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JOB HISTORY

2017, Assistant Professor, University of Tehran, Tehran, Iran.
2017, Adjunct Assistant Professor, Shahid Beheshti University, Tehran, Iran.
2015, Research Associate, Tohoku University, Sendai, Japan.
2014, Researcher, Czech University of Life Sciences, Prague, Czech Republic.
2011, Post-Doctoral Fellow, Tohoku University, Sendai, Japan.
2009, Researcher, University of South Bohemia, České Budějovice, Czech Republic.

EDUCATION

- Ph.D., Animal Breeding - Fishery, University of South Bohemia, České Budějovice, Czech Republic, September 3, 2009.
- M.Sc., Natural Resources Engineering - Fishery, University of Tehran, Tehran, Iran, March 3, 2003.
- B.Sc., Natural Resources Engineering - Fishery, University of Tehran, Tehran, Iran, September 21, 2000.

FELLOWSHIP AND SCHOLARSHIP

- Japan Society for the Promotion of Science Post-Doctoral Fellowship, 2011–2013
- The University of South Bohemia PhD scholarship, 2005–2009

AWARDS

- The Dr Saeid Kazemi Ashtiani Early Career Faculty Award, The National Elites Foundation of Iran, 2019.
- The 20th Iranian Annual Academic Book Award to “Alavi, S.M.H., et al., 2008. Fish Spermatology. Alpha Science Ltd, Oxford, UK”, 2012.
- Faculty of Fisheries and Protection of Waters Dean Award to “Alavi, S.M.H., et al., 2009. Effects of osmolality on sperm morphology, motility and flagellar wave parameters in Northern pike (*Esox lucius* L.). Theriogenology 72: 32–43”, 2009.
- Research Institute of Fish Culture and Hydrobiology Director Award to “Alavi, S.M.H., et al., 2008. Fish Spermatology. Alpha Science Ltd, Oxford”, 2008.
- The University of Tehran President Award to the excellent out-standing post- graduate research, 2004.
- Faculty of Natural Resources Dean Award to undergraduate student, 2000.

GRANTS

Grants awarded to me as principal investigator or co-principal investigator

- Identification of reproductive biomarkers for environmental risk assessment of polycyclic aromatic hydrocarbons in the Persian Gulf (120/S/98), Department of Environment of Iran, PI, 2019-2020 (1 Year)
- Identification of epigenetic biomarkers of male germ cell disorders linked to adverse environmental factors, The Grant Agency of the Czech Republic (P503/12/1834), Co-PI, 2012–2014 (3 Years).
- Effect of endocrine disruptors on reproductive parameters and expression of selected genes in fish and mouse gonads, The Grant Agency of the Czech Republic (523/09/1793), Co-PI, 2009–2012 (4 Years).

Other grants: To my PhD supervisor, PostDoc mentor, and PhD students (2008-2014)

- Neuroendocrine control of sperm maturation and motility in marine bivalve, The Japan Society for the Promotion of Science Grant-in-Aids for Postdoctoral fellows (23-01404), 2011–2013.
- Modulations in neuroendocrine regulation of steroidogenesis in male goldfish exposed to anti-androgen vinclozolin, The Grant Agency of the University of South Bohemia (067/2013/Z), 2013.
- Mechanisms of action of Bisphenol A on steroidogenesis using gene expression of vitellogenin, StAR, P450scc, 3beta-HSD and CYP19 in male fish, The Grant Agency of the University of South Bohemia (033/2010/Z), 2010.
- Ultrastructure, energetic and competition in spermatozoa: A comparative study using two models species of chondrosteian and teleostean fishes, The Grant Agency of the Czech Republic (524/06/0817), 2006–2008.

RESEARCH

- Cell and Molecular Biology of Reproduction
- Reproductive Health and Fertility

LECTURES

Invited lectures

- Regulatory mechanisms of sperm motility initiation in fishes. The 21st National and 9th International Congress on Biology, Semnan University, February 2021.
- Reproductive strategies to conserve biodiversity in fishes. Iranian Fisheries Research Organization, Tehran, Iran, May 2019.
- Sperm cryopreservation in sturgeons – A review. Iranian Fisheries Research Organization, Tehran, Iran, January 2018.
- Sperm biology in fish and bivalves: Basic sciences, evolutionary biology and environmental health perspectives. School of Biology, College of Science, University of Tehran, Tehran, Iran, January 2017.
- Sperm biology in fish and bivalves: Basic sciences, evolutionary biology and environmental health perspectives. School of Biology, College of Science, University of Tehran, Tehran, Iran, December 2016.

- Sperm biology in fish and bivalves: From basic sciences to environmental perspectives. Department of Aquatic Bio-Science, Tohoku University, Sendai, Japan, November 2015.
- Sperm biology in aquatic organisms: Physiological controls and the effects of environmental contaminants. Department of Biological Sciences, University of Calgary, Calgary, Canada, November 2014.
- Evolutionary sperm biology in fish and marine bivalve mollusks. Department of Biology, Yamagata University, Yamagata, Japan, July 2013.
- Diversity in the mechanisms of sperm activation in fish. Annual Meeting of the Japan Society of Spermatology, Tohoku University, Sendai, Japan, November 2012.
- Endocrine regulation of reproduction in male fish: Testicular development and sperm morphology, physiology and motility signaling. Graduate School of Agricultural Science, Tohoku University, Sendai, Japan, June 2012.
- Sperm motility and flagellar beating behavior in fish. Department of Biological Sciences, Dartmouth College, Hanover, NH, USA, June 2010.
- Sperm morphology, physiology and motility in fish: Evolutionary biology and environmental health perspectives. Shimoda Marine Research Center, Tsukuba University, Shimoda, Japan, March 2010.
- Sperm motility signaling in fish. Institute of Molecular biology and Biophysics, Swiss Federal Institute of Technology, Zurich, Switzerland, October 2009.
- Spermatology as a tool for aquaculture development. UR AFPA, Université de Lorraine, Nancy, France, April 2009.
- Biology of sperm in freshwater fish. Department of Aquaculture, University of Nordland, Bodø, Norway, April 2008.

Lectures at conferences and symposiums

- Metabolic stress decreases sperm quality in goldfish associated with changes in hormonal functions of hypothalamus-pituitary-testis axis. The 7th International Workshop on the Biology of Fish Gametes. Rennes, France, September 2–6, 2019.
- Serotonin induces initiation of sperm motility in marine bivalve mollusks. The 84th Annual Meeting of the Zoological Society of Japan, Okayama University, Okayama, September 26–28, 2013.
- Calcium-dependent sperm activation in bivalve mollusks is prohibited by scallop oocyte maturation arresting factor and enhanced by serotonin. AQUA 2012: Global Aquaculture - Securing Our Future, Prague, Czech Republic, September 1–5, 2012.
- Structure, motility, fertilization and cryopreservation of sperm of chondrosteian fish species – a review. The 6th International Symposium on Sturgeon, Wuhan, China, October 25–31, 2009.
- Semen characteristics, sex steroids and stress indicators in *Acipenser ruthenus* after spermiation induction by carp pituitary extract and GnRH α implants. The 6th International Symposium on Sturgeon, Wuhan, China, October 25–31, 2009.
- Biology of sperm and control of reproduction in Cyprinidae. The 2nd International Workshop on the Biology of Fish Gametes, Valencia, Spain, September 9–11, 2009.
- A review on sperm motility characteristics in freshwater fish. Aquaculture Europe, Krakow, Poland, September 15–18, 2008.
- Ultrastructure, biochemical characteristics and motility of *Barbus barbus* spermatozoa. The 1st International Workshop on the Biology of Fish Sperm, Vodňany, Czech Republic, August 29–31, 2007.

- Roles of extracellular Ca^{2+} and pH on motility and flagellar waveform parameters in sturgeon spermatozoa. The 8th International Symposium in Reproductive Physiology of Fish, Saint-Malo, France, June 3–8, 2007.
- Spermatology as a tool in aquaculture management. Czechoslovak Society of Arts & Sciences Congress, Českých Budějovicích, Czech Republic, June 26–30, 2006.
- Sperm motility and energetics in sturgeon fishes. The 5th International Symposium on Sturgeon, Ramsar, Iran, May 9–13, 2005.

SOCIETIES

- The Zoological Society of Japan, 2013–present.
- Society of Environmental Toxicology and Chemistry, 2014–2015.
- Society for Reproduction and Fertility, 2005–2006.
- World Sturgeon Conservation Society, 2005–2006.

PEDAGOGICAL ACTIVITY

Courses taught

Undergraduate

Principles of Animal Physiology
 Animal Biology: Physiology of Organs
 Animal Biology: Endocrine System
 Biology of Fishes
 Aquatic Ecology and Aquaculture
 Principles of Animal Biotechnology
 Literature in Animal Biology
 Project

Graduate

Advanced Endocrinology - MSc
 The Physiology of Reproduction - MSc
 Ecophysiology in Aquatic Animals - MSc
 Research Methods and Data Presentation in Biology - MSc
 Biotechnology in Aquatic animals - MSc
 Seminar - MSc
 *Recent Topics in Cell and Developmental Biology - PhD
 *Neuroendocrinology of Reproduction - PhD
 *Recent Topics in Reproduction - PhD

PhD students

- Parastoo Rahdar, M.Sc., To be determined, Supervisor, University of Tehran, Tehran, Iran, October 2020 – present.
- Mahdi Golshan, M.Sc., Environmental contaminants and endocrine associated male infertility in fish, Advisor, University of South Bohemia, České Budějovice, Czech Republic, October 2011 – September 2015.
- Azadeh Hatef, M.Sc., Sperm functions impairments and steroidogenesis transcriptomic alternations in fish exposed to endocrine disrupting chemicals, Advisor, University of South Bohemia, České Budějovice, Czech Republic, October 2008 – September 2012.

SERVICES

Program committee

- Workshop on “Methods for sperm quality assessment in aquatic animals”, The 4th International Congress on Fisheries and Aquatic Research. Tehran, Iran, November 18–20, 2020.

- Workshop on “Sperm biology in fish: From basic to applied sciences”, The 2nd National Conference on Fisheries Sciences & Aquatic Organisms. Lahijan, Iran, May 1–2, 2011.
- Chair of session, The 6th International Symposium on Sturgeon, Wuhan, China, October 25–31, 2009.
- Workshop on “Methods for sperm motility assessment and cryopreservation in sturgeon”, lecture and practical course, The 6th International Symposium on Sturgeon, Wuhan, China, October 25–31, 2009.
- The 2nd International Workshop on the Biology of Fish Gametes, Organizing Committee – Member, Valencia, Spain, September 9–11, 2009.
- The 1st International Workshop on the Biology of Fish Sperm, Executive chair, Vodňany, Czech Republic, August 29–31, 2007

Guest editor

- A special issue on the Reproductive Biology in Aquatic Animals: Implications for Aquaculture and Environmental Conservation. *Animals*, 2021.
- A special issue on the Reproductive Biology in Male Aquatic Animals: From Stem Cells to Sperm – a review collection. *Theriogenology*, 2019.
- The Proceedings of the 1st International Workshop on the Biology of Fish Sperm. *Journal of Applied Ichthyology*, 2008.

Reviewer

Animal Reproduction Science, Aquaculture, Aquaculture Research, Aquatic Living Resources, Aquatic Toxicology, Biology of Reproduction, Canadian Journal of Zoology, Chemosphere, Comparative Biochemistry and Physiology–Part A and Part D, Czech Journal of Animal Science, Ecotoxicology and Environmental Safety, Environmental Pollution, Fish Physiology and Biochemistry, General and Comparative Endocrinology, Iranian Journal of Biology (Farsi), Iranian Journal of Fisheries Sciences, Journal of Applied Biology (Farsi), Journal of Applied Ichthyology, Journal of Endocrinology, Journal of Fish Biology, Journal of Experimental Marine Biology and Ecology, PLoS ONE, Progress in Biological Sciences, Reproduction in Domestic Animals, Science of the Total Environment, Theriogenology, Zygote