## **INFOSYS PRIZE LECTURES** HOSTED BY THE INDIAN INSTITUTE OF SCIENCE, BANGALORE

INFOSYS SCIENCE FOUNDATION INFOSYS PRIZE

## DNA DREAM MACHINES

## **QUANTITATIVE CHEMICAL IMAGING IN IMMUNE CELLS**

DNA can be self-assembled into molecularly precise, well-defined, synthetic assemblies on the nanoscale, commonly referred to as designer DNA nanodevices. Prof. Yamuna Krishnan's lab creates synthetic, chemically responsive, DNA-based fluorescent probes. In 2009 she discovered that designer DNA nanodevices could function as fluorescent reporters to quantitatively image ionic second messengers in real time in living systems. Until this innovation, it was not at all obvious whether such DNA nanodevices could function inside a living cell without being interfered with, or interfering with, the cells own networks of DNA control. In this talk Prof. Krishnan will discuss unpublished work on the use of fluorescent reporters for reactive species developed by her lab to quantitatively image reactive oxygen species and reactive nitrogen species in immune cells.

Venue: Faculty Hall, Indian Institute of Science Date: July 2, 2018 | Time: 4 - 5 pm



## Yamuna Krishnan, Department of Chemistry & Grossman Institute of Neuroscience, Quantitative Biology and Human Behavior, The University of Chicago

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