# Rajshekhar Giraddi, PhD

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## EDUCATION and RESEARCH EXPERIENCE

Postdoctoral fellow: Geoffrey Wahl lab, Salk Institute, Nov 2016 onwards FNRS Postdoctoral fellow: Université Libre de Bruxelles, Brussels, Belgium, March 2013 – Aug 2016 Scientific Officer: Cambridge Cancer Research UK Institute, Oct 2012 – Feb 2013 PhD in Oncology: University of Cambridge, UK, Oct 2008 – Oct 2012 Project assistant: Indian Institute of Science & Manipal Institute, Bangalore, India June 2006 - Sep 2008 MSc Biotechnology: Bangalore University, India, June 2004 – June 2006 BSc Biotechnology: Bangalore University, India, June 2001 – June 2004

### **RESEARCH OVERVIEW**

I have extensive experience working with mouse mammary gland biology, human breast biology and breast cancer. I have worked on a range of projects from normal mammary stem cells to cancer stem cells and intratumor heterogeneity. I have designed, implemented and managed several projects in prestigious labs and contributed to our understanding of the cellular hierarchy, lineage restrictions, properties of stem and non-stem cells of normal and cancer breast. Currently, I am working on fetal mammary stem cells, cancer stem cells, phenotypic and intra-tumour heterogeneity in breast cancer; developing mouse models, characterize clonal interactions, evolutions and drug resistance with extensive focus on single cell RNA sequencing. In the past, I have been successful in receiving government and private grants in India, England and Belgium.

#### CORE COMPETENCE

\*Epithelial biology \*Stem cells \*Cancer stem cells \*Lineage tracing \*Tumor heterogeneity \*EMT \*Mouse models \*Confocal Microscopy \*Flow Cytometry \*Routine molecular techniques \*Brainbow Mice \*Single cell techniques \*High-throughput screening \*Mouse surgeries \*In Vitro assays \*Human tissue samples \*Currently adopting CRISPR protocols

## PUBLICATIONS

(Total of 274 citations, h-index: 5)

- 1. <u>Nature</u> (2015) Vol. 525(7567). Activation of multipotency by oncogenic PIK3CA induces breast tumor heterogeneity. Van Keymeulen A, Lee MY, Ousset M, Rorive S, Brohée S, <u>Giraddi RR</u>, Wuidart A et al.
- <u>Nature Communications</u> (2015) Vol. 6(8487). Stem and progenitor cell division kinetics during postnatal mouse mammary gland development. <u>Giraddi RR</u>, Shehata M, Gallardo M, Blasco MA, Simons BD and Stingl J.
- 3. *Nature Cell Biology* (2014) Vol. 10:942-50. Mammary myoepithelial cells can acquire stem cell properties. Prater MD, Petit V, Russell I, <u>Giraddi RR</u>, et al.
- 4. <u>Breast Cancer Research</u> (2014) Vol. 16(4): 411. The influence of Tamoxifen on normal mouse mammary gland homeostasis implications for inducible lineage tracing studies. Shehata M, Amerongen RV, <u>Giraddi RR</u> and Stingl J.
- <u>PLoS ONE</u> (2009) Vol. 4(4): e5329. Phenotypic and Functional Characterization of Human Mammary Stem/Progenitor Cells in Long Term Culture. Dey D, Saxena M, Paranjape AN, Krishnan V, <u>Giraddi RR</u>, et al.

#### AWARDS and PARTICIPATION

- 1. FNRS-Televie short-term postdoctoral fellow (ULB University, Belgium)
- 2. Cancer Research UK PhD scholarship (University of Cambridge, UK): 1<sup>st</sup> among 120 international applications.
- 3. Travel fellowship winner at the prestigious RIKEN-CDB conference at Japan in addition to poster presentations at various international conferences in USA, Canada, Belgium, Germany, Switzerland, Italy and Japan.
- 4. Recipient of best poster award at an international conference on stem cells (1<sup>st</sup> among 65 posters, judged by Dr. Connie Eaves).
- 5. Presented a specific and professional report to venture capitalists for £3 million funding (team of 5) at BiotechnologyYes-BBSRC competition, UK.
- 6. Management of Technology and Innovation (MoTI) Programme, Judge Business School, University of Cambridge: Classes in Technology, Innovation, Decision Theory and Tech Marketing.
- 7. Selected participant in 3 days science communication workshop organized by BBC, Science and Cancer Research UK.