



## Roohallah Nakhaei Sistani

Assistant Professor

College: Faculty of Chemistry

Department: Cell and Molecular Biology

### Assistant Professor

Molecular Genetics, University of Kashan, Kashan, Iran, 2013-Now

Field of interest: **Biology of morphine addiction, miRNAs, Cancer biology, Herbal medicine, Bioinformatics.** MicroRNAs are small RNA molecules which regulate many biological processes, including development, cancer, and also addiction. And Bioinformatics, in my opinion, is a tool to explain many aspects of molecular biology, and unraveling neglected data, especially mass data. Iran has a great history of medicine based on herbs and working on herbs is promising for incurable diseases.

### Ph.D

Molecular Genetics, Tarbiat Modares University, Tehran, Iran, 2008-2013.

During my Ph.D., I was working on microRNAs involving in morphine response in BE-2-C neuronal cell line as a model for molecular events happening in cells in the process of opioid addiction. Our data analysis indicates many biological pathways which could be involved in this process.

### Master of Science

Molecular Genetics, Tarbiat Modares University, Tehran, Iran, 2002-2005.

Have you ever heard about DIAPOPS. This is a PCR-based technique which does not need for agarose gel electrophoresis. It uses a probe and enzymatic reaction for visualizing PCR products. I used this technique to detect fastidious adenoviruses in stool samples in my Ms.c.

## Bachelor of Science

Plant Biology, Ferdowsi University, Mashhad, Iran, 1997-2002.

## Education

Degree	Graduated in	Major	University
BSc	2002	Plant Biology	Ferdowsi University of Mashhad
MSc	2005	Molecular Genetics	Tarbiat Modares University
Ph.D	2013	Molecular Genetics	Tarbiat Modares University

## Employment Information

Faculty/Department	Position/Rank	Employment Type	Cooperation Type	Grade
University of Kashan	Academic staff	Tenure Track	Full Time	8

## Papers in Conferences

1. نگار ربیعی فرادنیه، علی محمد احمدی، روح الله نخعی سیستانی، راضیه بهارلو. Investigation of serum cholesterol level in the individuals affected by obesity and correlation of it with rs2241766 and rs266729 polymorphisms of adiponectin gene ,The 4th conference of protein and peptide sciences (PPS4) ,1 - 01 05 2019, اصفهان .
2. Roohollah Nakhaei Sistani و Seyed Mahdi Sadatolhosseini.The study of the prevalence of hepatitis G virus among clients referring to Kashan Blood Transfusion Organization.3rd National conference on modern biologicalscience and technology.۱۴/۵/۱۱.
3. Roohollah Nakhaei Sistani و Marzieh Salehi Siavashani.Designing a PCR-based system to identify the HLA-DQB1 \* 03 allele in a sample population from Tehran.3rd National conference on modern biologicalscience and technology.۱۴/۵/۱۱.
4. Roohollah Nakhaei Sistani و Marzieh Salehi Siavashani.The molecular mechanism of acid resistance in human pathogens.The first National Congress of Paramedical Students.۱۶ ۳ ۳.
5. Roohollah Nakhaei Sistani و Marzieh Salehi Siavashani.Dystrophin and muscular dystrophy.The first National Congress of Paramedical Students.۱۶ ۳ ۳.
6. Alireza Panahi , Roohollah Nakhaei Sistani , Majid Sadeghizadeh.The study of the effect of dendrosomic nano-curcumin on the expression levels of HSP70 heat shock protein in gastric cancer cell line AGS.The 2nd Scientific-Research Conference on Biology and Horticulture in Iran.۱۶ ۲ ۲۲.
7. Alireza Panahi , Roohollah Nakhaei Sistani , Majid Sadeghizadeh.The study of changes in the expression levels of HSP70 heat shock proteins in response to polymeric nanocurcumin in gastric cancer cell line AGS.The 2nd Scientific-Research Conference on Biology and Horticulture in Iran.۱۶ ۲ ۲۲.
8. Roohollah Nakhaei Sistani و Marzieh Salehi Siavashani.Cell Therapy, Approaches and Methods.The 2nd Conference on Molecular Medicine in the Diagnosis and Treatment of Diseases.۱۶ ۲ ۱۸.
9. Majid Tafrihi و Roohollah Nakhaei Sistani.The effect of acetone-derived extract of pomegranate fruit on cancerous cell PC-3.2nd National conference on modern biologicalscience and technology.۱۵/۱/۲۹.

10. Roohollah Nakhaei Sistani ,& Marzieh Salehi Siavashani ,Classification of HLA alleles in different populations with multiple sclerosis ,13th internationalMS Congress of Iran, Tehran, 9-11 November 2016 ,2016 11 9.
11. Alireza Panahi , Roohollah Nakhaei Sistani , Majid Sadeghizadeh ,Analysis of the expression of heat shock protein Hsp90 in response to polymeric nano-cucrcumin on gastric cancer cell line (AGS) ,13th conference on biophysical chemistry ,2015/5/26.

## Papers in Journals

---

1. Majid Tafrihi ,& Roohollah Nakhaei Sistani,E-Cadherin/ $\beta$ -Catenin Complex: A Target for Anticancer and Antimetastasis Plants/Plant-derived Compounds,Nutrition and Cancer,2017.
2. Seyed Hosseini E et al.,Studies on combination of oxaliplatin and dendrosomal nanocurcumin on proliferation, apoptosis induction, and long non-coding RNA expression in ovarian cancer cells,Cell Biology and Toxicology,2018/11/28,ISI, SCOPUS.
3. Roohollah Nakhaei Sistani , Majid Sadeghizadeh , Bahram Mohammad Soltani,Identifying microRNAs relating to morphine response in BE (2)-C cell line by microRNA profiling,Proceedings of the National Academy of Sciences, India Section B: Biological Sciences,2017.
4. با بیماری HLA-DQB1\*<sup>03</sup> مرضیه صالحی سیاوشانی,روح الله نخعی سیستانی,علی رضا پناهی,بررسی ارتباط گروه آلتی ,در تهران,زیستفناوری مدرس,۱۴۰۱/۰۲/۰۲,MS (ISI).
5. با بیماری HLA-DQB1\*<sup>03</sup> مرضیه صالحی سیاوشانی,روح الله نخعی سیستانی,علی رضا پناهی,بررسی ارتباط گروه آلتی ,در تهران,زیستفناوری مدرس,۱۴۰۱/۰۲/۰۲,MS (ISI).
6. فاطمه صباحیان بیدگلی,اباصلت حسین زاده کلاگر,مجید تفریحی,روح الله نخعی سیستانی,Association between PON1-rs662 Gene Polymorphism and Diabetic Retinopathy in Population of the Qom, Iran,Avicenna Journal of Medical Biotechnology,Vol. 15,pp. 253,2023 09 13,SCOPUS ,ISC ,PubMed.
7. نگار ربیعی فرادنیه,روح الله نخعی سیستانی,علی محمد احمدی,Screening rs2241766 Polymorphism as a Susceptibility Index Parameter in Obese Patients with a High Level of Cholesterol,Journal of Genetic Resources (J Genet Resour),Vol. 8,pp. 198,2022 08 23,ISC.
8. نگار ربیعی فرادنیه,روح الله نخعی سیستانی,علی محمد احمدی,رهام بھارلو,EVALUATION OF THE CORRELATION BETWEEN SERUM LIPID CHARACTERISTICS OF OBESE SUBJECTS AND ADIPOQ GENE RS266729 POLYMORPHISM IN CHAHARMAHAL AND BAKHTIARI PROVINCE OF IRAN,Journal of Current Biomedical Reports,Vol. 1,pp. 1,2020 12 08,ISC.
9. مهدی عبود,روح الله نخعی سیستانی,موسى نیما مژر الجعفری,علا عبدالحسین رسول,هاشم علی عبدالامر ,Prevalence and Risk Factors of Hepatitis B among Blood Donors in Al-Najaf Governorate,Biosciences Biotechnology Research Asia,Vol. 17,pp. 133,2020 04 10,SCOPUS.
10. الهه سید حسینی,مرضیه علیزاده زایری,صادق باشا شاه,روح الله نخعی سیستانی,مجید صادقی زاده,حامد حداد ,Studies on combination of oxaliplatin and dendrosomal nanocurcumin on proliferation, apoptosis induction, and long non-coding RNA expression in ovarian cancer cells,CELL BIOL TOXICOL,Vol. 33,pp. 1,2018 11 11.
11. Roohollah Nakhaei Sistani و Seyed Mahdi Sadatolhosseini,The designation of PCR test to detect hepatitis B virus and evaluate the performance of this test in screening applicants of blood transfusion organization,Journal of Cellular and Molecular Researches,۲۰۱۷.
12. Sheida Ilkhanizadeh , Roohollah Nakhaei Sistani , Majid Sadeghizadeh , Ghasem Ahangari,Analysis of long-term treatment of Mu opioid receptors agonists effect on Dnm1L and Rab22a expression in HEK293 Flp-In MOP YFP,Pathobiology research,۲۰۱۷.
13. Majid Tafrihi و Roohollah Nakhaei Sistani,Effect of acetone-derived pomegranate extract on the expression of E-cadherin and  $\beta$ -catenin proteins in PC-3 cells,Journal of Cellular and Molecular Researches,۲۰۱۵.
14. Najmeh Ranji و سایر,MicroRNAs Signature in IL-2-Induced CD4+ T Cells and Their Potential Targets,Biochemical genetics,۲۰۱۵.
15. Alireza Panahi , Roohollah Nakhaei Sistani , Majid Sadeghizadeh,Evaluation of apoptosis induction

on gastric cancer AGS cells made by polymer Nano curcumin.Police medicine,۱۴(۲).

16. Roohollah Nakhaei Sistani , Majid Sadeghizadeh , Bahram Mohammad Soltani.Analysis of the Effect of Chronic Morphine Treatment on miRNA Profile and Introduction of the MAPK Pathway as the Target of Differentially Expressed miRNAs.Pathobiology resaerch,۱۳(۲).

17. Roohollah Nakhaei Sistani , Hadi Shirzad , Mojtaba Saadati.Inverted metabolic engineering of *E. coli* to produce PHB and simplifying of lysis process, using gene E from phage PhiX174.Journal of Army University,۱۰(۲).

18. Alireza Panahi et al.,Dendrosomal Nanocurcumin Induces Changes in the Expression Levels of Heat Shock Proteins in the AGS Cell Line: Cellular Tolerance or Smart Apoptosis Induction,biomacromolecular journal,2017.

19. Mohammad Javad Dehghan Esmatabadi et al.,Up-regulation of miR-21 decreases chemotherapeutic effect of dendrosomal curcumin in breast cancer cells,Iranian journal of basic medical sciences,2017.

20. Roohollah Nakhaei Sistani et al.,Detection of types 40 and 41 adenoviruses in stool samples of diarrheal children by solid phase PCR,Iranian journal of biotechnology,2007.