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9th December, 2004

To Whom It May Concern:

Re: Dr. Arpita Upadhyaya

I am writing in order to give my wholehearted support for Dr. Arpita Upadhyaya's application for a junior faculty position at your University. I have been involved in extensive collaborative work with Dr. Upadhyaya over the past two years. The collaboration consists of quarterly meetings and regular follow-ups between scientists in my lab and Dr. Upadhyaya in Dr. Van Oudenaarden's laboratory at MIT. The focus of this work is the understanding and quantitation of directional decision making in primary human neutrophils. Dr. Upadhyaya has provided us with absolutely excellent collaborative support which included mathematical analysis and interpretation of data generated in our microfluidic system for studying directional cell migration. Her help with this collaboration is reflected in her coauthorship on an article currently under review at Nature Cell Biology. Dr. Upadhyaya is an extremely intelligent, insightful, careful and creative scientist who applies her wide ranging knowledge of eukaryotic cell movement and noise to a multitude of fascinating biophysical and biological issues. It is fair to say that we could not have completed our work without Dr. Upadhyaya's intellectual input and direct assistance and that the manuscript would not have reached the review stage at Nature Cell Biology without this.

It is also clear that Dr. Upadhyaya has applied her knowledge of biophysics and her ability to communicate across disciplines to the fascinating but complicated chemotaxis network of a eukaryotic cell which gives us the perfect opportunity to combine biology, physics and medicine. The biology teaches us about the components of the chemotaxis network and physics gives us the mathematical tools necessary to characterize and finally understand this complex network. There is an inherent intellectual synergy consequently between biologists and physicists in this field and we do need more physicists who are able to understand the biology and construct new mathematical models of the cell.



In summary, Dr. Upadhyaya is an outstanding research scientist who is clearly capable of doing both independent and collaborative research work in the area of eukaryotic cell migration. I have no doubt that as a junior faculty member Dr. Upadhyaya will make highly original and significant contributions to the field.

Yours sincerely,

A handwritten signature in black ink, appearing to be 'M. Poznansky', written in a cursive style.

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