PUBLICATIONS:

After joining IITB:

1. Alteration in microRNA-17-92 dynamics accounts for differential nature of cellular proliferation  
   D. Sengupta and S. Kar, *FEBS Letters*, (2018), *(Accepted, in Press).*

2. Deciphering the dynamical origin of mixed population during neural stem cell developmental lineage commitment  
   D. Sengupta and S. Kar, *Biophysical Journal*, (2018), *(Accepted, in Press).*

3. Alteration in microRNA expression governs the nature and timing of cellular fate commitment  
   D. Sengupta and S. Kar, *ACS Chemical Neuroscience*, (2017), Article ASAP.  
   DOI: 10.1021/acschemneuro.7b00423.

4. Decoding the regulatory mechanism of Glucose and Insulin induced Phosphatidyinositol 3,4,5-Trisphosphate dynamics in β-cells  
   (* Equal contribution 1st author)

5. Protein abundance of AKT and ERK pathway components governs cell-type-specific regulation of proliferation  
   L. Adlung *, S. Kar *, M. C. Wagner *, B. She *, S. Chakroborty, J. Bao, S. Lattermann, M. Boerries,  
   (* Equal contribution 1st author)

6. Unraveling the differential dynamics of developmental fate in central and peripheral nervous systems?  
   DOI: 10.1038/srep36397

7. Unraveling Cell-Cycle Dynamics in Cancer  

8. Are Quasi-Steady-State Approximated Models Suitable for Quantifying Intrinsic Noise Accurately?  
   DOI: 10.1371/journal.pone.0136668

Before joining IITB:

1. Heterogeneous kinetics of AKT signaling in individual cells are accounted for by variable protein concentration  
   (* Equal contribution 1st author)

2. Exploring the Roles of Noise in the Eukaryotic Cell Cycle  

3. Antagonism and bistability in protein interaction networks  
4. Pattern formation in reaction-diffusion system in crossed electric and magnetic fields

5. Pattern formation induced by additive noise : a moment based analysis

6. Differential flow induced transition of Hopf instability to Turing instability and pattern formation

7. Sustained simultaneous Glycolytic and Insulin oscillations in β-cells

8. A model reaction diffusion system under spatial perturbation: theoretical and numerical investigation

9. Mobility induced instability and pattern formation in a reaction-diffusion system

10. Nonlinear Dynamics of Glycolysis (Invited Review)

11. Large Fluctuations and Nonlinear Dynamics of Birhythmicity

12. Collapse and Revival of Glycolytic oscillation

13. Exact solutions of Fisher and Burgers equations with finite transport memory