


# GANESH PUSAPATI

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## Present position

Senior Research Scientist, Stanford University  
06/2018 - present

## Education

07/2001 - 04/2004

B.Sc. (Biotechnology), Andhra University, India

07/2004 - 04/2006

M.Sc. (Animal Biotechnology), University of Hyderabad, India

10/2006 - 12/2010

Ph.D., University of Ulm, Germany  
Advisor: Thomas Seufferelin, M.D.

## Research Experience

01/2011 - 02/2013

Post-doc, Stanford University, United States  
Advisor: Suzanne Pfeffer, Ph.D.

03/2013 - 12/2015

Post-doc, Stanford University, United States  
Advisor: Rajat Rohatgi, M.D., Ph.D.

01/2016 - 05/2018

Research Scientist, Stanford University, United States

## Honors and Awards

06/2005 - 04/2006

Shantha Biotech Merit Scholarship

10/2006 - 12/2009

Graduate College 1041 - Molecular Diabetology and  
Endocrinology in Medicine - Ph.D. Fellowship

07/2014 - 06/2016

American Heart Association - Postdoctoral Award

## Research interest

Signal transduction cascades regulating development  
and disease

## Professional Affiliations

2008-2009

Member, American Society for Cell Biology

2010-2011

Member, American Association for Cancer Research

2013-2014

Member, American Heart Association

2015-present

Editorial Board, *Journal of Molecular Biology Research* and  
*Cancer and Clinical Oncology*

2015-present

Peer Reviewer, *Frontiers in Cell and Developmental Biology*,  
*Advances in Biochemistry*, and *Cancer Research Journal*

## Conferences and Talks

- 2007 Annual Meeting of the Graduate College 1041 - Molecular Diabetology and Endocrinology in Medicine, Germany (Talk)
- 2008 Annual Meeting of the International Graduate School in Molecular Medicine, Germany (Talk)
- 2008 Annual Meeting of the American Society for Cell Biology (Poster)
- 2009 Annual Meeting of the International Graduate School in Molecular Medicine, Germany (Talk)
- 2009 Annual Meeting of the German Society for Digestive and Metabolic Diseases (Poster)
- 2010 Annual Meeting of the American Association for Cancer Research (Poster)
- 2010 Annual Meeting of the German Society for Digestive and Metabolic Diseases (Poster)
- 2014 Keystone Symposia - Cilia, Development and Disease (Poster)
- 2018 Annual Meeting of the American Association for Cancer Research

## Publications

1. **Pusapati GV**, Krndija D, Armacki M, von Wichert G, von Blume J, Malhotra V, Adler G, Seufferlein T. Role of the second cysteine-rich domain and Pro275 in PKD2 interaction with ARF1, TGN recruitment and protein transport. *Mol Biol Cell*. 2010 21: 1011-1022
2. Azoitei N, **Pusapati GV\***, Kleger A\*, Moeller P, Kuefer R, Genze F, Wagner M, Van Lint J, Carmeliet P, Adler G, Seufferlein T. Protein kinase D2 is a crucial regulator of tumor cell-endothelial cell communication in gastrointestinal tumors. *Gut*. 2010 59: 1316-1330 (\*equal contribution)
3. Kleger A, Seufferlein T, Malan D, Tischendorf M, Storch A, Wolheim A, Latz S, Protze S, Porzner M, Proepper C, Brunner C, Katz SF, **Varma Pusapati G**, *et al*. Modulation of calcium activated potassium channels induces cardiogenesis of pluripotent stem cells and enrichment of pacemaker-like cells. *Circulation*. 2010 122: 1823-1836
4. Kleger A, Loebnitz C, **Pusapati GV**, Armacki M, Mueller M, Tuempel S, Illing A, Hartmann D, Brunner C, Liebau S, *et al*. Protein kinase D2 is an essential regulator of murine myoblast differentiation. *PLoS One*. 2011 6: e14599
5. Azoitei N, Kleger A, Schoo N, Thal DR, Brunner C, **Pusapati GV**, Filatova A, Genze F, Moeller P, Acker T, *et al*. Protein kinase D2 is a novel regulator of glioblastoma growth and tumor formation. *Neuro Oncol*. 2011 13: 710-724

Publications continued

6. **Pusapati GV\***, Eiseler T\*, Rykx A, Vandoninck S, Derua R, Waelkens E, Van Lint J, von Wichert G, Seufferlein T. Protein kinase D regulates RhoA activity via rhotekin phosphorylation. *J Biol Chem.* 2012 287: 9473-9483 (\*equal contribution)
7. Nottingham RM, **Pusapati GV**, Ganley IG, Barr FA, Lambright DG, Pfeffer SR. RUTBC2: A Rab9A effector and GTPase activating protein for Rab36. *J Biol Chem.* 2012 287: 22740-22748
8. **Pusapati GV**, Luchetti G, Pfeffer SR. Ric1/Rgp1 complex is a guanine nucleotide exchange factor for the late Golgi rab6A GTPase and an effector for the medial Golgi Rab33B GTPase. *J Biol Chem.* 2012 287: 42129-42137
9. Armacki M, Joodi G, Nimmagadda SC, de Kimpe L, **Pusapati GV**, Vandoninck S, Van Lint J, Illing A, Seufferlein T. A novel splice variant of calcium and integrin-binding protein 1 mediates protein kinase D2-stimulated tumour growth by regulating angiogenesis. *Oncogene.* 2014 33: 1167-1180
10. **Pusapati GV\***, Hughes CE\*, Dorn KV\*, Zhang D\*, Sugianto P, Aravind L, Rohatgi R. EFCAB7 and IQCE regulate hedgehog signaling by tethering the EVC-EVC2 complex to the base of primary cilia. *Dev Cell.* 2014 28: 483-496 (\*equal contribution)
11. **Pusapati GV**, Rohatgi R. Location, location, and location: compartmentalization of Hedgehog signaling at primary cilia. *EMBO J* 2014 33: 1852-1854
12. Carmi Y, Spitzer MH, Linde IL, Burt BM, Prestwood TR, Perlman N, Davidson MG, Kenkel JA, Segal E, **Pusapati GV**, Bhattacharya N, Engleman. Allogeneic IgG combined with dendritic cell stimuli induce antitumour T-cell immunity. *Nature.* 2015 521: 99-104
13. Zhao Z, Lee RT, **Pusapati GV**, Iyu A, Rohatgi R, Ingham PW. An essential role for Grk2 in Hedgehog signalling downstream of Smoothened. *EMBO Rep.* 2016 17:739-752
14. Phua SC, Chiba S, Suzuki M, Su E, Roberson EC, **Pusapati GV**, Setou M, Rohatgi R, Reiter JF, Ikegami K, Inoue T. Dynamic remodeling of membrane composition drives cell cycle through primary cilia excision. *Cell.* 2017 168:264-279
15. **Pusapati GV\***, Kong JH\*, Patel BB\*, Krishnan A, Sagner A, Kinnebrew M, Briscoe J, Aravind L, Rohatgi R. CRISPR screens uncover genes that regulate target cell sensitivity to the morphogen sonic hedgehog. *Dev Cell.* 2018 44: 113-129 (\*equal contribution)
16. **Pusapati GV\***, Kong JH\*, Patel BB, Gouti M, Sagner A, Sircar R, Luchetti G, Ingham PW, Briscoe J, Rohatgi R. G protein-coupled receptors control the sensitivity of cells to the morphogen Sonic Hedgehog. *Sci Signal.* 2018 11: eaa05749 (\*equal contribution)

## Publications continued

17. Hong SR, Wang CL, Huang YS, Chang YC, Chang YC, **Pusapati GV** *et al.* Spatiotemporal manipulation of ciliary glutamylation reveals its roles in intraciliary trafficking and Hedgehog signaling. *Nat Commun.* 2018 9:1732
18. Patel BB, Lebensohn AM, **Pusapati GV**, Carette JE, Salzman J, Rohatgi R. Discovery of gene regulatory elements through a new bioinformatics analysis of haploid genetic screens. *PLoS One.* 2019 14:e0198463

## References

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