

Online International Workshop
on
**Physics and Technical Innovations
In Brachytherapy: Clinical Challenges**

10th – 14th August, 2020

Foreign Faculty : **Vrinda Narayana**, PhD
Professor, University of Michigan
Chief Physicist, Providence & Assarian
Cancer Centers
Providence Cancer Center
Southfield, MI 48075

Course Coordinators: **Prof. S. Ganesan & Prof. P. Aruna**
Department of Medical Physics,
Anna University, Chennai-25

Overview

The Brachytherapy is the ultimate form of conformal radiation therapy as it is unparalleled in its ability to direct a large dose of radiation to tumor while minimizing exposure to surrounding sensitive normal structures. Brachytherapy has a long and storied history in the treatment of neoplastic diseases. Cancer patients deserve state-of-the-art evidence-based care including the delivery of high quality and high value Brachytherapy. Hence education about Brachytherapy is highly essential in creating awareness and proficiency. Hence the present workshop by the distinguished speaker with international expertise will be an indispensable source for students and practitioners of this complex and challenging modality. The workshop will describe the rapid evolution of this technique as an essential element in the multidisciplinary technique in a comprehensive manner and thoroughly up-to-date

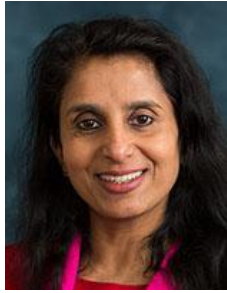
Program Schedule

Days: August 10th – 14th, 2020

Time: 04:30 pm - 6:00 pm IST (7:00 am - 8:30 am EST)

Date	Topics To Be Covered
10 th August 2020	Introduction to Brachytherapy
11 th August 2020	HDR Brachytherapy
12 th August 2020	LDR Brachytherapy
13 th August 2020	Novel techniques: Y90 Microspheres, Intravascular Brachytherapy
14 th August 2020	Novel Techniques in Practice – Challenges and Conclusions

Foreign Faculty



Vrinda Narayana, PhD

**Professor, University of Michigan &
Chief Physicist, Providence & Assarian Cancer Centers,
Southfield, MI 48075.**

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Areas of Interest

- Prostate brachytherapy
- Combined prostate brachy and external beam treatments
- Gynecological HDR brachytherapy
- Deformable registration

External Beam

- Acceptance, Commissioning, Monthly and annual linear accelerator quality assurance (Varian 21EX and TrueBeam), and treatment machine calls.
- 3D treatment planning, plan and monitor unit checks, and weekly chart checks.
- VMAT and IMRT planning and quality assurance.

Brachytherapy

HDR

- Designed and developed HDR program at Providence Hospital
- Treatment planning (Brachy Vision), plan checks, daily and quarterly quality assurance and new source acceptance and calibration (for Varian's GammaMed Plus unit).

LDR

- Responsible for the prostate brachytherapy program
- Responsible for the stereotactic brain implant brachytherapy program
- Responsible for high source strength interstitial implants

Thera Spheres

- Designed and developed the TheraSpheres program at Providence Hospital

Radiation Safety Officer

Electronic Clinical Workflow:

- Implemented the electronic workflow from Simulation to Treatment in the clinic
- Designed and developed the electronic workflow for protocol patients

Honors & Awards

- 2016 Fellow of the American Association of Medical Physicists

Credentials

- PhD (Medical Physics), Wayne State University, Detroit, Michigan, 1997
- Board Certification: Radiation Oncology Physics, American Board of Medical Physics, 1999
- Board Certification: Therapeutic Radiological Physics, American Board of Radiology, 1999

Co-Coordinator



Dr. S. Ganesan is the Professor of Medical Physics in Department of Medical Physics, Anna University Chennai. He is the recipient of prestigious BOYSCAST award by DST during 1994. He has more than 150 international publications in reputed journals and he has guided 25 research students. His area of Research Interest is Bio photonics, Radiation Dosimetry and other allied Sciences.



Dr. P. Aruna is the Professor and Head, Department of Medical Physics, Anna University, Chennai. She has received Ph.D. degree from Anna University in 1991. She is the recipient of the prestigious BOYSCAST award from DST in 1998. She has guided 11 doctoral candidates and 150 post graduate projects of MDS, M.Tech., M.Phil.&M.Sc. students in the field of Mediphotonics. Her research interests include fluoroscopy and spectroscopy based techniques for cancer diagnosis. She has published more than 100 papers in national and international journals.

Contact Details

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Who can attend?

- PG students (Physics and Medical Physics)
- Trainee Radiation Therapist and Safety Officers

Registration : Participants need to fill the Registration form for confirmation.

Last date for Registration : On or before 03.08.2020

Registration Fee : NIL