C U R I C U L U M V I T A E

Klementina Fon Tacer, DVM, PhD
Texas Tech University | School of Veterinary Medicine
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EDUCATION

Doctor of Philosophy (PhD), Biochemistry and Molecular Biology, Faculty of Medicine at the University of Ljubljana, Slovenia — 2005

Master of Science (MS), Biochemistry and Molecular Biology, Faculty of Medicine at the University of Ljubljana, Slovenia — 2002

Doctor of Veterinary Medicine (DVM), Veterinary Faculty at the University of Ljubljana, Slovenia — 1999

PROFESSIONAL APPOINTMENTS AND AFFILIATIONS

Assistant Professor, Reproductive Biology and Oncology, Texas Tech University School of Veterinary Medicine, Amarillo, TX — 2020-present
Founder and inaugural director, Texas Center for Comparative Cancer Research (TC3R) — 2021-present
Assistant Professor, secondary appointment, Texas Tech University, Department of Biological Sciences, Lubbock, TX — 2020-present
Board of Directors, member, American Society of Andrology — 2023-2025
Member, Obesity Research Institute (ORI), Texas Tech University, Lubbock, TX — 2020-present
Member, STEM Center for Outreach, Research & Education (STEM CORE), Texas Tech University, Lubbock, TX — 2020-present

RESEARCH INTEREST

Fon Tacer lab (fontacerlab.org) investigates tissue-specific mechanisms that evolved in mammals to protect cells against stress. We want to understand why and how these pathways get hijacked in cancer or deregulated in different diseases. To address these questions, we use genes with unique tissue-specific expressions as a handle. We aim to determine their function in humans and animals with comparative and multidisciplinary approaches. Our favorite genes are melanoma antigens (**MAGEs**) and **γKlotho** whose expression is restricted to the testis or brain and eye lens, respectively. We envision that our research will help advance fertility preservation and cancer therapy for human and animal patients.

TRAINING AND RESEARCH

Instructor/ Research Scientist, Mentor: R. Potts — 2012-2020
Department of Cell and Molecular Biology, St. Jude Children's Research Hospital, Memphis, TN
Department of Physiology, UT Southwestern Medical Center, Dallas, TX

- *Design and lead research projects*
  - *MAGE and other cancer-testis antigen genes in cancer, regulation of metabolism, therapy resistance, and stress response*
  - *MAGE genes in spermatogenesis, regulation of stemness and differentiation, reproduction and fertility, metabolism and stress response*
  - *MAGE-L2 role in hypothalamic functions, Schaaf-Yang, and Prader-Willie Syndromes*
  - *Protein ubiquitination and degradation*
  - *MAGE genes and synuclein in erythropoiesis*
- *Train students, technicians, and an MD fellow*
- *Independently and together with P.I. write grants and peer review articles*
- *Establish and manage mouse colonies, generated mouse models by CRISPR-Cas9, xenograft studies, reproduction analysis, analysis of the hypothalamus*

- *Establish primary cultures of spermatogonia*

Adjunct Assistant Professor, Institute for Hygiene and Pathology of Animal Nutrition, Veterinary Faculty, University of Ljubljana, Slovenia, EU. 2011-2012

- *Design and teach a class of animal nutrition for DVM students*
- *Design and lead research projects (FGFs and Klotho proteins in cancer and metabolism)*

Post-doctoral Researcher, Mentor: R. Komel 2008-2010
University of Ljubljana, Faculty of Medicine, Slovenia.

- *Design and perform research (FGFs and Klothos in metabolism and cancer)*
- *Collaborate in an applicative project with the pharmaceutical company Lek (Sandoz) -erythropoietin in cancer*
- *Train students*

Post-doctoral Researcher, Fulbright fellow, Mentors: S. Kliewer and D. Mangelsdorf 2006-2008
Departments of Molecular Biology and Pharmacology, UT Southwestern Medical Center, Dallas, TX.

- *Design and perform research (nuclear receptors, FGFs, and Klothos in lipid metabolism and cancer)*

PhD Student, Mentor**:** D. Rozman 1999-2005
Department of Biochemistry, Faculty of Medicine, University of Ljubljana, Slovenia, EU**.**

- *Study lipid metabolism and the tissue-specific regulation of cholesterol biosynthesis in testis, brain and, liver; cytochromes P450 and drug metabolism*
- *Establish DNA microarray analysis*
- *Establish sterol analysis and metabolic labeling of cholesterol biosynthesis to screen novel inhibitors (collaboration with the pharmaceutical company Lek (Sandoz) - patent*

ADDITIONAL TRAINING AND EXPERIENCE

Visiting Scientist, Mentors: G. Majdič, D. Rozman Oct-Nov 2017
Veterinary Faculty and Faculty of Medicine, University of Ljubljana, Slovenia

- *Collaborate in the grant proposal writing*
- *2 lectures for veterinary medicine and medicine students on stem cell and cancer*
- *Training of the sperm analysis and tests of maternal behavior*
- *Mouse liver tumors and dog tumors for gene expression analysis*

Mentor to a PhD Student, Co-mentors: E.D. Martinez, J. Stojan 2010-2016
University of Ljubljana, Slovenia and UT Southwestern Medical Center, Dallas, TX

- *γKlotho protects against oxidative stress in breast cancer, graduated 2016*

Visiting Scientist, Mentor: J. Oatley
Centre for Reproductive Biology, College of Veterinary Medicine, WSU, Pullman, WA Oct-Nov 2017

- *Primary culture of spermatogonia and evaluation of spermatogonial stem cells*
- *Male fertility evaluation* Feb 2000

Visiting Student, Mentors: M. Baltsen, A.G. Byskov
Laboratory of Reproductive Biology, Rigshospitalet-Copenhagen University Hospital, Denmark Mar 2002

- *HPLC analysis of sterols from gonads and other tissues*

Visiting Student, Mentor: D. Pompon
Laboratory of membrane proteins engineering, CNRS-CGM, Gif-Sur-Yvette, France

- *DNA microarray analysis*

AWARDS

TTU Global Vision Award for Faculty International Scholarship	2023
Cancer Prevention and Research Institute of Texas (CPRIT) Scholar Award	2020
Project Visit at the Slovenian Higher Education Institutions (217 JR)	2017
Fulbright Fellowship	2006
World Federation of Scientists Fellowship	2006
Wellcome Trust Scholarship for the course Functional Genomics and System Biology	2006
Krka Pharmaceuticals research award for PhD research	2005
Klaus Ruckpaul Award at 12th International Conference on Cytochromes P450	2001
Golden Award of the University of Ljubljana – the highest honor bestowed to the students	1999

Krka Pharmaceuticals research award for the undergraduate research 1998

FUNDING

Foundation for Prader Willi Research, P.I., $108, 000 2022-2023
Foundation for Prader Willi Research, P.I., $375, 000 2023-2025
Texas Center for Comparative Cancer Research (TC3R), Texas Tech University, Director, $264,000 2021-2027
Cancer Prevention and Research Institute of Texas (CPRIT) Scholar Award, P.I., $2,000,000 2020-2024

LIST OF PUBLICATIONS

1. Chen H., Victor A. K., Klein J., **Fon Tacer K.**, Tai D. J. C., de Esch C., Nuttle A., Temirov J., Burnett L. C., Rosenbaum M., Zhang Y., Ding L., Moresco J. J., Diedrich J. K., Yates J. R. III, Tillman H. S., Leibel R. L., Talkowski M. E., Billadeau D. D., Reiter L. T., and Potts P. R. (2020) *Loss of MAGEL2 in Prader-Willi syndrome leads to decreased secretory granule and neuropeptide production.* JCI Insight 5(17):138576.
2. Koirala S., Klein J., Zheng Y., Glenn N.O., Eisemann T., **Fon Tacer K.**, Miller D.J., Kulak O., Lu M., Finkelstein D.B., Neale G., Tillman H., Vogel P., Strand D.W., Lum L., Brautigam C.A., Pascal J.M., Clements W.K., and Potts P.R. *Tissue-Specific Regulation of the Wnt/β-Catenin Pathway by PAGE4 Inhibition of Tankyrase. (2020) Cell Rep 32, 107922*
3. Lee A. K., Klein, J., **Fon Tacer K.**, Lord, T., Oatley M. J., Oatley J. M., Porter, S. N., Pruett-Miller S. M., Tikhonova, E. B., Karamyshev A. L., Wang Y.D. Yang P., Korff, A., Kim H. J., Taylor J. P., and Potts P. R. (2020) *Translational Repression of G3BP in Cancer and Germ Cells Suppresses Stress Granules and Enhances Stress Tolerance.* Mol Cell 79, 645-659.e649
4. Sapkota Y., Wilson CL, Zaidi A. K., Moon W., **Fon Tacer K.,** Lu L., Liu Q., Baedke J., Dhaduk R., Wang Z., Chemaitilly W., Krasin M. J., Berry F. B., Zhang J., Hudson M. M., Robison L. L., Green D. M., and Yasui Y. (2020) *A novel locus predicts spermatogenic recovery among childhood cancer survivors exposed to alkylating agents.* Cancer Res 1;80(17):3755-3764
5. Yang S.W., Li L., Connelly J.P., Porter S.N., Kodali K., Gan H., Park J.M., **Fon Tacer K**., Tillman H., Peng J., Pruett-Miller S.M., Li W., and Potts P.R. (2020) *A cancer-specific ubiquitin ligase drives alternative polyadenylation by targeting PCF11. Molecular Cell. Mol Cell. Jan 8. pii: S1097-2765(19)30952-9.*
6. **Fon Tacer K.,** Montoya M.C., Oatley M.J., Lord T., Oatley J.M., Klein J., Ravichandran R., Tillman H., Kim M., Connelly J.P., Pruett-Miller S.M., Bookout A.L., Binshtock E., Kamiński M.M., and Potts P.R. (2019) *MAGE cancer-testis antigens protect the mammalian germline under environmental stress.* Science Advances. May 29,5 (5): eaav4832. (**Featured in the St. Jude Insider.)**
7. Zhang H., Sun S., Wu L., Pchitskaya E., Zakharova O., **Fon Tacer K.**, and Bezprozvanny I. (2016) *Store-Operated Calcium Channel Complex in Postsynaptic Spines: A New Therapeutic Target for Alzheimer's Disease Treatment.* J Neurosci. Nov 23;36(47):11837-11850.
8. Devjak R., Burnik Papler T., Verdenik I., **Fon Tacer K.,** and Vrtačnik Bokal E. (2016) *Embryo quality predictive models based on cumulus cells gene expression.* Balkan J Med Genet. Aug 2;19(1):5-12.
9. Trošt N., Peña-Llopis S., Stojan J., Potts P.R., **Fon Tacer K.,** and Martinez E.D. (2016) *γKlotho is a Novel Marker and Cell Survival Factor in a Subset of Triple-Negative Breast Cancers.* Oncotarget. Jan 19;7(3):2611-28 (**Co-corresponding author, Cover article, Interview with an outstanding author**).
10. Hao Y.H., Fountain Jr. M.D., **Fon Tacer K.,** Bi, W., Kang S.L., Patel A., Rosenfeld J.A., Le Caignec C., Isidor B., Krantz I.D., Noon S.E., Pfotenhauer J.P., Morgan T.M., Moran R., Pedersen R.C., Saenz M.S., and Schaaf C.P., Potts, P.R**.** (2015) *USP7 haploinsufficiency causes a neurodevelopmental disorder due to defects in endosomal trafficking.* Mol Cell. 17;59(6):956-69.
11. Pineda C.T., Ramanathan S., **Fon Tacer K.**, Weon J.L., Potts M.B., Ou Y.H., White M.A., and Potts P.R. (2015) *Degradation of AMPK by a Cancer-Specific Ubiquitin Ligase.* Cell. *160*, 715-28. **(Science Signaling Editor's Choice, Current Biology Dispatch Highlight)**
12. Nekvindova J., Contreras J.A., Juvan P, **Fon Tacer K.,** Anzenbacher P., Zidek Z., Kopecna Zapletalova M, Rozman D, and Anzenbacherova E. (2014) *Acyclic nucleoside phosphonates: a study on cytochrome P450 gene expression.* Xenobiotica. 44(8):708-15.

13. Papler T.B., Bokal E.V., **Fon Tacer K.**, Juvan P., Virant Klun I., and Devjak R. (2014) *Differences in cumulus cells gene expression between modified natural and stimulated in vitro fertilization cycles.* J Assist Reprod Genet. Jan;31(1):79-88.
14. Mlinac, K., **Fon Tacer, K.,** Heffer M., Rozman D., and Kalanj-Bognar S. (2012) *Cholesterogenic genes expression in brain and liver of ganglioside-deficient mice.* Mol. Cell. Biochem. 369(1-2):127-33.
15. Devjak R., **Fon Tacer K.,** Juvan, P., Virant-Klun, I., Rozman, D., and Vrtačnik-Bokal, E. (2012). Cumulus cells gene expression profiling in terms of oocyte maturity in controlled ovarian hyperstimulation using GnRH agonist or GnRH antagonist. PloS One. 7(10):e47106.
16. **Fon Tacer, K.,** Bookout, A.L., Ding, X., Kurosu, H., John, G.B., Wang, L., Goetz, R., Mohammadi, M., Kuro-o, M., Mangelsdorf, D.J., and Kliewer, S.A. (2010) *Research resource: Comprehensive expression atlas of the fibroblast growth factor system in adult mouse.* Mol Endocrinol. 24(10):2050-64.
17. Schmidt D., Holmstrom S., **Fon Tacer K.,** Bookout A.L., Kliewer S., and Mangelsdorf D. (2010) *Regulation of bile acid synthesis by fat-soluble vitamins A and D.* J Biol Chem. 285(19):14486-94.
18. **Fon Tacer, K.,** Pompon, D., and Rozman, D. (2010) *Adaptation of cholesterol synthesis to fasting and TNF-alpha: Profiling cholesterol intermediates in the liver, brain, and testis.* J Steroid Biochem Mol Biol. 121(3-5):619-25.
19. Kuzman D., **Fon Tacer K.,** Černe M., Režen T., Ačimovič J., Čegovnik U., Kocjan D., Urleb U. and Rozman D. (2009). *Modulation of Hepatic transcriptome in the Poloxamer P-407 Hyperlipidemia Mouse Model.* Acta Chim. Slov. 56:262–269.
20. Režen, T., Juvan, P., **Fon Tacer, K.,** Kuzman, D., Roth, A., Pompon, D., Aggerbeck, L. P., Meyer, U. A., and Rozman, D. (2008) *The Sterolgene v0 cDNA microarray: a systemic approach to studies of cholesterol homeostasis and drug metabolism.* BMC Genomics. 9:76.
21. Korosec T., Ačimović J., Seliškar M., Kocjan D., **Fon Tacer K.,** Rozman D., and Urleb U. (2008) *Novel cholesterol biosynthesis inhibitors targeting human lanosterol 14alpha-demethylase (CYP51).* Bioorg Med Chem. 16:209-221.
22. **Fon Tacer, K.,** Kuzman, D., Seliškar, M., Pompon, D., and Rozman, D. (2007). *TNF-alpha interferes with lipid homeostasis and activates acute and proatherogenic processes.* Physiol Genomics. 31:216-227.
23. Bokal E. V., **Fon Tacer K.,** Vrbnjak M., Lepoša S., Virant Klun I., Verdenik I., and Rozman D. (2006) *Follicular sterol composition in gonadotrophin stimulated women with polycystic ovarian syndrome.* Mol Cell Endocrinol. 249: 92-98.
24. Cotman M., Ježek D., **Fon Tacer K.,** Frangež R., and Rozman D. (2004) *A functional cytochrome P450 lanosterol 14 alpha-demethylase CYP51 enzyme in the acrosome: transport through the Golgi and synthesis of meiosis-activating sterols.* Endocrinology. 145:1419-1426.
25. **Fon Tacer K.,** Kalanj-Bognar S., Waterman M. R., and Rozman D. (2003). Lanosterol metabolism and sterol regulatory element binding protein (SREBP) expression in male germ cell maturation. J Steroid Biochem Mol Biol. 85, 429-438.
26. **Fon Tacer K.,** Haugen T. B., Baltsen M., Debeljak N., and Rozman D. (2002) *Tissue-specific transcriptional regulation of the cholesterol biosynthetic pathway leads to accumulation of testis meiosis-activating sterol (T-MAS).* J Lipid Res. 43:82-89.

Review Articles and Book Chapters:

1. Štepihar D., Florke Gee R.R., Hoyos Sanchez M.C., and Fon Tacer K. (2023) *Cell-specific secretory granule sorting mechanisms: the role of MAGEL2 and retromer in hypothalamic regulated secretion,* Frontiers in Cell and Developmental Biology, accepted. Corresponding author.
2. Hoyos Sanchez, M.C.; Bayat, T., Florke Gee, R.R., and **Fon Tacer, K**. (2023) *Hormonal Imbalances in Prader–Willi and Schaaf–Yang Syndromes Imply the Evolution of Specific Regulation of Hypothalamic Neuroendocrine Function in Mammals. Int. J. Mol. Sci.* , *24*, 13109. Corresponding author.
3. Tavčar Kunstič T., Debeljak N., and **Fon Tacer K.** (2022) *Heterogeneity in hormone-dependent breast cancer and therapy: steroid hormones, HER2, melanoma antigens, and cannabinoid receptors.* Advances in Cancer Biology - Metastasis. Forthcoming; 100086. doi: doi.org/10.1016/j.adcanc.2022.100086. **Corresponding author.**
4. Florke Gee R. R., Chen H., Lee A. K., Daly C. A., Wilander B. A., **Fon Tacer K.,** and Potts P. R. (2020) *Emerging Roles of the MAGE Protein Family in Stress Response Pathways.* J Biol Chem Reviews, **Co-corresponding author.**

5. **Fon Tacer K.** (2020) Oxysterols and Bile Acid Act as Signaling Molecules That Regulate Cholesterol Homeostasis: *Nuclear Receptors LXR, FXR, and Fibroblast Growth Factor 15/19. in Mammalian Sterols: Novel Biological Roles of Cholesterol Synthesis Intermediates, Oxysterols and Bile Acids* (Rozman D. and Gebhardt R. eds.), Springer International Publishing, Cham. pp 117-143
6. **Fon Tacer K.** and Potts P.R. (2017) *Cellular and disease functions of the Prader-Willi Syndrome gene MAGEL2.* Biochem J. Jun 16;474(13):2177-2190.
7. **Fon Tacer, K.** and Rozman, D. (2011) *Nonalcoholic fatty liver disease: focus on lipoprotein and lipid deregulation.* J. Lipids. 783976.

Publications in Slovenian Language and/or Journals

1. Fon Tacer K. (2017) Prader-Willi syndrome: are we any closer to better help affected children? Metina lista: spletna postaja za osebe širokih pogledov in aktivnega duha, ISSN 2536-3425, 6.12. 2017. (https://metinalista.si/category/english_articles)
2. Žalig, V., Jakovac-Strajn, B., Ujčič Vrhovnik, I., and **Fon Tacer, K.** (2013) *Donkey's Nutritional Requirements and Diet Associated Diseases.* Acta Agriculturae Slovenica. 102 ,1: 39-45.
3. Rozman, D., **Fon Tacer, K.** (2013) *Cytochrome P450 - oxidoreductase (POR) in the biosynthesis of cholesterol.* Farmacevtski vestnik. 64, 5: 380-384.
4. **Fon Tacer, K.** (2009) *Cytochromes P450, nuclear receptors, and fibroblast growth factors - new endocrine axes as potential drug targets to treat metabolic disorders.* Zdravniški Vestnik. 78, 6/7: 309-314.
5. **Fon Tacer, K.** (2009) *Fasting hormone fibroblast growth factor 21 - new therapy for obesity and metabolic syndrome?* Farmacevtski vestnik. 60, 5: 251-255.

Patent

Rode B., Rozman D., **Fon Tacer K.** and Kocjan D. (2009) Novel derivates of pyridylethanol (phenylethyl) amines as inhibitors of cholesterol biosynthesis, processes for their preparation, and pharmaceutical compositions containing them: patent: US 7560474 (B2), 2009-07-14. Alexandria: United States Patent and Trademark Office. 2009

INVITED AND SELECTED SPEAKER

Meeting and Conferences

Adhere 1, Fourwaves 1st Conference on Cell Adhesion, Zadar, Croatia
15th Meeting of the Slovenian Biochemical Society, Portorož, Slovenia 2023
SiNAPSA Neuroscience Conference '23, Ljubljana, Slovenia 2023
1st Spermatogenesis Fusion Conference, Dubrovnik, Croatia 2023
Biochemistry and Molecular Genetics in Medicine, Ljubljana, Slovenia 2023
SSK, Slovenian World Congress, Ljubljana, Slovenia 2023
28th Annual Texas Forum for Reproductive Sciences, Huston, TX 2023
SMUL, World Network of the University of Ljubljana, Science for All, Virtual 2022
Croatian Institute for Brain Research's Symposium, Virtual 2022
American Slovenian Educational Foundation, ASEF, Virtual 2021
26th Annual Texas Forum for Reproductive Sciences, TX, Virtual 2021
18th Annual Research Days TTUHSC School of Farmacy, Amarillo, TX, Virtual 2021
2021 European Society of Veterinary Oncology (ESVONC) Congress, Virtual 2021
6th Annual Obesity Research Institute (ORI) Meeting, TTU, Lubbock, TX Virtual 2021
15th CFGBC Symposium, University of Ljubljana, Slovenia, Virtual 2020
Vanderbilt Program in Developmental Biology Retreat XXI, Belmont State Park, TN, USA 2018
Gordon Research Conference on Mammalian Reproduction, Lucca, Italy 2018
12th Meeting of the Slovenian Biochemical Society with International Participation, Bled, Slovenia 2017
33rd Mycotoxin Workshop, Freising, Germany 2011

University Seminars

University of Ljubljana, Biotechnical Faculty 2022
Texas Tech University School of Veterinary Medicine, One Health Seminars 2022

University of Ljubljana, Biotechnical Faculty 2021
Texas Tech University, Department of Biological Sciences, Lubbock, TX 2019
Jožef Stefan Institute, Ljubljana, Slovenia 2019
St. Jude Children's Research Hospital, Monthly Metabolism Meeting Series, Memphis, TN, USA 2019
Texas Tech University Health Sciences Center, CBB, Lubbock, TX 2018
St. Jude Children's Research Hospital, Monthly Metabolism Meeting Series, Memphis, TN 2018
University of Ljubljana, Faculty of Medicine, Ljubljana, Slovenia 2017
National Institute of Chemistry, Ljubljana, Slovenia 2016
University of Ljubljana, Veterinary Faculty, Ljubljana, Slovenia 2015
Slovenian Biochemical Society& University of Ljubljana, Faculty of Medicine, Ljubljana, Slovenia 2015
Vanderbilt University, Department of Biochemistry, Nashville, TN 2009

Poster presentation

Gordon Research Seminar on Mammalian Reproduction, West Dover, VT (first author and presenter Maria Camila Hoyos Sanchez) 2022
Gordon Research Conference, on Mammalian Reproduction, West Dover, VT (first author and presenter Maria Camila Hoyos Sanchez) 2022
Nort American Testis Workshop, San Diego, CA 2022

MEDIA APPEARANCE

RaiderVet Podcast, Texas tech University School of Veterinary Medicine, https://podcasts.apple.com/us/podcast/s4e5-tc3r/id1589480359?i=1000624993304 2023
Interview, Slovenian Small Animal Veterinary Association (SiSAVA), https://www.zdruzenje-szvmz.si/page/pogovori/ 2021
Interview, Radio – RAI Radiotelevisione Italiana Spa, https://tinyurl.com/y6xggmzm 2021

SERVICE

University Committees and Centers

Mentor, SVM Student Mentoring Group 2022-present
Member, Ph.D. Student Advisory Committee, TTU SVM (2 students) 2022-present
Member, Ph.D. Program Admission Committee, TTU SVM 2022-present
Member, Search Committees, TTUHSC SOP (1 search) 2022-present
Member, Search Committees, TTU DBS (1 search) 2022-present
Member, Research Committee, TTU SVM 2020-present
Director, Texas Center for Comparative Cancer Research (TC3R), TTU SVM 2020-present
Member, M.Sci. and Ph.D. Student Advisory Committee, TTUHSC SOP (2 students) 2020-present
Member, Search Committees, TTU SVM (5 searches, including ADR) 2020-present
Head, International Relations Committee at the Veterinary Faculty, University of Ljubljana 2011-2012
Head, Erasmus and CMEPIUS coordinator (study abroad programs at the University of Ljubljana) 2011-2012

Journal Reviewer/Editor

Editor-in-Chief, Slovenian Veterinary Research (SloVetRes) 2021-present
Editorial board member, Frontiers - Cellular Biochemistry (specialty section of Frontiers in Chemistry, Frontiers in Molecular Biosciences and Frontiers in Cell and Developmental Biology) 2023-present
Assistant Editor, Slovenian Veterinary Research (SloVetRes) 2012-2021
Reviewer; Molecular Reproduction and Development, Biology of Reproduction, Cell proliferation, Clinical and Translational Medicine, PLOS Genetics 2019-present
Associate Faculty Member, Faculty of 1000 2008-2015

Organization of Meetings

Session Chair, American Society for Andrology, Basic Science Workshop	2023
Session moderator, 8th Obesity Research Institute Annual Meeting	2023
Chair, Gordon Research Seminar on Mammalian Reproduction	2022
Breakroom moderator, The Slovenian American Virtual Academic Symposium (SAVAS)	2020

Professional Societies and Leadership Positions

Board of Directors, American Society for Andrology (ASA)	2023-present
Chair, International Network of the University of Ljubljana (SMUL)	2022-present
Director, Texas Center for Comparative Cancer Research (TC3R) at TTU	2021-present
Host Professor and Mentor, American Slovenian Educational Foundation (ASEF)	2020-present
Member, Sinapsa, Slovenian Neuroscience Association	2023-present
Member, Veterinary Cancer Society	2023-present
Member, American Association for Cancer Research (AACR)	2021-present
Member, European Association for Comparative Oncology (ESVONC)	2021-present
Member, International Society for Stem Cell Research (ISSCR)	2019-present
Member, European Association for Cancer Research (EACR)	2017-present
Member, Society for the Study of Reproduction (SSR), Diversity Committee	2016-present
Member, Slovenian Genetic Society (SGD)	2016-present
Member, Slovenian Biochemistry Society (SBD)	1999-present

OTHER

Resource database - generated data and designed a website https://mage.stjude.org	2018
A standard operating procedure (SOP) - Mouse Fertility Phenotyping: Sperm Analysis for St. Jude Children's Research Hospital Veterinary Pathology Core	2018

TEACHING

IoR, DVM 5190, Introduction to Research and EBVM, TTU SVM	2022-present
Lecturer, DVM 5341, Cancer biology and Oncology, TTU SVM	2021
Lecturer, ANCS 5001, One Health and Non-communicable diseases	2021
Lecturer, NSG 6315, Nuclear receptors and Crispr, TTU	2021
Guest lecturer, Cancer biology, Biochemistry I, University of Ljubljana, Faculty of Medicine, Slovenia	2017
Guest lecturer, Stem cells, Histology with Embryology, University of Ljubljana, Veterinary Faculty, Slovenia	2017
Guest lecturer, Stem cells, B#350/550 Core Course, Washington State University, Pullman, WA, USA	2016
IoR for labs, Animal Nutrition, University of Ljubljana, Veterinary Faculty, Ljubljana, Slovenia	2011-2012
Teaching Assistant, Biochemistry Laboratory, University of Ljubljana, Faculty of Medicine, Ljubljana, Slovenia	1999-2005

TRAINEES

Since starting my independent lab, I trained 5 master's students, who were visiting my lab for a short term to perform research for their master's thesis. Among them, there were awardees of the American Slovenian Educational Foundation. Currently, I train 5 Ph.D. students and 1 research scientists. During my graduate and postdoctoral time, I trained 16 students and technicians. My trainees are very diverse, a lot of them are women, minority group members, and from different countries. I enjoyed working with every one of them, and they are all doing very well in their respective career paths after leaving my lab. Several of them were recipients of different awards and scholarships and co-authors of publications.

Trainee Awards

Tara Bayat, Farzana Popy, Sima Tozandehjani, 22nd Annual Graduate Student Poster Competition	2023
Tara Bayat, 2023 Summer Thesis/Dissertation Research Award	2023
Sima Tozandehjani, Poster Award, 2023 Phi Zeta Research days at TTU SVM	2023
Brooke Foster, Summer Veterinary Research Fellow	2022

Barbara Breznik, Fulbright Fellowship	2022
Maria Camila Hoyos Sanchez, TTU Matador Award (Distinguished Staff Award)	2022
Maria Camila Hoyos Sanchez, Jackson Laboratory Meeting Award	2022
Tara Bayat, TTU Study Abroad Competitive Scholarship (SACS)	2022
Tara Bayat, TTU Graduated School Designated Scholarship (Summer 2022)	2022
Tara Bayat, TTU TA RA Ex Scholarship (Spring and Fall 2022)	2022
Tadej Jerončič, American Slovenian Educational Fellowship (ASEF)	2022
Denis Štepihar, American Slovenian Educational Fellowship (ASEF)	2022
Danijela Herga, Ad Futura fellowship for international mobility of students from Slovenia	2022
Tajda Tavčar Kunstič, Ad Futura fellowship for international mobility of students from Slovenia	2022
Sara Uhan, American Slovenian Educational Fellowship (ASEF)	2021
Sonja Lepoša and Marko Vrbnjak, Prešeren's Student Award, University of Ljubljana, Slovenia	2004
Katja Vrabl, Krka Pharmaceuticals Research Award, Slovenia	2004

Trainees

Current

Denis Štepihar, TTU SVM One Health Sciences Graduate Program, Ph.D. Student	2023-present
Maria Camila Hoyos Sanchez, TTU Department of Biology, Biology Graduate Program, Ph.D. Student	2023-present
Kayla Justiss, DVM Student, Veterinary Research Scholar	2022-present
Brooke Foster, DVM Student, Veterinary Research Scholar	2022-present
Juan Solano, TTU SVM, Research associate	2022-present
Tara Bayat, TTU Department of Biology, Biology Graduate Program, Ph.D. Student	2022-present
Farzana Popy, TTU SVM One Health Sciences Graduate Program, Ph.D. Student	2022-present
Sima Tozandehjani, TTU SVM One Health Sciences Graduate Program, Ph.D. Student	2022-present
Maria Camila Hoyos Sanchez, TTU SVM, Research associate and lab manager	2020-present

Past - after 2020 2022-2023

Barbara Breznik, Postdoctoral Fulbright fellow. *Currently Group Leader at NIB, Ljubljana, Slovenia..*	2022
Tadej Jerončič, American Slovenian Educational Fellowship (ASEF). *Currently in a private sector as DVM.*	2022
Nicolás Gutiérrez Franco, Pontifical Javierian University, Cali, Colombia. Currently a PhD student.	2022
Denis Štepihar, American Slovenian Educational Fellowship (ASEF). *Currently a master student at the University of Ljubljana.*	2022
Danijela Herga, Ad futura fellowship for international mobility of students from Slovenia. **Mentor** for master's thesis. *Currently a research scientist at the University of Ljubljana.*	2022
Tajda Tavčar Kunstič, Ad futura fellowship for international mobility of students from Slovenia. *Currently a master student at the University of Ljubljana.*	2021
Sara Uhan, TTU SVM, Sara Uhan, American Slovenian Educational Fellowship (ASEF). *Currently a PhD student at the Charité Iniversity Hospital, Berlin, Germany.*	

Past - before 2020 2017-2020

Jon Klein, St. Jude Children's Research Hospital, Memphis, TN, a research technician. *Currently a research technician at the Center for Advanced Genome Engineering (CAGE), St. Jude Children's Research Hospital, Memphis, TN.*	2019
Jesenia Perez, Pediatric Oncology Education program at St. Jude Children's Research Hospital, Memphis, TN, an undergraduate summer student. *Currently PhD student at the UMN, Twin Cities, MN.*	2019
Menglin Jiang, MD, St. Jude Children's Research Hospital, Memphis, TN, a rotation student. *Currently a PhD student at the UT Health Science Center (UTHSC), Memphis, TN.*	2016-2018
Ramya Ravichandran - St. Jude Children's Research Hospital, Memphis, TN, a research technician. *Currently works in the private sector.*	2014-2016
Rebecca Collins, UT Southwestern Medical Center, Dallas, TX, MD fellow. *Currently an assistant professor at the UT Southwestern Medical Center, Dallas, TX, USA.*	2016

Emily Binshtock, Pediatric Oncology Education program at St. Jude Children's Research Hospital, Memphis, TN, an undergraduate summer student. *Currently MD, PhD student at UT Southwestern Medical Center, Dallas, TX, USA.*	2011-2015
Nuša Trošt, University of Ljubljana, Slovenia, a graduate student**, co-mentor**. *Currently works at the Clinical Institute of Medical Genetics, UMC Ljubljana, Slovenia.*	2012-2015
Marhiah Montoya, UT Southwestern Medical Center, Dallas, TX, a research technician. *Currently a post-doctoral research associate at Duke University, Durham, NC.*	2013
Mercedes Quintana, UT Southwestern Medical Center, Dallas, TX, an undergraduate student, Quantitative and Physical Sciences Summer Undergraduate Research Fellowship Program (QP-SURF). *Graduated and currently works in private sector.*	2010-2011
Saša Nastran, University of Ljubljana, Slovenia, an undergraduate student, diploma thesis, **mentor**. *Currently works in a private sector.*	2010-2011
Tanja Burnik Papler, University of Ljubljana, Slovenia, MD, PhD student. *Currently works as an OBGYN doctor in the University Hospital, Ljubljana, Slovenia.*	2009-2011 2009
Rok Devjak, University of Ljubljana, Slovenia, MD, PhD student. *Currently works as an oncologist.*	
Kristina Mlinac Jerković, University of Ljubljana, Slovenia, a visiting graduate student from the University of Zagreb. *Currently an assistant professor at the University of Zagreb, Croatia.*	2003-2004
Sonja Lepoša and Marko Vrbnjak, University of Ljubljana, Slovenia, medical students awarded by the Prešeren's student award at the University of Ljubljana, 2004. *Currently work in the private sector.*	2003-2004
Katja Vrabl, University of Ljubljana, Slovenia, an undergraduate student, awarded by Krka Pharmaceuticals research award. *Currently works in the private sector.*	