

I *Guldal INAL GULTEKIN*

Research interests

For the last 10 years, I have studied the genetics underlying rare neuromuscular disorders, diabetes, cardiovascular diseases and urinary bladder and leiomyosarcoma cancer pathways, using molecular and genetic techniques and bioinformatic analytic expertise. I recently designed a molecular test to identify disease-causing mutations of McArdle patients in Turkey (Patented 2018). I have expertise in bioinformatics analysis [including but not limited to, SIFT, STRING, GO terms analysis, ExPaSy Swiss-Model], and in seminar organization (I have been part of the leading team that organise bi-annual bioinformatic workshops in the Istanbul University Aziz Sancar Institute of Experimental Research (Turkey) between 2014-2017). I am interested in genomics and transcriptomics studies to understand the genetic and protein background of human pathologies in term of identifying mutations, polymorphisms, next generation sequencing (gene specific sequencing or at a greater aspect whole genome) and validation of these mutations with functional studies. I have experience in designing and pursuing in-vitro studies on stem cells and flow cytometry techniques [sabbatical in LMU, Germany (2004)].

Education

Associate Professor: Medical Physiology (17/03/2017)

PhD: Veterinary Medicine Department of Physiology (20/10/2001- 25/12/2007)

Undergraduate Degree: Veterinary Medicine (20/06/2000- 01/09/1995)

Experience

1. For the last 10 years, I have studied the genetics underlying rare neuromuscular disorders, diabetes, cardiovascular diseases and urinary bladder and leiomyosarcoma cancer pathways, using molecular and genetic techniques and bioinformatic analytic expertise (2010 -2020).

2. Istanbul Okan University, Faculty of Medicine, Department of Physiology (2017 - present): I have been teaching medical physiology since 2011, and in the last three years, due to my new post at Okan University; I have been practicing mostly teaching of medical physiology to in the Faculty of Medicine in (Turkish and English programs, 1st year and 2nd year medical students), Faculty of Dentistry (Turkish and English programs, 2nd year dentistry students) and finally at the Faculty of Health Sciences, Nutrition and Dietetics English Program (1st year students)

3. Istanbul University Aziz Sancar Institute of Experimental Research (Turkey) (2011-2017): I recently designed a molecular test to identify disease-causing mutations of McArdle's disease patients in Turkey (Patented 2018) (project 2013-2015, 24 months).

4. My expertise in bioinformatics analysis [including but not limited to, SIFT, STRING, GO terms analysis, ExPaSy Swiss-Model], and in seminar organization. I have been part of the leading team that organise bi-annual bioinformatic workshops in the Istanbul University Aziz Sancar Institute of Experimental Research (Turkey) between 2014-2017.

5. UPENN, School of Veterinary Medicine, Department of Clinical Genetics (2010-2011, 12 months): Following my PhD, I completed a one year post-doc fellowship at UPENN, School of Veterinary Medicine, Department of

Clinical Genetics, at PENNGen laboratory, I was responsible for research of current lab work, writing research papers for conferences and journals, with my PI Prof. Dr. Urs GIGER, DVM, ACVIM, ECVIM.

6. Ludwig Maximilian University Medical School, Research Laboratory of Haematology, Munich, Germany (2004, 6 months) During my sabbatical before my PhD, I gained experience in-vitro techniques and manipulation on stem cells and flow cytometry studies, under the supervision of Prof. Dr. Hans KOLB, MD, PhD

7. Istanbul University Veterinary Faculty Department of Physiology (2001-2010): Research assistant, post doc after 2007, responsible in research in the department with other peers and teaching. During my PhD I have implemented the animal blood bank, and produced blood products for dogs, I have build-up a voluntary blood donation program. I continued to organise voluntary blood donation days for dogs, and creating a non-profit 'dogs helping dogs' initiative until I left for my post-doc fellowship at UPENN.

Contact information

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