



Indian Institute of Science Education and Research (IISER), Mohali

(Ministry of Human Resource Development, Govt. of India)

Knowledge City, Sector-81, SAS Nagar (Mohali),

Manauli P.O. Punjab-140306, India

Purnananda Guptasarma, Ph.D

Dean of Faculty & Professor, Department of Biological Sciences

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Prince is currently working as an assistant professor at IIT Roorkee since July 2022. His primary research investigates the effects of mutations in myosin and myosin-binding proteins using Cryo-electron microscopy.

In addition, he is also interested in studying the effects of myosin-targeted therapeutic drugs (designed to treat cardiomyopathy symptoms) on myosin molecular structure.

His most important contribution is in determining the revolutionary first near-atomic (4.3 Å) structure of the inhibited form of smooth muscle myosin II, revealing numerous new insights into myosin structure and function. This work was published in *Nature* in December 2020. Prince made significant key contributions to this work. Prince's academic contribution are further demonstrated by his published work in collaboration, which was also featured in eLife.

His exceptional abilities were recognized when he secured the highly competitive American Heart Association postdoctoral fellowship in 2022, a feat achieved by only 20 % of applicants in 2020-21. He was also invited to give a talk on his myosin flexibility work at the 2020 Biophysical Society Motility subgroup meeting, and another talk on his myosin cryo-EM work at the 6th New England Cryo-EM Symposium held at Yale University in 2021. Both talks were well-presented and well-received.

In summary, Prince has accomplished a lot in his time during his postdoctoral training. Prince is a superb team player. He generously contributes his time, data, and insights to projects he is involved with, and offers many perceptive comments to others when they present their work.

As mentioned above, in addition to his own work, he collaborates on multiple other projects. He does so collegially and positively, always willing to help and be a part of a bigger team. This reflects his overall personality, which is positive, optimistic, outgoing, and helpful.

(Purnananda Guptasarma),

Professor, Indian Institute of Science Education and Research (IISER) Mohali

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