



Semi-sesquicentennial of mecheng @ IISc

Distinguished Seminar Series



TECHNOLOGY STARTUP FUNDING BY THE US NATIONAL SCIENCE FOUNDATION

Dr. Murali S. Nair

Program Director, United States' National Science Foundation SBIR/STTR program

July 14, 2021 at 6:00 PM IST

Meeting link: <https://bit.ly/3qQ3qrk> (MS Teams)

ABSTRACT

This lecture describes the United States' National Science Foundation and in particular its Small Business Innovation Research/Small Business Technology Transfer (SBIR/STTR) Program. It is important to note the history of this program and its many unique features. The technical and business background/experience of the program directors that make up the team is an essential differentiator. The areas of technology that are typically considered for funding by this program along with the criteria for award selection and the various stages of funding are then addressed. Proposal submission, the review process, and timelines are discussed. The supporting ecosystem, including adjacent programs within the Division of Industrial Innovation and Partnerships, that surround each grantee company, pre- and post-award, and the various supplements that are available to increase the chances of success, are critical features of this program. Pertinent statistics and select recent (June 2021) outcomes are presented. The talk ends with sharing thoughts about possible future developments.

ABOUT THE SPEAKER

Murali S. Nair is a Program Director in the United States' National Science Foundation (NSF) Small Business Innovation Research/Small Business Technology Transfer (SBIR/STTR) Program. He joined NSF in January 2003 and is responsible for the following technology areas: Robotics, Wireless, IoT, and Space Systems. In 2009, Murali was the recipient of the NSF Meritorious Service Award, the second-highest award at NSF, for creating the strategic plan for a new Division, the Division of Industrial Innovation and Partnerships (IIP). The SBIR/STTR program is part of IIP. Previously, he was the Founder CEO of a wireless product company. In this capacity, he raised equity capital for worldwide operations in the US, India and China. He designed, planned and implemented the product development cycle, and managed the marketing strategy, strategic alliances and business development processes. Before this, Murali was a Senior Systems Engineer at Storm Control Systems where he provided strategic advice to the Executive Vice President for a complete re-plan of the Hughes contract for real-time, embedded ground control software for the PANAMSAT communications satellite. Prior to joining Storm, he was a Mission Planner at Motorola Iridium where he was involved in all aspects of satellite operations including orbit determination, generating guidance targets, and orbital slot placement. Preceding Iridium, Murali was a faculty member at Embry-Riddle Aeronautical University, where he developed an entire Space Systems Design Lab from concept inception to fully operational mode and national prominence, and supervised five (5) space system designs, three (3) of which were winners in the National AIAA/Loral Design Competition. He is a recipient of a number of awards that include the President's Innovation Award for the Space Systems Design program.



He is the author of two published books on technology: *New Industry Creation: Discovery to Innovation*, and *Technology Startup Narratives*. He is currently writing a book on technology that will be published in 2023-24. He is the author of a published book of fiction: *We are All Little Gods: An Ordinary Life*, and is writing another volume of fiction to be published in 2022.

Murali is a graduate of the Indian Institute of Technology and the University of Texas.

Session chair: Prof. B. Gurumoorthy, CPDM/mecheng @ IISc