



**Department of Biomedical Engineering**  
Manipal Institute of Technology, Manipal - 576 104



## Guest Lecture Series – 2018

You are cordially invited to the

**Lecture - 4**

**Imaging in Nuclear Medicine**

*By*



**Dr. Rajesh Kumar**  
HOD, Dept. of Nuclear Medicine,  
KMC, Manipal

**Date & Time**

Thursday, 05 April 2018  
3:30 PM

**Venue**

AB5 - 407

**Dr. Ramesh R Galigekere**  
Professor & Head, Dept. of BME, MIT, Manipal

**All are Welcome**



**Department of Biomedical Engineering**  
Manipal Institute of Technology, Manipal - 576 104



## Guest Lecture Series – 2018

You are cordially invited to

**Lecture - 1**

# **Some Out-of-the-box Ideas in Biomedical Engineering**



**Dr. Narasimha B Bhat**  
CEO & Founder, Manipal Dot Net Pvt. Ltd., Manipal

**Date & Time**

**Saturday, February 03, 2018  
9:00 AM**

**Venue**

**AB-5, 404**

**Dr. Ramesh R Galigekere**

**Professor & Head, Dept. of BME, MIT, Manipal – 576 104**

*All are Welcome*



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## **Guest Lecture Series – 2018**

**You are cordially invited to the**

**Lecture – 5**  
**(Webinar Series from the US)**

**Magnetic Resonance Imaging: Basics & Applications**

***By***



**Dr. Praveen Kulkarni**  
**Center for Translational Neuroimaging,**  
**Northeastern University, Boston**

### **Date & Time**

**Friday, 06 April 2018, 5.30 PM**  
**Saturday, 07 April 2018, 3.30PM**

### **Venue**

**Research Lab**  
**Dept. of BME**

**Dr. Ramesh R Galigekere**  
**Professor & Head, Dept. of BME, MIT, Manipal**

**All are Welcome**



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## **Diamond Jubilee Lecture-series**

You are cordially invited to

**Lecture - 9**

***Advances in Biophotonics***

**By**



**Dr. Santosh C,  
Professor & Head  
DAMP, MIT**

**Date & Time**

**Monday, November 06, 2017  
10:30 AM**

**Venue**

**AB-5, 404**

**Dr. Ramesh R Galigekere  
Professor & Head, Dept. of BME, MIT, Manipal**

***All are Welcome***



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## **Diamond Jubilee Lecture-series**

**You are cordially invited to**

**Lecture - 6**

**Brain and Health**

***By***

**Dr. A G Ramakrishnan**

**Professor and Chairman, EE**

**Medical Intelligence & Language Engineering Lab**

**Department of Electrical Engineering**

**Indian Institute of Science**

**Bangalore**

**Date & Time**

**Monday, 10 July 2017**

**11:00 AM**

**Venue**

**AB5 - 211**

**Dr. Ramesh R Galigekere**

**Professor & Head, Dept. of BME, MIT, Manipal**

**All are Welcome**





**Department of Biomedical Engineering**  
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## **Guest Lecture Series – 2018**

**You are cordially invited to**

**Lecture - 2**

# **High-resolution Ultrasound in Medical Diagnosis: Recent Development**



**Dr. Debabrata Ghosh**

**Dept. of Radiology**

**University of Texas Southwestern Medical Center**

**Dallas, Texas**

### **Date & Time**

**Tuesday, February 13, 2018**

**9:00 AM**

### **Venue**

**AB-5, 404**

**Dr. Ramesh R Galigekere**

**Professor & Head, Dept. of BME, MIT, Manipal – 576 104**

***All are Welcome***

# High-resolution Ultrasound in Medical Diagnosis: Recent Development

## Abstract

Microvascular processes play key roles in many diseases including diabetes. Improved understanding of the microvascular changes involved in disease development could offer crucial insight into the relationship of these changes to disease pathogenesis. This may allow development of novel and more effective therapeutic strategies. Despite intensive efforts, monitoring changes in the microvasculature remains a challenging task, mainly due to the resolution limitation of traditional medical imaging modalities. In clinical imaging, ultrasound has been considered the best alternative to the other modalities due to its compact size, nonionizing radiation, low cost, and relatively faster image acquisition. While the use of microbubble contrast agent during ultrasound imaging improves the detection of small blood vessels, it still lacks the spatial resolution necessary to differentiate vessels at the capillary level. A new high-resolution ultrasound imaging modality, termed super-resolution ultrasound (SR-US) has shown promise for providing image spatial resolutions greater than the diffraction limit of the ultrasound system.



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## **Diamond Jubilee Lecture-series**

You are cordially invited to

**Lecture - 8**

**Mathematical Modeling in Neurologic Diseases**

**By**



**Dr. Pitchaiah Mandava**

Baylor College of Medicine  
Houston, Texas, USA

Director of the Stroke Unit at Micheal E DeBarkey VA Medical Center  
*Adjunct Professor, Dept. of Biomedical Engineering, MIT, Manipal.*

### **Date & Time**

Friday, August 18, 2017  
3:00 PM

### **Venue**

ECE Seminar Hall  
(Academic Block 5)

**Dr. Ramesh R Galigekere**

**Professor & Head, Dept. of BME, MIT, Manipal**

*All are Welcome*





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## Diamond Jubilee Lecture-series

You are cordially invited to

### Lecture - 7

**3D hydrogel systems as platforms for manipulating cell  
behavior**

*By*

**Dr. Prakriti Tyalia**

Assistant Professor  
Department of Biosciences & Bioengineering  
Indian Institute of Technology - Bombay  
Mumbai

Date & Time

Monday, 24 July 2017  
11:00 AM

Venue

AB5 - 404

**Dr. Ramesh R Galigekere**  
Professor & Head, Dept. of BME, MIT, Manipal

**All are Welcome**



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**Guest Lecture Series – 2018**

**You are cordially invited to the**

**Lecture - 3**

**“Relevance & opportunities of Bio Medical Engineering in  
Speech & Hearing”**



**Dr. B. Rajashekhar**  
Dean & Professor (Sp.& Hg.)  
School of Allied Health Sciences  
Manipal Academy of Higher Education  
Manipal

**Date & Time**

**Saturday, 31 March 2018  
3:00 PM**

**Venue**

**Sir M V Hall, AB 2**

**Dr. Ramesh R Galigekere**

**Professor & Head, Dept. of BME, MIT, Manipal**

**All are Welcome**