Maryam Kamali

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Professional Appointments

January 2018- Present	Assistant Professor, Department of Medical Entomology and Parasitology, Tarbiat Modares University, Tehran, Iran.
2024- Present	Director, International Scientific Cooperation and International Campus, Tarbiat Modares University, Tehran, Iran.
2024-2025	Head, Department of Medical Entomology, Faculty of Medical Sciences, Tarbiat Modares University, Tehran, Iran.

Education

2014- 2015	Postdoctoral Researcher, Department of Entomology, Virginia Polytechnic Institute and State University, Blacksburg, VA.
2008-2013	Ph.D. Department of Entomology, Virginia Polytechnic Institute and State University, Blacksburg, VA.
2004-2007	M.S. Department of Medical Entomology, Tehran University of Medical Sciences, School of Public Health. Tehran, Iran.
1999-2003	B.S. Department of Biology, Shahid Beheshti University, Tehran, Iran.

Teaching Certificates

Future Professoriate Graduate Certificate. Virginia Tech, 2012.

Publications

- Hosseingholilou, B., Ghobadian, B., Motevali, A., **Kamali, M**., Birkved, M., & Khoshnevisan, B. (2025). Environmental sustainability assessment of a biorefinery platform utilizing black soldier Fly larvae for organic waste valorization. ***Sustainable Production and Consumption***.

- Shabanipoor, M., Kamali, M., Raz, A., & Sharakhov, I. (2025). Canonical correlation of physiological traits and growth parameters of two biotypes of *Anopheles stephensi*: Intermediate and mysorensis. ***Pathobiology Research***, 28(1), 71-76.

- Hodjat, S. H., & Kamali, M. (2024). How aphids and hygiene insect pests respond to stressful environmental conditions. ***Pathobiology Research***, *27*(3), 7–18.

- Shabanipoor, M., Kamali, M., Raz, A., & Sharakhov, I. (2024). Life table parameters of *Anopheles stephensi* intermediate biotype in the water of four regions of Iran. ***Pathobiology Research****, 27*(4), 59-68.

- Kharazmi, H., **Kamali, M.,** Akbari, E. (2024) Investigating the effect of education through social networks on the prevention of arthropod-borne diseases among the villagers of Bardsir in Kerman province. ***Journal of the Faculty of Medicine, Mashhad University of Medical Sciences,*** 1403, 67(3).

- Shabanipoor, M., **Kamali, M.,** Raz, A., Dayer, M. & Sharakhov, I. V. (2024). Geostatistical maps of malaria patients and their correlation with distribution indicators in southern Iran. ***Migration Letters,*** 21(S9), 1167–1180.

- Yurchenko, A. A., Naumenko, A. N., Artemov, G. N., Karagodin, D. A., …., **Kamali, M.,** et al. (2023). Phylogenomics revealed migration routes and adaptive radiation timing of Holarctic malaria mosquito species of the Maculipennis Group. ***BMC biology***, 21(1), 63.

- Clarkson, C. S., Miles, A., Harding, N. J., Lucas, E. R., Battey, C. J., …., **Kamali, M.,** et al. & Anopheles gambiae 1000 Genomes Consortium. (2020). Genome variation and population structure among 1142 mosquitoes of the African malaria vector species *Anopheles gambiae* and *Anopheles coluzzii*. ***Genome research***, 30(10), 1533-1546.

- Waterhouse, R. M., Aganezov, S., Anselmetti, Y., Lee, J., Ruzzante, L., Reijnders, M. J.,… **Kamali, M.,** et al. (2020). Evolutionary superscaffolding and chromosome anchoring to improve *Anopheles* genome assemblies. ***BMC biology***, 18(1), 1-20.

- Neafsey, D. E., Waterhouse, R. M., Abai, M. R., Aganezov, S. S., Alekseyev, M. A., Allen, J. E.,... **Kamali, M.,** et al. (2015). Highly evolvable malaria vectors: the genomes of 16 *Anopheles* mosquitoes. ***Science***, 347(6217).

- **Kamali, M.,** Marek, P. E., Peery, A., Antonio-Nkondjio, C., Ndo, C., Tu, Z., ... & Sharakhov, I. V. (2014). Multigene phylogenetics reveals temporal diversification of major African malaria vectors. ***PloS one***, 9(4), e93580.

- **Kamali, M.,** Xia, A., Tu, Z., & Sharakhov, I. V. (2012). A new chromosomal phylogeny supports the repeated origin of vectorial capacity in malaria mosquitoes of the *Anopheles gambiae* complex. ***PLoS pathog***, 8(10), e1002960. (News highlights: Science Daily).

- **Kamali, M.,** Sharakhova, M. V., Baricheva, E., Karagodin, D., Tu, Z., & Sharakhov, I. V. (2011). An integrated chromosome map of microsatellite markers and inversion breakpoints for an Asian malaria mosquito, *Anopheles stephensi*. ***Journal of Heredity***, 102(6), 719-726.

Protocol

Xia. A., A. Peery, **M. Kamali**, J. Liang, M.V. Sharakhova and I. V. Sharakhov (2013).Fluorescence *in situ* Hybridization to the Polytene Chromosomes of *Anopheles* Mosquitoes. Bio-protocol.org. Vol 3, Iss 16.

Papers Presented at Scientific Meetings

- **Kamali, M**., M. Shabanipoor, M.S. Dayer, A. Raz and I. Sharakhov. A Novel Geostatistical Map of Malaria Patients with Correlation to Distribution Indicators in Southern Iran. XXVII International Congress of Entomology, Kyoto, Japan, August 25–30, 2024.
- Shabanipoor, M., **M. Kamali**, A. Raz, and I. Sharakhov. Life Table Indicators of the *Anopheles stephensi* Mosquito in the Waters of Four Regions of Iran. XXVII International Congress of Entomology, Kyoto, Japan, August 25–30, 2024.
- Naraki, M., F. Ghaffarifar, and **M. Kamali**. Phlebotomine Sand Flies (Diptera: Psychodidae) Species, and Molecular Identification of *Leishmania* Isolated from Sand Flies in Bandar-e-Mahshahr, Khuzestan. 3rd International Congress of Vector-Borne Diseases & 5th National Congress of Medical Entomology, Tehran, Iran, November 21–23, 2023.

- **Kamali, M**., H. Kharazmi and E. Akbari. A Novel Educational Method for Prevention and Control of Vector-Borne Diseases in the Villages of Bardsir, Kerman Province, Iran. XXVI International Congress of Entomology, Helsinki, Finland, July 17-22, 2022.
- Gordani, T., **M. Kamali,** G. Noori, and R. Farhangi. New Record of Parasitic Stigmaeid Mite (Acari: Stigmaeidae) of *Phlebotomus papatasi* (Diptera: Psychodidae) from Ilam Province,Western Iran. The 3rd Iranian International Congress of Entomology, University of Tabriz, Tabriz, Iran, August 17-19, 2019.
- **Kamali, M**., and M. A. Ghias. A Simple and Fast Microfluidic System for Separation and Concentration of Sperm and Hemocytes in Sandfly (*Phlebotomous papatasi*). Eight International Symposium on Molecular Insect Science, Sitges, nr Barcelona, Spain, July 7-10, 2019.
- **Kamali, M**., A. Xia, Z. Tu and I. V. Sharakhov .Chromosomal and Molecular Phylogeny Elucidate the Evolutionary History of *An. gambiae* Complex. Graduate Student Assembly (GSA) 29th Annual Research Symposium. March-27, Virginia Tech, 2013.
- **Kamali, M** and I. V. Sharakhov. Molecular Phylogenies of Inversion Breakpoints in the *Anopheles gambiae* Complex. The 3rd Virginia Tech Symposium on Vector-Borne Disease Research."Parasitology, Vector Biology, Vaccine and Drug Delivery". Blacksburg, Virginia, March 8-9, 2013.
- **Kamali, M**., A. Xia, Z. Tu and I. V. Sharakhov. A New Chromosomal Phylogeny Revealed the Ancestral Karyotype in the Complex of African Malaria Vectors. The 2nd Virginia Tech Symposium on Vector-Borne Disease Research."Parasitology, Vector Biology, Vaccine and Drug Discovery". Blacksburg, Virginia, March 9-10, 2012.
- **Kamali, M**., A. Xia, Z. Tu and I. V. Sharakhov. Ancestral Chromosomal Arrangement and Revised Phylogeny of the *Anopheles gambiae* Complex. In proceeding of the 60th American Society of Tropical Medicine and Hygiene, Philadelphia, PA, Dec 4-8, 2011.
- **Kamali, M**., A. Xia, Z. Tu and I. V. Sharakhov. Cloning of the Breakpoints of Fixed 2Ro and 2Rp Inversions in the *Anopheles gambiae* Complex. In proceeding of the 59th American Society of Tropical Medicine and Hygiene,Atlanta, GA. Nov, 3-7, 2010.
- **Kamali, M**., M. Sharakhova, Z. Tu and I.V. Sharakhov. Microsatellite Physical Map of *Anopheles stephensi* Polytene Chromosomes. In proceeding of the 59th American Society of Tropical Medicine and Hygiene,Atlanta, GA. Nov. 3-7, 2010.
- Basseri, H. R., **M. Kamali,** J. Rafinejad, and M. Aboulhasani. Agglutination activities in four soft tick species, *Ornithodoros tholozani*, *O.lahorensis*, *O. canestiini* and *Argas persicus*. In proceedings of the 4th African Acarology symposiam, Hammamet, Tunisia, Oct. 22- 26, 2007.
- **Kamali, M**., H. R. Basseri, , J. Rafinejad, and M. Abdoulhassani, Carbohydrate Inhibitioy Effect of Lectins of *Ornithidoros lahorensis*. Presented in proceeding of the 28th Nordic Baltic Congress of Entomology. Uppsala, Sweden, July 29- August 4, 2007.
- **Kamali, M**., K. Jafari, J. Rafinejad, and H. R. Basseri. Edaphic Prostigmadic Mites (Acari: Prostigmata) from Northern Tehran, Iran. Presentation in Proceedings of 12th International Congress of Acarology, Amsterdam, the Netherlands, August 21-26, 2006.
- **Kamali, M**., K. Jafari, and J. Rafinejad. Some Beetle Mites (Acari: Oribatida) from Northern Tehran. In Proceeding of 2nd Iranian Congress of Medical Entomology and Vector control. Tehran, Iran, May16-18, 2006.
- **Kamali, M**., K. Kamali, K.Jafari, and E. Uchermann. Edaphic Mites of Order Mesostigmata Collected from Shahid Beheshti University Campus. In Proceedings of 16th Congress of Plant Protection. Tabriz, Iran, August 24- September 1, 2004.

Invited Talks

- Cytogenetic Studies in Mosquitoes: Approaches and Applications. The 3rd Iranian International Congress of Entomology, University of Tabriz, Tabriz, Iran, August 17, 2019.

Skills and Techniques

- Fluorescent *In Situ* Hybridization.
- Confocal and fluorescent microscopy.
- Preparation of polytene choromosome slides from ovarian nurse cells in *Anopheles* species.
- Rearing *Anopheles* species in insectary.

- Cytogenetic Mapping.
- Practical experience of standard molecular biology techniques; PCR, gel electrophoresis, isolation of genomic DNA.
- Microsatellite probe preparation.
- Genomic library screening.
- Bioinformatics: DNA sequence and transposable elements analysis; BLAST, ClastalW, TEfam,Vectorbase.
- Molecular phylogeny using MEGA and Geneious programs.

Additional Training

- NIH Vectorbase workshop, Bethesda, MD, 2013.
- Issues in Bioethics, NIH Responsible Conduct of Research training requirements. Virginia Tech, Blacksburg, VA, 2012.
- Training in Human Subjects Protection, Virginia Tech, Blacksburg, VA, 2012.
- Summer Institute in Statistical Genetics Course: Molecular Genetics and Genomics, Seattle, WA, 2010.
- Basic Science Pre-Meeting Course, 59th American Society of Tropical Medicine and Hygiene, Recent Advances in the Biology of Invertebrate Vectors and Implications for the Control of Tropical Diseases, Atlanta, GA, 2010.

Teaching Experience

- Arbovirology (Graduate Course), Tarbiat Modares University, Fall semesters.
- Insect Systematics (Graduate Course), Tarbiat Modares University, Fall semesters.
- Advanced Leishmaniasis (Graduate Course), Tarbiat Modares University, Fall semesters.
- General Leishmaniasis (Graduate Course), Tarbiat Modares University, Fall semesters.
- Molecular Entomology (Graduate Course), Tarbiat Modares University, Spring semesters.
- Advanced Malariology (Lab) (Graduate Course), Tarbiat Modares University, Spring semesters.
- Teaching Assistant for Insect and Human Society class (Grading Assistant), Virginia Tech, Fall 2012.
- Teaching assistant for Medical and Veterinary Entomology Lab (Lab Instructor), Virginia Tech, Spring. 2012
- Teaching Assistant for Insect and Human Society class, (Grading Assistant), Virginia Tech, Spring 2011.

Honors and Awards

- Winner of Dr. Kazemi Ashtiani Award from Iran's National Elites Foundation, Tehran, Iran, 2018.
- Member of Iran's National Elites Foundation, Tehran, Iran, 2018.
- First Place Presentation Award, Graduate Student Assembly (GSA) 29th Annual Research Symposium, March-27, Virginia Tech, 2013.
- First Place Poster Presentation Award in Vector Biology, 3rd Virginia Tech Symposium on Vector-borne Disease Research. ."Parasitology, Vector Biology, Vaccine and Drug Delivery", March 8-9, Virginia Tech, 2013.
- First Place Poster Presentation Award, Iranian showcase of research competition, August-27. Virginia Tech, 2012.
- Department of Entomology Kosztarab Scholarship Award, for distinguished achievement in systematic Entomology, Virginia Tech, 2012.
- Graduate Student Assembly (GSA) Graduate Research Development Program Award, Virginia Tech, 2012.
- Young Investigator Award Honorable Mention, 60th American Society of Tropical Medicine and Hygiene, Philadelphia, PA, 2011.
- Graduate Student Assembly (GSA) Travel Grant Award, Virginia Tech, 2011.
- Cyrus McCormick scholarship, College of Agriculture and Life Sciences. Virginia Tech, September 2011.
- Graduate Student Assembly (GSA) Travel Grant Award, Virginia Tech, 2010.
- Scholarship to participate in a course "Molecular Genetics and Genomics" of the 15th Summer Institute in Statistical Genetics, University of Washington, Seattle, June 14 - 16, 2010.
- Fralin Life Sciences Institute Fellowship, 2008-2009.
- Two grants from the Palms Foundation (Sweden) and Tehran University of Medical Sciences to attend and present thesis research at 28th Nordic-Baltic Congress of Entomology in Uppsala, Sweden, July 2007.