Semir Vranić, M.D., Ph.D.

Business address	**College of Medicine, QU Health, Qatar University** Doha 2713, Doha, Qatar **Academy of Sciences and Arts of Bosnia and Herzegovina (ANUBiH)** 71000 Sarajevo, Bosnia and Herzegovina Contacts: semir.vranic@gmail.com, svranic@qu.edu.qa, svranic@anubih.ba
Date and place of birth	October 10, 1974, Bosnia and Herzegovina
Citizenship	Bosnia and Herzegovina
Education	1997-2004, School of Medicine, University of Sarajevo 2004, December 22: M.D. degree, School of Medicine, University of Sarajevo 2006, January 25: License for clinical practice in Bosnia and Herzegovina 2006-2012. PhD study. Zagreb University School of Medicine, Zagreb, Croatia 2007-2011. Residency. Anatomic Pathology, University of Sarajevo 2008/2009: Research fellow of UICC/ACS at the Creighton University School of Medicine, Omaha, NE, United States of America 2011, December 17: Pathologist (Board Certified, Bosnia and Herzegovina) 2012, September 14: Ph.D. degree, Zagreb University School of Medicine (Croatia) 2012/2013: Post-doc fellowship at the University of Turin, Italy
Appointments	2005/2006: Internship, Clinical Center of the University of Sarajevo 2006-2007/2009-2011: Resident, Department of Pathology, Clinical Center of the University of Sarajevo 2008/2009: Research fellow of UICC/ACS, Creighton University Medical School, Omaha, NE, United States of America 2012-2017: Staff Pathologist, Clinical Center of the University of Sarajevo 2012/2013: Post-doc researcher, University of Turin, Italy 2013: Assistant Research Scientist, Zagreb University School of Medicine 2014-2020: Consultant, Caris Life Sciences, Phoenix, Arizona, United States of America 2016-2017: Assistant professor of pathology, School of Medicine, University of Sarajevo 2016-2017: Member of the Council for Science and Art, University of Sarajevo 2017-2020: Assistant professor of pathology, College of Medicine, Qatar University 2021: Associate professor of pathology, College of Medicine, Qatar University 2022: Corresponding member of the Academy of Sciences and Arts of Bosnia and Herzegovina
Administrative and organizational positions	• Founder and course coordinator of the Bosnian-British School of Pathology (**Bryan Warren School of Pathology**) (since 2006-) https://www.bosnianpathology.org/pathology-school/introduction • One of the organizers of the **Bosnian Turkish School of Cytopathology** (since 2016-) https://www.bosnianpathology.org/cytopathology-school/introduction • President of the Association of Pathologists and Cytologists of the Federation of Bosnia and Herzegovina (2015-2017)

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<tr><td>Experience</td><td>

Vice president of the Association of Basic Medical Sciences of the Federation of Bosnia and Herzegovina (2015-)
ALLEA Task Force “Strengthening Trust in Science”, representative of the Academy of Sciences and Arts of Bosnia and Herzegovina (2025-)
IRB Member, Qatar University (2025-)

<u>Journal editor positions and editorial board member</u>:
Biomolecules & Biomedicine (previously BJBMS) (section editor and editor in chief, 2014-)
Breast Cancer: Targets and Therapy (consulting editor, 2015-2019)
Journal of Laboratory Physicians: Editorial board member, 2012-2019; Associate editor (2019-)
Annals of Translational Medicine: Editorial board member, November 2017- December 2021
PLOS One: Academic editor (2018-)
Cancer Cell International: Associate editor (January 2019 – July 2020)
Acta Medica Academica: Editorial board member (2020-)
Central European Journal of Paediatrics: Editorial board member (2020-2024)

<u>Peer-review activities</u>
a) Biomedical journals (>150 journals since 2011-):
Selected journals: BMC Cancer, Pathology Research & Practice, Cancer Letters, PLoS One, Diagnostic Cytopathology, Histopathology, APMIS, Diagnostic Pathology, Journal for ImmunoTherapy of Cancer, Molecular Oncology, Journal of Pathology, Applied Immunohistochemistry and Molecular Morphology, Clinical Breast Cancer, Immunotherapy, Cancer Immunology Research, Pathobiology, Clinical Genitourinary Cancer, The Breast, npjBreast Cancer, International Journal of Cancer, Cancer Communications, Archives of Pathology and Laboratory Medicine, Virchows Archiv, Cancer Treatment Reviews, Am J Emerg Medicine, npj Precision Oncology.
b) External peer reviews for institutions and research agencies

Agency for Health Quality and Assessment of Catalonia (Barcelona, Spain) (2017-2020)
Breast Cancer Now (United Kingdom) (2019)
University of Vienna (Austria) (2020-)
“La Caixa” Foundation (Palma, Spain) (2020-2023)

<u>Mentorship/Supervision</u>:

Three Ph.D. students (Dr. Faruk Skenderi, completed his Ph.D. at the University of Zagreb, in September 2021; Dr. Ana Parić, Ph.D. Student, University of Mostar School of Medicine, 2023-; Dr. Emir Begagić; Ph.D. Student, University of Tuzla School of Medicine, 2025-)
Three graduate/master students (2014-2017, University of Sarajevo and University of Zagreb)
One early career researcher (Dr. Hamda Al Thawadi, Qatar University, 2022-24, co-supervisor)

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<tr><td>Scientific/ research interests</td><td>Breast cancer pathology (special types)
Genitourinary pathology
Hereditary cancer syndromes
Molecular pathology of rare tumors</td></tr>
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	Precision medicine biomarkers Scientific writing, academic publishing
Language skills	Bosnian (native) English Danish
Teaching and course coordination responsibilities	**Undergraduate medical students (2014-)** 1. **General pathology courses covering**: a) Fundamentals of cancer cell biology and pathology b) Cancer genetics and molecular pathology c) Introduction to hereditary and developmental diseases 2. **Systems pathology covering**: a) Breast cancer pathology b) Genitourinary pathology c) Reproductive pathology d) Endocrine pathology e) Thyroid gland pathology f) Pulmonary and mediastinal pathology g) Neuroscience and neuromuscular pathology **Problem-based learning (PBL),** College of Medicine, Qatar University (2017-) • Involved in tutoring small groups of medical students • Writing case problems and coordinating cases • Writing multiple choice questions (MCQ) **Graduate/Postgraduate medical students** • Master's thesis (2 students) (supervisor) • PhD thesis (3 students) (supervisor/co-supervisor) • Postdoctoral candidates (1 candidate) (co-supervisor) (ECRA3: Early Career Researchers – 3rd cycle, Qatar University 2021) **Postgraduate (PhD) courses:** **Qatar University College of Medicine and College of Health Sciences (2018-)**: 1. Advanced Research Methods (Course BIOM 700): Methods in microscopy and sample preparations: light microscopy, fluorescence microscopy, confocal microscopy 2. Clinical translational research (Course MEDI 720): The role of pathology in cancer research 3. Cellular and molecular basis of disease (Course QUHC710): The role of pathology in precision medicine (biomarkers) 4. Oncology (Course BIOM680): Pathology of Cancer; Novel predictive biomarkers for targeted cancer therapy (2020-2021) 5. QUHC710 - Molecular basis of Carcinogenesis II: Molecular pathology of common cancers (2022-2025) **University of Tuzla School of Medicine (Bosnia and Herzegovina) (2019-)**: 1. Scientific methodology in biomedical research (since 2025) 2. Basic Science Research in Biomedicine (The role of pathology in precision medicine (molecular pathology); The role of pathology in cancer research; Pathology of tumors; Scientific publishing: the role of predatory journals) 3. Clinical Oncology (Advances in molecular pathology of breast cancer)

Awards and scholarships	2007. Fellowship for a one-month training program in a European Breast Unit in 2008 by the European Society of Mastology (EUSOMA), Nottingham (UK) 2008. Fellowship from the American Cancer Society/UICC for beginning researcher (Omaha, NE, USA), October 2008-October 2009 2012. Fellowship from the British Division of the International Academy of Pathology (BDIAP) for breast pathology training at Guy's Hospital, London (November 2012). 2012. Post-doc Fellowship at the University of Turin (Italy), 2012-2013, Erasmus University Rotterdam, Netherlands 2012. University of Zagreb School of Medicine: Award for the most productive PhD 2016. The Pathologist: "Power List 2016" (The "rising stars" in pathology) 2020. Academic Research Award, College of Medicine, Qatar University **2021-2025. Top 2% of the world's most cited scientists (Stanford University Study)**
Grants (from 2018)	1. The expression of the Hedgehog signaling pathway components Gli1, Gli3 and PTCH1 in invasive apocrine carcinoma of the breast (**Lead PI, funded by Qatar University, 2018-2019, 25,000€)** 2. The role and contribution of predatory pathology journals and publishers in academic medical pathology (**Lead PI, funded by Qatar University, 2018-2019, 2500€**) 3. Effect of Truffle extract on Triple-Negative Human Breast Cancer Cells: A pilot study (**Lead PI, funded by Qatar University, 2018-2019, 2500€)** 4. Gene expression profiling of triple-negative breast cancer in Qatari women (**Co-PI, funded by Qatar University, 2019, 25,000€)** 5. Prevalence and genotype distribution of human papillomaviruses in rectal cancer in the Middle East region (**Co-PI, funded by Qatar University, 2019-2020, 132,000€)** 6. Epstein-Barr virus and Helicobacter Pylori in oral cancer: A new concept of oncoviruses/oncobacteria cooperation in human carcinogenesis (**Lead PI, funded by Qatar University, 2020-2021, 74,000€**) 7. miRNA profiles of HER2-positive breast cancer with brain metastasis (**Lead PI, funded by Qatar University, 2021-2022, 65,000$**) 8. Role of HCN, Kv7 and A-type Potassium Channels in Diabetic Peripheral Neuropathic Pain (**Co-PI, National Priorities Research Program - Standard (NPRP-S) 13th Cycle, 2021-2023, 486,000$**) 9. Diabetes and colorectal cancer – molecular risk association, characterization of mechanisms and identification of molecular signature(s)/biomarker(s) (**Co-PI, National Priorities Research Program - Standard (NPRP-S) 14th Cycle, 2023-2027, 450,000$)** 10. ECRA3: Early Career Researchers – 3rd cycle **(co-mentor for Dr. Hamda Al Thawadi, 330,000 US$, 2022-2023, funded by Qatar National Research Foundation/QNRF/)** 11. Uncovering novel diagnostic and therapeutic biomarkers for Small Cell Lung cancer using Shotgun and Functional proteomics to map the clinicopathological landscape (**PI, Qatar University, 2024-2025, 300,000 QAR**)
	(2022) • Virtual BDIAP Molecular Pathology Study Day, BDIAP, March 7, 2022 (virtual) • USCAP Annual meeting, 19-23 March, Los Angeles, CA, USA • 6th Bosnian Turkish Cytopathology School, May 29 (Virtual, Zoom) • 34th European Congress of Pathology, September 3-7, Basel, Switzerland • 15th Bryan Warren School of Pathology, November 5 (Virtual event) • 12th MEAACR Annual Meeting, December 16-17 (Virtual) (**2023)**

International congresses, seminars, education (past 5 years)	• ESMO Breast Cancer, May 11-13, Berlin, Germany • 7th Bosnian Turkish Cytopathology School, May 27 (virtual) • 35th European Congress of Pathology, September 9-13, Dublin, Ireland • 16th Bryan Warren School of Pathology, November 4-5, Sarajevo, Bosnia and Herzegovina • 34th Congress of the Arab Division of IAP, November 3 – December 3, Doha, Qatar **(2024)** • USCAP Annual meeting, 23-27 March, Baltimore, MD, USA • 18th National Congress of Pathology Serbia, May 9-12, Novi Sad, Serbia • 8th Bosnian Turkish Cytopathology School, May 25 (virtual) **(2025)** • European Lung Cancer Conference 2025 (ELCC 2025), Paris, France, March 26-29 • 4th Congress of Pathologists of Bosnia and Herzegovina, Tuzla, May 22-24 • 9th Bosnian Turkish Cytopathology School, May 29, 2025 (virtual) • 30th International Symposium on Comparative Pathology Ljudevit Jurak, June 6-8, Zagreb, Croatia • 17th Bryan Warren School of Pathology, Sarajevo, June 28-29 • Breast cancer pathology seminar, Novi Sad (Serbia), December 12-13 **(2026)** • 10th Bosnian Turkish Cytopathology School, June 6, 2026 (virtual) • 18th Bryan Warren School of Pathology, June 27-28, Sarajevo, Bosnia and Herzegovina
Memberships	European Association for Cancer Research (2005-) European Society of Pathology (ESP) (2006-) Clinical Genetic Society of Croatia (2007-) United States & Canadian Academy of Pathology (2010-) **Fellow and Life Member of the International Union Against Cancer (UICC) (2010-)** The European Network of Uropathology (2011-2015) ESP Working Group for Breast Pathology (2011-2017) World Association of Medical Editors (2015-) Council of Science Editors (2015-2018) Association of Basic Medical Sciences of the Federation of B&H (2015-) Association of Pathologists and Cytologists of the Federation of B&H (2015-) COPE (Committee on Publication Ethics) (2016-) **Academy of Sciences and Arts of Bosnia and Herzegovina (corresponding member) (December 2022)**
Invited lectures	1. "Molecular Pathology of Ovarian Carcinoma with Morphologic Correlation", Seminar: Cervical and Ovarian Carcinoma. European Society of Gynecological Oncology & Udruženje onkologa BiH, Sarajevo, Sept. 14-15, 2007. 2. „Special types of breast carcinomas: Is apocrine carcinoma fulfilling the requirements?" Creighton University School of Medicine, Omaha, NE, USA, September 22, 2009. 3. „Hereditary cancer syndromes of the breast and colon". Clinical Genetic Society of Croatia & Zagreb University School of Medicine, Zagreb, Croatia, November 17, 2009. 4. „Molecular pathology of breast cancer", Symposium „Genetika u medicinskoj praksi", Sarajevo, October 19, 2010. 5. „Predictive markers in ER/PR negative breast carcinomas". Simpozij „Savremeni tretman karcinoma dojke", Akademija nauka i umjetnosti Bosne i Hercegovine, Sarajevo, November 23, 2011.

	6. "The role of genetic testing in the management of breast cancer", 4th Days of the Bosnian-Herzegovinian-American Academy of Sciences and Arts, Sarajevo, April 19, 2012. 7. "Breast cancer and microenvironment", Acidox meeting, Munich, Germany, December 3-4, 2013. 8. "The role of pathology in multidisciplinary management of breast cancer", "Onkoplastika dojke", Sarajevo, 7. februar 2014. 9. "Breast Cancer Pathology Update", 6th Days of the Bosnian-Herzegovinian-American Academy of Sciences and Arts, Bihać, May 22, 2014. 10. "Prediktivni markeri u eri ciljane terapije karcinoma dojke", 7th Days of the Bosnian-Herzegovinian-American Academy of Sciences and Arts, Brčko, April 23, 2015. 11. "Uticaj grešaka u preanalitičkoj fazi na interpretaciju rezultata", Stručni sastanak "Biomarker testiranje u Bosni i Hercegovini", Konjic, May 9, 2015. 12. "ASCO/CAP smjernice za HER2 testiranje u karcinomu dojke: Jesmo li na pravom putu?", Stručni sastanak "Biomarker testiranje u Bosni i Hercegovini", Konjic, May 9, 2015. 13. "Immune check point inhibitori u solidnim tumorima", 1st Sarajevo Winter Oncology Conference: Latest advances in the treatment of solid tumors, Jahorina (Sarajevo), 04-06 December 2015 14. „A review of PD-1/PD-L1 in solid tumors in the era of personalized medicine", Pathology Lecture Series, Department of Pathology, Wayne State University, March 2016. School of Medicine and Affiliated Hospitals, Detroit, Michigan, United States of America 15. „ASCO/CAP smjernice za HER2 testiranje u karcinomu dojke: Da li smo stigli do cilja?", Stručni sastanak "Biomarker testiranje u BiH: Važnost i odgovornost patologije u eri personalizirane medicine", Teslić, 15-16. april 2016. 16. "Od uzimanja uzorka do molekularnog profiliranja: Izazovi HER2 testiranja". Stručni sastanak "Biomarker testiranje u BiH: Važnost i odgovornost patologije u eri personalizirane medicine", Teslić, 15-16. april 2016. 17. "Novi biomarkeri u eri imunoterapije solidnih tumora", Stručni sastanak "Biomarker testiranje u BiH: Važnost i odgovornost patologije u eri personalizirane medicine", Teslić, 15-16. april 216. 18. „Apocrine carcinoma of the breast" (Dr. Zoran Gatalica, Dr. Rebecca Feldman, Dr. Semir Vranić), XXXI International Congress of the IAP and 28th European Congress of Pathology: Breast Pathology: Histology-based prognostic markers besides grade and stage (Session I) & Special types of breast cancers with clinical impact (Session II), Cologne, 25-29 September 2016. 19. „Preanalitička priprema tkiva dojke", HER2day HER2morrow", Roche stručni sastanak, 28-29 October, 2016 20. „Određivanje patološkog odgovora nakon završene neoadjuvantne terapije HER2-pozitivnog karcinoma dojke", Roche stručni sastanak, 28-29 October, 2016 21. „Biomarkers that predict response to the immune checkpoint inhibitors: A brief overview", "2nd Sarajevo Winter Oncology Conference: Latest advances in treatment of solid tumors", 09-11 December 2016 22. „Molecular pathology: requirements for precision medicine in oncology", 10-12-2016. „2nd Sarajevo Winter Oncology Conference: Latest advances in treatment of solid tumors", 09-11 December 2016 23. „Recent advances in molecular pathology of breast cancer", Jurak Symposium, Zagreb, June 2, 2017 24. „Special types of breast cancer: Molecular genetic features", 31st Adriatic Society of Pathology International Meeting, Neum, June 30 – July 1, 2017

25. „Comprehensive analysis of cancers of unknown primary for the biomarkers of response to immune checkpoint blockade therapy“, The 3rd Annual Health Cluster Research Symposium, Qatar University, 21-22 April 2018
26. “The role of oxidative stress in breast cancer”, 2nd ROS Meeting, Munich, Germany, July 6-8, 2018
27. “Predatory journals in pathology: A comprehensive assessment”, IAP 2018, Amman (Jordan), October 2018.
28. “The status of predictive biomarkers to immune checkpoint inhibitors in breast cancer”, 8th Middle East Cancer Conference, Muscat (Oman), December 2018
29. “Recent advances in the molecular pathology of the breast cancer”, 9th MEACR Conference, Doha, Qatar, December 2019
30. “PD-L1 testing in metastatic triple-negative breast cancer”, Virtual RIME: “Od trostruko negativnog do PD-L1 pozitivnog raka dojke”, June 2020 (Roche Webinar)
31. HER2 testing in breast cancer, August 2020 (Roche Webinar)
32. Practical Aspects in Implementing a routine pan-TRK IHC Testing: A local pathology perspective in Bosnia and Herzegovina, 11 February 2021 (Roche Training for Practicing Pathologists)
33. Scientific publishing for your researchers (SaMED 2021, 28 February 2021)
34. Pathology and Precision Medicine, Academy of Sciences and Arts of Bosnia and Herzegovina (ANUBiH), June 10, 2021, link: https://bbb.anubih.ba/playback/presentation/2.0/playback.html?meetingId=f963959d054143f6fcb3bad618956d6b159091a2-1623325683014
35. Gatalica Zoran, **Vranic Semir**. Apocrine carcinoma from biomarkers to therapy, 8th Annual Congress of the European Society for Translational Medicine (EUSTM-2021) 26 September, 2021, link: https://eustm-2021.heysummit.com/talks/apocrine-breast-carcinoma-from-biomarkers-to-therapy/
36. Gatalica Zoran, **Vranic Semi**r. NTRK gene fusions in cancers and their diagnostics. 11th Annual Meeting of the Middle Eastern Association for Cancer Research, November 27, 2021, link: http://www.qu.edu.qa/conference/meacr
37. **Vranic S,** Gatalica Z. Molecular and clinical characteristics of apocrine carcinoma of the breast. 28th Ljudevit Jurak International Symposium on Comparative Pathology. Zagreb, June 10-11, 2022, link: https://www.kbcsm.hr/2022/06/03/28th-ljudevit-jurak-international-symposium-on-comparative-pathology-2022/.
38. **Vranic S.** RET fuzije u nemikrocelularnom karcinomu pluća. Roche simpozij “Precizna medicina u srcu onkološke kliničke prakse”, November 11-12, 2022
39. **Vranic S,** Basu G, Gatalica Z. *BRAF* mutations & other genomic alterations across cancers: An updated review. 12th MEACR Annual Meeting, 16-17 December 2022, Casablanca, Morocco
40. **Vranic S.** Indeksiranost i međunarodni utjecaj biomedicinskih časopisa u BiH i region. “Uticaj scientometrije na nauku i akademsku zajednicu”. Round table. Academy of Sciences and Arts of Bosnia and Herzegovina. Sarajevo, February 25, 2023.
41. **Vranic Semir –** Skenderi Faruk. Znanstveno publiciranje – kako odabrati idealan časopis za svoj rad. The Mostar University School of Medicine, Mostar, April 24, 2023.
42. **Vranic S**, Kuzumova N, Rose I, Gatalica Z. The assessment of tumor-infiltrating lymphocytes in invasive apocrine carcinoma of the breast in relation to the Her2 status. 35th European Congress of Pathology, Dublin, 12 September 2023.

	43. **Vranic S**. Morfološke i molekularne karakteristike češćih sarkoma. Scientific meeting "News and updates in the diagnosis and treatment of common sarcomas", Academy of Sciences and Arts of Bosnia and Herzegovina, Sarajevo, 16 September 2023. 44. **Vranic S** – Gatalica Z. Molecular pathology of special types of breast cancers. 18th National Congress of Serbian Pathologists and Cytologists with International Participation, Novi Sad, Serbia, May 9-11, 2024 45. Personalized medicine in the treatment of prostate cancer: The role of molecular profiling. Multidisciplinary meeting on diagnosis and treatment of prostate cancer, ANUBiH, Sarajevo, September 27, 2024 46. Scientific Publishing: Possibilities and Challenges. STEMM meeting, ANUBiH, October 25, 2024 47. "Global trends, challenges and opportunities in scientific publishing", Research Webinar, BH Futures Foundation, December 7, 2024 48. "Biomarkers and predictive molecular assays in breast cancer", 4th Congress of Pathologists of Bosnia and Herzegovina, Tuzla, May 22-24, 2025 49. NTRK1-3 fusions in sarcomas, 30th Ljudevit Jurak International Symposium on Comparative Pathology, Zagreb, June 6-8, 2025 50. Biomarkers in Precision Oncology, 2nd Congress of Bosnian and Herzegovinian Doctors in Germany. Berlin, June 14, 2025 51. Spindle cell lesions of the breast, Seminar "Patologija tumora dojke", Novi Sad, Serbia, 12-13 December 2025 52. Rare subtypes of triple-negative breast cancer, "Patologija tumora dojke", Novi Sad, Serbia, 12-13 December 2025 53. Modern breast cancer diagnostics: Biomarkers and the most recent WHO Classification (2026), June 9, 2026, ANUBiH, Sarajevo 54. Morphological and Molecular Spectrum of Triple-Negative Breast Carcinomas. Peti srpski senološki kongres, Novi Sad, 25-26. septembar 2026.
Hobbies	• Collecting Bosnian Traditional Music/Sevdalinka: • *Web site/blog*: http://www.sevdalinke.com (since 1998) • *Sevdah Treasure Channel*: https://soundcloud.com/semir-vranic (since 2011) • Editor of the edition "From the cultural history of sevdalinka", BH National Broadcasting Service (BHR1), March 2016 – October 2017, and July 2020-June 2022. • *Books:* - "Zaboravljeno blago: Stotinu bosanskih narodnih pjesama sa notnim zapisima", Buybook, Zagreb-Sarajevo, 2021 (co-authored with Zanin Berbić), http://www.buybook.ba/shop/product/4921/zaboravljeno-blago - "Zaboravljeno blago 2: Stotinu bosanskih narodnih pjesama sa notnim zapisima", Buybook, Zagreb-Sarajevo, 2023 (co-authored with Zanin Berbić and Damir Galijašević), https://buybook.ba/proizvod/zaboravljeno-blago-2-5759