

2025 MIDWEST

# RADIATION ONCOLOGY

SYMPOSIUM

**Friday, Aug. 22**

All times listed are in US Central Daylight Time (CDT)

|           |  |
|-----------|--|
| 7:00 a.m. | Registration / Continental Breakfast / Exhibits  |
| 7:30 a.m. | Department Chair Welcome and Introductory Remarks<br>Charles A. Enke, MD, FASTRO, FACR               |
| 7:45 a.m. | <b>KEYNOTE PRESENTATION:</b><br>Radiation Treatment for Vestibular Schwannomas<br>Eric J. Lehrer, MD |

## Session 1: Central Nervous System (CNS) Benign Diseases

Moderator: Chi (Kevin) Zhang, MD, PhD

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|------------|---|
| 8:35 a.m.  | Neurosurgical Prospective of Brain Arteriovenous Malformations<br>William E. Thorell, MD                                      |
| 8:55 a.m.  | Surgical Aspects of Trigeminal Neuralgia from Non-Destructive to Destructive Procedures<br>Josue M. Avecillas-Chasin, MD, PhD |
| 9:15 a.m.  | Roles of Radiation Therapy in Pituitary Adenoma<br>Chi (Kevin) Zhang, MD, PhD   |
| 9:35 a.m.  | Incidence and Survival Outcomes of Multicentric High-Grade Glioma in Rural Midwestern Cancer Patients<br>Lisa Chaiken, MD     |
| 9:55 a.m.  | Q & A   |
| 10:10 a.m. | Break / Exhibits  |

## Session 2: Heterotopic Ossification and Arthritis

Moderator: Andrew Wahl, MD

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|------------|--|
| 10:25 a.m. | An Update on the Management of Osteoarthritis in 2025<br>Elizabeth Wellsandt, PT, DPT, PhD   |
| 10:45 a.m. | Low-Dose Radiation Therapy for the Treatment of Recalcitrant Osteoarthritis: Current Evidence, Future Implications<br>Joseph Carmichael, MD, PhD |
| 11:05 a.m. | Surgical Considerations for Heterotopic Ossification of Large Joints<br>Kyuhak Oh, PhD   |
| 11:25 a.m. | Radiation Therapy for Heterotopic Ossification<br>Andrew Wahl, MD  |
| 11:45 a.m. | Q & A  |
| 12:00 p.m. | Lunch / Exhibits   |

## SYMPOSIUM FACULTY

### Symposium Director

Chi Lin, MD, PhD  
Professor and Vice Chair of Research, Department of Radiation Oncology, UNMC

### Keynote Speakers

Eric J. Lehrer, MD  
Radiation Oncologist, Department of Radiation Oncology, Mayo Clinic, Rochester, MN

Ehsan Samei, PhD, DABR, FAAPM, FSPiE, FAIMBE, FIOMP, FACR

Reed and Martha Rice Distinguished Professor of Radiology, Duke University; Chief Imaging Physicist, Duke University Health System, Durham, NC

### Guest Speakers

Jeremy Brownstein, MD  
Associate Professor, Department of Radiation Oncology, The Ohio State University, Columbus, OH

Serdar Charyyev, PhD  
Clinical Assistant Professor, Division of Medical Physics, Department of Radiation Oncology, Stanford Medicine, Stanford, CA

James A. Glazier, PhD  
Professor, Intelligent Systems Engineering, Luddy School of Informatics, Computing, and Engineering, Indiana University, Bloomington, IN

Sam Hendley, PhD, DABR  
Medical Physicist, City of Hope Cancer Center, San Diego, CA

Minglei Kang, PhD, DABR  
Associate Professor, Department of Human Oncology, School of Medicine and Public Health, University of Wisconsin-Madison, Madison, WI

Yang Lei, PhD  
Assistant Professor, Department of Radiation Oncology, Icahn School of Medicine at Mount Sinai, New York, NY

Liyong Lin, PhD, FAAPM, DABR  
Professor, Department of Radiation Oncology, Emory University School of Medicine, Atlanta, GA

Michael Prusator, PhD  
Assistant Professor, Department of Radiation Oncology, Washington University in St. Louis, St. Louis, MO

### Session 3: Cardiac Disease and Thymoma

Moderator: Chi Lin, MD, PhD

1:00 p.m. Management of Ventricular Tachycardia and the Role of Radiotherapy  
John W. Schleifer, MD

1:20 p.m. Implementation of a Cardiac Ablation Program  
Jeremy Brownstein, MD

1:40 p.m. Linac in Cardiac Ablation  
Michael Prusator, PhD

2:00 p.m. Surgical Considerations for Thymoma  
Erik E. Lewis, MD

2:20 p.m. Radiotherapy in Thymoma Management  
Qateeb Khan, MD

2:40 p.m. Q & A

2:55 p.m. Break / Exhibits

### Session 4: Gynecologic Brachytherapy

Moderator: Breann Bowar, MD

3:10 p.m. Surgical Considerations for Benign Gynecologic Tumors  
Lindsey A. McAlarnen, MD, MSc, FACOG

3:30 p.m. Gynecologic Brachytherapy  
Breann Bowar, MD

3:50 p.m. Improving the Patient Experience of Gynecologic Brachytherapy Through Patient Education  
Chase Jablon

4:10 p.m. Q & A

### Session 5: Head and Neck Tumors

Moderator: Weining (Ken) Zhen, MD, FACR, FASTRO

4:20 p.m. Transoral Robotic Surgery and Minimally Invasive Techniques in Oropharyngeal Cancer: Patient Selection and Outcomes  
Elizabeth Bradford Bell, MD

4:40 p.m. Non-Surgical De-Escalation in Treating Human Papillomavirus–Driven Squamous Cell Carcinoma: Where Are We Now?  
Kurtis Johnson, MD

5:00 p.m. Integrative Care: The Vital Role of Speech Therapist and Dietitians in Head and Neck Cancer Management  
Carol Gaebler, MS, CCC-SLP and Morgan Scheen, RDN, LMNT

5:20 p.m. Optimizing Communication, Enhancing Efficiency, and Improving Nursing Care  
Rebecca Cobb, BSN and Mikayla Morrow, BSN

5:40 p.m. Q & A

5:55 p.m. Adjourn for the Day

Jason Shen, PhD

Associate Professor, Department of Radiation Oncology, Mayo Clinic, Phoenix, AZ

Robert Stewart, PhD

Professor, Department of Radiation Oncology, University of Washington, Seattle, WA

Xiandong Zhao, PhD

Assistant Professor, Department of Radiation Oncology, Washington University in St. Louis, St. Louis, MO

### Symposium Faculty – UNMC/ Nebraska Medicine

Josue M. Avecillas-Chasin, MD, PhD

Assistant Professor, Department of Neurosurgery

Michael Baine, MD, PhD

Associate Professor, Department of Radiation Oncology

Breann Bowar, MD

Assistant Professor, Department of Radiation Oncology

Elizabeth Bradford Bell, MD

Assistant Professor, Department of Otolaryngology-Head and Neck Surgery

Joseph Carmichael, MD, PhD

Resident, Department of Radiation Oncology

Lisa Chaiken, MD

Assistant Professor, Department of Radiation Oncology

Rao V. Chundury, MD, MBA

Dr. Joseph J. Hompes Professor of Ophthalmology; Associate Professor, Department of Ophthalmology and Visual Sciences

Rebecca Cobb, BSN

Lead Registered Nurse, Fred & Pamela Buffett Cancer Center, Nebraska Medicine

Charles A. Enke, MD, FASTRO, FACR

Professor and Chair, Department of Radiation Oncology

Carol Gaebler, MS, CCC-SLP

Speech Language Pathologist, Department of Speech-Language Pathology, Munroe-Meyer Institute

Kyle Gallagher, PhD, DABR

Assistant Professor, Department of Radiation Oncology

Chase Jablon

Medical Student

Kurtis Johnson, MD

Resident, Department of Radiation Oncology

Qateeb Khan, MD

Assistant Professor, Department of Radiation Oncology

Erik E. Lewis, MD

Assistant Professor, Division of Cardiothoracic Surgery, Department of Surgery

## Saturday, Aug. 23

All times listed are in US Central Daylight Time (CDT)

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|--|--|
| 7:00 a.m.  | Registration / Continental Breakfast / Exhibits  |
| 7:30 a.m.  | Introduction by the Director of Medical Physics<br>Sumin Zhou, PhD   |
| 7:45 a.m.  | <b>KEYNOTE PRESENTATION:</b><br>Digital Twin in Radiation Oncology<br>Ehsan Samei, PhD, DABR, FAAPM, FSPiE, FAIMBE, FIOMP, FACR  |
| <b>Session 6: Digital Twin</b><br>Moderator: Ruirui Liu, PhD, CHP, DABR    |  |
| 8:35 a.m.  | Integrating Deformable Image Registration into Virtual Digital Twin for High Dose Rate (HDR) Prostate Brachytherapy<br>Yang Lei, PhD   |
| 8:55 a.m.  | Digital Twin in Radiation Biology<br>Ruirui Liu, PhD, CHP, DABR  |
| 9:15 a.m.  | Multicellular Simulation, Digital Twin<br>James A. Glazier, PhD  |
| 9:35 a.m.  | Opportunities and Challenges in the Clinical Applications of Multiscale Radiation Biology Modeling<br>Robert Stewart, PhD  |
| 9:55 a.m.  | Q & A  |
| 10:10 a.m.   | Break / Exhibits   |
| <b>Session 7: FLASH Therapy</b><br>Moderator: Kyle J. Gallagher, PhD, DABR |  |
| 10:25 a.m.   | Mevion Proton FLASH-Related Experience<br>Xiandong Zhao, PhD   |
| 10:45 a.m.   | Proton FLASH, Upright Proton System<br>Minglei Kang, PhD, DABR   |
| 11:05 a.m.   | Multi-Institutional Evaluation of Dosimetry Systems for Electron FLASH Therapy: Experience from the FlashForward Consortium (FCC) Quality Assurance and Dosimetry Management Working Group<br>Kyuhak Oh, PhD |
| 11:25 a.m.   | Comparing the Response of Normal and Cancer Cells to FLASH and Conventional Radiation<br>Ying Yan, PhD   |
| 11:45 a.m.   | Q & A  |
| 12:00 p.m.   | Lunch / Exhibits   |

Ruirui Liu, PhD, CHP, DABR  
Assistant Professor, Department of Radiation Oncology

Lindsay A. McAlarnen, MD, MSc, FACOG  
Assistant Professor, Division of Gynecologic Oncology,  
Department of Obstetrics and Gynecology

Mikayla Morrow, BSN  
Radiation Oncology Nurse, Nebraska Medicine

Kyuhak Oh, PhD  
Medical Physics Resident, Department of  
Radiation Oncology

Lauren A. O'Neil, MD  
Assistant Professor, Department of Ophthalmology  
and Visual Sciences

John W. Schleifer, MD  
Assistant Professor, Division of Cardiovascular  
Medicine, Department of Internal Medicine

Jared Schober, MD  
Assistant Professor, Division of Urologic Surgery,  
Department of Surgery

Morgan Sheen, RDN, LMNT  
Registered Dietitian, Department of Clinical Nutrition,  
Nebraska Medicine

Benjamin A. Teply, MD  
Associate Professor, Division of Oncology and  
Hematology, Department of Internal Medicine

William E. Thorell, MD  
Professor, Department of Neurosurgery

Andrew Wahl, MD  
Associate Professor, Department of Radiation Oncology

Shuo Wang, PhD  
Associate Professor, Department of Radiation Oncology

Elizabeth Wellsandt, PT, DPT, PhD  
Associate Professor, Department of Health and  
Rehabilitation Sciences, College of Allied Health  
Professions

Ying Yan, PhD  
Professor, Department of Radiation Oncology

Chi (Kevin) Zhang, MD, PhD  
Associate Professor, Department of  
Radiation Oncology

Weining (Ken) Zhen, MD, FACR, FASTRO  
Professor, Department of Radiation Oncology

Sumin Zhou, PhD  
Professor and Director of Medical Physics,  
Department of Radiation Oncology

## Session 8: Proton Therapy

Moderator: Shuo Wang, PhD

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| 1:00 p.m. | Implementing Proton Stereotactic Radiosurgery (SRS) Technique with Pencil Beam Scanning and Brass Aperture to Minimize Integrated Dose for Benign Brain Tumors<br>Jason Shen, PhD |
| 1:20 p.m. | Toward Acceptance and Commissioning of the First Ultra-Compact Upright Proton Therapy System: Mevion S250-FIT<br>Serdar Charyyev, PhD   |
| 1:40 p.m. | Proton Therapy Workflow<br>Liyong Lin, PhD, FAAPM, DABR   |
| 2:00 p.m. | Good Vibrations: Focused Ultrasound in the Realm of Benign Disease<br>Sam Hendley, PhD, DABR  |
| 2:20 p.m. | Q & A   |
| 2:35 p.m. | Break / Exhibits  |

## Session 9: Orbital Diseases

Moderator: Charles A. Enke, MD, FASTRO, FACR

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|-----------|---|
| 2:50 p.m. | The Role of Orbital Radiation Therapy for Thyroid Eye Disease<br>Charles A. Enke, MD, FASTRO, FACR            |
| 3:10 p.m. | From Steroids to Biologics: Evolving Strategies in Thyroid Eye Disease Management<br>Rao V. Churdury, MD, MBA |
| 3:30 p.m. | The Surgical Management of Thyroid Eye Disease<br>Lauren A. O'Neil, MD  |
| 3:50 p.m. | Q & A   |

## Session 10: Prostate Cancer

Moderator: Michael Baine, MD, PhD

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|-----------|---|
| 4:00 p.m. | Focal Therapy in Prostate Cancer: Emerging Options for Tumor Ablation<br>Jared Schober, MD              |
| 4:20 p.m. | Cutting-Edge Radiation Therapy in Prostate Cancer: Protons and FLASH<br>Michael Baine, MD, PhD          |
| 4:40 p.m. | The Role of Radiopharmaceuticals in the Treatment of Advanced Prostate Cancer<br>Benjamin A. Tepley, MD |
| 5:00 p.m. | Q & A   |
| 5:10 p.m. | Closing Comments by the Department Vice Chair of Research<br>Chi Lin, MD, PhD                           |
| 5:15 p.m. | Adjourn   |

## Symposium Planning Committee

Michael Baine, MD, PhD  
Dinah Clark  
Valeta Creason-Wahl, MMP  
Missy Edwards  
Charles A. Enke, MD, FACR, FASTRO  
Kyle Gallagher, PhD, DABR  
Julie Huglin  
Heidi Keeler, PhD, MSN/MBA, RN  
Chi Lin, MD, PhD  
Renee Paulin, MSN, RN, CWOCN  
Charlene Rhodd, CMD, RT, (R)(T) (CT) (ARRT)  
Brenda Ram, CMP, CHCP  
Hongmei Ren, BSN  
Chi (Kevin) Zhang, MD, PhD