

## CURRICULUM VITAE, KONSTANTINA NIKΑ

| PERSONAL INFORMATION |                  |
|----------------------|------------------|
| SURNAME              | NIKA             |
| NAME                 | KONSTANTINA      |
| e-mail               | knika@upatras.gr |
| Tel.                 | +2610996116      |

| CURRENT POSITION   |                                                                                                                    |
|--------------------|--------------------------------------------------------------------------------------------------------------------|
| 2019 - Present     | <b>Assistant Professor</b><br>Department of Biological Chemistry, School of Medicine, University of Patras, Greece |
| PREVIOUS POSITIONS |                                                                                                                    |
| 2015-2019          | <b>Lecturer</b><br>Department of Biological Chemistry, School of Medicine, University of Patras, Greece            |
| 1997 - 2001        | <b>Research Scientist (grade 8, point 7)</b><br>Sir William Dunn School of Pathology, University of Oxford, UK     |
| 2002-2006          | <b>Postdoctoral associate</b><br>Sanford Burnham Prebys Medical Discovery Institute, La Jolla CA, USA.             |

| EDUCATION  |                                                                                                                                                                           |
|------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2015-2019  | <b>PhD:</b> School of Pharmacy and Biomedical Sciences, Portsmouth University, UK,<br>Thesis title: 'The interactions of immune cytokines with sulphated polysaccharides' |
| 1993 -1996 | <b>BSc (Hons) in Biomedical Sciences:</b> School of Pharmacy and Biomedical Sciences, Portsmouth University, UK                                                           |

| PUBLICATIONS |                                                                                                                                                                                                                                                                                                                                                                                      |
|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1.           | Tyritidis I, Tsioupros E, Christou P, Koutras N, Morfos V, <b>Nika K*</b> . A non-invasive nanobody probe for high precision mapping of Lck spatial distribution. <i>Front Immunol.</i> 2024 Jul 3;15:1440499. doi: 10.3389/fimmu.2024.1440499. PMID: 39021567; PMCID: PMC11251914.                                                                                                  |
| 2.           | Koutras N, Morfos V, Konnaris K, Kouvela A, Shaukat AN, Stathopoulos C, Stamatopoulou V, <b>Nika K*</b> . Integrated signaling and transcriptome analysis reveals Src family kinase individualities and novel pathways controlled by their constitutive activity. <i>Front Immunol.</i> 2023 Aug 23;14:1224520. doi: 10.3389/fimmu.2023.1224520. PMID: 37680627; PMCID: PMC10482094. |
| 3.           | Porciello N, Cipria D, Masi G, Lanz AL, Milanetti E, Grottesi A, Howie D, Cobbold SP, Schermelleh L, He HT, D'Abramo M, Destainville N, Acuto O, <b>Nika K*</b> . Role of the membrane anchor in the regulation                                                                                                                                                                      |

- of Lck activity. *J Biol Chem*. 2022 Dec;298(12):102663. doi: 10.1016/j.jbc.2022.102663. Epub 2022 Nov 11. PMID: 36372231; PMCID: PMC9763865.
4. Theofani E, Alexis S, Costeas P, Andriopoulos C, Feleskoura G, Zikos P, Aktypi A, Spyridonidis A, **Nika K\***. Ectopic Lck expression in CLL demarcates intratumoral subpopulations with aberrant B-cell receptor signaling. *Blood Adv*. 2018; 24;2(8):877-882. doi: 10.1182/bloodadvances.2017015321. PMID: 29669754; PMCID: PMC5916004.
  5. **Nika K\***, Acuto O. Membrane nanodomains in T-cell antigen receptor signalling. *Essays Biochem*. 2015;57:165-75. doi: 10.1042/bse0570165. PMID: 25658352.
  6. Paster W, Bruger AM, Katsch K, Grégoire C, Roncagalli R, Fu G, Gascoigne NR, **Nika K**, Cohnen A, Feller SM, Simister PC, Molder KC, Cordoba SP, Dushek O, Malissen B, Acuto O. A THEMIS:SHP1 complex promotes T-cell survival. *EMBO J*. 2015 ;34(3):393-409. doi: 10.15252/embj.201387725. Epub 2014 Dec 22. PMID: 25535246; PMCID: PMC4339124.
  7. Dong S, Corre B, **Nika K**, Pellegrini S, Michel F. T cell receptor signal initiation induced by low-grade stimulation requires the cooperation of LAT in human T cells. *PLoS One*. 2010 Nov 30;5(11):e15114. doi: 10.1371/journal.pone.0015114. PMID: 21152094; PMCID: PMC2994893.
  8. **Nika K**, Soldani C, Salek M, Paster W, Gray A, Etzensperger R, Fugger L, Polzella P, Cerundolo V, Dushek O, Höfer T, Viola A, Acuto O. Constitutively active Lck kinase in T cells drives antigen receptor signal transduction. *Immunity*. 2010 Jun 25;32(6):766-77. doi: 10.1016/j.immuni.2010.05.011. Epub 2010 Jun 11. PMID: 20541955; PMCID: PMC2996607.
  9. **Nika K\***, Tautz L, Arimura Y, Vang T, Williams S, Mustelin T. A weak Lck tail bite is necessary for Lck function in T cell antigen receptor signaling. *J Biol Chem*. 2007 Dec 7;282(49):36000-9. doi: 10.1074/jbc.M702779200. Epub 2007 Sep 26. PMID: 17897955.
  10. Friedberg I, **Nika K**, Tautz L, Saito K, Cerignoli F, Friedberg I, Godzik A, Mustelin T. Identification and characterization of DUSP27, a novel dual-specific protein phosphatase. *FEBS Lett*. 2007 May 29;581(13):2527-33. doi: 10.1016/j.febslet.2007.04.059. Epub 2007 Apr 30. PMID: 17498703.
  11. **Nika K**, Charvet C, Williams S, Tautz L, Bruckner S, Rahmouni S, Bottini N, Schoenberger SP, Baier G, Altman A, Mustelin T. Lipid raft targeting of hematopoietic protein tyrosine phosphatase by protein kinase C theta-mediated phosphorylation. *Mol Cell Biol*. 2006 Mar;26(5):1806-16. doi: 10.1128/MCB.26.5.1806-1816.2006. PMID: 16479000; PMCID: PMC1430257.
  12. Vang T, Congia M, Macis MD, Musumeci L, Orrú V, Zavattari P, **Nika K**, Tautz L, Taskén K, Cucca F, Mustelin T, Bottini N. Autoimmune-associated lymphoid tyrosine phosphatase is a gain-of-function variant. *Nat Genet*. 2005 Dec;37(12):1317-9. doi: 10.1038/ng1673. Epub 2005 Nov 6. PMID: 16273109.
  13. Bottini M, Bruckner S, **Nika K**, Bottini N, Bellucci S, Magrini A, Bergamaschi A, Mustelin T. Multi-walled carbon nanotubes induce T lymphocyte apoptosis. *Toxicol Lett*. 2006 Jan 5;160(2):121-6. doi: 10.1016/j.toxlet.2005.06.020. Epub 2005 Aug 25. PMID: 16125885.
  14. Abrahamsen H, Baillie G, Ngai J, Vang T, **Nika K**, Ruppelt A, Mustelin T, Zaccolo M, Houslay M, Taskén K. TCR- and CD28-mediated recruitment of phosphodiesterase 4 to lipid rafts potentiates TCR signaling. *J Immunol*. 2004 Oct 15;173(8):4847-58. doi: 10.4049/jimmunol.173.8.4847. PMID: 15470025.
  15. Mustelin T, Alonso A, Bottini N, Huynh H, Rahmouni S, **Nika K**, Louis-dit-Sully C, Tautz L, Togo SH, Bruckner S, Mena-Duran AV, al-Khoury AM. Protein tyrosine phosphatases in T cell physiology. *Mol Immunol*. 2004 Jul;41(6-7):687-700. doi: 10.1016/j.molimm.2004.04.015. PMID: 15220004.

16. Bottini N, Musumeci L, Alonso A, Rahmouni S, **Nika K**, Rostamkhani M, MacMurray J, Meloni GF, Lucarelli P, Pellecchia M, Eisenbarth GS, Comings D, Mustelin T. A functional variant of lymphoid tyrosine phosphatase is associated with type I diabetes. *Nat Genet.* 2004 Apr;36(4):337-8. doi: 10.1038/ng1323. Epub 2004 Mar 7. PMID: 15004560.
17. **Nika K**, Hyunh H, Williams S, Paul S, Bottini N, Taskén K, Lombroso PJ, Mustelin T. Haematopoietic protein tyrosine phosphatase (HePTP) phosphorylation by cAMP-dependent protein kinase in T-cells: dynamics and subcellular location. *Biochem J.* 2004 Mar 1;378(Pt 2):335-42. doi: 10.1042/BJ20031244. PMID: 14613483; PMCID: PMC1223964.
18. Huynh H, Wang X, Li W, Bottini N, Williams S, **Nika K**, Ishihara H, Godzik A, Mustelin T. Homotypic secretory vesicle fusion induced by the protein tyrosine phosphatase MEG2 depends on polyphosphoinositides in T cells. *J Immunol.* 2003 Dec 15;171(12):6661-71. doi: 10.4049/jimmunol.171.12.6661. PMID: 14662869.
19. **Nika K**, Mulloy B, Carpenter B, Gibbs R. Specific recognition of immune cytokines by sulphated polysaccharides from marine algae. *European Journal of Phycology*, 2003; 38(3),257–264. <https://doi.org/10.1080/0967026031000136367>.

**\*Corresponding author**

**Publications can also be found in:**

<https://www.ncbi.nlm.nih.gov/pubmed/?term=Nika+K>

<https://scholar.google.com/citations?user=1tuRpvEAAAJ&hl=en>

ORCID: <https://orcid.org/0000-0002-9620-0263>

| RESEARCH GRANTS                                                                                                             |                                                                      |                     |                        |
|-----------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------|---------------------|------------------------|
| Project Title                                                                                                               | Funding source                                                       | Period              | Role of the PI         |
| Phosphoproteome Profiling of Chronic Lymphocytic Leukemia (CLL) intratumoral subpopulations with aberrant BCR signaling     | The European Proteomics Infrastructure Consortium ( <b>EPIC-XS</b> ) | 2021-2022           | Principal Investigator |
| Transcriptomics Profiling of CLL intratumoral subpopulations with aberrant BCR signaling                                    | Asklepeios Program (Gilead Sciences)                                 | 2020-2022           | Principal Investigator |
| Innovative blocking nanobodies for Lck inhibition and their validation as “safety switches” in T-cell Immunotherapy         | GSRT, Research-Create-Innovate (T2EΔK-00474)                         | 2020-2023           | Principal Investigator |
| Intratumoral heterogeneity of B cell receptor signaling in Chronic Lymphocytic Leukemia; The role of ectopic Lck expression | Fondation Santé                                                      | 2020-2021 (Renewal) | Principal Investigator |

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| Intratumoral heterogeneity of B cell receptor signaling in Chronic Lymphocytic Leukemia; The role of ectopic Lck expression | Fondation Santé                      | 2019-2020           | Principal Investigator |
| Identification of determinants attributing Src Family Kinase substrate specificity                                          | Program C. Caratheodory              | 2016-2019           | Principal Investigator |
| The role of ectopic Lck expression in constitutive activation of BCR-signaling in CLL                                       | Asklepeios Program (Gilead Sciences) | 2016-2017 (Renewal) | Principal Investigator |
| The effect of concurrent PI3K $\delta$ and Lck inhibition on BCR signaling and survival in CLL                              | Asklepeios Program (Gilead Sciences) | 2015-2016           | Principal Investigator |
| Molecular mechanisms of TCR signal initiation, propagation and regulation determining T cell fate                           | Wellcome Trust (UK)                  | 2010-2015           | Co-participant         |

#### SUPERVISION OF GRADUATE STUDENTS & POSTDOCTORAL FELLOWS

|                     |                                                                                                                                                                                                                                                                                                                                                                              |
|---------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>2015-present</b> | <p>Post-doctoral fellows: 1</p> <p>PhD candidates</p> <p>As theses advisor: 2 completed, 2 in progress,</p> <p>Participating in three-member advisory committee: 3 completed, 4 in progress.</p> <p>MSc Students</p> <p>As dissertation advisor: 5 completed, 3 in progress.</p> <p>Senior Undergraduate Students</p> <p>As project advisor: 1 in progress, 7 completed.</p> |
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#### FELLOWSHIPS and AWARDS

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| <b>2021</b>      | <p>32nd Annual Congress of the Hellenic Society of Haematology, Athens Greece</p> <p>1<sup>st</sup> prize for best poster presentation</p> <p>Tyritidis I, Konnaris K, Morfos, V, Koutras N and Nika K. Lck Inhibition by innovative blocking nanobodies</p> |
| <b>1997-2001</b> | PhD Scholarship, awarded by the University of Portsmouth                                                                                                                                                                                                     |

| MEMBERSHIPS & REVIEWING ACTIVITIES |                                                                                                                                                                                                  |
|------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>2022-present</b>                | Review Editor, Frontiers in Immunology                                                                                                                                                           |
| <b>2007- present</b>               | Reviewer for: PLOs One, Frontiers in Immunology, The Journal of Immunology, EMBO Journal, The European Journal of Immunology Annals of Clinical Biochemistry, Bioorganic and Medicinal Chemistry |
| <b>2017-present</b>                | Member, Society of Gene Therapy and Regenerative Medicine                                                                                                                                        |
| <b>2015-present</b>                | Member, Hellenic Society of Biochemistry and Molecular Biology                                                                                                                                   |
| <b>2014-presnt</b>                 | Member, British Society of Immunology                                                                                                                                                            |
| <b>2006-present</b>                | Member, American Association of Immunologists (AAI)                                                                                                                                              |

| PATENTS                                                                                                                                      |
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| Application approved for funding by the University of Patras Research Committee (decision №. 551/21.05.2018). Application still in progress. |

| TEACHING ACTIVITIES  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
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| <b>2015-present:</b> | <u>Undergraduate Courses:</u><br>-Biochemistry I, II and III and Clinical Biochemistry, in the School of Medicine, University of Patras, Greece<br><u>MSc Courses:</u><br>Postgraduate Program in Biomedical Sciences (BIE),<br>-Medical Physics, Biomedical Engineering,<br>-Cell and Gene Therapies in the School of Medicine, University of Patras, Greece<br>-IPPS "Precision Medicine - Translational Research and Therapeutics", in the School of Medicine, Aristotle University of Thessaloniki |
| <b>2006-2015</b>     | University of Oxford, UK Lecturing, tutorials and supervision of lab classes in the subject of Immunohaematology for 2nd and 3rd year Medical students.                                                                                                                                                                                                                                                                                                                                                |
| <b>1997-2001</b>     | University of Portsmouth, UK Part-time Lecturing position in the subjects of Immunology, haematology, Biochemistry and Histology at the School of Pharmacy and Biomedical Sciences.                                                                                                                                                                                                                                                                                                                    |