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## *Personal Information*

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- Name: Amin
- Surname: Ravaei

## *Research Interests*

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- Genetic and epigenetic of rheumatoid arteritis
- Multiple targeting approach in rheumatoid arteritis
- Pathogenesis of miscarriage
- Pharmaceutical biotechnology

## Education

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- **Ph.D Student** (2017-Present) Medical Genetics. University of Ferrara, Ferrara, Italy.  
**Supervisor:** Prof. Michele Rubini
- **M.Sc.** (2011-2014) Developmental Biology. Kharazmi University, Tehran, Iran. CGPA: 17.43/20  
**Final thesis:** Transformation of Canola (*Brassica napus* L.) by *Agrobacterium tumefaciens* Containing *espA-eae* Gene, under the Control of Seed-specific FAE Promoter  
**Supervisors:** Prof. Ali Hatef Salmanian, Prof. Parissa Jonoubi  
**Score:** 20/20
- **B.Sc.** (2007-2011) Cellular and Molecular Biology-Genetics. Azad University, Tonekabon, Iran. CGPA: 18.20/20
- **Pre-university degree.** (2005-2006) Experimental Sciences. Ali-ebne-Abitaleb High School, Khalkhal, Iran. CGPA: 15.23/20
- **High School Diploma.** (2002-2005) Experimental Sciences. Ali-ebne-Abitaleb High School, Khalkhal, Iran. CGPA: 18.32/20

## Scientific Skills

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- Cell culture: Human primary cell/tissue culture, plant cell/tissue culture, *Agrobacterium*-mediated plant transformation, bacterial culture, microbiological diagnostic tests and cultures
- Molecular Techniques:
  - Nucleic acid extraction (gDNA, Nuclear RNA and Total RNA) from blood, cultured cells, human/plant tissues, buccal swabs
  - Nucleic acid titration
  - PCR, RT-PCR, Real-Time PCR (genotyping, quantitative), Methylation-specific PCR
  - Electrophoresis
  - Pyrosequencing
- TaqMan SNP assay designing
- Primer/Methylation-Specific primer designing
- Biobanking

## *Honors and Awards*

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- Young Researcher's Award by AJA University for Scientific Investigations, Iran (2015)
- Young Researcher's Award by Young Researcher's Club for Scientific Investigations, Iran (2010)
- Ranked among top 5% B.Sc. students
- Ranked among top 5% high school students

## *Research Experience*

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- **Visiting scientist.** (2019). Long non-coding RNAs in gene-environmental interactions. RWTH Aachen University, Aachen, Germany.
- **Ph.D thesis.** (2017-Present). Pharmacogenetics of bDMARDs and pharmacoepigenetics of MTX in rheumatoid arthritis. University of Ferrara, Ferrara, Italy.
- **Research project.** (2017-Present). Gene-Environmental Interactions in cleft lip. University of Ferrara, Ferrara, Italy.
- **Research project.** (2017-Present). Interplay between embryo's and mother's genetic profile in the pathogenesis of miscarriage. University of Ferrara, Ferrara, Italy.
- **Research project.** (2017-Present). The effect of folates on growth, survival and differentiation of human primary trophoblasts cells. University of Ferrara, Ferrara, Italy.
- **Research project.** (2015-2016). Levels of serum LPA (lysophosphatidic acid) of chronic myeloid leukemia (CML) patients in Imam-Reza Hospital. AJA Medical University, Tehran, Iran.
- **Master thesis.** (2012-2014). Transformation of Canola (*Brassica napus* L.) by *Agrobacterium tumefaciens* Containing *espA-eae* Gene, under the Control of Seed-specific FAE Promoter. Kharazmi University, Tehran, Iran.

- **Research project.** (2010-2011). Antimicrobial effects of three *Lactobacillus* species against antibiotic resistant *Salmonella typhimurium*. Islamic Azad University, Tonekabon, Iran.
- **Research project.** (2010-2011). Population Genetic structure of *Clupeonella cultriventris* in the south Caspian Sea coastline using microsatellite marker. Azad University, Tonekabon, Iran.
- **Research project.** (2008-2009). Occurrence and prevalence of gill parasites of sturgeons in southwestern region of the Caspian Sea. Azad University, Tonekabon, Iran.

## *Work Experience*

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- **Office Manager.** (2015-2016) Besat Hospital. Tehran, Iran.
- **Lecturer** in theoretical and practical workshop on "Plant Cell and Tissue Culture" 2015. Kharazmi University, Tehran, Iran.
- **Technical Manager in Genetic Laboratory.** (2012-2014). Genetic Laboratory of Kharazmi University, Tehran, Iran.
- **Teaching Assistant.** (2012-2014). Kharazmi University, Tehran, Iran.
- **Lecturer** in theoretical and practical workshops on "Molecular Techniques in Botechnology, DNA Extraction, PCR, Electrophoresis" 2013. Kharazmi University, Tehran, Iran.
- **Lecturer** in theoretical and practical workshops on " Plant Cell and Tissue Culture; Plan Transformation" 2013. Kharazmi University, Tehran, Iran.
- **Lecturer** in theoretical and practical workshops on "Plant Cell and Tissue Culture" 2012. Kharazmi University, Tehran, Iran.

## Publications

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- Khan MFJ, Little J, Aleotti V, Mossey PA, Steegers-Theunissen RPM5, Autelitano L, Meazzini MC, [Ravaei A](#), Rubini M. LINE-1 methylation in cleft lip tissues: Influence of infant MTHFR c.677C>T genotype. *Oral Diseases*. 2019. 25(6): 1668-1671.
- Abouhamzeh B, Mirzaii-Dizgah I, [Ravaei A](#). Serum Lysophosphatidic Acid Level in Chronic Myeloid Leukemia. *Annals of Military & Health Science Research*. 2017. 15(1): e62801.
- [Ravaei A](#), Jonoubi P, Salmanian AH. Optimization of *in vitro* shoot regeneration and *Agrobacterium*-mediated transformation of *Brassica napus*. *International Journal of Biosciences*. 2015. 6(3): 319-329.
- Samiei MH, Norouzi M, [Ravaei A](#), Behrooz M, Nazemi A. Genetic structure in anzali wetland's pike (*Esox lucius*) using microsatellite molecular method. *Journal of biodiversity and Environmental Sciences*. 2015. 6(3): 91-99.
- Jonoubi P, Salmanian AH, [Ravaei A](#). Histochemical analysis of expression pattern of CaMV 35S promoter in transgenic rapeseed (*Brassica napus* L.). *Current World Environment*. 2015. 10(1): 752-757.
- [Ravaei A](#), Heshmatipoor Z, Zahraei Salehi T, Ashrafi Tamai I, Ghane M, Derakhshanpoor J. Evaluation of Antimicrobial Activity of Three *Lactobacillus* spp. Against Antibiotic Resistance *Salmonella typhimurium*. *Advanced Studies in Biology*. 2013. 5(2):61-70.
- Norouzi M, Nazemi A, Pourkazemi M, Samiei MH, [Ravaei A](#). Population genetic structure of common kilka (*Clupeonella cultriventris*) in the South Caspian Sea coastline (Gilan Province) using microsatellite markers. *Journal of Fisheries, Islamic Azad University, Azadshahr Branch*. 2013. 7(2):69-76. (In Persian)
- Norouzi M, Nazemi A, Pourkazemi M, Samiei MH, [Ravaei A](#), Daneshvar F. Population genetic structure of common kilka (*Clupeonella cultriventris*) in the South Caspian Sea coastline (Babolsar and Anzali zone) using microsatellite markers. *Research Journal of Aquatic Organisms*. 2013. 1(3):61-69. (In Persian).
- Samiei Ardekani MH, Norouzi M, Nazemi A, [Ravaei A](#), Amirjanati A, Behruz M, Arabi Sh. Population Genetic Structure of Anzali Wetland Pike (*Esox lucius* L.) during Spawning Seasons: Spring and winter. *Journal of the First Conference of Marine and Ocean Science and Technology of Khorramshahr*. 2012.

## Presentations

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- [Longobardi P](#), Leandro G, Galvani A, [Ravaei A](#), Donghia R, Rubini M. Functional gene polymorphisms in divers with previous DCS. TRICON. 2018. Durban, South Africa.
- Capucci R, Brasile O, Graziano A, Poggi A, Bassi-Andreas R, Aleotti V, [Ravaei A](#), Khan M, Aiello V, Astolfi G, Rubini M. Maternal and embryo's MTHFR genotypes influence the risk of spontaneous abortion. 21st National congress AGORA SIMP. 2018. Catania. Italy.
- [Ravaei A](#), Jonoubi P, Salmanian AH. Histochemical analysis of expression pattern of CaMV 35S promoter in transgenic rapeseed (*Brassica napus* L.). 2<sup>nd</sup> National Conference of Applied Researches in chemistry, Biology and Geology. 2015. Tehran, Iran.
- Norouzi M, Nazemi A, Pourkazemi M, Samie MH, [Ravaei A](#), Eskandari A. Population Genetic structure of Common Kilka (*Clupeonella cultriventris*) in the South Caspian Sea (Gilan Province) Using Microsatellite Marker. International Congress on Aquaculture, AQUA. 2012. Prague, Czech Republic.
- Samiei Ardekani MH, Norouzi M, Nazemi A, [Ravaei A](#), Amirjanati A, Behruz M, Arabi Sh. Population Genetic Structure of Anzali Wetland Pike (*Esox lucius* L.) during Spawning Seasons: Spring and winter. The First Conference of Marine and Ocean Science and Technology of Khorramshahr. 2012. Khorramshahr, Iran.
- Arabi Sh, Jafar poor M, [Ravaei A](#), Samiei Ardekani MH. Frequency determination of Entrobacteriaceae causing lamb abortion in western area of Mazandaran Province. 6th Iranian Congress of Clinical Microbiology & the First International Congress of Clinical Microbiology. 2012. Mashham, Iran.
- Arabi Sh, Jafarpoor M, Samiei Ardekani MH, [Ravaei A](#). Identification and isolation of *Enterobacteriaceae* causing lamb abortion using culture and PCR methods in western Mazandaran. 2<sup>nd</sup> National Congress of Veterinary Laboratory Sciences. 2012. Semnan. Iran. (In Persian)
- Shokouhi Mostafavi SK, Memariani H, Memariani M, Shokouhi Mostafavi NS, [Ravaei A](#). Determining Antibiotic Resistance of Shigella Strains in Hospitalized Children in Different Parts of Bahrami Children's Hospital in the First Half of 1390. The 13<sup>th</sup> Iranian and the 2<sup>nd</sup> International Congress of Microbiology. 2012. Ardabil. Iran. (In Persian)

- Memariani H, Memariani M, Shokouhi Mostafavi NS, , [Ravaei A](#), Shokouhi Mostafavi SK. The 6 Month Study of Antibiotic Resistance of Bacteria Isolated From Children with Septicemia In Tehran. The 13<sup>th</sup> Iranian and The 2<sup>nd</sup> International Congress of Microbiology. 2012. Ardabil. Iran. (In Persian)
- Tavakol S, Aghlmandi F, Akhemi H, [Ravaei A](#). Occurrence and Prevalence of Gill Parasites of Sturgeons in Southwestern Region of the Caspian Sea. The 1st International Congress on Aquatic Animal Health Management and Diseases. 2009. Tehran, Iran.

## *Supervised Theses*

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- Ricerca di associazione tra varianti genetiche ed evoluzione da Artrite Indifferenziata ad Artrite Reumatoide. Ilaria Cestonare. 2018. University of Ferrara, Ferrara, Italy
- *MTHFR* e aborto spontaneo: studio dei polimorfismi c.677C>T e c.1298A>C nel genotipo materno ed embrionale. Giovanna Miranda Chin. 2018. University of Ferrara, Ferrara, Italy
- Effetti dei folati sulla crescita e la sopravvivenza di cellule irradiate con raggi UV-A. Federica Nardini. 2017. University of Ferrara, Ferrara, Italy

## *Educational Workshops*

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- Basic, Structure and Documentation of Quality Management System in Laboratories in Accordance with: ISO/IEC 17025:2005 (American Global Standard). 2013. Kharazmi University, Tehran, Iran.
- Webcast on Charting a Course for a Successful Research Career (By ELSEVIER) 2012. Dublin, Ireland.
- General Education of Nanotechnology. 2012. Kharazmi University, Tehran. Iran.
- PCR and Real-Time PCR Primer-Probe Design. 2010. Tarbiat Modares University, Tehran, Iran.
- How to use data from NCBI. 2010. Azad University, Tonekabon, Iran.
- Exploring Internet. 2010. Azad University, Tonekabon, Iran.
- Scientific paper writing skills in English. 2010. Azad University, Tonekabon, Iran.
- Methods in Preparing Research Proposals. 2010. Azad University, Tonekabon, Iran.
- Bioinformatics in Proteomic. 2009. Azad University, Tonekabon, Iran.

- Epigenetics' role in Genetic Syndromes. 2009. Sarem Hospital, Tehran, Iran.
- Genetics' role in Breast and Familial Ovary Cancer. 2009. Sarem Hospital, Tehran, Iran.

## *Language Proficiency*

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- **iBT TOEFL (ETS): 85**
  - ✓ Reading: 25
  - ✓ Listening: 20
  - ✓ Speaking: 17
  - ✓ Writing: 23
- **Computer-based General GRE (ETS)**
  - ✓ Quantitative: 150-155
  - ✓ Verbal: 149-146
  - ✓ Analytical writing: 3-3
- **Italian**
  - ✓ A2
- **Azerbaijani**
  - ✓ Native
- **Persian**
  - ✓ Native

## *Computer Skills*

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- **International Computer Driving Licence (ICDL)**

## *Scientific Membership*

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- Young Researcher's Club



- Iranian Genetic Society
- Iranian Biology Society
- Plant Sciences Society of Kharazmi University

## *References*

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- Prof. Michele Rubini  
Medical Genetics Unit, Department of Biomedical and Specialty Surgical Sciences,  
University of Ferrara, Ferrara, Iran.
  
- Prof. Parissa Jonoubi  
Department of Biology, Faculty of Biological Sciences, Kharazmi University, Tehran,  
Iran.
  
- Prof. Saeed Irian  
Department of Cellular and Molecular Biology, Faculty of Biological Sciences,  
Kharazmi University, Tehran, Iran
  
- Prof. Mohammad Tahmaseb  
Department of Genetics, Faculty of Biological Sciences, Kharazmi University, Tehran,  
Iran