

## **Mangesh** Damre

PostDoctoral Researcher | Bioinformatician

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A&S-Chemistry, CROSLEY, 301 Clifton Ct, Cincinnati OH 45221-0172





#### About Me

PostDoctoral researcher in Department of Chemistry in Univeresity of Cincinnati (Ohio, USA). I have completed my Ph.D. (11/2014-11/2018) from SISSA institute (Trieste, Italy) in Neurobiology department. My Ph.D. research was mainly focused on the homology model development of channels, membrane proteins, and their investigation through coarse-grained molecular dynamics along with the development of coarse-grained force field parameters for the small molecules. I development of coarse-grained force field parameters for the small molecules. I completed my MS (08/2011-06/2013) in PharmacoInformatics discipline from NIPER (Mohali, India). During MS, I dealt with different techniques like Homology Modelling, PKPD modeling, Molecular Dynamics, Molecular Docking, Pharmacophore generation, Virtual Screening and 3D QSAR benefit me to add international publications in my research profile.



#### **SKILLS**

### Core Competencies

Pharmacoinformatics Coarse-grained MD Bioinformatcs Illustartion creation Homology modeling WEB designing Molecular Dynamics

### Tools

Gromacs Modeller PYMOL Latex INKSCAPE Bash Script HTML & PHP GNUPLOT



### CONFERENCES

2018-02 | Poster Presentation in Biophysical Society, 62nd Annual meeting 2018, SanFrancisco www.linkinghub.elsevier.com/retrieve/pii/S0006349517319604

2018-02 | Poster presentation in The European Iron Club 2018, ETH Zürich IronGenes: a webserver for rare genetic disorders of Iron metabolism http://www.ironclub2018.ethz.ch/

2018-01 | Oral Presentation in Winter School Canazei 2018, Applied Bioinformatics, Verona (Italy) https://www.winterschoolbiotech2018.com/

2014-03 | Poster Presentation in 5th International DMPK (Drug Metabolism and Pharmacokinetics) Symposium.



### **ACHIEVEMENTS**

2018-02 | The Crichton Prize winner for Best Poster in The Iron Club 2018, ETH Zürich

2014-03 | Best Poster Award Winner in 5th International DMPK (Drug Metabolism and Pharmacokinetics) Symposium.



























### PostDoctoral Researcher | 2019/02 - Present

- A&S-Chemistry, CROSLEY, 301 Clifton Ct, Cincinnati OH 45221-0172
- \* Modeling and simulation of biological macromolecules.

#### Bioinformatician | 2014/11 -2018/11 (**•**)

- SISSA, Via Bonomea 265, 34136, Trieste, Italy 34136 (Trieste, Italy)
- \* Modeling and simulation of CNGA1 ion channel

### Visiting PhD Student | 2016/12 -2018/11

- University of Verona, Department of Biotechnology, Ca' Vignal 1, Strada Le Grazie, 15 I-37134 Verona
- \* Bioinformatics and simulation studies of membrane proteins Junior Research Fellow | 2013/08 - 2014/03
- NIPER, National Institute of Pharmaceutical Education and Research, S.A.S. Nagar, Mohali. Panjab. 160062



### PhD student | 2014/11 -2018/11

- SISSA, Via Bonomea 265, 34136, Trieste, Italy
- \* Modeling and simulation of CNGA1 ion channel

### MS Scholar (Pharmacoinformatics) | 2011/08 -2013/06

NIPER, National Institute of Pharmaceutical Education and Research, S.A.S. Nagar, Mohali. Panjab. 160062

### Bachelor of pharmacy | 2007/06 -2011/08

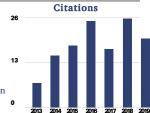
• Government College of Pharmacy Amravati, Maharashtra. 444601

### **METRICS**









### WEB SERVERS UNDER DEVELOPMENT

- IronGenes | Genes and Proteins of iron related genetic diseases server designed by University of Verona.
- MERMAID | Martini Coarse Grained Membrane Protein Dynamics

### REFERENCES

### Prof. Ruxandra Dima

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### Prof. Alejandro Giorgetti

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### **Publications under preparation**

Gating Mechanism Investigation in Homotetramer CNGA1 Ion Channel by Coarse-Grained Molecular Dynamics Simulation MV Damre, A Giorgetti, V Torre

- IronGenes: Genes and Proteins of iron related genetic diseases server MV Damre, A Marchetto, A Giorgetti
- **(•)** Molecular insight of CB1 receptor by Coarse-grained molecular dynamics simulation MV Damre, A Tocci, A Giorgetti, E Dainese



### **Publications**

2019-05 (IF: 11.56)	•	MERMAID web server : Martini coarsE gRained MembrAne proteIn Dynamics MV Damre, et. al. Nucleic Acids Research, 2019
2018-08 (IF: 3.687)	•	Structural prediction of the physiologically relevant form of mammalian TSPO - a key target for brain diagnosticss <b>MV Damre</b> , et. al, Int. J. Mol. Sci. 2018, 19(9), 2588
2016-04 (IF: 2.498)	•	Leucine-684: A conserved residue of an AMP-acetyl CoA synthetase (AceCS) from Leishmania donovani is involved in substrate recognition, catalysis and acetylation N Soumya, H Tandan, <b>MV Damre</b> , RP Gangwal, AT Sangamwar, S Singh <i>Gene</i> 580 (2), 125-133
2016-03	•	Overview and recent advances in QSAR studies RP Gangwal, <b>MV Damre</b> , AT Sangamwar Chemometrics Applications and Research: QSAR in Medicinal Chemistry, 1
2015-04 (IF: 1.885)	•	Structure based virtual screening to identify selective phosphodiesterase 4B inhibitors RP Gangwal, <b>MV Damre</b> , NR Das, GV Dhoke, A Bhadauriya, RA Varikoti, <i>Journal of Molecular Graphics and Modelling</i> 57, 89-98
2015-01 (IF: 2.442)	•	Biological evaluation and structural insights for design of subtypeselective peroxisome proliferator activated receptor- $\alpha$ (PPAR- $\alpha$ ) agonists RP Gangwal, <b>MV Damre</b> , NR Das, SS Sharma, AT Sangamwar <i>Bioorganic &amp; medicinal chemistry letters</i> 25 (2), 270-275
2014-11 (IF: 1.607)	•	Computational insights into the active site of human breast cancer resistance protein (BCRP/ABCG2): a similarity search approach K Khandelwal, RP Gangwal, U Singh, R Prajapati, MV Damre, Medicinal Chemistry Research 23 (11), 4657-4668
2014-05 (IF: 2.051)	•	A PPAR- $\beta/\delta$ agonist is neuroprotective and decreases cognitive impairment in a rodent model of Parkinson's disease NR Das, RP Gangwal, <b>MV Damre</b> , AT Sangamwar, SS Sharma Current neurovascular research 11 (2), 114-124
2014-04 (IF: 1.885)	•	Identification of p38α MAP kinase inhibitors by pharmacophore based virtual screening RP Gangwal, NR Das, K Thanki, <b>MV Damre</b> , GV Dhoke, SS Sharma, <i>Journal of Molecular Graphics and Modelling</i> 49, 18-24
2014-03 (IF: 3.849)	•	3D-QSAR and molecular docking studies of amino-pyrimidine derivatives as PknB inhibitors <b>MV Damre</b> , RP Gangwal, GV Dhoke, M Lalit, D Sharma, K Khandelwal, <i>Journal of the Taiwan Institute of Chemical Engineers</i> 45 (2), 354-364



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### **Publications**

Neuroprotective potential of peroxisome proliferator activated receptor-α agonist in 2014-02 cognitive impairment in Parkinson's disease: Behavioral, biochemical, and PBPK profile (IF: 3.386) D Uppalapati, NR Das, RP Gangwal, MV Damre, AT Sangamwar, PPAR research 2014 A combined pharmacophore modeling, 3D-OSAR and molecular docking study of substituted 2013-10 bicvclo-[3.3. 0] oct-2-enes as liver receptor homolog-1 (LRH-1) agonists M Lalit, (IF: 2.011) RP Gangwal, GV Dhoke, MV Damre, K Khandelwal, Journal of Molecular Structure 1049, 315-325 Structure-Based Virtual Screening and Molecular Dynamic Simulation Studies to 2013-08 **(•)** Identify Novel Cytochrome bc1 Inhibitors as Antimalarial Agents RP Gangwal, GV Dhoke, MV Damre, K Khandelwal, AT Sangamwar Journal of Computational Medicine 2013 p38 Mitogen-activated protein kinase inhibitors: a review on pharmacophore mapping 2013-05 and QSAR studies RP Gangwal, A Bhadauriya, MV Damre, GV Dhoke, AT Sangamwar (IF: 3.374)Current topics in medicinal chemistry 13 (9), 1015-1035 Identification of dual Acetyl-CoA carboxylases 1 and 2 inhibitors by pharmacophore 2013-02 based virtual screening and molecular docking approach A Bhadauriya, GV Dhoke, (IF: 2.229) RP Gangwal, MV Damre, AT sangamwar Journal of Computational Medicine 17 (1), 139-149 3D-OSAR and Molecular Docking Analysis of (4-Piperidinyl)-Piperazines as 2012-11 Acetyl-CoA Carboxylases Inhibitors U Singh, RP Gangwal, GV Dhoke, (IF: 4.008)

R Prajapati, M Damre, AT Sangamwar Arabian Journal of Chemistry 2012



### Guest Reviewer

- Scientific Reports (SREP) Nature
- Computational and Structural Biotechnology Journal (CSBJ) elsevier
- Journal of Biomolecular Screening (JBS) SAGE Journals