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Professor

Ph.D. in Molecular Biology and Genetic Engineering

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EDUCATION

2001 -2006 Ph.D: Molecular Biology

1994-1997 M.Sc: Microbiology

1983-1987 B.Sc: Biology

SPECIALISATION

Genetics, Biotechnology, Molecular Biology, Genetics Engineering

RESEARCH TOPICS

Genetics Biodiversity

Gene Cloning

Transgenic

Gene Library

Phylogenetic

Genetic Manipulation

Bioremediation

Teaching Experience

Teaching at Doctorate, Master's and Bachelor's degree levels

Subjects taught:

Biotechnology

Genetics

Molecular Biology

Speciation

Advanced Molecular Biology

Bioremediation

Molecular Biology Techniques

Sample list of Master and Ph.D Thesis

Genetic, physiologic, histopathologic and morphologic responses of Southern Caspian kutum, *Rutilus frisii* Kutum, to fipronil (Ph.D Thesis is completed)

Molecular systematic and morphometric of dominant Gastropoda on rock coasts of Persian Gulf. (Ph.D Thesis is completed)

Isolation and Characterization of DNA Microsatellite Markers in the Fourfinger Threadfin (*Eleutheronema tetradactylum*). (Ph.D Thesis is completed)

Isolation, characterization and sequencing of MVIIA protein from food tissue of *Conus magus*. (Ph.D Thesis is completed)

Identification of relationship between digestive tract indices and species diversity of Mugilidae from Caspian Sea and the Persian gulf. (Ph.D Thesis is completed)

Genetic structure of *litopenaeus vannami* (Penaeoidea) populations using 16srna gene and RAPD Techniques. (Ph.D Thesis is completed)

Molecular Systematic and characterization of Dominant venom from Cone snails (*Conus* sp) in the Persian Gulf. (Ph.D Thesis is completed)

Population Diversity of the Black lip Oyster (*Pinctada margaritifera*) in the Northern part of Persian Gulf, Using Microsatellite Marker and mtDNA Sequencing. (Ph.D Thesis is completed)

Isolation, characterization and sequencing of fp-5 protein from food tissue of *Modiolus* sp.

Molecular Systematic and characterization of Dominant venom from Cone snails (*Conus* sp) in the Persian Gulf. (Master Thesis is completed)

Cloning of the Metallothionein Gene (SMt A) from the *Synechococcus* sp. PCC 7942 into *Escherichia coli* By Use of Cloning Vector pBluescript KS and Expression Vector pET-15b. (Master Thesis is completed)

Extraction and Purification of Fucoxanthin from $\gamma\gamma$ *Sargassum* genus in Coast of Bushehr and Evaluation of their Antioxidant Activities. Master Thesis is completed

Shark (*Chiloscyllium punctatum*) anti-angiogenesis cDNA cloning & sequencing. (Master Thesis is completed) Antibacterial and Anti-oxidant activity of three species of green, brown and red algae from Northern coast of Persian Gulf. (Master Thesis is completed)

Isolation, characterization and cloning of Shk gene from sea anemone *Stichodactyla helianthus*. (Master Thesis is completed)

Isolation identification and cloning of growth hormone gene from *Otolithes ruber*. (Master Thesis is completed)

Construction and Transfer Gene Construct Carrying GH Gene Cassette from Beluga sturgeon (*Huso huso*) to HEK Cell Lines By Recombinant Lentivirus and Evaluation Gene Expression. (Master Thesis is completed)

Characterization and cloning of metallothionein gene from *Saccostrea cucullata*. (Master Thesis is completed)

Genetic Diversity of *Aphanius ginaonis* Population in the Persian Gulf (Hormozgan Areas) Based on RFLP Markers. (Master Thesis is completed)

Effect of fluctuation of salinity on aldosterone, cortisol and electrolytes of blood and in *Tenualosa ilisha* acclimated to seawater, brackish water and fresh water. (Master Thesis is completed)

Publications

Hossein Zolgharnein, Mohd Lila MohdAzmi., Mohd Zamri Saad., Abdul Rahim Mutalib., CheAbd Rahim Mohamed., 2007. Detection of plasmids in heavy metal

resistance bacteria isolated from the Persian Gulf and enclosed industrial areas. Iranian Journal of Biotechnology, 5: 232-239.

Mohammad Ali Salari-Aliabadi., Sohrab Rezvani-Gilkolaei., Ahmad Savari., **Hossein Zolgharnien.**, Seyed Mohammad Bagher Nabavi., 2008. Microsatellite polymorphism in Iranian populations of cobia (*Rachycentron canadum*). Biotechnology, 7(4), 775-780.

Mohammad Ali Salari-Aliabadi., Sohrab Rezvani-Gilkolaei., Ahmad Savari, **Hossein Zolgharnien.**, Seyed Mohammad Bagher Nabavi., 2008. Population genetic structure of cobia, *Rachycentron canadum* revealed by microsatellite markers, Journal of Applied Biological Sciences, 3 (1): 96-100

Yadollah Nikpour., **Hossein Zolgharnein.**, Mahmood Sinaei., 2008. Evaluation of metallothionein-like-proteins (MLTPs) as a biomarker for mercury bioavailability monitoring. Pakistan Journal of Biological Sciences, 11:2269-2273.

S. Aminzadeh, A. Ghoroghi, M. Zarei, S.A. Lotfi, M. Daliri, **H. Zolgharnain**, S. Alireza. 2009. Screening of Chitinolytic Microorganisms in Shrimp Farming Water and Wastewater. Journal of Comparative Pathology, 141: 279

Zolgharnein, H., K. Karami, M.M. Assadi and A.D. Sohrab, 2010. Molecular characterization and phylogenetic analyses of heavy metal removal bacteria from the Persian Gulf. Biotechnology, 9: 1-8.

Zolgharnein, H., K. Karami, M.M. Assadi and A.D. Sohrab, 2010. Investigation of Heavy Metals Biosorption on *Pseudomonas aeruginosa* Strain MCCB 102 Isolated from the Persian Gulf. Asian Journal of Biotechnology, 2:99 - 109

H. Zolgharnein , M. Kamyab , S. Keyvanshokoo , A. Ghasemi and S.M.B. Nabavi, 2010. Genetic diversity of *Avicennia marina* (Forsk.) Vierh. Populations in the Persian Gulf by microsatellite markers J. Fish. Aquat. Sci., 5: 223-229.

Mandana Zarei¹, Saeed Aminzadeh, **Hossein Zolgharnein**, Alireza Safahieh, Ahmad Ghoroghi, Abbasali Motallebi, Morteza Daliri¹, Abbas Sahebghadam Lotfi¹. 2010. *Serratia marcescens* B4A chitinase product optimization using Taguchi approach, Iranian journal of Biotechnology, 8: 252-262

K. Karami, **H. Zolgharnein**, M. MazaheriAssadi, A. Savari and S. Dadollahi,, 2011. New Report on the Occurrence of Exiguobacteriumsp. AT1b in the Persian Gulf and its Resistance to Mercury Pollution.Current Research in Bacteriology, 1-5

Hossein Zolgharnein, Mohammad Ali Salari-Aliabadi, Ali Mohammad Forougmand, Somayeh Roshani. Genetic population structure of Hawksbill turtle (*Eretmochelysimbricta*) using microsatellite analysis. Iranian Journal of Biotechnology.

Amir Jaferian, **Hossein Zolgharnein**, Mehdi Mohammadi, Mohamad-Ali Salari-Aliabadi and Seyed-Javad Hossini,2010.Morphometric Study of *Eleutheronematetra dactylum* in Persian Gulf Based on The truss Network. World Journal of Fish and Marine Sciences,6: 499-504

N. Amrollahi Biuki, A. Savari, M.S. Mortazavi and **H. Zolgharnein**, 2010.Acute Toxicity of Cadmium Chloride ($CdCl_2 \cdot H_2O$) on 2 2 *Chanoschanos* and Their Behavior Responses, World Journal of Fish and Marine Sciences, 6: 481-486.

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A. Ghaziloua; F. Chenarya; H. Morovvatib; **H. Zolgharnein**, 2011.Time course of saltwater adaptation in Spotted Scat (*Scatophagusargus*)(Pisces): A histomorphometric approach, Italian Journal of Zoology. 78:1, 82-89.

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Narges Amrollahi Biuki Ahmad Savari Mohammad Sedigh Mortazavi, **Hossein Zolgharnein** Negin Salamat. 2011. Accumulation and elimination of cadmium and lead in juvenile milk fish during sub lethal exposure. *Toxicological & Environmental Chemistry*.

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Maryam Shokoohmand, **Hossein Zolgharnein**, Sakineh Mashjoo, Faramarz Laloi, Ali Mohammad Foroughmand, Ahmad Savari. 2017. Analysis of Genetic Diversity of White Shrimp (*Metapenaeus Affinis*) from the Northwest of the Persian Gulf Using Microsatellite Markers. *Turkish Journal of Fisheries and Aquatic Sciences*.

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Mohammad Sharif., Ranjbar., **Hossein Zolgharnein**., Vahid Yavari., Bitar Archangi., Mohammad Ali Salari., Sophie Arnaud-Haond., Regina L. Cunha. 2016. Rising the Persian Gulf Black-Lip Pearl Oyster to the Species Level: Fragmented Habitat and Chaotic Genetic Patchiness in *Pinctada persica*. *Evolutionary Biology*. Volume 43, Issue 1, pp 131–143.

Negintaji A, Safahieh A, **Zolgharnein H**, 2017. Matroodi S. Short-term induction of vitellogenesis in the immature male yellowfin seabream (*Acanthopagrus latus*) exposed to bisphenol A and 17 β -estradiol. *Toxicology and Industrial Health*. Vol 33, Issue 1.

Rashid Alijani Ardeshir, **Hossein Zolgharnein**, Abdolali Movahedinia, Negin Salamat, and Ebrahim Zabihic. 2018. CYP1A gene expression as a basic factor for fipronil toxicity in Caspian kutum fis. *Toxicology Reports*. 5: 113–124.

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M Shokoohmand, **H Zolgharnein**, S Mashjoor, F Laloi, AM Foroughmand. (2018). Analysis of Genetic Diversity of White Shrimp (*Metapenaeus affinis*) from the Northwest of the Persian Gulf Using Microsatellite Markers. *Turkish Journal of Fisheries and Aquatic Sciences* 18 (3), 385-394

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H Rajabi, **H Zolgharnein**, MT Ronagh, A Savari. 2017. Molecular genetics and ecological divergence time study of the cone snail species in the Persian Gulf. *Iranian Journal of Animal Biosystematics* 13 (1)

A Rastiannasab, SM mousavi, **H Zolgharnein**, (2017). Effect of the food supplemented probioenzyme on expression of immune-related genes and redmouth

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Books

Title of book **Description of Cloning, Transgenesis and Genetic Engineering in Fish** written in Persian Language

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