CURRICULUM VITAE

NAME	POSITION TITLE
Krishna Midde	**Postdoctoral Scholar**

INSTITUTION AND LOCATION	DEGREE	MM/YY	FIELD OF STUDY
Nagarjuna University, Vijayawada, India	B.Sc	05/01	Genetics
Madras University, Chennai, India	M.Sc	05/04	Biotechnology
Stephen F. Austin State University, Texas	M.S	05/07	Biotechnology
University of North Texas HSC, Fort Worth, Texas	Ph.D.	05/13	Biochemistry and Molecular Biology

Positions and Honors

Positions

1. Research Assistant at Vijje Biotechnologies, Vijayawada, India (May 04 – May 05)
2. Research Associate at the University of Texas HSC at Tyler, Texas (May 07- May 09)
3. Postdoctoral Fellow at University of California San Diego (Current Position)

Honors and Awards

1. Chancellors award for scholarly excellence in research for the graduating class of 2013 - University of North Texas Health Science Center
2. Deans award for academic excellence in research for the graduating class of 2013 - University of North Texas Health Science Center
3. Delivered the valedictorian speech for the graduating class of 2013- University of North Texas Health Science Center

Professional Memberships

1. Associate member of the Sigma Xi – The Scientific Research Society
2. Active member of Biophysical Society (ID: 108658)
3. Active member of the American Association for the Advancement of Science (ID: 20302071)
4. Active member of the American Society for Cell Biology (ID: 96211)

Peer-reviewed Publications

1. **Midde. K**, Aznar. N, Laederich. M. B, Ma. G. S, Kunkel. M. T, Newton. A. C and Ghosh. P. Multi-modular Biosensors Reveal a Novel Platform for Activation of G Proteins by Growth Factor Receptors (2015). PNAS. In Press.
2. Lo. I, Gupta. V, **Midde. K**, Taupin. V, Lopez-Sanchez. I, Kufareva. I, Abagyan. R, Randazzo. P, Farquhar. M.G and Ghosh. P. Activation of Gai at the Golgi by GIV/Girdin Imposes Finiteness in Arf1 Signaling (2015). Dev Cell. In Press.
3. Lin. C, Ear. J, **Midde. K**, Lopez-Sanchez. I, Aznar. N, Garcia-Marcos. M, Kufareva. I, Abagyan. R and Ghosh. P (2014). Structural basis for multi-receptor signal enhancement via the metastasis-related protein GIV/Girdin. MBoC. 25:22 3654-3671.

4. **Midde. K**, Rich. R, Saxena. A, Gryczynski. I, Borejdo. J, and Das. H.K. (2014). Membrane Topology of Human Presenilin-1 in SK-N-SH Cells Determined by Fluorescence Correlation Spectroscopy and Fluorescent Energy Transfer. Cell Biochem Biophys. 70:923–932.
5. Peter Marandos and **Krishna Midde** (2014). Simulation model for combined motion of myosin cross-bridges agrees with experimental data. Front Biosci, Landmark, 19, 1398-1410.
6. Duggal. D, Nagwekar. J, Rich. R, **Midde. K**, Fudala. R, Gryczynski. I and Borejdo. J (2014). Phosphorylation of myosin regulatory light chain has minimal effect on kinetics and distribution of orientations of cross-bridges of rabbit skeletal muscle. Am J Physiol Regul Integr Comp Physiol. 306:R222-R233.
7. **K. Midde**, R. Rich, P. Marandos, R. Fudala, A. Li, I. Gryczynski and J. Borejdo (2013). "Orientation and rotational motion of cross-bridges containing phosphorylated and de-phosphorylated myosin regulatory light chain". J Biol Chem 288(10): 7012-23.
8. **K. Midde**, V. Dumka, J. R. Pinto, P. Muthu, P. Marandos, I. Gryczynski, Z. Gryczynski, J. D. Potter and J. Borejdo (2011). "Myosin cross-bridges do not form precise rigor bonds in hypertrophic heart muscle carrying troponin T mutations". J Mol Cell Cardiol 51(3): 409-18.
9. **K. Midde**, R. Luchowski, H. K. Das, J. Fedorick, V. Dumka, I. Gryczynski, Z. Gryczynski and J. Borejdo (2011). "Evidence for pre- and post-power stroke of cross-bridges of contracting skeletal myofibrils". Biophys J 100(4): 1024-33.
10. **K. K. Midde**, A. I. Batchinsky, L. C. Cancio, S. Shetty, A. A. Komissarov, G. Florova, K. P. Walker, 3rd, K. Koenig, Z. C. Chroneos, T. Allen, K. Chung, M. Dubick and S. Idell (2011). "Wood bark smoke induces lung and pleural plasminogen activator inhibitor 1 and stabilizes its mRNA in porcine lung cells". Shock 36(2): 128-37.
11. J. Borejdo, R. Rich and **K. Midde** (2012). "Mesoscopic analysis of motion and conformation of cross-bridges". In Biophysical Reviews, J. Garnier, Editor.
12. **K. Midde**, R. Rich, V. Hohreiter, S. Raut, R. Luchowski, C. Hinze, R. Fudala, I. Gryczynski, Z. Gryczynski & J. Borejdo (2012). "Rotation of myosin lever arms during isometric contraction of skeletal myofibrils ". In Skeletal Muscle: Physiology, Classification and Disease, M. Willems, Editor, Nova Science Publishers: Chichester, United Kingdom
13. R. Luchowski, M. Szabelski, P. Sarkar, E. Apicella, **K. Midde**, S. Raut, J. Borejdo, Z. Gryczynski and I. Gryczynski (2010). "Fluorescence instrument response standards in two-photon time-resolved spectroscopy". Appl Spectrosc 64(8): 918-22.
14. Z. C. Chroneos, **K. Midde**, Z. Sever-Chroneos and C. Jagannath (2009). "Pulmonary surfactant and tuberculosis". Tuberculosis (Edinb) 89 Suppl 1: S10-4.

Published Abstracts – Conference Proceedings

1. 57th Biophysical Society meeting. Philadelphia-PA, Feb 2-6, 2013. "Relaxed skeletal muscle cross-bridges containing dephosphorylated regulatory light chain are better oriented than phosphorylated ones". Biophysical Journal, vol. 104, issue 2, p. 309a.
2. 55th Biophysical society meeting. Baltimore-MD, March 5-9, 2011. "Evidence for pre- and post-power stroke of cross-bridges of contracting skeletal myofibrils". Biophysical Journal, vol. 100, issue 3, p. 309a.
3. American Journal of Respiratory and Critical Care Medicine. "Plasminogen Activator Inhibitor-1 (PAI-1) is induced by exposure to cigarette in vivo and in vitro: Role of increased PAI-1 mRNA stability". American Thoracic Society. Vol. 179, 2009/1/1

Invited Talks/Oral Presentations:

1. Myosin cross-bridges do not form precise rigor bonds in hypertrophic heart muscle carrying troponin T mutations. 56th Biophysical Society meeting. San Diego-CA, Feb 25-29, 2012.
2. Mesoscopic analysis of motion and conformation of myosin cross-bridges. Gordon Research Conference, New London-NH, July 10-15, 2011. Muscle and Molecular Motors.

Work in Progress (Manuscripts Submitted):

1. Nicolas Aznar, **Krishna Midde**, Ying Dunkel, Inmaculada Lopez-Sanchez, Yelena Pavlova, Arthur Marivin, Jorge Barbazán, Fiona Murray, Ulrich Nitsche, Klaus Peter Janssen, Ajay Goel, Miguel Abal, Mikel Garcia-Marcos and Pradipta Ghosh. Frizzled Receptors Activate Gi Proteins via Daple. ***EMBO.*** *Article Submitted*.
2. **Krishna Midde**, Nina Sun, Priyanka Mehlawat, Hatim Husain and Pradipta Ghosh. Molecular Imaging of Metastatic Potential and Resistance in Single Tumor Cells. **Science.** *In preparation*.
3. Therapeutic Effects of Cell-Permeant Peptides that Activate G Proteins downstream of Growth Factors. Gary S. Ma, Nicolas Aznar, Nicholas Kalogriopoulos, Inmaculada Lopez-Sanchez, **Krishna Midde**, Emi Sato, Ying Dunkel, Richard L. Gallo and Pradipta Ghosh. **PNAS. Re-submitted.**

Research Support/Funding

Active: Postdoctoral Fellowship (PI: Midde) July 2014 – June 2017
Agency: Susan G. Komen Award # PDF14298952 $180,000
Title: A Novel Diagnostic and Therapeutic Target for Triple Negative Breast Cancers

Completed:

1. Pre-Doctoral fellowship (PI: Midde) 01/01/2011 - 05/29/2013
Agency: American Heart Association (AHA) $ 50,000
Award #: 12PRE8730003
Title: Insight into Myofibrillar Disarray in Familial Hypertrophic Cardiomyopathy

2. Flight Attendant Medical Research Institute (FAMRI) (PI: Dr. Idell, Fellow: Midde)
Title: PAI-1 and Airway Remodeling in Passive Smoke Exposure (08/05- 05/09)

Patent: Method to Assemble, Visualize, and Measure RTK-Gαi Protein Complexes in Living Cells (SD2014-283-1)

Journal Reviewer: Molecular and Cellular Biochemistry, Scientific Research Journal - Advances in Aging Research (AAR), Biochemical and Biophysical Research Communication (BBRC), Frontiers in Biomedical Sciences, Journal of Visual Sciences (JoVE) and International Journal of Molecular Sciences (IJMS).

Journal Editor: Libertas Academica – Current developments in Chronic Obstructive and Pulmonary Disease (COPD) and Lung Injury. (***Lead Guest Editor***)

References

1. Postdoc Mentor: Pradipta Ghosh M.D. Associate Professor, Department of Medicine. University of California San Diego. (http://ghoshlab.ucsd.edu/Pages/default.aspx)
   Email: prghosh@ucsd.edu
   Phone: (858) 822-7735

2. Co-Mentor: Marilyn Farquhar Ph.D. Distinguished Professor, Cell and Molecular Medicine. University of California San Diego. (http://cmm.ucsd.edu/farquhar/Farquhar_Lab/Home_.html)
   Email: mfarquhar@ucsd.edu
   Phone: (858) 534-7711

3. Graduate Advisor: Julian Borejdo Ph.D. Professor, Molecular Biology and Immunology. University of North Texas Health Science Center.
   Email: Julian.borejdo@unthsc.edu
   Phone: (817) 735-2106