster)**

56th American Society of Hematology Meeting, San Francisco, CA, USA, December 6-9, 2014.

Giannini S, Adelman M, Begonja AJ, Hoffmeister KM. **Posttranslational Modification in Megakaryocytes Regulates β 1 Integrin Expression, Migration and Platelet Production in Vivo.** Blood 2014 vol. 124, issue 21, 1435. **(Poster)**

56th American Society of Hematology Meeting, San Francisco, CA, USA, December 6-9, 2014.

Begonja AJ, Grozovsky R, Hoffmeister KM, Falet H, Hartwig JH. **Filamin A stabilizes thrombopoietin receptor surface expression and inhibits its degradation. (Predavanje)**

2nd EUPLAN (European Platelet Network) Conference, Le Bischenberg, France. 25-26.9.2014.

Giannini S, Begonja AJ, Adelman M, Hoffmeister KM. **Aberrant Type-2-Lactosaminoglycan Synthesis Severely Impairs Thrombopoiesis.** Blood 2013 vol. 122, issue 21, 2320. **(Poster)**

55th American Society of Hematology Meeting, New Orleans, LA, USA, December 5-7, 2013.

Hoffmeister KM, Grozovsky R, Begonja AJ, Hartwig JH. **The hepatic Ashwell-Morell receptor regulates thrombopoietin production.** J Throm Haemost 11, (Sup2) p157. International Society on Thrombosis and Haemostasis XXIV Congress, Amsterdam, Netherlands, June 29-July 4, 2013. **(Predavanje)**

Giannini S, Adelman M, Begonja AJ, Hoffmeister KM. **Correct LacNAc synthesis is required for platelet production. (Poster)**

Gordon Research Conference, Galveston, TX, USA, March 10-15, 2013.

Jönsson T, Begonja AJ, Bender M, Kim H, Kormann J, Merkl B, Pluthero F, Kahr WH, Hartwig JH, Plomann M, Falet H. **The F-BAR protein PACSIN 2 orchestrates the intracellular membrane architecture of platelets and megakaryocytes. (Poster)**

Gordon Research Conference, Galveston, TX, USA, March 10-15, 2013.

Begonja AJ, Grozovsky R, Hoffmeister KM, Falet H, Hartwig JH. **Filamin A regulates thrombopoietin c-Mpl receptor function. (Poster)**

Gordon Research Conference, Galveston, TX, USA, March 10-15, 2013.

Grozovsky R, **Begonja AJ**, Hartwig JH, Hoffmeister KM. **Clearance of Desialylated Platelets by the Hepatic Asialoglycoprotein Receptor Regulates TPO Homeostasis in Vivo.** *Blood* **2012** vol. 120, issue 21, **2170. (Poster)**

54th American Society of Hematology Meeting, Atlanta, USA, December 8-11, 2012.

Begonja AJ, Nguyen L, Italiano JE, Falet H, Meiri K, Hartwig JH. **The neuronal protein GAP-43 associates with microtubules and lipid rafts in platelets and megakaryocytes and is involved in platelet genesis.** *Blood* **2011** vol. 118, issue 21, **2201. (Poster)**

53rd American Society of Hematology Meeting, San Diego, USA, December 9-12, 2011.

Giannini S, Grozovsky R, **Begonja AJ**, Hoffmeister KM. **β -1,4-Galactosyltransferase 1 Expression Is Required for Platelet Production in Vitro and In Vivo.** *Blood* **2011** vol. 118, issue 21, **192. (Predavanje)**

53rd American Society of Hematology Meeting, San Diego, USA, December 9-12, 2011.

Jönsson T, **Begonja AJ**, Kormann J, Merkl B, Pluthero F, Kahr WH, Hartwig JH, Plomann M, Falet H. **The F-BAR Protein PACSIN 2 Specifically Coats the Anastomosing Intracellular Membrane Systems of Platelets and Megakaryocytes.** *Blood* **2011** vol. 118, issue 21, **3261. (Poster)**

53rd American Society of Hematology Meeting, San Diego, USA, December 9-12, 2011.

Giannini S, Grozovsky R, **Begonja AJ**, Hoffmeister KM. **β -1,4-Galactosyltransferase 1 Expression Is Required for Platelet Production in Vitro and In Vivo.** *Glycobiology* 2011; volume 21, issue 11. **(Poster)** Annual Conference of the Society for Glycobiology, Seattle, USA, November 9-12, 2011.

Jönsson T, **Begonja AJ**, Hartwig JH, Falet H. **Expression and localization of the membrane-binding and -deforming protein, pacsin 2, in platelets and megakaryocytes. (Poster)**

International Society on Thrombosis and Haemostasis XXIII Congress, Kyoto, Japan, July 23-28, 2011.

Begonja AJ, Hoffmeister K, Hartwig JH, Falet H. **FlnA null megakaryocytes prematurely release large and fragile platelets that spontaneously microvesiculate and poorly circulate. (Poster)**

Gordon Research Conference, Galveston, TX, USA, March 20-25, 2011.

Jönsson T, **Begonja AJ**, Hartwig JH, Falet H. **Expression and localization of the membrane-binding and -deforming protein, pacsin 2, in platelets and megakaryocytes. (Poster)**

Gordon Research Conference, Galveston, TX, USA, March 20-25, 2011.

Begonja AJ, Weber SE, Hoffmeister KM, Hartwig JH, Falet H. **Filamin A Deficiency Leads to Premature Platelet Formation and Increased Clearance.** *Blood* **2010** vol. 116, issue 21, **2207. (Poster)**

52nd American Society of Hematology Meeting, Orlando, USA, December 4-7, 2010.

Begonja AJ, Weber SE, Falet H, Hartwig JH. **Aberrant Thrombopoiesis in Filamin A-Null Megakaryocytes Generates Abnormal Platelets that are Rapidly Cleared. (Poster)**

BWH Research Excellence Awards, Boston, May 25, 2010.

Hartwig JH, **Begonja A**, Falet H, Patel-Hett S, Thon J, Italiano J. **Megakaryocytes and Thrombopoiesis. (Predavanje)**

International Society on Thrombosis and Haemostasis XXII Congress, Boston, USA, July 11-16, 2009.

Begonja AJ, Gambaryan S, Schulze H, Patel-Hett S, Italiano Jr. JE, Hartwig J, Walter U. **Differential Roles of cAMP and cGMP in Megakaryocyte Maturation and Platelet Formation. (Poster)**

International Society on Thrombosis and Haemostasis XXII Congress, Boston, MA, USA, July 11-16, 2009.

Begonja AJ, Gambaryan S, Walter U. **Differential Mechanisms of Platelet ROS Production by Thrombin and Convulxin. (Predavanje)**

XXth European Platelet Meeting, Ede, Netherlands. October 14th 2005.

Begonja AJ, Gambaryan S, Geiger J, Walter U. **Platelet NAD(P)H Oxidase-Mediated ROS Production Regulates α IIb β 3 Activation. (Poster)**

Gordon Research Conference, Buellton, CA, USA, March 5-11, 2005.

Begonja AJ, Gambaryan S, Geiger J, Aktas B, Walter U. **NAD(P)H Oxidase Modulates GPIIb/IIIa Activity In Platelets. (Poster)**

XIXth European Platelet Meeting, Bad Brückenau, Germany, October 14-16, 2004.

Begonja A, Topic E, Simundic AM, Stefanovic M, Nikolic V. PAI-1 And Fibrinogen Polymorphisms In Patients With Myocardial Infarction In Croatia. (Poster)

EUROMEDLAB, Barcelona, Spain, June 1-5, 2003.

Begonja A, Topic E, Simundic AM, Stefanovic M. Polymorphisms Of Some Coagulation Factor Genes In Healthy Croatian Subjects. (Poster)

13th Congress of the European anthropological association, Zagreb, Croatia, September 1-3, 2002.

Begonja A, Topic E, Simundic AM, Stefanovic M. Plasminogen Activator Inhibitor-1 4G5G Polymorphism In Stroke Patients. (Poster)

POPULARIZACIJA ZNANOSTI

- Znanost za mlade u Vukovaru: Uspješne priče o znanosti, javna predavanja o uspjehu i primjeri dobre prakse, u organizaciji akademika prof. Ivana Đikića i Lotusmedije. *Ružičkina kuća, Vukovar.* **25. listopada 2019**
- *Od čega je građeno naše tijelo?* Posjet dječjem vrtiću "Maestral", Rijeka **15. svibnja 2018**
- *Što je krv?* Laboratorij za hematopoezu, Odjel za biotehnologiju, Sveučilište u Rijeci. **Otvoreni dan Sveučilišnih odjela, Festival znanosti** **17. travnja 2018.**
- *Što je laboratorij? Kako istraživati krv?* Posjet osnovne škole "Belvedere" Odjelu za biotehnologiju, Sveučilišta u Rijeci **7. lipnja 2017.**
- *Tekućine u našem tijelu.* Posjet dječjem vrtiću "Maestral", Rijeka **12. svibnja 2017.**
- *Što je krv?* Laboratorij za hematopoezu, Odjel za biotehnologiju, Sveučilište u Rijeci. **Otvoreni dan Sveučilišnih odjela, Festival znanosti** **25. travnja 2017.**
- Akademska karijera: međunarodno i domaće iskustvo. Konferencija Udruge studenata Biotehnologije "Budućnost i perspektiva studija", Odjel za biotehnologiju, Sveučilište u Rijeci **8. prosinca 2016.**
- *Što je krv?* Laboratorij za hematopoezu, Odjel za biotehnologiju, Sveučilište u Rijeci. **Otvoreni dan Sveučilišnih odjela, Festival znanosti** **19. travnja 2016.**
- *Nova otkrića u području hemostaze i tromboze.* Novi list. **9. siječnja 2015.**
- *Borba za svaku pločicu.* Novi list. (intervju u dnevnim novinama) **22. ožujka 2015.**
- *Zakrpe u vašoj krvi.* Odjel za biotehnologiju, Sveučilište u Rijeci. **Otvoreni dan Sveučilišnih odjela, Festival znanosti** **8. travanj 2014.**
- Posjet djece 7. razreda osnovne škole Cres Odjelu za biotehnologiju **11. travanj 2014.**
- Posjet djece predškolske dobi vrtića "Đurđice" Odjelu za biotehnologiju **6. lipnja 2014.**

NASTAVA

Gost predavač, diplomski studij Biotehnologije i Farmacije, Fakultet biomedicinskih znanosti, Sveučilište Europea Madrid, Španjolska
7-9.5.2014.

Odjel za biotehnologiju, Sveučilište u Rijeci:
 Voditelj, preddiplomski studij (Biotehnologija i istraživanje lijekova)
2013 - Biologija matičnih stanica
2015 - Opća fiziologija i patofiziologija

Suradnik, preddiplomski studij i diplomski studij
2014 - Imunologija
2014 - Uvod u znanstveni rad

Suradnik, doktorski studij Medicinska kemija
2017 - Uvod u znanstveni rad

MENTORSTVO DIPLOMSKIH RADOVA

- 2018/2019 **Eni Tomović** "Kloniranje i karakterizacija SNX9 u HEK292 i DAMI staničnoj liniji"
 2017/2018 **Ana Bura** "Characterization of SACM1L phosphatase and PI4P in Dami cell line and primary megakaryocytes"
 2016/2017 **Roberta Kurelić**: "Analiza ranih i kasnih endosoma u razvojnim fazama mišjih megakariocita"
 2015/2016 **Paola Paškvan**: "Kloniranje, mutageneza i karakterizacija fosfatidilinozitol 3-monofosfat vezujućih domena u HEK293T i primarnim megakariocitima"
 2014/2015 **Marija Banović**: "Ekspresija i funkcija VPS34 u nastanku protrombocita" – *nagrada "Zoran Zgaga" za najbolji diplomski rad (Hrvatska udruga genetičkih inženjera)*
 2013/2014 **Romina Sabo**: "Uloga filamin A u lokalizaciji trombopoetinskog receptora"

KOMENTORSTVO DIPLOMSKIH RADOVA

- 2016/2017 **Nina Volf**: "Razumijevanje slabe sposobnosti angiogeneze odraslog srca"
 2015/2016 **Kristina Žuža**: "Razvoj dvostrukog luciferaznog reporter eseja za in vivo detekciju miRNA genskog utišavanja"
 2014/2015 **Ana-Marija Vučković**: "Istraživanje feroptoznog inhibitora GPx4"
 2011/2012 **Mehrshad Aschmann**: "A role for microtubule sliding in platelet production" (Brigham & Women's Hospital, Harvard Medical School, Boston, SAD)
 2010/2011 **Julia Sjodin** (Brigham & Women's Hospital, Harvard Medical School, Boston, SAD)
 2009/2010 **Teresse Joensson** (Brigham & Women's Hospital, Harvard Medical School, Boston, SAD)

MENTORSTVO ZAVRŠNIH RADOVA

- 2017/2018 **Tea Bruketa**: "Analiza LC3-II kao markera autofagije u različitim razvojnim stadijima megakariocita"
 2017/2018 **Rozalija Šajn**: "Analiza broja jezgrica u primarnim mišjim megakariocitima"
 2016/2017 **Roberta Padavić**: "Matične stanice kao izvor megakariocita i trombocita"
 2016/2017 **Andrea Mihalić**: "Novi potencijalni interakcijski partneri: PI3P i protein kinaza A"
 2016/2017 **Martina Nenadić**: "Evaluacija fosfoinozidnih fosfataza u transkriptomu i proteomu ljudskih i mišjih trombocita"
 2015/2016 **Ana Bura**: "Uloga fosfoinozitida u prometu unutarstaničnih membrana"
 2015/2016 **Iris Car**: "Molekularni mehanizmi nastanka trombocita"
 2014/2015 **Marta Ursić**: "Regulacija prometa receptora filaminom A"

ORGANIZACIJA ZNANSTVENIH SKUPOVA

2015. - 6. simpozij HAZU: Razvojna biologija trombocita, trombocitopenije i mijeloproliiferativne neoplazme. Rijeka, Hrvatska, 12.3.2015., član znanstvenog odbora.
 2019. - Kongres HDBMB 2019, Crossroads in Life Sciences, Lovran, 25-28. rujna 2019., član organizacijskog odbora

NACIONALNA I MEĐUNARODNA PREPOZNATLJIVOST

- Gostujući znanstvenik, Erasmus K+ projekt, St. Cloud State Sveučilište (SCSU), Odjel za biologiju, St. Cloud, MN, SAD, studeni/prosinac 2019.
- Hrvstko društvo za biokemiju i molekularnu biologiju (HDBMB), koordinator podružnice, 2019
- Član panela Hrvatske zaklade za znanost, Biomedicina i zdravstvo, Temeljne medicinske znanosti, 2016 - 2019.
- Pozvani voditelj sekcije ("Discussion leader") - Gordon Research Conference "Cell Biology of Megakaryocytes and Platelets" Barga, Italija, 26.2. – 3.3.2017.
- Recenzent za HRZZ projekte, od 2016.

RECENZIJE ČLANAKA

Thrombosis Research

Cell Communication and Signaling

Periodicum Biologorum

Blood

Platelet

INSTITUCIJSKI DOPRINOS

Sveučilište u Rijeci

- Član stručnog vijeća za internacionalizaciju, istraživanje i projekte (SVIIP), zamjenik člana, 2018 – danas
- Savjet Sveučilišta, član, 2019 - danas

Odjel za biotehnologiju

- Žalbeno stegovno povjerenstvo, član, od 2019 - danas
- Povjerenstva za međunarodnu suradnju i projekte, član, od 2015 – danas
- Povjerenstva za Erasmus mobilnost, član od 2015 - 2018
- Povjerenstva za završne i diplomske radove od 2014 - danas
- Vijeće Odjela, član od 2013