

## NSF Biographical Sketch

**Rama Gullapalli, M.D., Ph.D.**

### Professional Preparation

Armed Forces Medical College	Medicine	MBBS (~MD), 1999
The Pennsylvania State University	Electrical Engineering	M.S., 2005
The Pennsylvania State University	Bioengineering	Ph.D., 2008
University of Pittsburgh Medical Center	Clinical Pathology	Residency, 2011
University of Pittsburgh Medical Center	Molecular Pathology	Fellowship, 2012

### Appointments

- *Assistant Professor*, Department of Chemical and Biological Engineering, 2013-present.  
University of New Mexico, NM, USA.
- *Assistant Professor*, Dept. of Pathology, 2012-present (**Tenure track** – July 2015 – present)  
University of New Mexico Health Sciences Center, NM, USA.
- *Medical Director of Biomedical Informatics*, Department of Pathology, 2012-present  
University of New Mexico Health Sciences Center, NM, USA.
- *Resident Medical Officer*, Intensive Coronary Care Unit, 1999-2001  
Yashoda Super Specialty Hospital, Hyderabad, India,
- *Clinical Intern*, South Central Railway Hospital, 1997-1998  
Hyderabad, India.

### Related Publications

- Pomo J.M., Taylor R.M., Gullapalli R.R., “Influence of TP53 and CDH1 genes in hepatocellular cancer spheroid formation and culture: a model system to understand cancer cell growth mechanics”, *Cancer Cell International*, 2016, 16:44, PMID:27303212
- Berry R.S., Gullapalli R.R., Wu J., Morris K.T., Hanson J.A., “Diffuse Glutamine Synthetase Overexpression Restricted to Areas of Peliosis in a  $\beta$ -Catenin Activated Hepatocellular Adenoma: A Potential Pitfall in Glutamine Synthetase Interpretation”, *Virchows Archiv Virchows Arch.* 2014
- Muddana H.S., Gullapalli R.R., Manias E, Butler P.J., "Atomistic simulation of lipid and DiI dynamics in membrane bilayers under tension", *Phys Chem Chem Phys.* 2011 Jan 28;13(4):1368-78. PMID: 21152516; PMCID: PMC3267629.
- Gullapalli R.R., Demirel, M., Butler, P.J., "Molecular dynamics simulations of DiI-C18(3) in a DPPC lipid bilayer", *Phys Chem Chem Phys.*, 2008 Jun 28;10(24):3548-60. PMID: 18548161; PMCID: PMC3251217.
- Gullapalli R.R., Tabouillot, T., Mathura, R., Dangaria, J., Butler, P.J., "Integrated multimodal microscopy, time resolved fluorescence, and optical-trap rheometry: toward single molecule mechanobiology", *J Biomed Opt.* 2007 Jan-Feb; 12(1):014012. PubMed PMID: 17343487;

## Other Significant Publications

- Taylor R.M., Monson T.C., Gullapalli R.R., “Influence of carbon chain length on the synthesis of fatty amine-coated iron-platinum nanoparticles”. *Nanoscale Research Letters* 2014, 9:306 PMID: 25006334
- Broehm C.J., Wu, J., Gullapalli R.R., Bocklage T., “Extraskeletal Myxoid Chondrosarcoma with a t(9;16)(q22;p11.2) Resulting in Fusion of FUS and NR4A3”, *Cancer Genetics*, 2014. Jun;207(6):276-80. doi: 10.1016/j.cancergen.2014.06.024. PMID: 25130955.
- Gullapalli R.R., Desai K.V., Santana-Santos L, Kant J.A., Becich M.J., “Next Generation Sequencing in Clinical Medicine: Challenges and Lessons for Pathology and Biomedical Informatics”, *J Pathol Inform* 2012;3:40 PMID: 23248761;
- Gullapalli R.R., Lyons-Weiler M, Petrosko P, Dhir R, Becich MJ, LaFramboise WA. Clinical integration of next-generation sequencing technology. *Clin Lab Med*. 2012 Dec;32(4):585-99. doi: 10.1016/j.cll.2012.07.005. PubMed PMID: 23078661;.
- Tabouillot, T., Gullapalli R.R., Butler, P.J., "Monitoring cellular mechanosensing using time-correlated single-photon counting", *Proceedings of SPIE Volume:6732, Advanced Photon Counting Techniques*, Nov 2006, ISBN: 0-8194-6470-8.

## Synergistic Activities

- **Associate Editor**, *BMC Cancer Journal*, (IF-3.3), 2016-Present, BioMedCentral; Translational Oncology, Systems Biology, Post-genomic Analysis and Emerging Technologies sub-group.
- Journal reviewer for *Scientific Reports* (Nature Journal), *Cancer Cell International*, *Journal of Pathology Informatics*, *Journal of Molecular Diagnostics*.
- 10 invited seminars/talks and 19 conference presentations at regional and national conferences.
- Advising/Mentoring: 1 Post-doctoral fellow, 2 undergraduate students, 3 summer undergraduate pipeline network (UPN) students, 2 research technicians, 2 medical students, 2 clinical residents and 2 clinical fellows.
- Provisional Patent Application No. 62/251,780 titled “Methods for Analyzing Microbiome of Paraffin Embedded Formalin Fixed Cancer Samples” filed on Nov 6, 2015.