

## **ŽIVOTOPIS**

Ivana Munitić, dr. med., dr. sc.

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**Google Scholar:** <https://orcid.org/0000-0002-5171-9950>

### **Obrazovanje/Diplome/Ispiti:**

2006. Doktorat znanosti u području imunologije ("Determinants Relavant for Development and Activation of T Cells"), Université René Descartes Paris 5, Pariz, Francuska;  
1998. Državni ispit za doktore medicine, Zagreb.  
1997. Doktor medicine, Medicinski Fakultet Sveučilišta u Zagrebu

### **Zaposlenja:**

- 2019- Predstojnica Zavoda za molekularnu i sistemsку biomedicinu, Odjel za biotehnologiju, Sveučilište u Rijeci.  
2018- Izvanredni profesor na Odjelu za biotehnologiju, Sveučilište u Rijeci.  
2014- Voditelj Laboratorija za molekularnu imunologiju, Odjel za biotehnologiju, Sveučilište u Rijeci.  
2013- Docent na Odjelu za biotehnologiju, Sveučilište u Rijeci.  
2009-2012 Gostujući znanstvenik, Laboratory of Immune Cell Biology, National Cancer Institute, National Institutes of Health. Bethesda, SAD.  
2005-2009 Gostujući znanstvenik, INSERM U591- Différenciation thymique et physiologie des lymphocytes T, Pariz, Francuska.  
2000-2004 Gostujući znanstvenik, Laboratory of Immune Cell Biology, NCI, NIH, Bethesda, SAD.  
1998-1999 Znanstveni novak, Zavod za Patofiziologiju, Medicinski Fakultet, Zagreb.  
1997-1998 Obavezni liječnički staž, Bolnica Merkur, Zagreb.

### **Nagrade i stipendije:**

- 2005-2007 Marie Curie Incoming Fellowship, EU.  
2000-2004 Fogarty International Fellowship, SAD.  
1995-1997 Rektorova nagrada Sveučilišta u Zagrebu.

### **Nastavna djelatnost:**

- 2016- Neuroimunologija, Odjel za biotehnologiju, Sveučilište u Rijeci (voditelj

	kolegija).
2015-	Imunologija, Odjel za biotehnologiju, Sveučilište u Rijeci (voditelj kolegija).
2014-	Metodologija znanstveno-istraživačkog rada (za doktorski studij), Odjel za biotehnologiju, Sveučilište u Rijeci (voditelj obaveznog kolegija i Modula 3 doktorskog studija Medicinske kemije).
2014-	Ljetna škola patofiziologije (engl. Capstone Course in Pathophysiology), Odjel za biotehnologiju, Sveučilište u Rijeci u suradnji s St. Cloud University, Minnesota (suradnik na kolegiju).
2013-	Imunoterapija, Odjel za biotehnologiju, Sveučilište u Rijeci, (voditelj kolegija).
2013-	Uvod u istraživački rad, Odjel za biotehnologiju, Sveučilište u Rijeci (voditelj kolegija).
1998-1999	Patofiziologija. Zavod za Patofiziologiju, Medicinski Fakultet, Zagreb (asistent).
1995- 1997	Demonstrator na Katedri za Patofiziologiju, Medicinski Fakultet, Sveučilište u Zagrebu.
1994- 1995	Demonstrator na Katedri za Kemiju i Biokemiju, Medicinski Fakultet, Sveučilište u Zagrebu.

#### **Tečajevi:**

2016	Trening za unaprjeđenje kompetencija nastavnika, Sveučilište u Rijeci.
2015	Advanced Operator Training for BD FACSARia III, Erembodegem, Belgium.
2008	In Vivo Non-Linear Microscopy, Institute Curie, Pariz, Francuska.
2004	Vaccines 2004. Foundation of Advanced Education in Science course, Bethesda, SAD.
2002	Molecular and Cellular Mechanisms of Immunity-II. Foundation of Advanced Education in Science course. Bethesda, SAD.
2000	Molecular and Cellular Mechanisms of Immunity. Foundation of Advanced Education in Science course. Bethesda, SAD.
1998	Molecular Medicine (Summer School). Dubrovnik.

#### **Članstva:**

2015	Hrvatsko Društvo za Neuroznanost (HZN)
2014	American Association of Immunologists (AAI)
2014	Hrvatsko Društvo za Biokemiju i Molekularnu Biologiju (HDBMB)
2013	European Federation of Immunological Societies (EFIS)
2013	Hrvatsko imunološko društvo (HID)

#### **Projekti i ostalo financiranje:**

2020	ICGEB financiranje organizacije znanstvenog simpozija: Joint ICGEB – ALS Society of Canada Symposium on inflammation and proteinopathy in ALS/FTD spectrum disorder
2019-2023	HRZZ istraživački projekt: Controlling neurodegeneration by modulating the crosstalk between inflammation and proteinopathy
2019-2023	Financiranje doktoranda putem projekta: Projekt razvoja karijera mladih istraživača - izobrazba novih doktora znanosti.
2019-2022	Potpore Sveučilišta u Rijeci za projekt: Generacija i molekularna

2014-2017	karakterizacija in vitro i in vivo modela amiotrofične lateralne skleroze HRZZ uspostavni istraživački projekt: Elucidating the Role of Optineurin in Neuroprotection.
2014-2018	Financiranje doktoranda putem projekta: Projekt razvoja karijera mladih istraživača - izobrazba novih doktora znanosti.
2014-2017	Potpore Sveučilišta u Rijeci za projekt: Elucidating the Role of Optineurin in Neuroinflammation and Cytoprotection.
2016	Erasmus+ exchange program s Laval University, Quebec City, Canada.

### Aktivne kolaboracije:

1. Emanuele Buratti (ICGEB, Trst, Italija): uloga optineurina u agregaciji i funkcionalnom ispadu TDP-43 proteina.
2. Jasna Križ (University Laval, Quebec, Kanada): aktivacija NF-κB kao molekularna osnova amiotrofične lateralne skleroze.
3. Jonathan D. Ashwell (National Cancer Institute, NIH, Bethesda, SAD): uloga optineurina u autofagiji.

### Pozvana predavanja:

- 2019 Optineurin Dysfunction in Amyotrophic Lateral Sclerosis, HDBMB Crossroads in Life Sciences, Lovran, Croatia.
- 2019 Optineurin Dysfunction in Neurodegeneration, Mind & Brain, Pula, Croatia.
- 2019 Immunity in Amyotrophic Lateral Sclerosis, International Conference on Neurological Disorders and Neurorestoration, Dubrovnik, Croatia.
- 2019 Neuroimmunology of ALS, 4th Croatian Neuroimmunological Congress with international participation, Opatija, Croatia. 2018 Imunologija u ALS-u: pogled unatrag i unaprijed; Simpozij Dileme u neurologiji, Poreč, 2018.
- 2018 The role of optineurin in Amyotrophic Lateral Sclerosis, Congress of Croatian Laboratory Animal Science Association "Laboratory Animals in Scientific Research", Zagreb 2018.
- 2018 Cijepljenje - najučinkovitija obrana protiv zaraznih bolesti, Baltazar na Gradini, Rijeka
- 2018 Cijepljenje - najučinkovitija obrana protiv zaraznih bolesti, Opatija Coffeehouse debates, Rijeka 2018
- 2018 Cijepljenje: znanstveni pristup, predavanje u sklopu Dana filozofskog fakulteta, Sveučilište u Rijeci.
- 2018 Razvoj novih životinjskih modela za istraživanje amiotrofične lateralne skleroze, godišnja skupština Hrvatskog društva za znanost o laboratorijskim životnjama (CroLASA), Zagreb, Hrvatska.
- 2017 Characterization of the role of optineurin in neurodegeneration, 13<sup>th</sup> Symposium of the André-Delambre Foundation, Montreal, Canada.
- 2017 Elucidating the role of optineurin in amyotrophic lateral sclerosis, Laval University, CERVO Brain, Research Centre Quebec City, Canada.
- 2017 Animal Models of Amyotrophic Lateral Sclerosis, Croatian National Academy of Sciences and Arts International symposium on Neurodegeneration, Rijeka, Croatia.
- 2017 Istraživanje uloge optineurina u neuroprotekciji, Predstavljanje uspješnih uspostavnih HRZZ projekata, Medicinski Fakultet, Sveučilište u Rijeci, Hrvatska.

- 2017 Molecular characterization of mouse optineurin insufficiency models, Regional meeting of clinicians and basic scientists that work on ALS, Ljubljana, Slovenia.
- 2016 Animal models for elucidating the role of adaptor protein optineurin during inflammation; simpozij Translation of Basic Immunology and Neuroscience Tools to Therapies: Where are We Now?; Croatian Academy for Sciences and Arts, Rijeka, and University of Rijeka, Croatia.
- 2016 Iskustva i izazovi istraživača u biomedicini, Filozofski fakultet, Sveučilište u Rijeci, Hrvatska.
- 2016 Immune system in the brain: more important than we thought, Open day of the Department of Biotechnology, University of Rijeka, Croatia.
- 2014 A Mouse Model of Optineurin Insufficiency, 10th Symposium of the André-Delambre Foundation, Amyotrophic Lateral Sclerosis: Causes and Therapeutic Perspectives, Montreal, Canada.
- 2014 Nove funkcije dendritičkih stanica, Tribina Hrvatske akademije znanosti i umjetnosti, "Novija postignuća u imunologiji i hematologiji", Rijeka, Hrvatska.

#### **Organizacija simpozija i okruglih stolova:**

- 2019 Skup za popularizaciju znanosti i kritičkog mišljenja: STEM: danas za sutra 2 (suorganizator), Rijeka 2018
- 2018 Skup za popularizaciju znanosti i kritičkog mišljenja: STEM: danas za sutra (suorganizator), Rijeka 2018
- 2018 2<sup>nd</sup> Meeting Of Basic Researchers And Clinicians Working On ALS (SLO/HR), Department of Biotechnology, University of Rijeka
- 2016 International Symposium: Translation of Basic Immunology and Neuroscience Tools to Therapies: Where are We Now?; Croatian Academy for Sciences and Arts, Rijeka, and University of Rijeka, Croatia.
- 2016 Roundtable: Interdisciplinary approach to complex diseases, Department of Biotechnology, University of Rijeka, Croatia.
- 2016 International symposium for young neuroscience researchers: 20<sup>th</sup> Young Neuroscientists Meeting, Department of Biotechnology, University of Rijeka, Croatia.

#### **Sudjelovanje u internacionalnim konzorcijima**

- 2019- COST Action: Biomaterials And Advanced Physical Techniques For Regenerative Cardiology And Neurology (BIONECA)
- 2018- project MinE

#### **Institucijske obaveze:**

- 2019- Član Savjeta za znanost Sveučilišta u Rijeci.
- 2019 Predstavnik Odjela za biotehnologiju u stručnom vijeću za internacionalizaciju, istraživanja i projekte, Sveučilišta u Rijeci.
- 2018- organizacija Otvorenog dana Odjela za biotehnologiju, Sveučilišta u Rijeci.
- 2018- član Povjerenstva za nastavu Odjela za biotehnologiju, Sveučilišta u Rijeci.

- 2017- organizacija 1. Dana doktoranada doktorskog studija Medicinska kemija Odjela za biotehnologiju, Sveučilišta u Rijeci.  
2017- organizacija Seminara Zavoda za molekularnu i sistemsку medicinu Odjela za biotehnologiju, Sveučilišta u Rijeci.  
2016- član Povjerenstva za doktorske studije Odjela za biotehnologiju, Sveučilišta u Rijeci.

**Mentorstva doktorskih studenata:**

- 2019- doktorandica Nikolina Prtenjača (HRZZ)  
2017- doktorand Raffaello Cimbro (vanjski)  
2015- doktorandica Andrea Markovinović (HRZZ); doktorirala u prosincu 2018.

**Mentorstva magistarskih i završnih radova:**

- 2019-20 magistarski rad: Josip Peradinović  
2019-20 magistarski rad: Rozalija Šajn  
2019-20 završni rad: Lorena Šimunić  
2019-20 završni rad: Marija Marošević  
2018-9 magistarski rad: Karla Dubaić  
2018-9 magistarski rad: Valentina Štimac; diplomirala  
2018-9 završni rad: Erika Radović; diplomirala  
2018-9 završni rad: Katarina Bulić; diplomirala  
2017-8 magistarski rad: Matea Rob; diplomirala  
2017-8 magistarski rad: Nikolina Prtenjača; diplomirala  
2017-8 magistarski rad: Vendi Šinkovec (komentor s M. Kuka, San Raffaele, Milano); diplomirala  
2017-8 magistarski rad: Ana Vidulić (komentor s I. Jurak, Odjel za biotehnologiju); diplomirala  
2017-8 završni rad: Karlo Mladenić; diplomirao  
2017-8 završni rad: Klara Krpina; diplomirala  
2017-8 završni rad: Alicia Pliego Mendieta (Erasmus studentica; diplomirala  
2015/6 magistarski rad: Tereza Ljutić; diplomirala  
2014/5 magistarski rad: Mia Jakopović; diplomirala  
2014/5 završni rad: Marina Rumora; diplomirala

**Revizija za međunarodne časopise:**

Brain Communications  
Journal of Neuroinflammation  
Frontiers in Immunology  
Immunity, Inflammation and Disease  
Amyotrophic Lateral Sclerosis and Frontotemporal Degeneration  
Trends in Immunology  
Neurological Sciences  
Stem Cell Reviews and Reports  
British Journal of Pharmacology  
Biochimica et Biophysica Acta  
British Journal of Pharmacology

**Uredništvo u međunarodnom časopisu:**

2017/8 gostujući urednik za časopis Frontiers in Immunology (zajedno s Dr. Andrew Smith i Prof. Folma Buss); tema: The Role of Optineurin in Immunity and Immune-Mediated Diseases.

<https://www.frontiersin.org/research-topics/6554/the-role-of-optineurin-in-immunity-and-immune-mediated-diseases>

### **Revizija projektnih prijedloga:**

2017- Program cjeloživotnog učenja, Sveučilište u Rijeci  
2016- projekti Hrvatske zaklade za znanost (HRZZ)

### **Popularizacija znanosti i predstavljanje laboratorija za široku javnost:**

2018. Igrokaz: Tko je jači: Imuni sustav ili virusi? Te Otvorena vrata laboratorija  
2017. Igrokaz: Tko je jači: Imuni sustav ili virusi?

2016. Plenarno predavanje: Imuni nadzor mozga, te Otvorena vrata laboratorija

2015. Predavanje: Mikroglija i ALS, te demonstracija: Određivanje krvnih grupa

### **Glavna postignuća:**

1. Dizajn i uspostavljanje novog genetskog modela kondicionalne insuficijencije optineurina, te karakterizacija uloge optineurina u perifernom imunosnom sustavu te imunosnim stanicama u mozgu.
2. Pronalazak važnosti endogenih glukokortikoida u prevenciji smrti prilikom sepse putem dva komplementarna mehanizma: imunosupresijom i eliminacijom CD8<sup>+</sup> dendritičkih stanica. Taj rad rad naglašava da su i dendritičke stanica, a ne samo makrofazi kao što se prije mislilo, važan izvor proinflamatornih citokina u ranoj fazi sepse, ponajviše IL-12, te da njihova nekontrolirana aktivacija (u odsutnosti glukokokortikoidnog receptora u tim stanicama) dovodi do smrti od cytokine oluje.
3. Objavljivanje niza otkrića na memorijskim CD8 T stanicama i njihovim prekursorima, uključujući ulogu kostimulacijske molekule CD70, neovisnosti ekspresije citotoksičnih gena o klonalnoj zastupljenosti, te razlike između primarnih i sekundarnih memorijskih stanica.
4. Identifikacija i karakterizacija nove vrste stanica urođenog imunološkog sustava, nazvanih T<sub>DC</sub>. T<sub>DC</sub> stanice su neobične jer imaju αβ T stanični receptor i probrane su u timusu, no po svemu drugome, kao npr. prezentaciji antigena i kostimulaciji T stanica te ovisnosti o Flt3 faktoru rasta, su slične klasičnim dendritičkim stanicama.
5. Karakterizacija važnosti dinamične ekspresije IL-7R receptora u ranoj fazi razvoja timocita. Analizom IL-7R transgeničnih miševa uviđeno je da ukoliko se IL-7R ekspresija ne ugasi u CD4<sup>+</sup>CD8<sup>+</sup> stadiju, timus postaje hipocelularan zbog ograničenog pristupa CD4<sup>-</sup>CD8<sup>-</sup> prekursorskih stanica trofičkom citokinu IL-7, što onemogućuje njihovu proliferaciju i razvoj.

### **Bibliografija:**

- 2019 Smith AM, Buss F, Munitic I. Editorial: The Role of Optineurin in Immunity and Immune-Mediated Diseases. **Frontiers in Immunology** 10, 2803.
- 2019 Ban, J, Sámano C, Mladinic M, **Munitic, I**. Glia in amyotrophic lateral sclerosis and spinal cord injury: common therapeutic targets. **Croatian Medical Journal** 60,109-120.
- 2019 Hancevic, M, Bilic H, Sitas D, Pavlisa G, Borovecki F, Munitic I, Bilic E. Attenuation of ALS progression during pregnancy—lessons to be learned or just a coincidence? **Neurological Sciences**, 40:1275-1278.
- 2018 Markovicinovic A, Ljutic T, Beland LC, Munitic I. 2018. Optineurin Insufficiency Disbalances Proinflammatory and Anti-inflammatory Factors by Reducing Microglial IFN-beta Responses. **Neuroscience** 388:139–151.
- 2018 Markovicinovic A, Cimbro R, Ljutic T, Kriz J, Rogelj B and Munitic I. Optineurin in amyotrophic lateral sclerosis: Multifunctional adaptor protein at the crossroads of different neuroprotective mechanisms. **Progress in Neurobiology**, **154**, 1-20.
- 2017 Malatesti N, Munitic I, and Jurak I. Porphyrin-based cationic amphiphilic photosensitisers as potential anticancer, antimicrobial and immunosuppressive agents. **Biophysical Reviews**, **9(2)**, 149-168.
- 2016 Pourcelot M, Zemirli N, Silva Da Costa L, Loyant R, Garcin D, Vitour D, Munitic I, Vazquez A, and Arnoult, D. The Golgi apparatus acts as a platform for TBK1 activation after viral RNA sensing. **BMC Biology**, **14**, 69.
- 2016 Meena NP, Zhu G, Mittelstadt PR, Giardino Torchia ML, Pourcelot M, Arnoult D, Ashwell JD and Munitic I. The TBK1-binding domain of optineurin promotes type I interferon responses. **FEBS Letters**, 590, 1498-1508.
- 2015 Li CC\*, Munitic, I\*, Mittelstadt PR, Castro E, Ashwell, JD. Suppression of dendritic cell-derived IL-12 by endogenous glucocorticoids is protective in LPS-induced sepsis, **PLOS Biology**. 13, e1002269.\***jednak doprinos**.
- 2015 Giardino Torchia, ML, Munitic, I, Castro E, Herz J, McGavern DB, Ashwell JD. c-IAP ubiquitin protein ligase activity is required for 4-1BB signaling and CD8 memory T-cell survival, **European Journal of Immunology**, 45, 2672-82.
- 2013 Munitic I\*, Giardino Torchia ML, Meena NP, Zhu G, Li CC, Ashwell, JD\*. Optineurin Insufficiency Impairs IRF3 but not NF-κB Activation in Immune Cells. **Journal of Immunology**, 191(12): 6231-40. \* **autor za korespondenciju**.
- 2013 Kuka M\*, Munitic I\*, Giardino Torchia ML, Ashwell JD. CD70 is downregulated by interaction with CD27. **Journal of Immunology**, 191(5): 2282-9. \* **jednak doprinos**.
- 2013 Munitic I, Kuka M, Allam A, Scoville JP, Ashwell JD. CD70-deficiency impairs effector CD8 T cell generation and viral clearance but is dispensable for the recall response to LCMV. **Journal of Immunology**, 190(3): 1169-79.
- 2012 Kuka M, Munitic I, Ashwell JD. Identification and characterization of polyclonal αβ-T cells with dendritic cell properties. **Nature Communications**, 2012: 3: 1223.
- 2010 Munitic I, Evaristo C, Sung HC, Rocha B. Transcriptional regulation during CD8 T-cell immune responses. **Advances in Experimental Medicine and Biology**, 684:11-27.
- 2010 Decaluwe H, Taillaret M, Corcuff E, Munitic I, Law HK, Rocha B, Riviere Y, Di Santo JP. Gamma(c) deficiency precludes CD8+ T cell memory despite formation of potent T cell effectors. **Proceedings of the National Academy of Sciences**, 107(20): 9311-6.
- 2009 Munitic I\*, Decaluwe H, Evaristo C, Lemos S, Wlodarczyk M, Worth A, Le Bon A, Selin LK, Riviere Y, Di Santo JP, Borrow P, Rocha B\*. Epitope specificity and relative clonal abundance do not affect CD8 differentiation patterns during lymphocytic choriomeningitis virus infection. **Journal of Virology**, 83(22): 11795-807.\* **autor za korespondenciju**.

- 2009 Allam A, Conze DB, Giardino Torchia ML, Munitic I, Yagita H, Sowell RT, Marzo AL, Ashwell JD. The CD8+ memory T-cell state of readiness is actively maintained and reversible. **Blood**, 114(10): 2121-30.
- 2007 Peixoto A, Evaristo C, Munitic I, Monteiro M, Charbit A, Rocha B, Veiga-Fernandes H. CD8 single-cell gene co-expression reveals three different effector types present at distinct phases of the immune response. **Journal Experimental Medicine**, 204, 1193-205.
- 2005 Munitic I, Ryan PE and Ashwell, JD. T cells in G1 provide a memory-like response to secondary stimulation. **Journal of Immunology**, 174, 4010-8.
- 2004 Munitic I, Williams JA, Yang Y, Dong B, Lucas PJ, El Kassar N, Gress RE, and Ashwell JD. Dynamic regulation of IL-7 receptor expression is required for normal thymopoiesis. **Blood**, 104, 4165-72.
- 2002 Oro U\*, Munitic I\*, Chacko G, Karpova T, McNally J, Ashwell JD. Regulation of constitutive T cell receptor internalization by the  $\zeta$  chain. **Journal of Immunology**, 169(11): 6269-78. \* jednak doprinos.

#### Poglavlja u knjizi:

- 2019 Miholović V, Munitić I: Uloga imunosnog sustava u nastanku i progresiji amiotrofične lateralne skleroze, Priručnik „Dijagnostika i liječenje bolesti motoričkih neurona“.

#### Odabrana izlaganja i poster prezentacije na simpozijima:

- 2019 Prtenjača N, Dominović M, Markovinović A and Munitić I. Elucidating the Role of Optineurin in Neuroinflammation and Autophagy, Lovran, Croatia.
- 2019 Markovinovic A, Ljutic T, Béland LC, Prtenjaca N, Dominovic M and Munitic I. Loss of optineurin function in microglia leads to a disbalance in pro- and anti-inflammatory factors regulated by IFN-beta. ENCALS (European Network for the Cure of ALS), Tours, France.
- 2017 Andrea Markovinović, Tereza Ljutić, Milojević i Ivana Munitić: Characterization of the role of optineurin in neuroinflammation. Atypical dementias: from diagnosis to emerging therapies, Trst, Italija.
- 2017 Hrvoje Jakovac, Andrea Markovinovic and Ivana Munitic: Neurohistopathological characterization of an optineurin insufficiency mouse model. Congress of Croatian Physiological Society and Regional Congress of the Physiological Societies, Dubrovnik.
- 2017 Andrea Markovinović, Tereza Ljutić, Milojević i Ivana Munitić: Characterization of the role of optineurin in neurodegeneration, Young Neuroscientists Meeting (YMN), Zagreb.
- 2017 Hrvoje Jakovac, Andrea Markovinovic and Ivana Munitic: Characterization of neurodegeneration in an optineurin insufficiency mouse model. Annual Meeting Of The Croatian Immunological Society With EFIS On Tour, Zagreb.
- 2017 Andrea Markovinović, Tereza Ljutić i Ivana Munitić: Molecular characterization of mouse optineurin insufficiency models, European Network for the Cure for ALS (ENCALS) meeting, Ljubljana, Slovenija.
- 2017 Tereza Ljutić, Andrea Markovinović, Sai Sampath Thammisetty, Jasna Križ, Ivana Munitić. Characterization of the optineurin insufficiency mouse model. Scientific poster day of CERVO Institute, Quebec city, Canada.
- 2016 Munitic I, Markovinovic A, and Ashwell JD. An optineurin insufficiency model of ALS. ENCALS (European Network for the Cure of ALS) meeting in Milano, Italy. Selected Oral presentation.
- 2015 Munitic I, Li CC, Mittelstadt PR, Castro E, and Ashwell JD. Endogenous

- glucocorticoids suppress dendritic cell-derived IL-12 and prevent death in LPS-induced sepsis, 4<sup>th</sup> European Congress of Immunology, Vienna, Austria. Selected Oral presentation.
- 2015 Markovinović A, Barukčić A, Jakopović M, Šinkovec V, Jakovac H, Grabušić K, Ashwell JD, and Munitić I. An optineurin insufficiency model as a potential tool for elucidating the pathogenesis of amyotrophic lateral sclerosis. Croatian Society for Neuroscience, Split, Croatia.
- 2015 Munitić I, Giardino Torchia ML, and Ashwell JD. Optineurin is dispensable for LPS- and *Salmonella typhimurium*-induced autophagy. American Associations of Immunologists, New Orleans, USA.
- 2014 Munitić I, Giardino Torchia ML, Meena NP, and Ashwell JD. Optineurin is a Positive Regulator of IFN- $\square$ . Annual meeting of the Croatian Immunological Society, Krk, Croatia. Selected Oral presentation.
- 2013 Munitić I, Giardino Torchia ML, Meena NP, and Ashwell JD. A Mouse Model of Optineurin Insufficiency Exhibits Impaired Signaling via IRF3 but not NF- $\kappa$ B Activation Pathway. 4<sup>th</sup> Croatian Neuroscience Congres. Zagreb, Croatia.
- 2013 Munitić I, Giardino Torchia ML, Meena NP, and Ashwell JD. Optineurin is Indispensible for Signaling via IRF3 but not NF- $\kappa$ B Activation Pathway. 2<sup>nd</sup> Meeting on Middle-European Societies for Immunology and Allergology. Opatija, Croatia.
- 2007 Munitić I, Le Bon A and Rocha B. Evaluating CD8 differentiation during LCMV response by a multiparametric gene expression study of individual cells. Keystone Symposium on Immunological Memory. Santa Fe, NM, USA.
- 2006 Munitić I, Le Bon A and Rocha B. Evaluating CD8 differentiation during LCMV response by a multiparametric gene expression study of individual cells. 16<sup>th</sup> European Congress of Immunology – ECI. Paris, France.
- 2006 Munitić I, Le Bon A and Rocha B. Single-cell multiparametric gene expression analysis of CD8 differentiation during an immune response to LCMV. DC-Thera Graduate School in St. Moritz, Switzerland. Selected oral Presentation.
- 2004 Munitić I, Ryan, P and Ashwell, JD. T Cells in G<sub>1</sub> provide a memory-like response to antigen rechallenge. National Institutes of Health-Immunology Interest Group Retreat. Warrenton, VA, USA. Selected Oral presentation.
- 2002 Munitić I, D’Oro U, Chacko, G, Karpova, T, McNally, J, Ashwell, JD. Enhanced Rates of Constitutive TCR Cycling in  $\square$ -deficient Cells. Federation of American Societies for Experimental Biology Meeting (FASEB). New Orleans, LA, USA.