## RISING TO NEW HEIGHTS

# The Radiation Oncology Summit

RADIATION The ONCOLOGY

# SUMMIT

March

ACRO 2019

Hilton Orlando Lake Buena Vista

Orlando, Florida

### SPECIAL FEATURES

- Disease Site-Based
   Scientific Program With
   Top Faculty
- Special Session on the Life and Legacy of Dr. Luther Brady
- Business and Economics of Radiation Oncology Practice Session
- · Resident & New Practitioner Symposia
- · Networking Opportunities
- Women in Radiation Oncology Forum
- MEET (Meet Excellent Educators & Teachers)
- · Diversity & Inclusion Forum
- · Oral Papers Sessions
- · Posters Sessions & Walk
- · Locum Tenens Forum
- · Fun Run/Walk
- · Exhibition Hall











Last year we changed the name of our annual meeting to The Radiation Oncology Summit - and it worked. A summit is a meeting where top people in a field gather together to learn from each other and improve their specialty. That's what happened.

ACRO's annual meetings have always been a relaxing and friendly experience, in contrast to so many other big national conferences where the pace is frenetic. At ACRO's Summit, attendees have the time to talk to each other and to the invited speakers in an environment of mutual respect and learning. And from social activities and other networking opportunities, education also occurs outside the lecture hall. Our goal is to make sure you leave the Summit with the latest knowledge and skills that can be implemented immediately as soon as you return to your practice.

In addition, most CME plenary sessions are eligible for a SAM to cover your ABR MOC requirement for a full year all in one place and at no extra cost. We look forward to meeting you at this Summit.

Eduardo Fernandez MD, PhD, FACRO Sheila Rege MD, FACRO





Vice President and

Jason Efstathiou MD, DPhil



Co-Chair, Scientific Program Committee

Steven Finkelstein MD, FACRO



Co-Chair Scientific

### Friday, March 8 • 1:15 - 1:45 pm —

### Special Remembrance:

### The Life and Legacy of Dr. Luther Brady



Moderator: Eduardo Fernandez MD, PhD, FACRO Sucha Asbel MD, FACRO Cooper University Health Care, Mount Laurel, NJ

Joanne Dragun MD, FACRO 21st Century Oncology, Jacksonville, FL

Dennis Galinsky MD, FACRO Berwyn Radiation Oncology, Berwyn, IL

#### **ACRO Board of Chancellors**

Chairman James Welsh MD, FACRO

**President** 

Eduardo Fernandez MD, PhD, FACRO

**Vice President** Sheila Rege MD, FACRO

Secretary/Treasurer William Noyes MD, MBA, FACRO

**Chancellors** 

Joanne Dragun MD, FACRO Steven Finkelstein MD, FACRO Arve Gillette MD, FACRO Dwight Heron MD, FACRO Shane Hopkins MD, FACRO Charles Thomas II MD, FACRO Catheryn Yashar MD, FACRO

### 2019 Annual Meeting Committee

**General Chair** 

Sheila Rege MD, FACRO

**Scientific Program Committee Co-Chairs** 

Jason Efstathiou MD, DPhil Steven Finkelstein MD, FACRO **Development Committee Chair** Charles Thomas II MD, FACRO

**CME Coordinator** Valerie Brown CPS

### 2019 Scientific Program Committee

Parul Barry MD Valerie Brown CPS Michael Chuong MD Steven Finkelstein MD, FACRO (Co-Chair) Jason Efstathiou MD, DPhil (Co-Chair) Courtney Hentz MD Brian Lally MD

Shannon MacDonald MD Jessica Moore MD Brandi Page MD Charles Simone II MD Tarita Thomas MD Stephanie Weiss MD

### 2019 Abstract Reviewers

Michael Chuong MD Steven Feigenberg MD Steven Finkelstein MD, FACRO Courtney Hentz MD Krisha Howell MD Brian Lally MD John Lukens MD Lawrence Kleinberg MD, FACRO Sameera Kumar MD Virginia Osborn MD Brandi Page MD Jessica Schuster MD Neil Taunk MD Tarita Thomas MD Stephanie Weiss MD

### **Learning Objectives:**

At the conclusion of the conference attendees should be able to:

- 1. Implement the latest scientific advances into evidenced based standards of care in radiation oncology.
- 2. Demonstrate competence in billing and coding for radiation oncology treatment in the face of increased governmental regulation and financial cuts.
- 3. Evaluate the treatment of acute and long-term complications of radiation therapy for Breast, CNS, Endometrial, Gastrointestinal, Genitourinary, Head & Neck, Lymphoma, Sarcoma, and Thoracic Malignancies in order to improve patient outcomes.
- 4. Describe and apply state of the art treatment management for Breast, CNS, Endometrial, Gastrointestinal, Genitourinary, Head & Neck, Lymphoma, Sarcoma, and Thoracic Malignancies.

- 5. Interpret the changing political, economic, and regulatory health care environment in order to survive the year ahead.
- 6. Link clinical/practice updates to address clinical controversies in tumor boards and grand rounds.

### **Accreditation, CME Credits** and Disclosure:

This activity has been planned and implemented in accordance with the accreditation requirements and policies of the Indiana State Medical Association (ISMA) through the joint providership of Community Health Network and the American College of Radiation Oncology. Community Health Network is accredited by ISMA to provide continuing medical education for physicians.

Community Health Network designates this live educational activity for a maximum of 22.75 AMA PRA Category 1 **Credit(s)**™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

While offering the CME credit above, this activity is not intended to provide extensive training in the field. ADA accommodations are available upon request.

Community Health Network has implemented a process whereby everyone who is in a position to control the content of an educational activity has disclosed all relevant financial relationships, with any commercial interest. In addition, should it be determined that a conflict of interest exists as a result of a financial relationship, it will be resolved prior to the activity.

### ACRO 2019 FACULTY



Robert Amdur MD University of Florida, Gainesville, FL



Vinai Gondi MD Northwestern Medicine Cancer Center, Warrenville, IL



Matthew Harkenrider MD Loyola University, Maywood, IL



Brian Lally MD University of Pennsylvania, Philadelphia, PA



Christopher Crane MD Memorial Sloan Kettering Cancer Center, New York, NY



David Grosshans MD, PhD MD Anderson Cancer Center, Houston, TX



Richard Hausmann PhD Elekta, Stockholm, Sweden



Richard Levy PhD Palo Alto, CA



Ronald DiGiamio MBA Revenue Cycle Inc., Cedar Park, TX



Bruce Haffty MD Rutgers Cancer Institute, New Brunswick, NJ



Courtney Hentz MD Loyola University Medical Center, PGY-5, Chicago, IL



J. Nicholas Lukens University of Pennsylvania School of Medicine, Philadelphia, PA



Bree Eaton MD Emory University, Atlanta, GA



Daniel Hamstra MD, PhD Oakland University, Dearborn, MI







Erin Gillespie MD Memorial Sloan Kettering Cancer Center, New York, NY



### ACRO 2019 FACULTY



Barbara McAneny MD American Medical Association, Chicago, IL



**Brandi Page MD** Johns Hopkins Medicine, Bethesda, MD



Sheila Rege MD, FACRO Northwest Cancer Clinic, Kennewick, WA



Neha Vapiwala MD University of Pennsylvania, Philadelphia, PA



Jason McKitrick MBA Liberty Partners Group, Washington, D.C.



Parag Parikh MD Henry Ford Health System, Detroit, MI



**Chad Rusthoven MD** University of Colorado, Aurora, CO



**Dow Wilson MBA** Varian Medical Systems, Palo Alto, CA



Jeff Michalski MD Washington University School of Medicine, St. Louis, MO



Asal Rahimi MD University of Texas Southwestern, Dallas, TX



**Charles Simone MD** New York Proton Center, Manhattan, NY



Karen Winkfield MD, PhD Wake Forest University, Winston-Salem, NC



Benjamin Movsas MD Henry Ford Cancer Institute, Detroit, MI



**Marcus Randall MD** University of Kentucky, Lexington, KY



Jonathan Strauss MD, MBA Northwestern Medicine. Chicago, IL



Andrew Woods Esq Liberty Partners Group, Washington D.C.



Catheryn Yashar MD, FACRO University of California San Diego, La Jolla, CA

### ACRO 25-YEAR MEMBERS

Andre Abitbol MD, FACRO Jeffrey Acker MD Scot Ackerman MD Mark Alden MD, FACRO Thomas Anderson DO, FACRO Steven Anolik MD Mitchell Anscher MD. FACRO Sucha Asbell MD, FACRO Azhar Awan MD Sanjeev Bahri MD, FACRO Franklin Banker MD Jerry Barker MD, FACRO Robert Bertoli MD David Beyer MD, FACRO Inder Bhutiani MD Stuart Blacher MD Tarlton Blair PhD, MD, FACRO Barry Blyton MD Luther Brady MD, FACRO Alice Bulger MBA David Butler MD Richard Byrnes MD, FACRO David Catalano MD, FACRO Alex Chen MD, FACRO Luci Chen MD, FACRO Judy Chin MD, FACRO Douglas Ciuba MD, FACRO Henry Cline MD, FACRO Brad Cohen MD Martin Colman MD James Corwin MD Gregory Cotter MD, FACRO Wayne Court PhD, MD, FACRO John Crawford MD James Currier MD, FACRO Mark D'Andrea MD, FACRO Pankaj Dalal MD Frank Dancuart MD, FACRO Kishore Dass MD D. Jeffrey Demanes PhD, MD, FACRO Paul DeMare MD Richard Deming MD, FACRO Melvin Deutsch MD Richard Diaz MD, FACRO Gregg Dickerson MD, FACRO Daniel Dosoretz MD, FACRO Joanne Dragun MD, FACRO Raymond Dugal MD Michael Durci MD John Edlund MD John Einck MD, FACRO Rodney Ellis MD Bahman Emami MD, FACRO Kirsten Erickson MD, FACRO

Thomas Fogel MD, FACRO James Fontanesi MD Arthur Frazier MD, FACRO **Donald Fuller** John Funke MD, FACRO Dennis Galinsky MD, FACRO Scott Gasiorek MD, FACRO James Giebink MD, FACRO Betty Gil MD Arve Gillette MD, FACRO Juan Godinez MD Robert Goebel MM, JD, MD, FACRO Joel Greenberger MD, FACRO Daniel Haraf MD Lowndes Harrison MD, FACRO Robert Haselow MD Mary Hebert MD, FACRO William Helvie MD, FACRO Jeffrey Herman MD Robert Hesselgesser MD Steven Hightower MD, FACRO Jack Hong MD, FACRO David Hurst MD, DMD, FACRO Tahir Ijaz MD, FACRO Joseph Jenrette MD, FACRO Gregory Jones MD Joseph Kaczor MD James Kane, Jr. MD, FACRO Michael Katin MD, FACRO Nathan Kaufman MD, FACRO Guy Kedziora MD, FACRO Joan Keit MD, FACRO Shiv Khandelwal MD, FACRO Monica Khanna MD Krystyna Kiel MD James Kinard PhD, MD, FACRO Gordon Koltis MD, FACRO John Kosiak MD Bradley Kramer MD John Kresl MD, PhD, FACRO Roger Krueger MBA Michael Kuettel PhD, MD, FACRO Anand Kuruvilla MD, FACRO Roby Lal DO Kenneth Lam MD, FACRO Michael Lambo MD, FACRO Frank Lamm MD, FACRO Steven Lester MD, FACRO Kathryn Lewis MD, FACRO Vasudha Lingareddy MD, FACRO Roberto Lipsztein MD Jeffrey Lopez MD Ricardo Lopez-Mujica MD, FACRO Hsin Lu MD Ronald Lutsic DO Gregory Maggass MD, FACRO

R. Mantravadi MD. FACRO Michael Marchese MD, FACRO John Marvel MD. FACRO Dean Mastras MD Charles Mateskon MD Byron May MD Bruce McAllister MD, MS, FACRO Dale McCord MD James McGee MD, FACRO William McGinnis MD Patrick McKenna MD Gerald Medwick DO, FACRO Allen Meek MD Ruby Meredith MD, PhD, FACRO Gregory Merrick MD Bruce Merwin MD, FACRO Paul Miller MD Terence Moore MD John Mullen MD Duane Myers MD Ranjeev Nanda MD, FACRO Ernest Ngo MD, FACRO Timothy Nichols MD John Norlund MD Louis Novak MD, FACRO William Noyes MBA, MD, FACRO David Owens MD, FACRO Laeton Pang MD, FACRO Shyam Paryani MD, FACRO Pradip Pathare MD, FACRO Claudia Perez-Tamayo MD, FACRO William Podolsky MD, PhD Farida Rajput MD, FACRO Susan Rakfal MD, FACRO Nilam Ramsinghani MD, FACRO Yallapragada Rao MD, FACRO Sarada Reddy MD, FACRO Sheila Rege MD, FACRO John Reilly MD Lillian Rinker MD Louis Rivello MD David Rohde MD Alfred Rosenbaum MD, FACRO Robert Rostock MD, FACRO James Rubenstein MD, FACRO Jose Santana-Rabell MD, FACRO Paul Schilling MD, FACRO Alvin Schlichtemeier MD Philip Schneider MD, FACRO Donald Schwarz MD, FACRO Carol Scicutella DO, FACRO Robert Scruggs MD Kimberly Sevening Armen Shahbazian MD John Shaw MD, FACRO

Sunderam Shetty MD, FACRO

Lawrence Shombert MD, FACRO Dennis Shrieve MD, PhD Khalid Siddigui MD, FACRO Larry Silverman MD Michael Skowronski MS, FACRO William Small, Jr. MD, FACRO Damon Smith MD, FACRO Gerald Sokol MD Michael Sorensen MD Wayne Spears MD T. Spencer MD, FACRO John Spera MD, FACRO Stephen Springate Jerome Spunberg MD, FACRO Baldassarre Stea PhD, MD Jonathan Stella MD James Stevens MD, FACRO Gordon Stillie MBA, DO, FACRO Thomas Stoffel MD, FACRO Andrejs Strauss MD Revathi Swaminathan MD A.M. Nisar Syed MD, FACRO Michael Tay MD Eric Taylor MD, FACRO John Taylor MD, FACRO Michael Taylor MD, FACRO Ferial Tewfik PhD, MD Hamed Tewfik MD Harish Thakrar MD, FACRO John Thomas MD, FACRO Charles Thomas II MD, FACRO Donald Tilton DO Robert Tomchuck DO William Tomlinson MD, FACRO Paul Treadwell MD Mark Trombetta MD, FACRO Jefferson Trupp MD, FACRO Eric Van Rooy MD Frank Vicini MD Phillip Vigneri DO, FACRO Vitune Vongtama MD David Wahl MD, FACRO Wesley Walker MD David Wazer MD, FACRO Benjamin West MD Barry Wilcox MD, FACRO Steven Wilson MD Michael Wing MD Ben Wright MD Theodore Yaeger MD Mohammed Zahra MD, FACRO Andrej Zajac MD Kenneth Zeitzer MD, FACRO

Eduardo Fernandez MD, PhD, FACRO

James Flynn MD, FACRO

_				i	
	SDAY, MARO	CH 6	10:15 — 11:45 am	Palm 1	Evolving Paradigms in Treating Breast Cancer With Radiotherapy
1:00 – 6:00 pm	Palm Foyer	Registration Open	12:00 – 1:00 pm	South Ballroom	Lunch with Presentations: CEO Vision for the Future (Varian and Elekta)
2:00 – 5:00 pm	Palm 5	Updates & Dilemmas in Billing and Coding	1:15 – 1:45 pm	Palm 1	The Life and Legacy of Dr. Luther Brady
THURS	DAY, MARCH	17	1:45 –		
6:30 am – 6:00 pm	Palm Foyer	Registration Open	2:15 pm	Palm 1	Keynote Address
7:30 – 8:15 am	Palm 1	Breakfast with the President of the AMA (21st Century)	2:15 – 2:45 pm	Palm 1	ACRO Awards Ceremony
8:15 – 8:30 am	Palm 1	Presidential Welcome & Meeting Overview	2:45 – 3:00 pm	Palm Foyer	Break
8:30 – 10:00 am	Palm 1	Ablative Radiotherapy for Liver and Pancreas Cancers: Why, When, and How	3:00 – 5:00 pm	Palm 1	The Business & Economics of Radiation Oncology Practice
10:00 – 10:40 am	Palm 2-3-4	Exhibits/Break	2:45 – 5:15 pm	Narcissus/Orange	Resident Symposium
10:45 am – 12:00 pm	Palm 1	Contouring Symposium	5:15 – 6:45 pm	Poinsettia	Government Relations & Economics Committee
12:00 – 1:00 pm	Palm 5	ViewRay Satellite Symposium	5:15 –	Narcissus/Orange	New Practitioner & Resident Symposium /
12:00 –	Palm 2-3-4	Lunch in Exhibit Hall	7:15 pm 6:00 –	Palm 5	MEET featuring Quizzo (Revenue Cycle)  Varian Satellite Symposium
1:15 pm	Narcissus/Orange	Sucha Asbell Women in Radiation Oncology Forum	7:00 pm 7:00 –	Poolside or	
1:15 – 2:45 pm	Palm 1	Improving the Paradigms in Lung Cancer	8:00 pm	Palm 2-3-4	President's Reception
2:45 – 3:30 pm	Palm 2-3-4	Exhibits/Break	7:30 am-	DAY, MARCH Palm Foyer	Registration Open
3:00 – 5:00 pm	Palm 1	PCI: To Radiate or Not to Radiate	2:00 pm 7:30 –	,	Resident & New Practitioner Symposium -
5:00 –	Palm 1	Oral Presentations	9:00 am	Narcissus/Orange	"Street Smarts"
6:00 pm	Narcissus/Orange	New Practitioner Symposium	8:00 – 9:00 am	Palm 5	Novocure Satellite Symposium
	Azalea/Begonia	Standards Committee Meeting	9:00 –	Veranda Room	Scientific Program Committee Meeting  Challenging Topics in Head
6:15 – 7:45 pm	Poinsettia/Quince	Membership Committee Meeting	10:15 am	Palm 1	and Neck Cancer
	Veranda Room	New Practitioner Committee Meeting	10:45 am	Palm 2-3-4	Break with Posters  Curing Endometrial Cancer,
6:30 – 7:30 pm	Palm 5	Sirtex Satellite Symposium	12:00 pm	Palm 1	One Gray at a Time
FRIDAY	, MARCH 8		1:30 pm	Palm 2-3-4	Lunch with Posters/Poster Walk
6:30 am – 6:00 pm	Palm Foyer	Registration Open	12:30 – 1:30 pm	Palm 5	Locum Tenens Forum
6:45 – 7:30 am	Palm Foyer	Radiating Hope Fun Run/Fun Walk!	1:30 – 2:45 pm	Palm 1	Lymphoma in Adults, Adolescents and Children
	Palm 5	Bayer Satellite Symposium	2:45 – 3:00 pm	Palm Foyer	Break
7:00 – 8:00 am	Palm 2-3-4	Breakfast in Exhibit Hall	3:00 – 4:15 pm	Palm 1	Sarcoma in Adults, Adolescents and Children
	Veranda	Diversity and Inclusion Breakfast	4:15 – 5:30 pm	Palm 1	Oral Presentations
8:00 – 9:30 am	Palm 1	Exploring the Changing Landscape for High-Risk and Advanced Prostate Cancer	5:30 pm	ACRO 2019 Adjo	ourns
9:30 – 10:15 am	Palm 2-3-4	Exhibits/Break	5:30 – 7:30 pm	Narcissus	ACRO Board of Chancellors Meeting



### WEDNESDAY, MARCH 6

1:00 - 6:00 pm • Palm Foyer

### **Registration Open**

2:00 - 5:00 pm • Palm 5

### **Updates & Dilemmas in Billing and Coding**

Ron DiGiaimo MBA - Revenue Cycle Inc., Austin, TX

### THURSDAY, MARCH 7

6:30 am - 6:00 pm • Palm Foyer

### **Registration Open**

7:30 - 8:15 am • Palm 1

#### Breakfast with the President of the AMA

Barbara McAneny, MD - American Medical Association, Chicago, IL

Hosted by 21st Century Oncology

8:15 - 8:30 am • Palm 1

### **Presidential Welcome & Meeting Overview**

Eduardo Fernandez MD, PhD, FACRO- President Jason Efstathiou MD, DPhil, & Steven Finkelstein MD, FACRO - Scientific Program Committee Co-Chairs

8:30 - 10:00 am • Palm 1 • FREE SAM

### **Ablative Radiotherapy for Liver and Pancreas** Cancers: Why, When, and How

Moderator: Michael Chuong

 Ablative Radiation for Locally Advanced Pancreatic Cancer Using (Cone Beam) CT

**Christopher Crane** – Memorial Sloan Kettering Cancer Center, New York, NY

Parag Parikh - Henry Ford Health System, Detroit, MI

10:00 am • Palm 2-3-4

### **Exhibits Open**

10:00 - 10:40 am • Palm 2-3-4

#### Exhibits/Break

10:45 am - 12:00 pm • Palm 1 • FREE SAM

### **Contouring Symposium**

Erin Gillespie – Memorial Sloan Kettering Cancer Center, New York, NY

Matthew Harkenrider – Loyola University, Maywood, IL

J. Nicholas Lukens - University of Pennsylvania School of Medicine, Philadelphia, PA

Jeff Michalski - Washington University School of Medicine, St. Louis, MO

12:00 - 1:15 pm • Palm 2-3-4

#### **Lunch in Exhibit Hall**

### ■ THURSDAY CONTINUED

12:00 - 1:00 pm • Palm 5

ViewRay Satellite Symposium (not CME Eligible)

See page 15 for more information.

 ViewRay MRIdian Linac: From Startup to **On-Table Adaptive Cases** Michael Chuong MD

12:00 - 1:15 pm • Narcissus/Orange

### **Sucha Asbell Women in Radiation Oncology Forum**

· Join your colleagues for a networking lunch.

1:15 - 5:15 pm • Azalea/Begonia

#### **Practice Interviews**

· Sign up at registration desk by 10:00 am

1:15 - 2:45 pm • Palm 1 • FREE SAM

### Improving the Paradigms in Lung Cancer

Moderators: Isabelle Choi, Steven Feigenberg

- Development of a Community-Based **Pulmonary Nodule Clinic** Brian Lally - University of Pennsylvania, Philadelphia, PA
- Advanced Technologies in Locally Advanced Non-Small Cell Lung Cancer: IGRT, IMRT, and **Proton Therapy**

Charles Simone - New York Proton Center, New York, NY

 Small Cell Lung Cancer: Past, Present, Future Benjamin Movsas - Henry Ford Cancer Institute, Detroit, MI

2:45 - 3:30 pm • Palm 2-3-4

### Exhibits/Break

3:00 - 5:00 pm • Palm 1 • FREE SAM

#### PCI: To Radiate or Not to Radiate

Moderators: Ranh Voong, Stephanie Weiss

- Evidence For and Against PCI Chad Rusthoven - University of Colorado, Aurora, CO
- Hippocampal Sparing in Small Cell Lung Cancer Vinai Gondi - Northwestern Medicine Cancer Center, Warrenville, IL
- Toxicity of PCI David Grosshans - MD Anderson Cancer Center, Houston, TX

5:00 - 6:00 pm • Palm 1

### **Oral Presentations**

Moderator: Colette Shen

- A Survey of Understanding and Perceptions of **Palliative Care in Radiation Oncology** Jill Remicki, Emily Kowalskii, Erica Glassi, Charles Simonei, Pranshu Mohindrai
  - University of Maryland Department of Radiation Oncology, Baltimore, MD
- Platelet-Lymphocyte and Lymphocyte-Monocyte Ratio Association with Vertebral Body Irradiation and Disease

**Progression in Esophageal Chemoradiotherapy** Alexander Sherryi, Neil Newmanii, Joshua Andersoni, Evan Osmundson<sup>ii</sup>

- <sup>1.</sup> Vanderbilt University School of Medicine, Nashville, TN
- " Vanderbilt University Medical Center, Nashville, TN
- Development of an Early Stage Breast Cancer **Episodic Payment in Radiation Oncology** Mark Waddle<sup>i</sup>, Laura Vallow<sup>i</sup>, Launia White<sup>ii</sup>, James Naessensii, Aaron Spauldingii, Robert Milleri
  - Department of Radiation Oncology, Mayo Clinic, Jacksonville, FL
  - ii. Robert D. and Patricia E. Kern Center for the Science of Health Care Delivery, Mayo Clinic, Jacksonville, FL
- Gleason Grade Group Prediction for Prostate Cancer Using a Convolutional Neural Network Pretrained on **Lesion and Normal Tissue Patches**

Joon Leei, Weiwei Zongi, Hassan Bagher-Ebadiani, Ning Weni Henry Ford Hospital, Detroit, MI

5:00 - 6:00 pm • Narcissus/Orange

### **New Practitioner Symposium**

Moderator: Brandon Mancini

• Program features panel of chairs of departments to offer insights and answer your questions about steps to a successful academic career, suggestions for facilitating promotion, how to become involved within the field of Radiation Oncology, and much more. Panelists will include: A.J. Mundt, University of San Diego; Ben Movsas MD, Henry Ford Cancer Institute; and Bruce Haffty MD, Rutgers Cancer Institute.

6:15 - 7:45 pm • Various Rooms (see page 7)

#### **Committee Meetings**

• Standards • Membership • New Practitioner

6:30 - 7:30 pm • Palm 5

### Sirtex Satellite Symposium (not CME Eligible)

See page 15 for more information.

 Use of Y-90 Alone and with External Beam Radiotherapy for Unresectable Hepatic Tumors Andrew Kennedy, MD

### FRIDAY, MARCH 8

6:30 am - 6:00 pm • Palm Foyer

### **Registration Open**

6:45 - 7:30 am • Palm Foyer

### Radiating Hope Fun Run/Fun Walk!

Organizer: Brandi Page

7:00 - 8:00 am • Veranda Rooom

### **Diversity and Inclusion Breakfast**

Moderator: Karen Winkfeld

· It is an exciting time in the field of radiation oncology as we are evolving into a diverse group of physicians. Diversity represents the full spectrum of human demographic differences -- race, religion, gender, sexual orientation, age, socio-economic status or physical disability. Inclusion refers to a cultural and environmental feeling of belonging. Join colleagues for an informal conversation over breakfast and coffee to discuss our vision and strategies. Everyone is welcome to participate.

7:00 - 8:00 am • Palm 5

#### Bayer Satellite Symposium (not CME Eligible)

See page 15 for more information.

 Xofigo (radium Ra 223 dichloride): 6 Facts on **Identifying Appropriate Patients** Steven Finkelstein MD, FACRO & Rodnev Ellis MD

7:00 - 8:00 am • Palm 2-3-4

#### **Breakfast in Exhibit Hall**

7:00 am - 12:00 pm • Palm 2-3-4

#### **Exhibits Open**

8:00 - 9:30 am • Palm 1 • FREE SAM

### **Exploring the Changing Landscape for High-**Risk and Advanced Prostate Cancer

Moderators: Jason Efstathiou, Steven Finkelstein

 Update on Radiotherapy in High-Risk Prostate Cancer: Staging, Dose, Volume, and Androgen Deprivation

Daniel Hamstra - University of Michigan, Ann Arbor, MI

- Introduction of Technology in Cooperative Group Trials: Prostate Cancer as a Paradigm Jeff Michalski - Washington University School of Medicine, St. Louis, MO
- Role of Radiotherapy in OligoMetastatic Prostate Cancer: Current State & Future Directions Neha Vapiwala - University of Pennsylvania, Philadelphia, PA

9:30 - 10:15 am • Palm 2-3-4

#### Exhibits/Break

10:15 - 11:45 am • Palm 1 • FREE SAM

### **Evolving Paradigms in Treating Breast Cancer** With Radiotherapy

Moderator: Tarita Thomas

- Management of the Axilla in the Modern Era Jonathan Strauss - Northwestern Medicine, Chicago, IL
- Radiation Issues Following Neoadjuvant **Chemotherapy in Breast Cancer** Bruce Haffty - Rutgers Cancer Institute, New Brunswick, NJ
- Altered Fractionation in Early Stage Breast Cancer Asal Rahimi – University of Texas Southwestern, Dallas, TX

12:00 - 1:00 pm • South Ballroom

### **Lunch with Presentations: CEO Vision for** the Future (not CME Eligible)

Moderators: Arno Mundt, Sheila Rege

#### **Hosted by Varian Medical Systems and Elekta**

 Industry CEOs Share Their Vision of the Future; **Innovative or Disruptive Threats to Radiation** Oncology

Dow Wilson MBA - Varian Medical Systems, Palo Alto, CA Richard Hausmann PhD - Elekta, Stockholm, Sweden



1:15 - 1:45 pm • Palm 1

### The Life and Legacy of Dr. Luther Brady

Moderator: Eduardo Fernandez

Sucha Asbel – Cooper University Health Care, Mount Laurel, NJ Joanne Dragun - 21st Century Oncology, Jacksonville, FL Dennis Galinsky – Berwyn Radiation Oncology, Berwyn, IL

1:45 - 2:15 pm • Palm 1

### **Keynote Address**

• The Future of Cancer Management Richard Levy PhD - Palo Alto, CA

2:15 - 2:45 pm • Palm 1

### **ACRO Awards Ceremony**

- Gold Medal Award Presentation
- Installations of New Fellows
- Presentations of Outstanding Abstract Awards

2:45 - 3:00 pm • Palm 1 Foyer

#### Break

3:00 - 5:00 pm • Palm 1

### The Business & Economics of Radiation **Oncology Practice**

Moderator: William Noyes

 ACRO Government Relations & Economics **Committee Update** 

Sheila Rege - Northwest Cancer Clinic, Kennewick, WA Jason McKitrick – Liberty Partners Group, Washington, DC

- Dr. David Krause Washington Update Andrew Woods - Liberty Partners Group, Washington, DC
- Practical Application of Coding Updates and **Documentation of Your Practice** Ron DiGiaimo – Revenue Cycle Inc., Austin, TX
- ACRO Accreditation Update Jaroslaw Hepel – Brown University, Providence, RI

2:45 - 5:15 pm • Narcissus/Orange

### Resident Symposium

 ACRO Resident HIT and GROW Presentations Global Radiation Oncology Workforce (GROW) **Experience** 

Lauren Kropp – Pacific Cancer Institute, Wailuku, HI **Lindsay Puckett** – Medical College of Wisconsin

Heidelberg Ion Therapy (HIT) Experience Jacqueline Kelly - Yale School of Medicine, New Haven, CT

 Career / Interview Advice - Panel Discussion Moderator: Courtney Hentz

Catheryn Yashar - University of California San Diego, La Jolla, CA

Jonathan Strauss - Northwestern Medicine, Chicago, IL Robert Amdur - University of Florida, Gainesville, FL

### **Faculty Panel Discussion**

- Arno Mundt, Jonathan Strauss, Robert Amdur
  - How to master your rotations advice from faculty on how to be an outstanding resident
  - . How to start the job hunt
  - · Review resources, how to draft a cover letter and construct a CV

#### **Interview Advice**

- What makes a candidate stand out in your mind?
- ASTRO interviews

#### Practice Cases with the Experts

Residents rotate around the room with 10+ disease site-specific attendings, running through patient cases in a Q&A format with feedback and advice from attendings.

Robert Amdur - H&N

Parul Barry - GYN and Breast

Jason Efstathiou - GU

Matthew Harkenrider – GYN and Lung

Brian Lally - Lung

**Shannon MacDonald** – Lymphoma

Arno Mundt – GYN

Suneel Nagda - Breast

Brandi Page - H&N

Abhishek Solanki – GU

Jonathan Strauss - Breast

Tarita Thomas - Gl

Stephanie Weiss - CNS

### ■ FRIDAY CONTINUED

5:15 - 7:15 pm • Narcissus/Orange

### **New Practitioner & Resident Symposium /** MEET featuring Quizzo (not CME Eligible)

Quizmasters: Parul Barry, Anthony Dragun, Courtney Hentz, Brian Lally, Brandi Page

#### Refreshments hosted by Revenue Cycle

The purpose of these two events is to have fun in an entertaining environment.

- The MEET (Meet Excellent Educators & Teachers) This is a speed networking event. Individuals will spend 4-5 minutes meeting various faculty for 4-5 rounds.
- ROQ (Radiation Oncology QUIZZO) We will use the fun Quizzo trivia format for this section of the evening. Faculty will serve as team captains. Teams work together to solve a series trivia questions. There will be prizes!

5:15 - 6:45 pm • Poinsettia

### Government Relations & **Economics Committee Meeting**

6:00 - 7:00 pm • Palm 5

#### Varian Satellite Symposium (not CME Eligible)

See page 15 for more information.

- From Whole Brain to HyperArc for Brian Metastases: Recent Outcomes **Evan Thomas MD. PhD**
- Gantry-Based SBRT for Prostate Cancer: **Outcomes of a Large Multi-Institutional Study Constantine Mantz MD**

7:00 -8:00 pm • Poolside (Palm 2-3-4 if rainy)

### **President's Reception**

 All conference attendees are welcome to enjoy a festive reception with complimentary appetizers and beverages.

### SATURDAY, MARCH 9

7:30 am - 2:00 pm • Outside Palm 1

### **Registration Open**

7:30 - 9:00 am • Narcissus/Orange

### Resident & New Practitioner Symposium -"Street Smarts" (not CME Eligible)

Moderators: Parul Barry, Courtney Hentz

**Breakfast hosted by SunTrust** 

7:30 - 7:55 am

- Insurance Topics and Managing Debt
  - Disability, Life, Malpractice insurance
  - Financial Advice buying a home, setting up retirement funds
  - Managing Medical school debt
  - Speakers: Carol Hakemian MassMutual, Tom Callahan - Sun Trust

8:00 - 8:25 am

- Starting a Practice/Excelling in Your Career
  - Private practice establishing referral patterns
  - Academics excelling in research endeavors: grant funding, finding mentor, etc
  - Speakers: Abhishek Solanki Loyola University Medical Center, Maywood, IL, Catheryn Yashar -University of California San Diego, La Jolla, CA, Ben Wilkinson – Provision Center for Proton Therapy, Knoxville, TN

8:30 - 9:00 am

- Work-Life Balance
  - Work life balance
  - Having a family in medicine
  - Speakers: Jessica Schuster University of Wisconsin, Madison, WI, Neha Vapiwala -University of Pennsylvania, Philadelphia, PA

8:00 - 9:00 am • Palm 5

### Novocure Satellite Symposium (not CME Eligible)

See page 15 for more information.

 TTFields and the Radiation Oncologist **Volker Stieber MD** 

8:00 - 9:00 am • Veranda Room

### Scientific Program Committee Meeting

### ■ SATURDAY CONTINUED

8:00 am - 1:30 pm • Palm 2-3-4

### **Posters Displayed**

9:00 - 10:15 am • Palm 1 • FREE SAM

### **Challenging Topics in Head and Neck Cancer**

Moderator: J. Nicholas Lukens

- Postop Oral Cavity Cases Robert Amdur - University of Florida, Gainesville, FL
- Managing Toxicity in Head and Neck Cancer **Patients**

Brandi Page – Johns Hopkins Medicine, Bethesda, MD

10:15 - 10:45 am • Palm 2-3-4

#### **Break with Posters**

10:45 am - 12:00 pm • Palm 1 • FREE SAM

### **Curing Endometrial Cancer, One Gray** at a Time

Moderators: Parul Barry, Neil Taunk

- Adjuvant Radiotherapy for Early Stage **Endometrial Cancer: Beyond the Risk Groups** Matthew Harkenrider – Loyola University, Maywood, IL
- Adjuvant Treatment in Endometrial Cancer: **Clarity or Confusion?**

Marcus Randall - University of Kentucky, Lexington, KY

 Challenging Cases in Endometrial Cancer Catheryn Yashar – University of California San Diego, La Jolla, CA

12:00 - 1:30 pm • Palm 2-3-4

### Lunch with Posters/Poster Walk (not CME Eligible)

Moderators: Steven Feigenberg, Brandi Page

- Radio-Sensitizing Effects of Mutant p53 Reactivating Drug APR-246 in Head and Neck Cancer
  - Anatoly Nikolaevi, Ling Zengi, James A. Bonneri, Sharon Spenceri, Eddy S. Yangi
    - <sup>1</sup> University of Alabama at Birmingham, Birmingham, AL
- Pathogenic Germline Variants in a Patient With Severe Fibrosis and Cardiac Toxicity from Breast Radiotherapy

Tyler Wilhite, MDi, Ryan Youlandi, Shulan Tiani, Randi Finleyi, Jann Sarkariai, Kimberly Corbini

<sup>1</sup> Mayo Clinic, Rochester, MN

 Megavoltage versus Kilovoltage CT Planning for **Definitive Prostate Brachytherapy** 

Thomas Hunter<sup>i</sup>, Bhaswanth Dhaniredy<sup>i</sup>, Stephen Strup<sup>i</sup>, William St. Clairi

- University of Kentucky, Lexington, KY
- Persistent [18F] Fluorodeoxyglucose Positron **Emission Tomography Avidity after Definitive** Radiotherapy and Outcome in Ewing Sarcoma and Rhabdomyosarcoma

Alexander Sherryi, Joshua Andersoni, Marques Bradshawii, David Wharton", Christopher Brett", Dominique Delbeke", Eric Shinohara". Scott Borinstein"

- <sup>1</sup> Vanderbilt University School of Medicine, Nashville, TN
- " Vanderbilt University Medical Center, Nashville, TN
- Grade and Lymphovascular Space Invasion are Significant Predictors of Lymph Node Involvement in Stage II Endometrial Adenocarcinoma

Eric Andersoni, Mark Sittigi, Mitchell Kamravai

- <sup>i.</sup> Cedars-Sinai Medical Center, Los Angeles, California, USA
- Patterns of Failure and Toxicity Profile for Stereotactic Body Radiation Therapy of Nodal Recurrent Head and Neck Squamous Cell Carcinoma Clark M Hathewayi, Brian J Gebhardti, James P Ohrii, M. Saiful Huqi, Robert L Ferrisii, Dwight E Heroni, David A Clumpi
  - Department of Radiation Oncology, UPMC Hillman Cancer Center, University of Pittsburgh School of Medicine, Pittsburgh, PA
  - Department of Medicine, Division of Medical Oncology, UPMC Hillman Cancer Center, University of Pittsburgh School of Medicine, Pittsburgh, PA
  - Department of Otolaryngology, Head and Neck Surgery, UPMC Hillman Cancer Center, University of Pittsburgh School of Medicine, Pittsburgh, PA

12:30 - 1:30 pm • Palm 5

#### **Locum Tenens Forum**

 Pick up your lunch at the buffet in Palm 2-3-4 before joining your locum tenens colleagues for a networking lunch in Palm 5.

1:30 - 2:45 pm • Palm 1 • FREE SAM

### Lymphoma in Adults, Adolescents and Children

Moderators: Parul Barry, Shannon MacDonald

 Lymphoma Hi-Lo: Playing Your Cards Right with Radiation Dose

Karen Winkfield - Wake Forest University, Winston-Salem, NC

 How Management of Pediatric Hodgkin's Lymphoma Differs from Adults

**Shannon MacDonald** – MGH/Harvard University, Boston, MA

2:45 - 3:00 pm • Palm Foyer

#### **Break**

### **■** SATURDAY CONTINUED

3:00 - 4:15 pm • Palm 1 • FREE SAM

### Sarcoma in Adults, Adolescents and Children

Moderators: Sara Alcorn, Shannon MacDonald

Radiotherapy for Pediatric and Adult Sarcoma:
 The Past and Future

Bree Eaton - Emory University, Atlanta, GA

 Treatment Planning Techniques for Challenging Sarcoma Cases

**Shannon MacDonald** – MGH/Harvard University, Boston, MA

4:15 - 5:30 pm • Palm 1

### **Oral Presentations**

Moderators: Sara Alcorn, Jessica Schuster

- Deep Convolutional Neural Networks for Automatic Segmentation of the Hippocampus on MRI Scans Charles Vui, Evan Porteri, Patricia Fuentesii, Thomas Guerreroi
  - i. Beaumont Health, Royal Oak, MI
  - ii Oakland William Beaumont School of Medicine, Rochester, MI
- A Prospective Evaluation of Whole Brain Volume Loss and Neurocognitive Decline Following Prophylactic Cranial Irradiation for Limited-Stage Small-Cell Lung Cancer

Chengcheng Gui<sup>i</sup>, Namrata Chintalapati<sup>i</sup>, Russell Hales<sup>i</sup>, Ranh Voong<sup>i</sup>, Haris Sair<sup>ii</sup>, Jimm Grimm<sup>i</sup>, Mario Duhon<sup>i</sup>, Lawrence Kleinberg<sup>i</sup>, Tracy Vannorsdall<sup>iii</sup>, Kristin Redmond<sup>i</sup>

- Department of Radiation Oncology and Molecular Radiation Sciences, Johns Hopkins University, Baltimore, MD
- Department of Radiology and Radiological Science, Johns Hopkins University, Baltimore, MD
- Department of Psychiatry and Behavioral Sciences, Johns Hopkins University, Baltimore, MD

 Placement and Repositioning of Tumor-Treating Field Arrays do not Alter Target Volume Coverage for Glioblastoma Radiotherapy

Gregory Stachelek<sup>i</sup>, Jimm Grimm<sup>i</sup>, Kristin Redmond<sup>i</sup>, Michael Lim<sup>i</sup>, Chetan Bettegowda<sup>i</sup>, Lawrence Kleinberg<sup>i</sup>

<sup>1</sup> Johns Hopkins Hospital, Baltimore, MD, USA

 Echo-Planar MR Spectroscopic Imaging Pre- and Post-Radiotherapy in Patient with High Grade Glioma: Correlation with Survival

Christen Elledge, MD<sup>i</sup>, Doris Lin, MD, PhD<sup>ii</sup>, Yanqin Lin, PhD<sup>iii</sup>, Karim Snoussi, PhD<sup>ii</sup>, Anouk Marsman, PhD<sup>ii</sup>, Andrew Maudsley, PhD<sup>iv</sup>, Sulaiman Sheriff, MS<sup>iv</sup>, Katie Link, BS<sup>ii</sup>, Peter Barker, DPhil<sup>ii</sup>, Lawrence Kleinberg, MD<sup>i</sup>

- Department of Radiation Oncology & Molecular Radiation Sciences, Sidney Kimmel Comprehensive Cancer Center, Johns Hopkins University School of Medicine, Baltimore, MD
- Russell H. Morgan Department of Radiology and Radiological Science, Johns Hopkins University School of Medicine, Baltimore, MD
- Department of Electronic Science, Fujian Provincial Key Laboratory of Plasma and Magnetic Resonance, Xiamen, Fujian, China
- Department of Radiology, Miller School of Medicine, University of Miami, Miami, FL
- Preoperative Versus Postoperative Radiosurgery -Differences in Target Delineation

Chase Hansen, Eddie Zhang, Vladimir Avkshtol, Jonathan Paly, Karen Wong, Douglas Lee, Nina Burbure, Jiangtao Gou, Xiaoming Chen, Sameera Kumar, Scott Shepard, Shelly Haves. Stephanie Weiss

<sup>1</sup>Fox Chase Cancer Center, Philadelphia, PA, USA

5:30 pm

### **ACRO 2019 Adjourns**

Sheila Rege MD, FACRO, President

5:30 - 7:30 pm • Narcissus

### **ACRO Board of Chancellors Meeting**



## INDUSTRY SPONSORED

# Satellite Symposium Sessions

Sessions are held in Palm 5 and are not for CME.

### VIEWRAY

### Thursday, March 7 • 12-1pm

Speaker: **Michael Chuong MD** 

> **Radiation Oncologist** Miami Cancer Institute

Title: **ViewRay MRIdian Linac: From Startup to** 

**On-table Adaptive Cases** 

Description: Dr. Chuong will describe the initial MRIdian Linac

> experience at Miami Cancer Institute including patient selection, early clinical outcomes, techniques to improve treatment efficiency, and

online adaptive applications.

### SIRIEX

### Thursday, March 7 • 6:30 -7:30pm

Speaker: **Andrew Kennedy MD** 

> Physician in Chief, Radiation Oncology Director, Radiation Oncology Research

Sarah Cannon, Nashville, TN

Title: **Use of Y-90 Alone and With External Beam** 

**Radiotherapy for Unresectable Hepatic Tumors** 

Dr. Kennedy will discuss a multimodality Description:

approach to radiation therapy to effectively treat

tumors resulting from colorectal cancer.

### BAYER

### Friday, March 8 • 7-8am

Speaker: Steven Finkelstein MD, FACRO and

Rodnev Ellis MD

Title: Xofigo (radium Ra 223 dichloride): 6 Facts on

**Identifying Appropriate Patients** 

Description: Treatment for advanced prostate cancer.

### VARIAN MEDICAL SYSTEMS

### Friday, March 8 • 6-7pm

Speaker: **Evan Thomas MD, PhD** 

University of Alabama @ Birmingham

Birmingham, AL

Title: **Featured Updates: From Whole Brain to** 

HyperArc for Brian Metastases: Recent

**Outcomes** 

Speaker: **Constantine Mantz MD** 

21st Century Oncology

Fort Myers, FL

**Featured Updates: Gantry-Based SBRT for** Title:

**Prostate Cancer: Outcomes of a Large Multi-**

**Institutional Study** 

### NOVOCURE

### Saturday, March 9 • 8-9am

Volker Stieber MD Speaker:

Director, Neuro-Oncology Tumor Board

Medical Director, Stereotactic Radiation Therapy

Novant Health Forsyth Medical Center

Derrick L. Davis Cancer Center

Winston-Salem, NC

Title: **TTFields and the Radiation Oncologist** 

Description: Dr. Volker Stieber will review TTFields MOA, its

efficacy and safety in GBM, and discuss why radiation oncologists play a pivotal role treating

patients with Optune®.

### EXHIBITOR DIRECTORY

### CORPORATE SUPPORTERS

Platinum Level





novœure"

varian



Gold Level





Silver Level



### Thank you to Mevion for establishing the Outstanding Abstract Award.

Prizes for the top three submitted abstracts will be presented at the award ceremony on Friday afternoon, March 8.

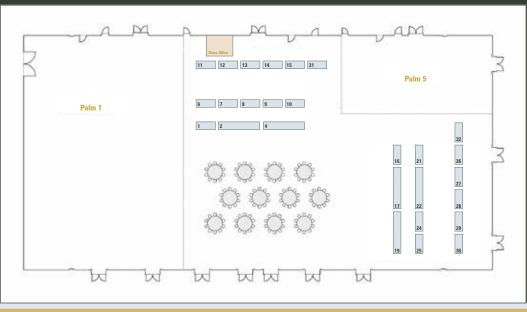
### SCHEDULE

Thursday March 7

Exhibition Hall Opens	10:00 am
Exhibits/Break	10:00-10:40 am
Exhibits/Break	2:45-3:30 pm
Exhibition Hall Closes	5:00 pm

Friday March 8 Exhibition Hall Opens......7:00 am
Breakfast in Exhibit Hall ......7:00-8:00 am
Exhibits/Break .....9:30-10:15 am
Exhibition Hall Closes .....12:00 pm

### EXHIBITOR FLOOR PLAN









### **Your Expert Oncology Resource**

The Revenue Cycle Coding Strategies team identifies practical ways to streamline radiation oncology reimbursement, cut operational costs, maintain compliance with federal regulations and provide education to improve profitability.

### **Consulting Services**

- Billing, Coding and Compliance Reviews
- Remote Charge Capture Solutions
- Electronic Health Record (EHR) Analysis and Solutions
- Revenue Cycle Management Solutions
- Client Resource Center
- On-site Training and Education

### **Education and Support**

- Navigators® Coding and Compliance Reference Guides with Authoritative Guidance
- Online Training Courses
- CROWN® Seminars Get the most comprehensive coding and compliance training and earn CEUs
- Webinars: Live and On Demand

www.revenuecycleinc.com | 512.583.2000 | www.codingstrategies.com



### We are medical billing specialists.

Providing customized services and medical billing solutions for hospital-based practices and freestanding facilities, RC Billing® leads the way in maximizing revenues for today's medical and radiation oncology specialists.

- Enhanced profitability
- · Industry-best billing expertise
- Clinical experience
- Proven performance

RC Billing<sup>®</sup> is the solution; the ideal business-side partner for high-performance medical and radiation oncology physicians and group practices.

512.583.2000 | www.rcbilling.com



### Platinum Supporter

### 21st Century Oncology

22

www.21co.com



### 21st Century Oncology

A premier nationwide provider of integrated cancer care. The largest radiation oncology provider and one of the largest groups of urologists in the U.S. Headquartered in Ft. Myers, Florida, the physician-led company operates in 17 states, 7 countries, with a network of over 300 locations, including 150 radiation therapy facilities.

#### Accuboost

8

www.accuboost.com



AccuBoost is a non-invasive breast brachytherapy treatment approach using mammographic imaging to conformally target the tumor bed for 5 or 10 day APBI and Boost.

## ACRO Accreditation Programs and Membership Information 25

www.acro.org



The American College of Radiation Oncology is the essential, professional society for success in the day-to-day practice of radiation oncology. Since 1990, ACRO has focused its attention on both the clinical and economic aspects of practicing radiation oncology. As a professional medical society of doctors representing a relatively small subspecialty, ACRO has led the effort to ensure appropriate reimbursement for clinical care and has provided services to help its members become better clinicians. ACRO's mission is to strive to ensure the highest quality care for radiation therapy patients and promote success in the practice of radiation oncology through education, responsible socioeconomic advocacy, and integration of science and technology into clinical practice. ACRO serves as THE society for radiation oncologists in the United States. Whether it is fostering the next generation of radiation oncologists, developing the talents of current physicians, or ensuring your clinic practices the highest quality of care, we are here to help.

### Accuray, Inc

34

### Augmenix/ Boston Scientific

26

www.spaceoar.com



SpaceOAR® hydrogel is a prostate-rectum spacer that separates and protects the rectum during prostate radiotherapy, decreasing rectal toxicity and minimize changes in quality of life. SpaceOAR hydrogel is FDA cleared, CE marked, approved in Australia and Japan and licensed in Canada. Augmenix was recently acquired by Boston Scientific.

### Gold Supporter

Bayer

16

www.bayer.us/



Bayer is a global enterprise with core competencies in the Life Science fields of health care and agriculture. Its products and services are designed to benefit people and improve their quality of life. At the same time, the Group aims to create value through innovation, growth and high earning power.

### Best Medical International

www.teambest.com/



TeamBest includes over a dozen companies offering complementary products and services for brachytherapy, health physics, radiation oncology, blood irradiation, vascular therapy, imaging, and medical particle acceleration.

TeamBest is the single source for an expansive line of life saving medical equipment and supplies. Our trusted team is constantly expanding and innovating to provide the most reliable and cutting edge medical equipment and supplies to the global healthcare and research industries.

### Blue Earth Diagnostics, Inc.

www.blueearthdiagnostics.com



Blue Earth Diagnostics, Inc. is a molecular imaging diagnostics company focused on the development and commercialization of novel PET imaging agents to inform clinical management for cancer patients. Its first product, Axumin® (fluciclovine F 18), was approved by the FDA in May 2016. For more information, please visit www.axumin.com.

#### **Brainlab**

14

10

www.brainlab.com



Brainlab develops, manufactures and markets software-driven medical technology, enabling access to advanced, less invasive patient treatments. Brainlab technology powers treatments in radiosurgery as well as neurosurgery and other surgical fields.

#### **CIVCO Radiotherapy**

28

www.CivcoRT.com



CIVCO Radiotherapy has over 35 years of experience in the radiation oncology industry and offers the largest breadth of high-quality, innovative, patient-centric radiotherapy solutions. These solutions include couchtops and overlays for linear accelerators and imaging systems, advanced patient immobilization solutions, robotic patient positioning, advanced fiducial markers, and immobilization/positioning equipment and consumables.



## Improving the Patient Journey

Visit CIVCO's ACRO Booth #28 to learn about our exciting, new collaborations and solutions that improve the entire patient journey. CIVCO is committed to providing a better way, from planning to post-treatment care.



### PUT GBM ON PAUSE





### **OPTUNE® + TMZ HAS BEEN PROVEN TO**

Survival with Optune + TMZ vs TMZ alone was significantly higher at the 2-year landmark analysis and remained higher at 5 years<sup>1</sup>

YEAR 2 (P<0.001)
43% vs 31%
Optune + TMZ TMZ alone

YEAR 5

13% vs 5%
Optune + TMZ TMZ alone

- Median OS was significantly extended with Optune—by nearly 5 months (P<0.001)<sup>1</sup>
- Optune + TMZ also significantly improved PFS vs TMZ alone (median PFS: 6.7 months vs 4.0 months, P<0.001)<sup>1</sup>

#### **Indications For Use**

Optune is intended as a treatment for adult patients (22 years of age or older) with histologically-confirmed glioblastoma multiforme (GBM).

Optune with temozolomide is indicated for the treatment of adult patients with newly diagnosed, supratentorial glioblastoma following maximal debulking surgery, and completion of radiation therapy together with concomitant standard of care chemotherapy.

### Selected Safety Information

#### Contraindications

Do not use Optune in patients with an active implanted medical device, a skull defect (such as, missing bone with no replacement), or bullet fragments. Use of Optune together with implanted electronic devices has not been tested and may theoretically lead to malfunctioning of the implanted device. Use of Optune together with skull defects or bullet fragments has not been tested and may possibly lead to tissue damage or render Optune ineffective.



### PROVIDE LONG-TERM QUALITY SURVIVAL<sup>1,2</sup>

### Patients treated with Optune + TMZ maintained QoL over time<sup>2,3</sup>

Both HCPs and patients reported stable QoL evaluation scores up to 1 year of Optune use

- HCP-reported KPS\* was approximately 90 at baseline and 12 months<sup>3</sup>
- Patient-reported Global Health Status<sup>†</sup> was approximately 70 at baseline and 12 months<sup>2</sup>

\*HCP-reported data collected per Karnofsky Performance Score (KPS) assessment at baseline and then repeated monthly. Patient functional status via KPS (at multiple time points) measured patient independence in activities of daily living.

Patient-reported data collected per EORTC QLQ-C30 at baseline and Months 3, 6, 9, and 12. This 30-question survey covered 5 daily-functioning domains (Physical, Role, Social, Emotional, and Cognitive).

EORTC QLQ-C30, European Organisation for Research and Treatment of Cancer core quality of life questionnaire; GBM, glioblastoma; OS, overall survival; PFS, progression-free survival; QoL, quality of life; TMZ, temozolomide.

References: 1. Stupp R, Taillibert S, Kanner A, et al. Effect of tumor-treating fields plus maintenance temozolomide vs maintenance temozolomide alone on survival in patients with glioblastoma: a randomized clinical trial. JAMA. 2017;318(23):2306-2316. 2. Taphoorn MJB, Dirven L, Kanner AA, et al. Influence of treatment with tumor-treating fields on health-related quality of life of patients with newly diagnosed glioblastoma: a secondary analysis of a randomized clinical trial. JAMA Oncol. 2018;4(4):495-504. 3. Zhu J-J, Demireva P, Kanner AA, et al. Health-related quality of life, cognitive screening, and functional status in a randomized phase III trial (EF-14) of tumor treating fields with temozolomide compared to temozolomide alone in newly diagnosed glioblastoma. J Neurooncol. 2017;135:545-552.

Please see the following Important Safety Information for Optune and visit Optune.com/IFU for Optune Instructions For Use for complete information regarding the device's indications, contraindications, warnings, and precautions.

Go to Optune.com to learn even more about putting GBM on pause and life on play

Patient image reflects the health status of the patient at the time the photo was taken.





#### **Indications For Use**

Optune® is intended as a treatment for adult patients (22 years of age or older) with histologically-confirmed glioblastoma multiforme (GBM).

Optune with temozolomide is indicated for the treatment of adult patients with newly diagnosed, supratentorial glioblastoma following maximal debulking surgery, and completion of radiation therapy together with concomitant standard of care chemotherapy.

#### Important Safety Information

#### Contraindications

Do not use Optune in patients with an active implanted medical device, a skull defect (such as, missing bone with no replacement), or bullet fragments. Use of Optune together with implanted electronic devices has not been tested and may theoretically lead to malfunctioning of the implanted device. Use of Optune together with skull defects or bullet fragments has not been tested and may possibly lead to tissue damage or render Optune ineffective.

Do not use Optune in patients that are known to be sensitive to conductive hydrogels. In this case, skin contact with the gel used with Optune may commonly cause increased redness and itching, and rarely may even lead to severe allergic reactions such as shock and respiratory failure.

#### Warnings and Precautions

Optune can only be prescribed by a healthcare provider that has completed the required certification training provided by Novocure™ (the device manufacturer).

Do not prescribe Optune for patients that are pregnant, you think might be pregnant or are trying to get pregnant, as the safety and effectiveness of Optune in these populations have not been established.

The most common (≥10%) adverse events involving Optune in combination with temozolomide were thrombocytopenia, nausea, constipation, vomiting, fatigue, medical device site reaction, headache, convulsions, and depression.

Use of Optune in patients with an inactive implanted medical device in the brain has not been studied for safety and effectiveness, and use of Optune in these patients could lead to tissue damage or lower the chance of Optune being effective.

If the patient has an underlying serious skin condition on the scalp, evaluate whether this may prevent or temporarily interfere with Optune treatment.

Please visit Optune.com/IFU for Optune Instructions For Use for complete information regarding the device's indications. contraindications, warnings, and precautions.

### Platinum Supporter

Elekta

19

www.Elekta.com



For almost five decades, Elekta has been a leader in precision radiation medicine. Our nearly 4,000 employees worldwide are committed to ensuring everyone in the world with cancer has access to – and benefits from more precise, personalized radiotherapy treatments. Headquartered in Stockholm, Sweden, Elekta is listed on NASDAO Stockholm Exchange. Visit elekta.com or follow @Elekta on Twitter.

### Elsevier PracticeUpdate

www.practiceupdate.com

11

30

www.iba-worldwide.com/ proton-therapy



IBA is the worldwide leader in proton therapy technology. The company has been leading proton therapy for the last 30 years and has built the largest user community of world's best proton therapy centers. IBA focuses on bringing integrated and innovative solutions for the diagnosis and treatment of cancer and is the worldwide technology leader in the field of proton therapy. IBA's proton therapy solutions are flexible and adaptable, allowing customers to choose from universal full-scale proton therapy centers or compact, single room solutions.

### Medtronic

27

www.medtronic.com

### Medtronic

As a global leader in medical technology, services and solutions. Medtronic improves the lives and health of millions of people each year. We use our deep clinical, therapeutic, and economic expertise to address the complex challenges faced by healthcare systems today. Let's take healthcare Further, Together. Learn more at Medtronic.com.

### Mevion Medical Systems 31

www.mevion.com

### MIM Software, Inc.

www.mimsoftware.com



MIM® offers practical solutions and timesavings for radiation oncology through atlas segmentation, deformable dose accumulation, deformable alignment of PET/ CT, and adaptive re-contouring. MIM Assistant® provides powerful automation of clinical tasks, MIMcloud® and MIM Zero Footprint offer secure and remote access. allowing users to run MIM anywhere, without VPN, via the internet.

### Platinum Supporter Novocure Inc.

www.novocure.com

### novœure"

Novocure is an oncology company developing a profoundly different cancer treatment utilizing a proprietary therapy called TTFields, which uses electric fields tuned to specific frequencies to disrupt solid tumor cancer cell division. Novocure's commercialized product, Optune, is approved for the treatment of adult patients with glioblastoma. Novocure has ongoing or completed clinical trials investigating TTFields in brain metastases, non-small cell lung cancer, pancreatic cancer, ovarian cancer and mesothelioma. For additional information about the company, please visit www.novocure.com or follow us at www.twitter.com/novocure

#### **Proton Therapy Partners 33**

#### **Radiating Hope**

www.radiatinghope.org



Radiating Hope is a nonprofit 501(c)(3) organization. Our mission is to improve cancer care, specifically radiation oncology care, around the globe. We do this by donating needed equipment to developing areas and by providing training and education from our volunteer medical professionals. Our goal is to improve access to cancer care for all who need it, regardless of where they live.

#### Raysearch Americas.

24

www.raysearchlabs.com



ADVANCING CANCER TREATMENT RaySearch is a committed pioneer of oncology software. Since 2000, we have worked in close cooperation with leading centers to improve life and outcomes for patients. Our systems use groundbreaking automation and machine learning to create new possibilities for care and to increase efficiency for our customers and partners. And this is just the beginning.

### Rejûvaskin

29

www.rejuvaskin.com



Rejûvaskin is a skin healing company dedicated to providing high quality, effective products that address unique skincare needs. Knowing the damage incurred by cancer treatments, Rejûvaskin has developed a range of products to help maintain your patients' skin health as they undergo these lifesaving therapies and procedures. Revive Skin Recovery Cream was created with your patients in mind to help fortify, soothe, and revitalize skin damaged by radiation therapy. Rejûvaskin also features the Scar Heal family of products, recommended by physicians around the world to target unwanted scarring. As a skin healing company, Rejûvaskin is here to help ensure your patients maintain healthy skin throughout their treatment; because healthy skin is always in.

### Silver Supporter Revenue Cycle Inc.

1

www.revenuecycleinc.com



Revenue Cycle provides oncology consulting services and educational resources to hospital-based, private practice or freestanding cancer center healthcare providers. Our services include medical record reviews, compliance, education and training, billing and coding, remote solutions and revenue cycle management solutions. Let us identify ways to streamline reimbursement, cut operational costs, maintain compliance and improve profitability.

#### **Sensus Healthcare**

www.sensushealthcare.com

At Sensus Healthcare, we are devoted to making a difference in the lives of people who suffer from non-melanoma skin cancer and unsightly keloid scarring. By designing and manufacturing safe and reliable state-of-theart Superficial Radiation Therapy technology right here in the United States, we are providing compassionate dermatologists and oncologists around the world with a nonsurgical treatment option that empowers them to cure patients without compromising patient confidence, dignity or quality of life.

### Gold Supporter Sirtex

21

www.sirtex.com



Sirtex Medical develops and delivers interventional oncology treatments using novel small particle technology to improve outcomes for patients with metastatic colorectal cancer (mCRC). SIR-Spheres® Y-90 resin microspheres target liver tumors with radiation via the hepatic artery during Selective Internal Radiation Therapy (SIRT). Recent SIRFLOX Study data showed a statistically significant improvement of 7.9 months in median Progression-Free Survival in the liver for patients with unresectable mCRC treated first line with SIR-Spheres Y-90 resin microspheres plus standard chemotherapy.

### **Springer Publishing**

32

www.springerpub.com

### Platinum Supporter

Varian

17

www.varian.com

### varian

Varian is the world's leading manufacturer of medical devices and software for treating cancer and other medical conditions with radiotherapy, radiosurgery, proton therapy and brachytherapy. We partner with physicians, scientists, researchers and others around the world to offer the most advances and cost-effective treatment technologies available.

### Platinum Supporter ViewRay, Inc

www.viewray.com



ViewRay®, Inc. (Nasdag: VRAY), designs, manufactures and markets the MRIdian® radiation therapy system. MRIdian is built upon a proprietary high-definition MR imaging system designed from the ground up to address the unique challenges and clinical workflow for advanced radiation oncology. Unlike MR systems used in diagnostic radiology, MRIdian's high-definition MR was purposely built to deliver high-precision radiation without unnecessary beam distortion, and consequently, help to mitigate skin toxicity and other safety concerns that may otherwise arise when high magnetic fields interact with radiation beams. ViewRay and MRIdian are registered trademarks of ViewRay, Inc.

#### Visionrt

6

www.visionrt.com

### 'ISIONIT

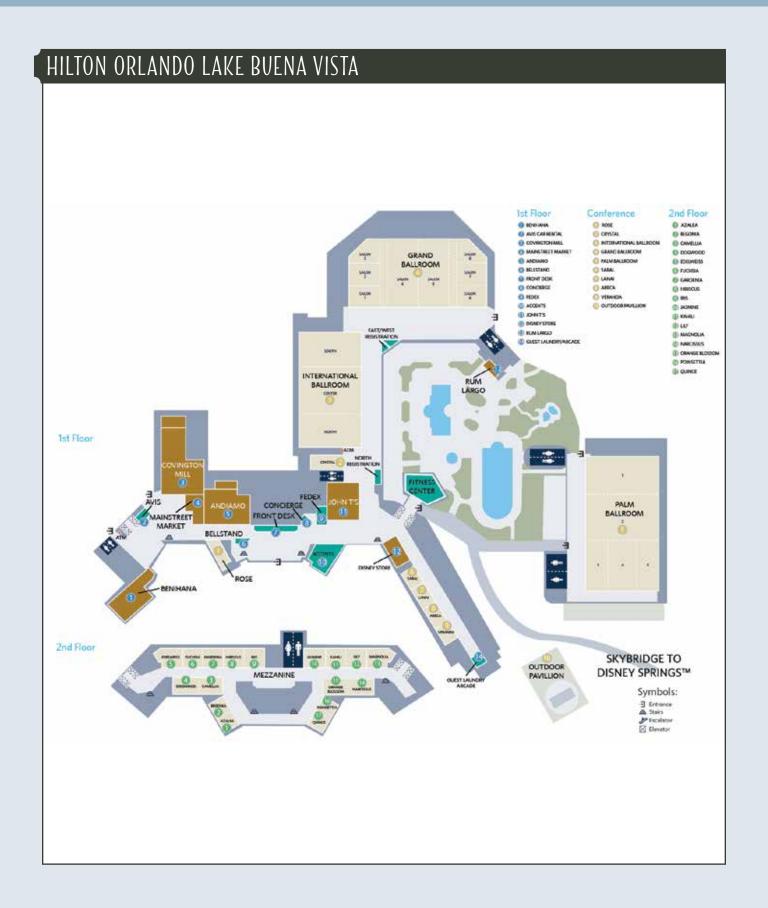
The leader in Surface Guided RT (SGRT), Vision RT, creates technology for Surface Guided Radiation Therapy. This technique allows patients to be positioned and monitored during radiation treatment using optical surface guidance. Widely used on all treatment sites, SGRT particularly benefits left breast cancer treatment by avoiding cardiac damage, and aids in both comfort and speed during brain treatments. Visit www.visionrt. com to learn more.

### **Wolters Kluwer**

13

www.lww.com

Wolters Kluwer Health is a leading global provider of information and point of care solutions for the healthcare industry. Our solutions are designed to help professionals build clinical competency and improve practice so that healthcare organizations can succeed in value-based care delivery models. Product solutions include Lippincott, Ovid®, and UpToDate®.



## SAVE THE DATE!



# The Radiation Oncology Summit February 27-29, 2020



For more information visit www.acro.org

### ACRO 2019 NOTES


### ACRO 2019 NOTES


Please come by our booth in the exhibit hall to discuss your accreditation needs.

Patients First
Our Focus is Radiation
Oncology Safety!



**Online Case Review** Expert Panel - Comprehensive

**Smart Submission** Guided - Efficient - Compliant



# Protect Your Patients and Practice -Get AccreditedCall ACRO 206.956.3642 Today!

As part of its mission as the "essential professional society for success in the day-to-day practice of radiation oncology," the American College of Radiation Oncology developed a program in 1995 to accredit radiation oncology practices. The goal: to equip radiation oncologists with a powerful tool to proactively protect patients, manage risk, and review practices from top to bottom. Since then, ACRO Accreditation has undergone periodic revisions to reflect clinical and scientific advances within the field. In October 2010, ACRO Accreditation emerged from an extensive administrative review with an updated and intuitive Web-based accreditation system, powered by Equal-Estro. This new system features:

- unbiased, blind, online case reviews by a disease site specific panel of experts
- smart 100% electronic compliant submission of case files
- ▶ 100% focus on radiation oncology

### **FEES**

#### \$8,750 | Principal Practice Fee

- Practice headquarters
- Travel fees for onsite reviews will apply

### \$3,500 | Additional Practice Fee

Additional office within the same practice (Max. 2)

### **FOR MORE INFORMATION**

For more information about ACRO and the accreditation program please call 206.956.3642 or visit acro.org.



2001 6th Ave, Suite 2700 Seattle, WA 98121 PH 206.956.3642 EM info@acro.org WB acro.org