

# Stanford

---



## Shashank Chetty

Basic Life Research Scientist, Rad/Pediatric Radiology

### CONTACT INFORMATION

- **Contact**

Tel +1-650-201-0625

### Bio

---

#### BIO

MCHRI Post-doctoral Fellow

Co-Chair, SURPAS

#### INSTITUTE AFFILIATIONS

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

#### HONORS AND AWARDS

- MCHRI Post-doctoral Fellowship Award, Stanford University (2021)
- International Travel Grant Award, Department of Science and Technology, Science and Engineering Research Board (DST-SERB) (2019)
- Inspire Senior Research Fellowship Award, Department of Science and Technology, Government of India (2018)
- Senior Research Fellow Award, Council of Scientific and Industrial Research (CSIR), Government of India (2017)
- Best Poster Presentation Award, Indian Institute of Science (IISc), Bangalore India (2016)
- Inspire Junior Research Fellowship Award, Department of Science and Technology, Government of India (2016)

#### BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- Member, American Chemical Society (ACS), USA (2019 - present)
- Member, Royal Society of Chemistry (RSC), UK (2019 - present)
- Member, Indian Society for Technical Education (ISTE), India (2008 - 2012)
- Member, International Society of Optics and Photonics (SPIE), USA (2017 - present)
- Member, Materials Research Society (MRS), USA (2019 - present)

#### PROFESSIONAL EDUCATION

- Doctor of Philosophy, Pondicherry Central University , Nanoscience and Technology (2020)
- Master of Technology, Pondicherry Central University , Nanoscience and Technology (2014)
- Bachelor of Technology, PSG College of Technology, Anna University , Biotechnology (2012)

## LINKS

- My Lab Site: <https://med.stanford.edu/thakorlab/team.html>
- LinkedIn: [https://www.linkedin.com/in/shashankchetty/?lipi=urn%3Ali%3Apage%3Ad\\_flagship3\\_feed%3BlmWowEjXR%2ButEc7wi2OKUg%3D%3D](https://www.linkedin.com/in/shashankchetty/?lipi=urn%3Ali%3Apage%3Ad_flagship3_feed%3BlmWowEjXR%2ButEc7wi2OKUg%3D%3D)
- Google Scholar: <https://scholar.google.com/citations?user=Qn7MixUAAAAJ&hl=en&oi=ao>

## Publications

---

### PUBLICATIONS

- **Preventing the onset of diabetes with precision delivery of mesenchymal stem cells to the pancreas in a preclinical model.** *Stem cell research & therapy*  
Yarani, R., Primavera, R., Chetty, S., Wang, J., Kaur, S., Haupt-Jorgensen, M., Pociot, F., Thakor, A. S.  
2025
- **Adeno-Associated Viral Mediated Genome Editing as a Curative Therapy for Polycystic Kidney Disease**  
Garcia, F., Thompson, L., Moreno, M., Chetty, S., Wang, J., Garcia-Gonzalez, M., Church, G., Bhalla, V., Thakor, A., Maxim, D.  
CELL PRESS.2025
- **Controlled Nutrient Delivery to Pancreatic Islets Using Polydopamine-Coated Mesoporous Silica Nanoparticles.** *Nano letters*  
Primavera, R., Wang, J., Buchwald, P., Ganguly, A., Patel, S., Bettencourt, L., Chetty, S., Yarani, R., Regmi, S., Levitte, S., Kevadiya, B., Guindani, M., Decuzzi, et al  
2025
- **Evaluating the therapeutic potential of different sources of mesenchymal stem cells in acute respiratory distress syndrome.** *Stem cell research & therapy*  
Regmi, S., Ganguly, A., Pathak, S., Primavera, R., Chetty, S., Wang, J., Patel, S., Thakor, A. S.  
2024; 15 (1): 385
- **Time-course analysis of cisplatin induced AKI in preclinical models: implications for testing different sources of MSCs.** *Journal of translational medicine*  
Ganguly, A., Chetty, S., Primavera, R., Levitte, S., Regmi, S., Dulken, B. W., Sutherland, S. M., Angeles, W., Wang, J., Thakor, A. S.  
2024; 22 (1): 789
- **Therapeutic potential of exosomes derived from mesenchymal stem cells for treatment of systemic lupus erythematosus.** *Journal of inflammation (London, England)*  
Samavati, S. F., Yarani, R., Kiani, S., HoseinKhani, Z., Mehrabi, M., Levitte, S., Primavera, R., Chetty, S., Thakor, A. S., Mansouri, K.  
2024; 21 (1): 20
- **Precision Delivery of Human Bone Marrow-Derived Mesenchymal Stem Cells Into the Pancreas Via Intra-arterial Injection Prevents the Onset of Diabetes.** *Stem cells translational medicine*  
Primavera, R., Regmi, S., Yarani, R., Levitte, S., Wang, J., Ganguly, A., Chetty, S., Guindani, M., Ricordi, C., Meyer, E., Thakor, A. S.  
2024
- **β Cell and Autophagy: What Do We Know?** *Biomolecules*  
Mohammadi-Motlagh, H. R., Sadeghalvad, M., Yavari, N., Primavera, R., Soltani, S., Chetty, S., Ganguly, A., Regmi, S., Fløyel, T., Kaur, S., Mirza, A. H., Thakor, A. S., Pociot, et al  
2023; 13 (4)
- **Integrated transcriptome-proteome analyses of human stem cells reveal source-dependent differences in their regenerative signature.** *Stem cell reports*  
Ganguly, A., Swaminathan, G., Garcia-Marques, F., Regmi, S., Yarani, R., Primavera, R., Chetty, S., Bermudez, A., Pitteri, S. J., Thakor, A. S.  
2022
- **Umbilical cord mesenchymal stromal cells-from bench to bedside.** *Frontiers in cell and developmental biology*  
Chetty, S., Yarani, R., Swaminathan, G., Primavera, R., Regmi, S., Rai, S., Zhong, J., Ganguly, A., Thakor, A. S.  
2022; 10: 1006295
- **Mesenchymal stromal cells for the treatment of Alzheimer's disease: Strategies and limitations.** *Frontiers in molecular neuroscience*  
Regmi, S., Liu, D. D., Shen, M., Kevadiya, B. D., Ganguly, A., Primavera, R., Chetty, S., Yarani, R., Thakor, A. S.

---

2022; 15: 1011225

- **Human Umbilical Cord Wharton's Jelly-Derived Mesenchymal Stem Cells Labeled with Mn<sup>2+</sup> and Gd<sup>3+</sup> Co-Doped CuInS<sub>2</sub>-ZnS Nanocrystals for Multimodality Imaging in a Tumor Mice Model** *ACS APPLIED MATERIALS & INTERFACES*  
Chetty, S., Praneetha, S., Murugan, A., Govarathanan, K., Verma, R.  
2020; 12 (3): 3415–29
- **Noninvasive Tracking and Regenerative Capabilities of Transplanted Human Umbilical Cord-Derived Mesenchymal Stem Cells Labeled with I-III-IV Semiconducting Nanocrystals in Liver-Injured Living Mice** *ACS APPLIED MATERIALS & INTERFACES*  
Chetty, S., Praneetha, S., Govarathanan, K., Verma, R., Murugan, A.  
2019; 11 (9): 8763–78
- **Microwave-Assisted Synthesis of Quasi-Pyramidal CuInS<sub>2</sub>-ZnS Nanocrystals for Enhanced Near-Infrared Targeted Fluorescent Imaging of Subcutaneous Melanoma** *ADVANCED BIOSYSTEMS*  
Chetty, S., Praneetha, S., Murugan, A., Govarathanan, K., Verma, R. S.  
2019; 3 (1): e1800127
- **Transition Metal Ion (Mn<sup>2+</sup>, Fe<sup>2+</sup>, Co<sup>2+</sup>, and Ni<sup>2+</sup>)-Doped Carbon Dots Synthesized via Microwave-Assisted Pyrolysis: A Potential Nanoprobe for Magneto-fluorescent Dual-Modality Bioimaging** *ACS BIOMATERIALS SCIENCE & ENGINEERING*  
Pakkath, S., Chetty, S., Selvarasu, P., Murugan, A., Kumar, Y., Periyasamy, L., Santhakumar, M., Sadras, S., Santhakumar, K.  
2018; 4 (7): 2582–96
- **Sustainable, Rapid Synthesis of Bright-Luminescent CuInS<sub>2</sub>-ZnS Alloyed Nanocrystals: Multistage Nano-xenotoxicity Assessment and Intravital Fluorescence Bioimaging in Zebrafish-Embryos (vol 6, 26078, 2016)** *SCIENTIFIC REPORTS*  
Chetty, S., Praneetha, S., Basu, S., Sachidanandan, C., Murugan, A.  
2016; 6: 28607
- **One-pot microwave-assisted in situ reduction of Ag<sup>+</sup> and Au<sup>3+</sup> ions by Citrus limon extract and their carbon-dots based nanohybrids: a potential nano-bioprobe for cancer cellular imaging** *RSC ADVANCES*  
Sajid, P. A., Chetty, S., Praneetha, S., Murugan, A., Kumar, Y., Periyasamy, L.  
2016; 6 (105): 103482–90