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Postdoctoral Researcher

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EDUCATION

2008-2012	Ph.D., Computational biology, Ajou University, South Korea <i>Thesis: "Comparative Modeling and Functional Analysis of Toll-Like Receptor Ligand-Recognition Domains"</i>
2005-2007	MSc, Bioinformatics, University of Madras, India <i>Thesis: "In-Silico Analysis of Substrate-Specificity of Adenylation Domain in Non-Ribosomal Peptides Gene"</i>
2002-2005	BSc. Biotechnology, Bharathidasan University, India

PROFESSIONAL EMPLOYMENTS

2016-date	Postdoctoral Researcher, Department of Biological Sciences, Center for Computation & Technology, Louisiana State University, USA
2016-November	Postdoctoral Associate, Department of Medicinal Chemistry, College of Pharmacy, University of Minnesota, USA
2013-2016	Postdoctoral Researcher, Bioinformatics and Molecular Design Research Center (BMDRC), South Korea
2012-2013	Postdoctoral Researcher, Department of Chemistry, Korean Advanced Institute of Science and Technology (KAIST), South Korea

PUBLICATIONS

1. Hyeon JW, Choi J, Kim Suyeon, **Govindaraj RG**, Hwang KJ, Lee YS, An SeongSon, Lee Myung Koo, KT No (2015), Discovery of Novel Anti-Prion Compounds Using In Silico and In Vitro Approaches. *Nature. Sci. Rep.* **5**, 14944; doi: 10.1038/srep14944.
2. Durai P, **Govindaraj RG**, Choi S (2013), Structure and Dynamic Behavior of Toll-Like Receptor 2 Subfamily Triggered by Malarial Glycosylphosphatidylinositols of *Plasmodium falciparum*, *FEBS Journal*, 280: 6196–6212. doi: 10.1111/febs.12541.
3. **Govindaraj RG**, PrasannaVenkatesh, Choi S (2013), *In Silico* Approaches to Study Drug-induced Renal Toxicity, *Kidney*. 103-120, CRC Press (Book chapter).
4. **Govindaraj RG** and Choi S (2012), Molecular Modeling studies of TLRs, LAP Lambert Academic Publishing (Book chapter).

5. **Govindaraj RG**, Manavalan B, Shaerin B, Choi S (2011), Comparative Analysis of Species-Specific Ligand Recognition in Toll-Like Receptor 8 Signaling: A Hypothesis, *PLoS One* . 6(9): e25118.
6. Shaerin B, Manavalan B, **Govindaraj RG**, Choi S (2011), *In silico* Approach to Inhibition of Signaling Pathways of Toll-like Receptors 2 and 4 by ST2L, *PLoS One* 6(8): e23989.
7. **Govindaraj RG**, Manavalan B, Lee G, Choi S (2010), Molecular Modeling-based Evaluation of hTLR10 and Identification of potential ligands in Toll-Like receptor signaling, *PLoS One* 5: e12713.
8. Manavalan B, **Govindaraj RG**, Lee G, Choi S (2010), Molecular Modeling-Based Evaluation of Ankyrin Repeat Domain of I κ B ζ Dual Function in Toll-Like Receptor Signaling, *Journal of Mol, Recognition*, DOI: 10.1002.
9. Durai P, Asma Achek, Kwon HK, **Govindaraj RG**, Pannerselvam S, Choi J, KT No, Choi S, Toll-like Receptor 2 Antagonists Identified through Pharmacophore-based Virtual Screening and Experimental Validation (*Under Review in Nature.Sci.Reports*, 2016).
10. **Govindaraj RG**, Choi J, Hyeon JW, Lee Kyoung, Song Ma, Kim Suyeon, Lee Jeongmin and KT No, Structural Insight into the Anti-Prion Inhibition Mechanism of Native Prion Folding Over Misfolding (*Accepted in Chemical Biology & Drug Design*, 2016).

CONFERENCE PRESENTATIONS AND TRAINING

- 2016 Minnesota NMR Center Advanced Workshop "Protein Structure and Dynamics", University of Minnesota, USA.
- 2015 **Govindaraj RG**, Choi J, Lee Kyoung, Song Ma, KT No, Binding of Anti-Prion Promotes Native Prion-Folding Over Misfolding Revealed by an Atomistic MD simulations (**Poster**), Bioinfo "The Deep Impact: Data-driven Biology & Medicine", KSBSB, Seoul, South Korea.
- 2014 Bioinfo Seoul, "Information leads biology, Yonsei University, Seoul, South Korea.
- 2013 **Govindaraj RG**, Durai P, Choi S, Structure and Dynamic Behavior of Toll-Like Receptor 2 Subfamily Triggered by Malarial Glycosylphosphatidylinositols of *Plasmodium falciparum* (**Speaker**), 7th International Symposium on Computational Methods in Toxicology and Pharmacology Integrating Internet Resources, South Korea.
- 2013 Discovery Studio Training Program, Accelrys Korea. Insilicotech Co., Ltd, South Korea.
- 2012 Fifth Korea-Japan Seminars on Biomolecular Sciences: Experiments and Simulations, High1 Resort, South Korea.
- 2012 The 12th Korean Institute of Advanced Study (KIAS) Conference on Protein Structure and Function, KIAS Center for *In Silico* Protein Sciences, Seoul, South Korea.
- 2011 **Govindaraj RG** and Choi S, Understanding the Binding Mode and Function of Glycosylphosphatidylinositols (GPIs) Of *Plasmodium Falciparum* with TLR2 Complexes (**Poster**), International Symposium of the German Society for Biochemistry and Molecular Biology (GBM), Campus Western, Goethe University, Frankfurt, Germany.
- 2010 **Govindaraj RG** and Choi S, *In-silico* analysis of species-specific ligand recognition in Toll-like receptor 8 signaling (**Poster**), Annual Joint Conference on Systems Biology, Columbia University, New York, USA.

- 2010 **Govindaraj RG** and Choi S, Molecular Modeling-Based Evaluation of homo and hetero-dimerization in hTLR10 signaling (**Poster**), Korean society for Molecular and Cellular Biology International Symposium, COEX, Seoul, South Korea.
- 2009 **Govindaraj RG** and Choi S, Structure analysis of ligand-induced homo-dimerization in Toll-like receptor 9 signaling (**Poster**), International Symposium on recent trends in Macromolecular Structure and Function, Department of Crystallography and Biophysics, University of Madras, Chennai, India.
- 2008 Indo-UK Seminar On Hepatitis HIV/AIDS & Health Education” (Sponsored by British Council Division-Chennai at University of Madras, Chennai), Chennai, India.
- 2007 **Govindaraj RG**, Computational Approach for Identifying Reductase Domain in NRPS System (**Best presentation Award**), BioMotif-07 Symposium, Bioinformatics Division, and Department of Biotechnology. Bharathiyar University, Coimbatore, India.
- 2006 BioMotif-06 Symposium, Bioinformatics Division, and Department of Biotechnology. Bharathiyar University, Coimbatore, India.
- 2005 Training in Analytical Methods in Grain Processing Technology, Paddy Processing Research Center, (Under the Ministry of Food Processing Industries, Government of India), Thanjavur, India.
- 2003 Diploma in Computer Application, CGI Institute, Thanjavur, India.

PROFESSIONAL ACTIVITIES

Manuscripts Review:

Journal of Biomolecular Structure and Dynamics (1), Toxicological Science (1), Archives in Pharmaceutical Science (1), Plos One (3) and BioMed Research International (3).

2013 - 2015, Teaching assistance for course in Computational biology, Yonsei University, Seoul, South Korea.