CURRICULUM VITAE

Gaurav A. Mehta, Ph.D.

Post-Doctoral Research fellow
Rutgers Cancer Institute of New Jersey
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EDUCATION

PhD: Department of Biochemistry and Cancer Biology, University of Toledo, College of Medicine (formerly Medical College of Ohio), Toledo, OH, USA (2010-2015). PI: Dr. Ivana de la Serna

MS**:** Biotechnology, B.K. Birla College of Arts, Science and Commerce, University of Mumbai, Mumbai, India. (2007-2009). PI: Dr. Geetha Menon

BS: Biotechnology, K.J. Somaiya College of Science and Commerce, University of Mumbai, Mumbai, India. (2004-2007).

Research and Professional Training

2016- **Postdoctoral training**, Rutgers Cancer Institute of New Jersey, NJ, USA.

- *Defining SOX4 mediated regulation of PI3K/Akt signaling in basal-like breast cancer.*
- *Identification and dissecting oncogenic role of SWI/SNF chromatin remodeling complex subunit, BRG1 in basal-like breast cancer.*

2015-2016 **Postdoctoral training**, University of Pennsylvania, PA, USA.

- *Defining the role of methyl transferase enzyme, G9a in cardiac stem cell lineage restriction.*

2010-2015 **Graduate Research**, University of Toledo, College of Medicine (formerly *Medical College of Ohio*), Ohio USA

- *Delineating the mechanism by which transcription factor, MITF and BRG1, SWI/SNF chromatin remodeling complex subunit regulate cardiac hypertrophy.*
- *Understanding the role of SWI/SNF chromatin remodeling enzymes (epigenetic modulators) in melanocyte differentiation and melanoma.*
- *Understanding the role of PRMT5 in melanocyte differentiation and melanoma.*

2009-2010 **Project Associate**, Advanced Centre for Treatment, Research and Education in Cancer (ACTREC), Tata Memorial Hospital, India

2007-2009 **Master's thesis,** Department of Biotechnology, University of Mumbai, India.

- *Study of phytochemicals, antioxidant activity and callus induction in Dendrophthoe falcate**.***

Academic and Professional Honors

2017 Gallo Award for Outstanding Research Work: Rutgers Cancer Institute of New Jersey.

2015 Prestigious Robert N. Whiteford memorial scholarship award: The University of Toledo.

2014 1st place oral presentation: Graduate Research Symposium, judged by invited keynote speaker, Dr. Mario Capecchi, 2007 Nobel Laureate at The University of Toledo.

2014 Travel award by "The Hindu temple of Toledo" to attend the Canadian Cardiovascular Congress hosted by Canadian Cardiovascular society and Heart Stroke foundation at Vancouver, Canada.

2013 1st place oral presentation: Physiology & Pharmacology Research Colloquium, Wayne State University.

2013 1st place oral presentation: Midwest Graduate Research symposium, The University of Toledo.

2013 Travel award by "PanAmerican Society for Pigment Cell Research (PASPCR)" to attend the 18th Meeting of the PASPCR at University of Wisconsin, Madison.

2008 Award for Excellence in Academic Achievement: Master of Science (M.Sc.), University of Mumbai.

2004 Award for Excellence in Academic Achievement: Guru Nanak Junior College, University of Mumbai.

Peer-Reviewed publications

1. **Mehta G.**, Tare M., Menon G., (2010). Phytochemical, Anti-Microbial and Antioxidant Evaluation of *Dendrophthoe falcata* (L.f.) Ettingsh Leaves. Indian Journal of Applied and Pure Biology. 25 (2): 285-292.
2. Marathe, H. G., **Mehta G.**, Zhang, X., Datar, I., Mehotra, A., Yeung, K. C., and de la Serna, I. L. (2013). SWI/SNF enzymes promote SOX10- mediated activation of myelin specific gene expression. PLOS ONE. 8(7): e69037.
3. Mehrotra A., **Mehta G.**, Aras S., Trivedi A., de la Serna I. (2014). SWI/SNF Chromatin Remodeling Enzymes in Melanocyte Differentiation and Melanoma. Crit Rev Eukaryot Gene Expr. 24(2): 151-61. (*Featured as the cover article*)
4. **Mehta G.**, Kumarasamy S., Wu J., Walsh A., Liu L., Williams K., Joe B., de la Serna I.L (2015). MITF interacts with the SWISNF subunit, BRG1 to promote GATA4 expression in cardiac hypertrophy. J Mol Cell Cardiol. 88: 101-110.
5. **Mehta G.**, Parker J.S., Silva G.O., Hoadley K.A., Perou C.M., Gatza M.L. Amplification of *SOX4* promotes PI3K/Akt signaling in human breast cancer (2017). Breast Cancer Research and Treatment. 162 (3): 439-450.
6. Marathe H.G., Chow D.E., Weider M., **Mehta G.**, Trivedi A., Aras S., Basuroy T., Mehrotra A., Wegner M., Pavan W.J., de la Serna, I.L. Brg1 interacts with Sox10 to establish the melanocyte lineage and to promote differentiation (2017). Nucleic Acid Research. 45 (11): 6442-6458.
7. Thomas A., Routh E.D., Pullikuth A., Jin G., Su J., Chou J.W., Hoadley K.A., Print C., Knowlton N., Black M.A., Demaria S., Wang E., Bedognetti D., Jones W.D., **Mehta G.**, Gatza M.L., Perou C.M., Page D.B., Triozzi P., Miller L.D. Tumor mutational burden is a determinant of immune-mediated survival in breast cancer (2018). Oncoimmunology. e1490854-2.

Manuscripts in Preparation

1. **Mehta G.**, de la Serna, IL. Protein Arginine methyltransferase–5 (PRMT5) promotes melanocyte differentiation.
2. Morgan E., **Mehta G.**, Zhao X., de la Serna I.L., Liu L. Ouabain induced Akt signaling is preserved in pressure-overload induced compensated hypertrophy.
3. Angus SP, Stuhlmiller TJ, **Mehta G.**, Tanioka M, Zawistowski JS, Sciaky N, Chen X, Bevill SM, He X, Rashid N, Chollett-Hinton L, Jefferys S, Hoadley KA, Parker JS, Gallagher KK, Forero A, Krop IE, Thompson AM, Murthy R, Gatza ML, Perou CM, Earp HS, Carey LA, Johnson GL. FOXA1 is a critical adaptive response determinant to targeted therapy in HER2-positive breast cancer.

Presentations

Invited Oral Presentations

1. Invited speaker at the Annual Retreat on Cancer Research in New Jersey, New Jersey. May 25, 2017. Title of the talk: "An integrated genomics approach identifies *BRG1* and *SOX4* as genetic drivers of PI3K/Akt signaling in breast cancer".
2. Invited speaker at the Canadian Cardiovascular Congress (CCC), Vancouver, Canada. October 25-28, 2014. Title of the talk: "SWISNF chromatin remodeling enzymes in transcriptional regulation of pathological cardiac hypertrophy".

3. Invited speaker at the University of Toledo, College of Medicine, OH. March 18, 2014. Title of the talk: "SWISNF chromatin remodeling enzymes in transcriptional regulation of pathological cardiac hypertrophy".
4. Invited speaker at the Physiology and Pharmacology Colloquium, Wayne State, Michigan. June 7, 2013. Title of the talk: "SWISNF chromatin remodeling enzymes in transcriptional regulation of pathological cardiac hypertrophy".
5. Invited speaker at the UT Midwest Graduate Research Symposium held at the University of Toledo, OH. March 29, 2013. Title of the talk: "SWISNF chromatin remodeling enzymes in transcriptional regulation of pathological cardiac hypertrophy".
6. Invited speaker at the 34th Annual Asilomar Chromatin and Chromosome conferences, California, December 13-16, 2012. Title of the talk: "SWISNF chromatin remodeling enzymes in transcriptional regulation of pathological cardiac hypertrophy".

Selected Poster Presentations

1. **Mehta G.**, Khella C., Angus SP, Johnson GL and Gatza ML. Amplification of *SOX4* promotes PI3K/Akt signaling in human breast cancer by regulating *TGFBR2* expression. The 2018 Annual Retreat on Cancer Research in New Jersey, May 24, 2018.
2. **Mehta G.**, Khella C., Angus SP, Johnson GL and Gatza ML. Amplification of *SOX4* promotes PI3K/Akt signaling in human breast cancer by regulating *TGFBR2* expression. American Association for Cancer Research (AACR) annual meeting, Chicago, IL, April 14-18, 2018.
3. **Mehta G.**, de la Serna IL. Protein arginine N-methyltransferase-5 (PRMT5) in melanocyte differentiation. 18th annual meeting of PanAmerican Society for Pigment Cell Research (PASPCR), University of Wisconsin, Madison, September 8-11, 2013

Editorial Board/Reviewer

2018 - Editorial board member, American Journal of Biochemistry and Biotechnology
2018 - Reviewer, Journal of Molecular and Genetic Medicine

Organizational Activities

2012 - 2013 Elected and served as the **President** of Council of Biomedical Graduate Students (CBGS).
2011 - 2012 Elected and served as the **Vice-president** of Council of Biomedical Graduate Students (CBGS).