

## DR.SUCHITRA DEVI GOPINATH

### Post Doctoral Research

Stanford University, California, USA

### Ph.D

Center for Cellular and Molecular Biology, Hyderabad, India

### M.Sc. Zoology

University of Pune, Pune, India

Email : [SGOPINATH@THSTI.RES.IN](mailto:SGOPINATH@THSTI.RES.IN)



### Profile:

I am interested in understanding the problem of fetal growth restriction (FGR) that has emerged as a leading cause for infant morbidity and mortality in India. In particular, I am interested in analyzing how a specific intrauterine micronutrient such as vitamin D can affect fetal body composition, with a specific focus on skeletal muscle mass changes and consequently the effects on birth weight in neonates. Allied to this objective are basic biological questions that aim to understand molecular signaling pathways that maintain muscle mass, which upon nutrient deprivation are deregulated and can result in muscle atrophy. Another focus of my studies is to evaluate the functionality of muscle stem cells that have been exposed to an intrauterine environment deprived of vitamin D, and thereby assess how specific maternal dietary requirements configure the fetal genomic landscape.

### Publications:

**Gopinath S.D.** (2017) Inhibition of Stat3 signaling ameliorates atrophy of the soleus muscles in mice lacking the vitamin D receptor. *Skeletal Muscle* . 7:2. doi. 10.1186/s13395-017-0121-2

Biressi S\* and **Gopinath S.D.\*** (2015) The quasi parallel lives of satellite cells and atrophying muscle. *Front.Aging Neurosci.* doi:10.3389/fnagi.2015.00140 (\**co-corresponding author*).

Biressi S., Miyabara E., **Gopinath S.D.**, Carlig P., Rando T.A (2014) Wnt-TGFb2 axis regulates the fate of muscle stem cells in dystrophic muscles. *Sci Transl Med.* Dec 17;6(267):267ra176. doi:10.1126/scitranslmed.3008411.

**Gopinath S.D.**, Webb E.A., Brunet A., Rando T.A. (2014) FOXO3 promotes quiescence in adult muscle stem cells during the process of self-renewal. *Stem Cell Reports*, April 8 (2): 414-426.

**Gopinath S.D.**, Rando T.A. (2008). Stem Cell review Series: Aging of the skeletal muscle stem cell niche. *Aging Cell* Aug;7(4):590-8.

**Gopinath S.D.**, Narumiya S, Dhawan J (2007). The RhoA effector mDiaphanous regulates MyoD expression via SRF- dependent and SRF-independent pathways. *J. Cell Sci.* Sep 1;120(Pt 17):3086-98.

### Book Chapter:

**Adult stem cells in regenerative Medicine**", Gopinath S.D. (in progress). Ane Books, Pvt.Ltd. Ansari Road, New Delhi.

### Honours and Awards:

- 1) Junior Research Fellowship awarded by the Council of Scientific and Industrial Research (CSIR), India
- 2) Senior Research Fellowship awarded by the Council of Scientific and Industrial Research (CSIR), India
- 3) American Society for Cell Biology (ASCB) Predoctoral Travel Award, 2004
- 4) Innovative Young Biotechnologist (IYBA) Award-2015

5) CSIR Travel grant Award for attending Gordon Research Conference on Myogenesis in Tuscany, Il Ciocco, June 2017

**Lab Member:**

Jayesh Kumar Sevak