About the Course: Over the past decade there has been a significant advancement in the field of thermal therapy, an adjuvant cancer therapy that sensitizes tumor cells to both radiation and chemotherapy. With increased knowledge and training, clinicians will be able to provide a less invasive form of radiation to their patients.

Theoretical aspects of thermal therapy will be presented in a lecture format with a question and answer session. Several cases will be reviewed to explain the different approaches to treat different treatment sites. Small groups will facilitate in-depth training of practical guidelines for thermal therapy treatment delivery, and will practice the treatment delivery in terms of software and hardware in experimental phantoms.

Attending practitioners will be made aware of combining thermal therapy with the different forms of radiation treatment and will benefit from a formal training course that will provide one day of lectures and one day of practical training that will cover reviewing clinical cases and using thermal therapy equipment.

Target Audience: This semi-annual course will be the first of its kind in the U.S. to provide practice guidelines and practical training to national and international thermal therapy practitioners, including:

- Radiation Oncologists
- Medical Oncologists
- Surgical Oncologists
- Medical Physicists
- Oncology Residents
- Oncology Fellows
- Radiation Therapists
- Students
- Nurses

Course Website: [https://www.medschool.umaryland.edu/radonc/Special-Courses--Events/Thermal-Oncology-Practice-School/](https://www.medschool.umaryland.edu/radonc/Special-Courses--Events/Thermal-Oncology-Practice-School/)

Location: Lectures and simulations will be held at two locations (walking distance):

- Maryland Proton Treatment Center (MPTC)
  850 W. Baltimore Street, Baltimore, MD 21201
  [http://www.mdproton.com](http://www.mdproton.com)

- University of Maryland Medical Center (UMMC)
  Department of Radiation Oncology
  22 S. Greene Street
  Baltimore, MD 21201

The registration fee is $2,000.00. To register, please visit:

Accommodations: We have secured a block of rooms at the Lord Baltimore Hotel, [www.lordbaltimorehotel.com](http://www.lordbaltimorehotel.com). There are also a variety of hotels to choose from in the immediate area.

Parking: There will be free garage parking for attendees at Garage One, located at the corner of W. Baltimore and Poppleton next to MPTC.

University of Maryland BioPark Garage One
1 N. Poppleton Street
Baltimore, MD 21201

Course Directors:

Zeljko Vujaskovic, MD, PhD
Professor of Radiation Oncology
Director of the Division of Translational Radiation Sciences (DTRS)

Dr. Vujaskovic is a 2016 Society of Thermal Medicine’s J. Eugene Robinson Award recipient. As Director of the Maryland Proton Alliance, one of his many research initiatives explores synergies between proton beam therapy and hyperthermia. Dr. Vujaskovic lectures around the world on the topic of thermal oncology.

Dario Rodrigues, PhD
Assistant Professor of Radiation Oncology

Dr. Rodrigues is one of the few Thermal Oncology physicists in the U.S. He specializes in focused heat generated by radio waves (hyperthermia) which is a potent enhancer of chemo- and radiotherapy. Dr. Rodrigues is also the Councilor of Engineering/Physics of the Society for Thermal Medicine.

Course Co-Directors:

James (J.W.) Snider, III, MD
Assistant Professor of Radiation Oncology

Jason Kyle Molitoris, MD, PhD
Assistant Professor of Radiation Oncology
Course Agenda

DAY 1: Friday, October 18

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
<th>Speaker(s)</th>
</tr>
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<tbody>
<tr>
<td>8:00 am</td>
<td>Opening remarks</td>
<td>Dr. Zeljko Vujaskovic and Dr. Dario Rodrigues, University of Maryland, Baltimore MD</td>
</tr>
<tr>
<td>8:15 am</td>
<td>How to establish a thermal oncology program</td>
<td>Dr. Zeljko Vujaskovic, University of Maryland, Baltimore MD</td>
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<tr>
<td>9:00 am</td>
<td>Clinical workflow, documentation, and reimbursement of thermal therapy</td>
<td>Erika Maynor, University of Maryland, Baltimore MD</td>
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<td>9:40 am</td>
<td>Break</td>
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<tr>
<td>9:50 am</td>
<td>Practice guidelines for superficial thermal therapy</td>
<td>Dr. James Snider, University of Maryland, Baltimore MD</td>
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<tr>
<td>10:35 am</td>
<td>Practice guidelines for interstitial thermal therapy</td>
<td>Dr. John Hayes, Gamma West, Salt Lake City UT</td>
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<tr>
<td>11:20 am</td>
<td>Practice guidelines for deep thermal therapy</td>
<td>Dr. Jason Molitoris, University of Maryland, Baltimore MD</td>
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<tr>
<td>12:05 pm</td>
<td>Lunch</td>
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<tr>
<td>1:00 pm</td>
<td>Physics, planning, and execution of MW superficial thermal therapy</td>
<td>Dr. Paul Stauffer, Thomas Jefferson University, Philadelphia PA</td>
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<tr>
<td>1:45 pm</td>
<td>Physics, planning, and execution of MW interstitial thermal therapy</td>
<td>Dr. Mariana Guerrero, University of Maryland, Baltimore MD</td>
</tr>
<tr>
<td>2:30 pm</td>
<td>Physics, planning, and execution of RF deep thermal therapy</td>
<td>Dr. Dario Rodrigues, University of Maryland, Baltimore MD</td>
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<tr>
<td>3:15 pm</td>
<td>Tour of MPTC</td>
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<tr>
<td>3:50 pm</td>
<td>Practical workshop rotation (3h) – Groups 1, 2 &amp; 3</td>
<td>Review of clinical cases at MPTC</td>
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<tr>
<td></td>
<td></td>
<td>Superficial/ interstitial thermal therapy practical course at UMMC</td>
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<td></td>
<td></td>
<td>Deep thermal therapy practical course at MPTC</td>
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<tr>
<td>7:15 pm</td>
<td>MPTC Tour and Reception</td>
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DAY 2: Saturday, October 19

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
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<tbody>
<tr>
<td>8:00 am</td>
<td>Practical workshop rotation (3h) – Groups 1, 2, 3</td>
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</tr>
<tr>
<td>11:15 am</td>
<td>Lunch</td>
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<tr>
<td>12:30 pm</td>
<td>Practical workshop rotation (3h) – Groups 1, 2, 3</td>
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<tr>
<td>4:00 pm</td>
<td>Closing session</td>
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Learning Objectives: At the conclusion of this activity, participants will be able to:
- Recall all the components required to establish a thermal oncology program
- Distinguish the different biology of tumors and healthy tissues during elevated temperatures
- Decide proper patient eligibility for thermal therapy treatments and the most adequate form of thermal therapy: interstitial, superficial or deep hyperthermia
- Describe the physics of radio waves and microwaves as well as the need for water bolus
- Explain how to position the different thermal therapy applicators and define the need for multiple treatment sites
- Perform treatment delivery of interstitial, superficial and deep thermal therapy
- Analyze and report thermal therapy treatment data
- Implement the clinical workflow, documentation and reimbursement of thermal therapy treatments

CME Sponsorship: Sponsored by the University of Maryland School of Medicine

Accreditation: The University of Maryland School of Medicine is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

Credit Designation: The University of Maryland School of Medicine designates this Live activity for a maximum of 15.50 AMA PRA Category 1 Credits™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.