

Kambiz Gilany, Ph.D.

دکتر کامبیز گیلانی

Nationality: Iranian (Danish)

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Co-Founder of Parsian BioTech: <http://parsianbiotech.com/en/>

Objective:

Proteomics, Metabolomics, Bioinformatics, Clinical Biochemistry, Clinical Medicine, Personalized/Precision Medicine (Pharmacogenetics, Pharmacoproteomics and Pharmacometabolomics), Male & Woman Infertility.

Summary of qualifications:

Mass spectrometer: MALDI-TOF/TOF-MS Applied Biosystem 4700, ESI-QTOF-II (Micromass), LCQ-DECA, Q-Trap 4000, GC-MS,

Optical spectroscopy: FT-IR, Raman spectroscopy

Gel electrophoresis: 1D SDS-PAGE, 2DE

HPLC: Micro- and Nano flow rate, Column material: C₄, C₈, C₁₈ reverse phase, SCX strong cation exchanger

Immunology techniques: western blotting, flow cytometry

Bioinformatics: Masslynx, Mascot, ProFound, GPMAW, Blastp, DAVID, PANTHER, PIGOK, MATLAB

Computer skills: Proficient in the use of MS office, Windows XP and internet

Education:

June 2003- Nov. 2008: **Ph. D.** In Science, Biomedicine. University of Antwerp, Antwerp, Belgium. Thesis: "Application of mass spectrometry-based proteomics techniques for protein characterization and study of hypoxia".

Sep. 2000-June 2003: **M. Sc.** In Applied Mathematics and Molecular and Cell Biology. University of Southern Denmark, Odense, Denmark. Thesis: "Proteome analysis of Bleomycin induced pulmonary fibrosis in mice".

Sep. 1996- Dec. 1999: **B. Sc.** In Molecular and Cell Biology, University of Southern Denmark, Odense, Denmark. Thesis: "A mathematical model for pellet growth of aspergillus oryzae based on steady state respiration rates measured in the mono-phase oxystat".

Current position:

2017- Present: Associate Professor

2012- 2016: Assistant Professor

May 2009-2012: Research Associate

Publications:

1. Untargeted metabolomic profiling of serum of endometriosis: a potential diagnostic test for endometriosis. **Kambiz Gilany**, Ahmad Mani-Varnsfaderani, Arash Minai-Tehrani , Alireza Ghassempour, Mehdi Amini. Manuscript in under preparation.
 2. Metabolomics of male infertility: a new tool for diagnostic test. **Kambiz Gilany**, Arash Minaei Tehrani, Mehdi Amini. Almost submitted.
 3. Metabolic fingerprinting of seminal plasma from non-obstructive azoospermia patients: positive TESE versus negative TESE. **Kambiz Gilany**, Naser Jafarzadeh , Ahmad Mani-Varnsfaderani, Arash Minai-Tehrani, Mehdi Amini. Submitted.
 4. The challenge of human sperm proteome. **Kambiz Gilany**, Arash Minaei Tehrani, Mehdi Amini, Niloofer Agharezaee. Under Review.
 5. Untargeted metabolomic profiling of seminal plasma of non-obstructive azoospermia men: a non-invasive detection of spermatogenesis. **Kambiz Gilany**, Ahmad Mani-Varnsfaderani, Arash Minai-Tehrani , Fateme Mirzajani, Alireza Ghassempour, Mohammed Reza Sadeghi, Mehdi Amini. Biomedical chromatography 2017. Accepted.
 6. Estimating complicated baselines in analytical signals using the iterative training of Bayesian regularized artificial neural networks. Anal Chim Acta. 2016 Oct 12;940:56-64. Ahmad Mani-Varnsfaderani, Atefeh Kanginejad **Kambiz Gilany** Abolfazl Valadkhani.
 7. Two-Way Gene Interaction From Microarray Data Based on Correlation Methods. Iran Red Crescent Med J. 2016 May 30;18(6):e24373. Hamid Alavi Majd, Atefeh Talebi, **Kambiz Gilany**, and Nasibeh Khayyer.
 8. Existence of Microchimerism in Pregnant Women Carrying a Boy! J Reprod Infertil. 2016 Jan-Mar;17(1):64-5. Arash Minaei Tehrani, Mehdi Amini, **Kambiz Gilany**.
 9. Metabolomics: a state-of-the-art technology for better understanding of male infertility. Arash Minaei Tehrani, Naser Jafarzadeh, **Kambiz Gilany**. Andrologia. 2016 Aug;48(6):609-16.
 10. Exploring the human seminal plasma proteome: an unexplored gold mine of biomarker for male infertility and male reproduction disorder. J Reprod Infertil, 16(2): 61-71, Apr-Jun 2015. **Kambiz Gilany**, Arash Minaei Tehrani, Elham Savadi-Shiraz, Hassan Rezadoost, Niknam Lakpour.
 11. Metabolomics fingerprinting of the human seminal plasma of unexplained infertile men: a need for a novel diagnostic biomarkers. Mol Reprod Dev., 82(3): 150, Mar 2015. Naser Jafarzadeh, Ahmad Mani-Varnsfaderani, Arash Minai-Tehrani, Elham Savadi-Shiraz, Mohamad Reza Sadeghi, **Kambiz Gilany**.
 12. Nonparametric correlation coefficient methods in gene interactions form microarray data. IJAPBS, 4(1): 38-46, Jan. 2015. Hamid Alavi Majd, Atefeh Talebi, **Kambiz Gilany**, Nasibeh Khayyer.
 13. Nonparametric correlation coefficient methods to constructing Three-way gene interactions in microarray data. IJAPBS, 4(1): 65-70, Jan 2015. Hamid Alavi Majd, Atefeh Talebi, **Kambiz Gilany**, Seyyed-Mohammad Tabatabaei.
 14. Proteomics and Traditional Medicine: New Aspect in Explanation of Temperaments. Forsch Komplementmed, 21(4): 250-3, 2014. Mohieddin Jafari, Hassan Rezadoost, Mehrdad Karimid, Mehdi Mirzaie, Mostafa Rezaie-Tavirani, Mahvash Khodabandeh, Gholamreza Kordafsharid, Nafiseh Abbasian, Payman Nickchi, **Kambiz Gilany**, Alireza Ghassempour.
 15. Fourier Transform Infrared Spectroscopy, a potential technique for noninvasive detection of spermatogenesis? Avicenna J Med Biotechnol 6(1): 47-52, January-March 2014. **Kambiz Gilany**, Roudabeh Sadat Moazeni Pouracil, Mohammad Reza Sadeghi.
 16. Metabolomics fingerprinting of the human seminal plasma of asthenozoospermic patients. Mol Reprod Dev. 81(1):84-6, Jan 2014. **Kambiz Gilany**, Roudabeh Sadat Moazeni Pouracil, Naser Jafarzadeh, Elham Savadi-Shiraz.
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17. Proteomics a Key Tool for a Better Understanding of Endometriosis. *Journal of Paramedical Science* 2(3): 51-58, Fall 2011. Bi bi Fatemeh Nobakht Motlagh Ghochani, **Kambiz Gilany**
 18. The profile of human sperm proteome: a minireview. *Journal of Reproduction and Infertility*. 12(3): 193-199, Fall 2011. **Kambiz Gilany**, Niknam Lakpour, Mohtaram Vafakhah, Mohammad Reza Sadeghi.
 19. Proteome analysis of mouse brain exposed to chronic hypoxia. *Cell Journal* 12(4): 503-510, Winter 2011. **Kambiz Gilany**, Maarten Aerts, Sylvia Dewilde, Bart Devreese, Luc Moens, Mohtaram Vafakhah.
 20. Hypoxia: a review. *Journal of Paramedical Science* 1(2): 40-58, 2009. **Kambiz Gilany**, Mohtaram Vafakhah.
 21. Mass spectrometry-based proteomics in the life sciences: review. *Journal of Paramedical Science*. 1(1):33-59, 2009. **Kambiz Gilany**, Luc Moens, Sylvia Dewilde.
 22. Effects of selenite and tellurite on growth, physiology and proteome of a moderately halophilic bacterium. *J Proteome Res*. 2009 Jun;8(6):3098-108.. Mahboobeh Kabiri, Mohammad Amoozegar, Mohammadsharif Tabebordbar, **Kambiz Gilany** and Ghasem Hosseini Salekdeh.
 23. A comparative proteome approach to decipher the mechanism of rice adaptation to phosphorous deficiency. *Proteomics* 2009, 9, 159–170. Sepideh Torabi, Matthias Wissuwa, Manzar Heidari, Mohammad-Reza Naghavi, **Kambiz Gilany**, Mohammad-Reza Hajirezaei, Mansoor Omidi, Bahman Yazdi-Samadi, Abdelbagi M. Ismail, Ghasem Hosseini Salekdeh.
 24. The hemoglobins of the trematodes *Fasciola hepatica* and *Paramphistomum epiclitum*: a molecular biological, physico-chemical, kinetic, and vaccination study. *Protein Sci*. 2008 Oct;17(10):1653-62. Dewilde S, Ioanitescu AI, Kiger L, **Gilany K**, Marden MC, Van Doorslaer S, Vercruyse J, Pesce A, Nardini M, Bolognesi M, Moens L.
 25. The proteome of the human neuroblastoma cell line SH-SY5Y: An enlarged proteome. *Biochim Biophys Acta-protein & proteomics*. 1784 (2008): 983-985. **Kambiz Gilany**, Roos Van Elzen, Kim Mous, Edmond Coen, Walter Van Dongen, Stefaan Van Damme, Kris Gevaert, Evy Timmerman, Joel Vandekerckhove, Sylvia Dewilde, Xaveer Van Ostade and Luc Moens.
 26. The role of the S1 binding site of carboxypeptidase M in substrate specificity and turn-over. *Biochim Biophys Acta*. 2007 Feb;1774(2):267-77. Deiteren K, Surpateanu G, **Gilany K**, Willemsse JL, Hendriks DF, Augustyns K, Laroche Y, Scharpe S, Lambeir AM.
 27. The nerve hemoglobin of the bivalve mollusc *Spisula solidissima*: molecular cloning, ligand binding studies, and phylogenetic analysis. *J Biol Chem*. 2006 Mar 3;281(9):5364-72. Dewilde S, Ebner B, Vinck E, **Gilany K**, Hankeln T, Burmester T, Kreiling J, Reinisch C, Vanfleteren JR, Kiger L, Marden MC, Hundahl C, Fago A, Van Doorslaer S, Moens L.
 28. Regulation of ompA mRNA stability: the role of a small regulatory RNA in growth phase-dependent control. *Mol Microbiol*. 2005 Dec;58(5):1421-9. Rasmussen AA, Eriksen M, **Gilany K**, Udesen C, Franch T, Petersen C, Valentin-Hansen P.
 29. P2Y(12) receptor signalling towards PKB proceeds through IGF-I receptor cross-talk and requires activation of Src, Pyk2 and Rap1. *Cell Signal*. 2006 Aug;18(8):1169-81. Van Kolen K, **Gilany K**, Moens L, Esmans EL, Slegers H.
 30. Allosteric Regulation and Temperature Dependence of Oxygen Binding in Human Neuroglobin and Cytoglobin. *J Biol Chem*. 2004 Oct 22;279(43):44417-26. Angela Fago, Christian Hundahl, Sylvia Dewilde, **Kambiz Gilany**, Luc Moens, and Roy E. Weber.
 31. Kinetic investigation of human dipeptidyl peptidase II (DPPII)-mediated hydrolysis of dipeptide derivatives and its identification as quiescent cell proline dipeptidase (QPP)/dipeptidyl peptidase 7 (DPP7). *Biochem. J.* (2005) 386 (315–324). Marie-Berthe Maes, Anne-Marie Lambeir, **Kambiz Gilany**, Kristel Senten, Pieter Van Der Veken, Barbara Leiting, Koen Augustyns, Simon Scharpe and Ingrid De Meester.
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Award:

Best researcher of the Avicenna Research Institute of the year 2016.

Teaching experience:

Mass spectrometry-based Proteomics for Ph.D. student at Shahid Beheshti University, Tehran, Iran.

Proteomics for beginner for Ph.D. student at Iran University of Medical Sciences, Tehran, Iran.

Oral Presentation:

8th International Conference and Exhibition on Metabolomics & Systems Biology. Singapore, May 08-10, 2017. Title of talk: "Metabolomics study of human seminal plasma of infertile male".

Sharif University of Technology, Departments of chemistry, 7/11/2016. Title of talk: "Metabolomics- Money, Fertility and Oil! What is the common factor?".

University of Isfahan, Department of chemistry, 5/12/2012. Title of talk: "Show me the money: System Biology".

The Second congress of Medical Proteomics of Iran, 27-28/10/2010. Title of talk: "The proteome of the human neuroblastoma cell line SH-SY5Y: An enlarged proteome".

The Second Iranian Proteomics Congress, 23-24/4/2009. Title of talk: "Application of MS-based proteomics for protein characterization and the study of hypoxia".

The First congress of Medical Proteomics of Iran, 20/2/2006. Title of talk: "The proteome of a human neuronal cell type obtained by different approaches".

References:

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Languages:

Persian, Danish, English, German (at novice level), understand Norway and Swedish.

Hobbies:

Sport, Travel, Movie, Music, Reading book (as much as possible)
