

# Stanford

---

## Mohan Babu Budikote Venkatappa

Basic Life Research Scientist, Genetics

### Bio

---

#### INSTITUTE AFFILIATIONS

- Member, Maternal & Child Health Research Institute (MCHRI)

#### BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- Associate Editor, ESC Heart Failure (2020 - present)

### Research & Scholarship

---

#### CURRENT RESEARCH AND SCHOLARLY INTERESTS

Longitudinal deep omics profiling to understand health and disease trajectories

#### LAB AFFILIATIONS

- Michael Snyder, Snyder Lab (4/1/2021)

### Publications

---

#### PUBLICATIONS

- **A comparison of deep multiomics profiles across ethnicity, geography, and age.** *Cell*  
Barapour, N., Cao, J. Z., Wu, Y., Gupta, S., Hoopmann, M. R., Qin, R., Midha, M. K., Mireault, M., Juanes-Velasco, P., Hanson, C., Ahadi, S., Higgs, E., Baxter, et al  
2026; 189 (10): 3004-3024.e35
- **Achieving inclusive healthcare through integrating education and research with AI and personalized curricula.** *Communications medicine*  
Bahmani, A., Cha, K., Alavi, A., Dixit, A., Ross, A., Park, R., Goncalves, F., Ma, S., Saxman, P., Nair, R., Akhavan-Sarraf, R., Zhou, X., Wang, et al  
2025; 5 (1): 356
- **Wearable Devices: Implications for Precision Medicine and the Future of Health Care.** *Annual review of medicine*  
Babu, M., Lautman, Z., Lin, X., Sobota, M. H., Snyder, M. P.  
2023
- **Multi-omics profiling for health.** *Molecular & cellular proteomics : MCP*  
Babu, M., Snyder, M.  
2023: 100561
- **ApoA-I Nanotherapy Rescues Postischemic Vascular Maladaptation by Modulating Endothelial Cell and Macrophage Phenotypes in Type 2 Diabetic Mice** *Arteriosclerosis, Thrombosis, and Vascular Biology*  
Babu, M., Devi, D., Örd, T., Aavik, E., Kaikkonen, M., Ylä-Herttuala, S.  
2022
- **DNA methylation processes in atherosclerotic plaque** *ATHEROSCLEROSIS*

- Aavik, E., Babu, M., Yla-Herttuala, S.  
2019; 281: 168-179
- **A Genome-Wide Association Study of Diabetic Kidney Disease in Subjects With Type 2 Diabetes** *DIABETES*  
van Zuydam, N. R., Ahlqvist, E., Sandholm, N., Deshmukh, H., Rayner, N., Abdalla, M., Ladenvall, C., Ziemek, D., Fauman, E., Robertson, N. R., McKeigue, P. M., Valo, E., Forsblom, et al  
2018; 67 (7): 1414-1427
  - **Aggravated Postinfarct Heart Failure in Type 2 Diabetes Is Associated with Impaired Mitophagy and Exaggerated Inflammasome Activation** *AMERICAN JOURNAL OF PATHOLOGY*  
Devi, T., Babu, M., Makinen, P., Kaikkonen, M. U., Heinaniemi, M., Laakso, H., Yla-Herttuala, E., Rieppo, L., Liimatainen, T., Naumenko, N., Tavi, P., Yla-Herttuala, S.  
2017; 187 (12): 2659-2673
  - **Differential Promoter Methylation of Macrophage Genes Is Associated With Impaired Vascular Growth in Ischemic Muscles of Hyperlipidemic and Type 2 Diabetic Mice Genome-Wide Promoter Methylation Study** *CIRCULATION RESEARCH*  
Babu, M., Devi, T., Makinen, P., Kaikkonen, M., Lesch, H. P., Juntila, S., Laiho, A., Ghimire, B., Gyenesei, A., Yla-Herttuala, S.  
2015; 117 (3): 289-299
  - **Adventitial gene transfer of VEGFR-2 specific VEGF-E chimera induces MCP-1 expression in vascular smooth muscle cells and enhances neointimal formation** *ATHEROSCLEROSIS*  
Bhardwaj, S., Roy, H., Babu, M., Shibuya, M., Yla-Herttuala, S.  
2011; 219 (1): 84-91
  - **VEGF-DNC mediated angiogenesis in skeletal muscles of diabetic WHHL rabbits** *EUROPEAN JOURNAL OF CLINICAL INVESTIGATION*  
Roy, H., Bhardwaj, S., Babu, M., Lahteenpuro, J. E., Yla-Herttuala, S.  
2010; 40 (5): 422-432
  - **Intravitreal Adenoviral 15-Lipoxygenase-1 Gene Transfer Prevents Vascular Endothelial Growth Factor A-Induced Neovascularization in Rabbit Eyes** *HUMAN GENE THERAPY*  
Viita, H., Kinnunen, K., Eriksson, E., Lahteenpuro, J., Babu, M., Kalesnykas, G., Heikura, T., Laidinen, S., Takalo, T., Yla-Herttuala, S.  
2009; 20 (12): 1679-1686
  - **VEGF-E chimera gene transfer to periaortic space induces neointimal formation**  
Bhardwaj, S., Roy, H., Babu, M., Shibuya, M., Yla-Herttuala, S.  
MARY ANN LIEBERT INC.2009: 1450
  - **ROLE OF VASCULAR GROWTH FACTORS IN DIABETIC NEPHROPATHY**  
Bhardwaj, S., Roy, H., Babu, M., Ahuja, S., Yla-Herttuala, S.  
SPRINGER TOKYO.2009: 438
  - **15-lipoxygenase-1 prevents vascular endothelial growth factor A- and placental growth factor-induced angiogenic effects in rabbit skeletal muscles via reduction in growth factor mRNA levels, NO bioactivity, and downregulation of VEGF receptor 2 expression** *CIRCULATION RESEARCH*  
Viita, H., Markkanen, J., Eriksson, E., Nurminen, M., Kinnunen, K., Babu, M., Heikura, T., Turpeinen, S., Laidinen, S., Takalo, T., Yla-Herttuala, S.  
2008; 102 (2): 177-184
  - **Screening for human cationic trypsinogen (PRSS1) and trypsinogen inhibitor gene (SPINK1) mutations in a Finnish family with hereditary pancreatitis** *SCANDINAVIAN JOURNAL OF GASTROENTEROLOGY*  
Raty, S., Piironen, A., Babu, M., Pelli, H., Sand, J., Uotila, S., Nordback, I., Herzig, K.  
2007; 42 (8): 1000-1005
  - **VEGF-A, VEGF-D, VEGF receptor-1, VEGF receptor-2, NF-kappa B, and RAGE in atherosclerotic lesions of diabetic Watanabe heritable hyperlipidemic rabbits** *FASEB JOURNAL*  
Roy, H., Bhardwaj, S., Babu, M., Kokina, I., Uotila, S., Ahtialansaari, T., Laitinen, T., Hakumaki, J., Laakso, M., Herzig, K., Yla-Herttuala, S.  
2006; 20 (12): 2159-+
  - **Adenovirus-mediated gene transfer of placental growth factor to perivascular tissue induces angiogenesis via upregulation of the expression of endogenous vascular endothelial growth factor-A** *HUMAN GENE THERAPY*  
Roy, H., Bhardwaj, S., Babu, M., Jauhainen, S., Herzig, K. H., Bellu, A. R., Haisma, H. J., Carmeliet, P., Alitalo, K., Yla-Herttuala, S.  
2005; 16 (12): 1422-1428

- **Effect of total colectomy and PYY infusion on food intake and body weight in rats** *REGULATORY PEPTIDES*  
Babu, M., Purhonen, A. K., Bansiewicz, T., Makela, K., Walkowiak, J., Miettinen, P., Herzig, K. H.  
2005; 131 (1-3): 29-33
- **Genetic analysis of a four generation Indian family with Usher syndrome: a novel insertion mutation in MYO7A** *MOLECULAR VISION*  
Kumar, A., Babu, M., Kimberling, W. J., Venkatesh, C. P.  
2004; 10 (109): 910-916
- **Genetic analysis of primary microcephaly in Indian families: novel ASPM mutations** *CLINICAL GENETICS*  
Kumar, A., Blanton, S. H., Babu, M., Markandaya, M., Girimaji, S. C.  
2004; 66 (4): 341-348
- **Genetic analysis of a five generation Indian family with BPES: A novel missense mutation (p.Y215C)** *MOLECULAR VISION*  
Kumar, A., Babu, M., Raghunath, A., Venkatesh, C.  
2004; 10 (56): 445-449