# Curriculum Vitae of Nasrollah Rezaei-Ghaleh

#### **Personal information:**

Born in 1973; Mazandaran, Iran.

Married; My spouse is now a M.A. student of women studies.

## Language:

Mother tongue: Persian; foreign language: English (proficient); Language to communicate with computers: C/C++ (Fluent).

#### **Education:**

- Entered in Tehran University of Medical Sciences in 1991; Graduated as MD in 1998.
- Entered in Institute of Biochemistry and Biophysics (IBB), University of Tehran in 2001 as a PhD candidate; Now conducting the PhD thesis under the supervision of Dr. M. Nemat-Gorgani (professor of biochemistry at IBB and the research associate in Stanford university) and Dr. A.A. Moosavi-Movahedi (Professor of Biophysics at IBB).

# **Memberships:**

- 1- Member of European Society of Mathematical and theoretical Biology (www.esmtb.org)
- 2- Member of Society for Mathematical Biology (<u>www.smb.org</u>)
- 3- Member of a bio-complexity work group in the Complex system research center in Khaje-Nasir Technical University (<a href="http://alborz.kntu.ac.ir/~ccsr/CAgroup.htm">http://alborz.kntu.ac.ir/~ccsr/CAgroup.htm</a>)

#### **Honors:**

- 1- In the nation-wide exam to enter universities in 1990 (known in Iran as conquer), I got the 9<sup>th</sup> rank among all participants, the 1<sup>st</sup> rank among participants from the second educational region of country.
- 2- All medical students should pass a general examination of basic sciences after they terminate the related courses. In this exam, held in 1993, I got the 1<sup>st</sup> rank among all medical students of the country.

#### Awards:

- 1- In 2005, I was awarded a European Commission grant by the European Society of Mathematical and Theoretical Biology (www.esmtb.org) to attend the 6th European Conference on Mathematical and Theoretical Biology, Dresden, Germany.
- 2- In 2003, I was awarded the **Landahl grant** by the **Society for Mathematical biology** (<u>www.smb.org</u>) to attend the 3rd International Conference on Mathematical Biology, Dundee, Scotland.
- 3- In 2003, I was awarded a travel grant by the Mediterranean branch of Eli ILilly Company to participate in the 18th International Diabetes Federation Congress, Paris, France.

### **Publications:**

1- **Rezaei-Ghaleh N.** Signaling in biological systems: insights from communication theory. Journal of Theoretical Biology 2003;224(3):411-412.

- 2- Ghaemi M., **Rezaei-Ghaleh N.**, Sarbolouki M.N. Directed Ligand Passage Over the Surface of Diffusion-Controlled Enzymes: A Cellular Automata Model. Lecture Notes in Computer Sciences 2004;3305:719-724.
- 3- As a MD, I have been involved in a part-time collaboration with the Endocrine Research Center, Shaheed Beheshti University of Medical Sciences, so I have published some clinical papers in national and international journals. You can find some of them in http://nrcms.ir/cv/detail.asp?cvusername=nrezaie.

# **International Congresses and Conferences:**

- 1- Rezaei-Ghaleh N., Ghaemi M., Sarbolouki M. N. Random walk of ligand over the random surface of enzyme: implications for diffusion-controlled enzymes. Oral presentation in the sixth European Conference in Mathematical and Theoretical Biology, Dresden, Germany, 2005.
- 2- Rezaei-Ghaleh N., Moshayedi P. The diffusion coefficient dependence on concentration implies novel chemotactic behavior of cell populations. Oral presentation in the 3rd international conference on Computational and Mathematical Population Dynamics (CMPD), Trento, Italy, 2004.
- 3- Rezaei-Ghaleh N., Ghaemi M., Sarbolouki M.N. A cellular automata model of ligand passage over the surface of diffusion-controlled enzymes. Poster presentation in the 5th International Conference on Biological Physics (ICBP), Gothenburg, Sweden, 2004.
- 4- Ghaemi M., Rezaei-Ghaleh N., Sarbolouki M.N. Directed ligand passage over the surface of diffusion-controlled enzymes: a cellular automata model. Poster presentation in the Sixth International conference on Cellular Automata for Research and Industry conference, Amsterdam, Netherlands, 2004.
- 5- Rezaei-Ghaleh N., Moshayedi P., Banaei-Moghadam A. A diffusion-limited aggregation model for the morphology and plasticity of neuritis. Poster presentation in the 4th Forum of European Neuroscience Societies (FENS), Lisbon, Portugal, 2004.
- 6- Rezaei-Ghaleh N. Biological control systems with negative steady-state error: How can they be stable? Poster presentation in the 3rd International Conference on Mathematical Biology, Dundee, Scotland, 2003.
- 7- Rezaei-Ghaleh N., Siadat F., Moshayedi P., Saadat N., Azizi F. An artificial neural network approach for inpatient diabetes management by insulin administration. Poster presentation in the 18th International Diabetes Federation (IDF) congress, Paris, France, 2003.

# **National Congresses and Conferences:**

- 1- Rezaei-Ghaleh N., Moshayedi P. The noise Problem in chemotaxis. Oral presentation in the 11th Iranian Conference on Biomedical Engineering, Tehran, Iran, 2004.
- 2- Rezaei-Ghaleh N., Zahedi-Asl S. Improvement of transient-phase behavior of endocrine control systems: Modification of a mathematical model. Poster presentation in the 16th Iranian Congress of Physiology and Pharmacology, Tehran, Iran, 2003.

- 3- Rezaei-Ghaleh N., Zahedi-Asl S. Endocrine systems in the light of chaos theory. Poster presentation in the 16th Iranian Congress of Physiology and Pharmacology, Tehran, Iran, 2003.
- **4-** Moshayedi P., **Rezaei-Ghaleh N.**, Gharibzadeh S. A simple mathematical model for receptive field-based edge detection. **Poster presentation** in the 2nd **Iranian neuroscience congress**, Tehran, Iran, 2003.