OSOBNI PODATCI

Ime i prezime: Nela Kelam

Mjesto rođenja: Split

Državljanstvo: hrvatsko

IZOBRAZBA

2021.-2025. Poslijediplomski sveučilišni doktorski studij Biologija Novotvorina, Medicinski fakultet, Sveučilište u Splitu

2013.-2015. Diplomski sveučilišni studij Biologije i kemije, Prirodoslovno-matematički fakultet Sveučilišta u Splitu

2010.-2013. Preddiplomski sveučilišni studij Biologije i kemije, Prirodoslovno-matematički fakultet, Sveučilište u Splitu

RADNO ISKUSTVO

2025.-danas Asistentica na Katedri za Histologiju i Embriologiju, Medicinski fakultet, Sveučilište u Splitu

2020.-2025. Asistentica na projektu Hrvatske zaklade za znanost „Karakterizacija kandidat gena za prirođene anomalije bubrega i urotrakta tijekom razvoja u miša i čovjeka“ (IP-2016-06-2575), voditeljice prof. Katarine Vukojević dr. med., pod mentorstvom izv. prof. dr. sc. Sandre Kostić

2018.-2019. Nastavnica biologije i kemije, SŠ „Braća Radić“, Kaštel Štafilić-Nehaj

2017. Nastavnica kemije, Nadbiskupijska klasična gimnazija „don Frane Bulić“ Split

2016.-2017. Nastavnica biologije i kemije, Osnovna škola Blatine-Škrape, Split (mentorica: prof. Ariana Marović)

2015.-2016. Vanjska suradnica na Prirodoslovno-Matematičkom fakultetu Sveučilišta u Splitu na kolegijima Kormofita i Ekologija bilja i geobotanika (voditelj kolegija dr. sc. Juraj Kamenjarin)

ČLANSTVA

2021. – danas Hrvatsko mikroskopijsko društvo (HMD), članica

2022. – danas Hrvatsko društvo za znanost o laboratorijskim životinjama (CroLASA), članica

PROFESIONALNO USAVRŠAVANJE

5.1.-5.3.2024. Poslijediplomsko stručno usavršavanje na „Center for Regenerative Medicine and Skeletal Development, Department of Reconstructive Sciences“, Uconn Health, School of Dental Medicine, Connecticut, USA (director: prof. Ivo Kalajzic)

2.-6.10.2023. „Blended intensive programme on Doctoral Education“, kratkoročna mobilnost studenata u okviru programa Erasmus+, Valladolid, Španjolska

22.-26.5.2023. Edukacija u tehnikama protočne citometrije, „From first principles to Polychromatic Applications“, Medicinski fakultet Sveučilišta u Splitu

24.4.-3.5.2023. Stručno usavršavanje u sklopu Erasmus+ kratkoročne mobilnosti nastavnog osoblja, Citogenetički laboratorij Sveučilišta u Mostaru

11./12.2021. Tečaj za osposobljavanje za rad s laboratorijskim životinjama; Labanim, Zavod za animalnu fiziologiju, Prirodoslovno-matematički fakultet, Sveučilište u Zagrebu

1.-5.11.2021. Edukacija u tehnikama PCR i RT-qPCR, Citogenetički laboratorij Sveučilišta u Mostaru

12.-16.7.2021. „Summer School of Science Communication“; Mediteranski institut za istraživanje života

05.-09.7.2021. „Radionica statističkog modeliranja biomedicinskih podataka“, Medicinski fakultet Sveučilišta u Splitu

23.-27.11.2020. Edukacija u tehnikama Western Blot, Mediteranski institut za istraživanje života

PROJEKTI

2024.-danas „Genetska dijagnostika malformacija bubrega i mokraćnog sustava" NEPHROGEN, IP-2022-10-8720, Hrvatska zaklada za znanost

2020.-2023. „Karakterizacija kandidat gena za prirođene anomalije bubrega i urotrakta tijekom razvoja u miša i čovjeka“ CAKUT, IP-2016-06-2575, Hrvatska zaklada za znanost

2022.-2024. Program potpore za mlade znanstvenike Medicinskog fakulteta Sveučilišta u Splitu „Izražaj proteina MAPK signalnog puta tijekom normalnog ljudskog razvoja bubrega te bubrega pogođenih CAKUTOM (MAPCUT)“

2022.-2023. Erasmus+ projekt – „Communication skills for students of vocational schools for medical professions: Design thinking for participatory medicine“ , DesignCARE

2020.-2023. „Erasmus+ projekt –„Integration of Transversal skills into healthcare and social care higher education and curriculum“, ITSHEC

ČLANSTVA

2021. – danas Hrvatsko mikroskopijsko društvo (HMD), članica

2022. – danas Hrvatsko društvo za znanost o laboratorijskim životinjama (CroLASA), članica

NAGRADE I PRIZNANJA

2025. Kovačević P., Vukojević N., Perić S., **Kelam N.**, Ivić L., Filipović N., Kunac N., Vukojević K Cubilin i Caveolin-1 kao biomarkeri u retinoblastomu i uvealnom melanomu: potencijalne implikacije za napredovanje tumora, dijagnozu i terapijsko ciljanje. Cubilin and Caveolin-1 as Biomarkers in Retinoblastoma and Uveal Melanoma: Potential Implications for Tumor Progression, Diagnosis, and Therapeutic Targeting.

2025. Festival znanosti „Od stanice do organskog sustava: mreže koje nas održavaju na životu“; „Najveći živac u obitelji“

2022. Program potpore za mlade znanstvenike Medicinskog fakulteta Sveučilišta u Splitu „Izražaj proteina MAPK signalnog puta tijekom normalnog ljudskog razvoja bubrega te bubrega pogođenih CAKUTOM (MAPCUT)“

2022. Zahvalnica – Europska noć istraživača

2021. Zahvalnica – Centar izvrsnosti prirodoslovlja Splitsko – dalmatinske županije

2015. Dekanova nagrada za ostvareni uspjeh na diplomskom studiju

2013. Dekanova nagrada za ostvareni uspjeh na preddiplomskom studiju

ZNANSTVENI RADOVI

1. Todorović P, **Kelam N**, Racetin A, Filipović N, Katsuyama Y, Saraga-Babić M, Vukojević K. Expression Pattern of Dab1, Reelin, PGP9.5 and Sox2 in the Stomach of Yotari (Dab1−/−) Mice. Genes. 2025; 16(9):1013. https://doi.org/10.3390/genes16091013

2. Todorović, P., Maglica, M., **Kelam, N.**, Filipović, N., Rizikalo, A., Perutina, I., Mišković, J., Katsuyama, Y., & Vukojević, K. (2025). Loss of Dab1 Alters Expression Patterns of Endocytic and Signaling Molecules During Embryonic Lung Development in Mice. Life, 15(9), 1395. https://doi.org/10.3390/life15091395

3. Komić, J.; **Kelam, N**.; Racetin, A.; Filipović, N.; Saraga-Babić, M.; Ihara, D.; Katsuyama, Y.; Vukojević, K. Spatial and Temporal Expression Patterns of EDA2R, PCDH9, and TRAF7 in Yotari (Dab1−/−) Mice: Implications for Understanding CAKUT Pathogenesis. Int. J. Mol. Sci. 2025, 26, 6421. https://doi.org/10.3390/ijms26136421

4. Bajt, P.; Racetin, A.; **Kelam, N.**; Pavlović, N.; Todorović, P.; Korčulanin, M.J.; Filipović, N.; Kuzmić Prusac, I.; Raguž, F.; Vukojević, K. Expression of FGF23 and α-KLOTHO in Normal Human Kidney Development and Congenital Anomalies of the Kidney and Urinary Tract (CAKUT). Biomolecules 2025, 15, 811. https://doi.org/10.3390/biom15060811

5. **Kelam N**, Ogorevc M, Gotovac I, Kuzmić Prusac I, Vukojević K, Saraga-Babić M, Mardešić S. Analysis of Kallikrein 6, Acetyl-α-Tubulin, and Aquaporin 1 and 2 Expression Patterns During Normal Human Nephrogenesis and in Congenital Anomalies of the Kidney and Urinary Tract (CAKUT). Genes (Basel). 2025 Apr 27;16(5):499. doi: 10.3390/genes16050499. PMID: 40428321; PMCID: PMC12111363.

6. Jurić I, **Kelam N**, Racetin A, Filipović N, Čarić D, Rošin M, Vukojević K. WNT Signaling Factors as Potential Synovial Inflammation Moderators in Patients with Hip Osteoarthritis. Biomedicines. 2025 Apr 19;13(4):995. doi: 10.3390/biomedicines13040995. PMID: 40299569; PMCID: PMC12025112.

7. Pavlović N, **Kelam N**, Racetin A, Gelemanović A, Filipović N, Bajt P, Katsuyama Y, Vukojević K. The significance of Itga8 and Vangl2 in kidney development: Insights from yotari mice. Acta Histochem. 2025 Jun;127(2):152247. doi: 10.1016/j.acthis.2025.152247. Epub 2025 Mar 17. PMID: 40101650.

8. Perutina I, **Kelam N**, Maglica M, Racetin A, Rizikalo A, Filipović N, Kuzmić Prusac I, Bošnjak M, Mišković J, Kablar B, Ghahramani N, Vukojević K. Spatiotemporal distribution of Wnt signaling pathway markers in human congenital anomalies of kidney and urinary tract. Acta Histochem., Volume 127, Issue 1, 2025, 152235, ISSN 0065-1281, https://doi.org/10.1016/j.acthis.2025.152235.

9. Bevanda, D.; Racetin, A.; **Kelam, N.**; Filipović, N.; Bevanda, M.; Rudan Dimlić, M.; Budimir, J.; Bevanda Glibo, D.; Bevanda, I.; Ramljak, D.; et al. Expression Pattern of AIFM3, VGLL4, and WNT4 in Patients with Different Stages of Colorectal Cancer. Cancers 2025, 17, 166. https://doi.org/10.3390/cancers17020166

10. Dražić Maras E, **Kelam N**, Racetin A, Haque E, Dražić M, Vukojević K, Katsuyama Y, Saraga-Babić M, Filipović N. Autophagy markers expression pattern in developing liver of the yotari (dab1-/-) mice and humans. Acta Histochem. 2024 Dec 7;127(1):152224. doi: 10.1016/j.acthis.2024.152224. Epub ahead of print. PMID: 39647211.

11. Skelin L, Racetin A, **Kelam N**, Ogorevc M, Znaor L, Saraga-Babić M, Filipović N, Katsuyama Y, Pogorelić Z, Vukojević K. Connexin Expression Is Altered in the Eye Development of Yotari Mice: A Preliminary Study. Biomolecules. 2024 Sep 19;14(9):1174. doi: 10.3390/biom14091174. PMID: 39334940; PMCID: PMC11430515.

12. Šitum Čeprnja Z, **Kelam N**, Ogorevc M, Racetin A, Vukoja M, Čeprnja T, Filipović N, Saraga-Babić M, Vukojević K. Expression of LOXL3, NES, and SNAI1 in Melanoma Genesis and Progression. Cells. 2024; 13(17):1450. https://doi.org/10.3390/cells13171450

13. Bevanda M, **Kelam N**, Racetin A, Filipović N, Bevanda Glibo D, Bevanda I, Vukojević K. Expression Pattern of PDE4B, PDE4D, and SFRP5 Markers in Colorectal Cancer. Medicina. 2024; 60(8):1202. https://doi.org/10.3390/medicina60081202

14. Žužul S, **Kelam N**, Racetin A, Kovačević P, Konjevoda S, Filipović N, Pavlović N, Vukojević K. Immunoexpression Patterns of Megalin, Cubilin, Caveolin-1, Gipc1 and Dab2IP in the Embryonic and Postnatal Development of the Kidneys in Yotari (Dab1−/−) Mice. Biomedicines. 2024; 12(7):1542. https://doi.org/10.3390/biomedicines12071542

15. Pavlović N, **Kelam N**, Racetin A, Filipović N, Pogorelić Z, Prusac IK, Vukojević K. Expression Profiles of ITGA8 and VANGL2 Are Altered in Congenital Anomalies of the Kidney and Urinary Tract (CAKUT). Molecules. 2024; 29(14):3294. https://doi.org/10.3390/molecules29143294

16. Maglica M, **Kelam N**, Perutina I, Racetin A, Rizikalo A, Filipović N, Kuzmić Prusac I, Mišković J, Vukojević K. Immunoexpression Pattern of Autophagy-Related Proteins in Human Congenital Anomalies of the Kidney and Urinary Tract. International Journal of Molecular Sciences. 2024; 25(13):6829. https://doi.org/10.3390/ijms25136829

17. Kelam J, **Kelam N**, Filipović N, Komić L, Racetin A, Komić D, Kostić S, Kuzmić Prusac I, Vukojević K. Expression of Congenital Anomalies of the Kidney and Urinary Tract (CAKUT) Candidate Genes EDA2R, PCDH9, and TRAF7 in Normal Human Kidney Development and CAKUT. Genes. 2024; 15(6):702. https://doi.org/10.3390/genes15060702

18. Rošin M, **Kelam N**, Jurić I, Racetin A, Ogorevc M, Corre B, Čarić D, Filipović N, Vukojević K. Syndecans, Exostosins and Sulfotransferases as Potential Synovial Inflammation Moderators in Patients with Hip Osteoarthritis. International Journal of Molecular Sciences. 2024; 25(8):4557. https://doi.org/10.3390/ijms25084557

19. Rizikalo A, Maglica M, **Kelam N**, Perutina I, Ogorevc M, Racetin A, Filipović N, Katsuyama Y, Zovko Z, Mišković J, et al. Unraveling the Impact of Dab1 Gene Silencing on the Expression of Autophagy Markers in Lung Development. Life. 2024; 14(3):316.

20. Strikic A, Kokeza J, Ogorevc M, **Kelam N**, Vukoja M, Dolonga P, et al. Differential expression of HIF1A and its downstream target VEGFA in the main subtypes of renal cell carcinoma and their impact on patient survival. Frontiers in Oncology. 2023;13.

21. Restović I, Vučemilo M, Obad M, Kević N, **Kelam N**, Racetin A, et al. Expression of dendrin, neurofilament and glial fibrillary acidic protein in the brain of the dogfish Scyliorhinus canicula L.: Dendrin in dogfish brain. Periodicum Biologorum. 2023;125:43-55.

22. Kokeza J, Strikic A, Ogorevc M, **Kelam N**, Vukoja M, Dilber I, et al. The Effect of GLUT1 and HIF-1alpha Expressions on Glucose Uptake and Patient Survival in Non-Small-Cell Lung Carcinoma. International journal of molecular sciences. 2023;24(13).

23. Dunatov Huljev A, **Kelam N**, Benzon B, Šoljić V, Filipović N, Pešutić Pisac V, Glavina Durdov M, Vukojević K. Expression Pattern of Sonic Hedgehog, Patched and Smoothened in Clear Cell Renal Carcinoma. Int J Mol Sci. 2023 May 18;24(10):8935. doi: 10.3390/ijms24108935. PMID: 37240278; PMCID: PMC10219518.

24. Maglica M, **Kelam N**, Haque E, Perutina I, Racetin A, Filipovic N, et al. Immunoexpression Pattern of Autophagy Markers in Developing and Postnatal Kidneys of Dab1(-/-)(yotari) Mice. Biomolecules. 2023;13(3).

25. Perutina I, **Kelam N**, Maglica M, Racetin A, Ogorevc M, Filipovic N, et al. Disturbances in Switching between Canonical and Non-Canonical Wnt Signaling Characterize Developing and Postnatal Kidneys of Dab1(-/-) (yotari) Mice. Biomedicines. 2023;11(5).

26. **Kelam N**, Racetin A, Polovic M, Benzon B, Ogorevc M, Vukojevic K, et al. Aberrations in FGFR1, FGFR2, and RIP5 Expression in Human Congenital Anomalies of the Kidney and Urinary Tract (CAKUT). International journal of molecular sciences. 2022;23(24).

27. **Kelam N**, Racetin A, Katsuyama Y, Vukojevic K, Kostic S. Immunohistochemical Expression Pattern of FGFR1, FGFR2, RIP5, and HIP2 in Developing and Postnatal Kidneys of Dab1(-/-) (yotari) Mice. International journal of molecular sciences. 2022;23(4).

28. Juric MD, Racetin A, Filipovic N, **Kelam N**, Kostic S, Ljutic D, et al. Altered Expression of EMT-Related Factors Snail, Wnt4, and Notch2 in the Short-Term Streptozotocin-Induced Diabetic Rat Kidneys. Life (Basel). 2022;12(10).

29. Lozic M, Filipovic N, Juric M, Kosovic I, Benzon B, Solic I, et al. Alteration of Cx37, Cx40, Cx43, Cx45, Panx1, and Renin Expression Patterns in Postnatal Kidneys of Dab1-/- (yotari) Mice. International journal of molecular sciences. 2021;22(3).

30. Pastar V, Lozic M, **Kelam N**, Filipovic N, Bernard B, Katsuyama Y, et al. Connexin Expression Is Altered in Liver Development of Yotari (dab1 -/-) Mice. International journal of molecular sciences. 2021;22(19).

31. Racetin A, Filipovic N, Lozic M, Ogata M, Gudelj Ensor L, **Kelam N**, et al. A Homozygous Dab1(-/-) Is a Potential Novel Cause of Autosomal Recessive Congenital Anomalies of the Mice Kidney and Urinary Tract. Biomolecules. 2021;11(4).

SAŽETCI SA SKUPOVA

1. **N. Kelam**, B. Bernard, J. Sørensen, S. Kostić (2025) IMPLEMENTING DESIGNCARE: ENHANCING COMMUNICATION AND DIVERSITY COMPETENCE IN PARTICIPATORY MEDICINE EDUCATION, EDULEARN25 Proceedings, p. 4643.

2. Bevanda M, **Kelam N**, Racetin A, Filipović N, Bevanda D, Bevanda I, Vukojević K. (2024) EXPRESSION PATTERN OF PDE4B, PDE4D AND SFRP5 MARKERS IN THE COLORECTAL CANCER. Abstract number: ABS-108-ISABS-2024. U: Journal of Bioanthropology doi:10.54062/jb.

3. Todorović P, **Kelam N,** Vukojevic K. Expression of Inversin and Dishevelled-1 in the stomach of yotari (Dab1-/-) mice. Students' CongreSS of Science and Sport in Split (ST-CongreSS); 8 - 10 May 2024.

4. Vukojevic K, Racetin A, **Kelam N**, Filipović N, Soljic V. Immunohistochemical Expression Pattern of RIP5, FGFR1, and FGFR2 in Normal Human Kidney Development and Congenital Anomalies of the Kidney and Urinary Tract (CAKUT). Kidney week, Orlando; November 05, 2022.; Exhibit Hall, Orange County Convention Center, West Building. American Society of Nephrology; 2022

5. Kazazić A, **Kelam N**, Racetin A, Filipović N, Katsuyama Y, Vukojević K. (2022) EXPRESSION PATTERN OF APOPTOTIC INDUCING FACTOR IN THE INNER EAR DEVELOPMENT OF YOTARI (DAB1 -/-) AND WILD TYPE MICE. U: Journal of Bioanthropology doi:10.54062/jb.

6. **Kelam N**, Racetin A, Kostic S, Vukojevic K, Mardesic S. IMMUNOHISTOCHEMICAL EXPRESSION PATTERN OF FGFR1, FGFR2 AND RIP5, IN DEVELOPING AND POSTNATAL KIDNEYS OF DAB1-/- (YOTARI) MICE. InPEDIATRIC NEPHROLOGY 2022 Nov 1 (Vol. 37, No. 11, pp. 2911-2911). ONE NEW YORK PLAZA, SUITE 4600, NEW YORK, NY, UNITED STATES: SPRINGER.

7. Racetin A, **Kelam N**, Lozic M, Filipovic N, Mardesic S, Saraga-Babic M, Vukojevic K. KIDNEY MORPHOLOGICAL CHANGES OF THE DAB1-/-MICE. InPEDIATRIC NEPHROLOGY 2022 Nov 1 (Vol. 37, No. 11, pp. 2958-2958). ONE NEW YORK PLAZA, SUITE 4600, NEW YORK, NY, UNITED STATES: SPRINGER.

8. Restović, I., Vučemilo, M., Obad, M., Kević, N., **Kelam, N.**, Racetin, A. & Bočina, I. (2022) Expression of NF, GFAP, and dendrin in the brain of small-spotted catshark Scyliorhinus canicula L.. U: Macan, J. & Kovačević, G. (ur.)4th Croatia Microscopy Congress with International Participation.