

IEM SEMINAR SERIES

TUESDAY
April 4th, 2017

Cryoablation for the Treatment of Soft Tissue and Bone Cancers



Institute for
Engineering in Medicine

UNIVERSITY OF MINNESOTA
Driven to DiscoverSM

Dr. Satish Ramadhyani
Fellow
Galil Medical



FREE event, no registration
required.

Pizza and Beverages will be
provided from 11:45 am

12:00PM - 1:00PM
Nils Hasselmo Hall
Room 4-101

For additional information on
Dr. Ramadhyani's presentation
please contact:
scot0353@umn.edu

The Institute for Engineering in Medicine (IEM) is pleased to announce a seminar by Dr. Satish Ramadhyani, "Cryoablation for the Treatment of Soft Tissue and Bone Cancers".

Cryoablation is a process in which extremely cold temperatures are used to destroy (ablate) target tissue. While cryoablation was used as early as the 1850s to treat easily accessible cancers, current cryoablation equipment permits physicians to treat virtually any target in the body in a minimally invasive manner. The lethality of cryogenic temperatures and the visibility of ice under multiple imaging modalities make cryoablation a convenient and attractive option for the treatment of many different solid cancers including prostate, liver, kidney, lung, and bone. This presentation begins with an overview of the history of cryoablation, a brief description of the technical details of cryoablation equipment, and the mechanisms of cell destruction by extreme cold. A discussion of the treatment techniques and outcomes associated with various kinds of solid cancers follows. The presentation concludes with a discussion of recent experiments indicating a potential synergy between cryoablation and immunotherapies for cancers.

Satish Ramadhyani is a Fellow at Galil Medical and is actively involved in the development of cryoablation systems for the treatment of various types of cancer. His career as a medical device engineer spans 17 years and encompasses development of a range of devices in the fields of urology, cardiology, bariatrics, and interventional oncology. His technical expertise is in the areas of thermodynamics, fluid mechanics, and heat transfer. His current research interests include cryogenic destruction of tissue and ways to promote immune response against cancers.

For more information on the IEM Seminar Series, visit
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