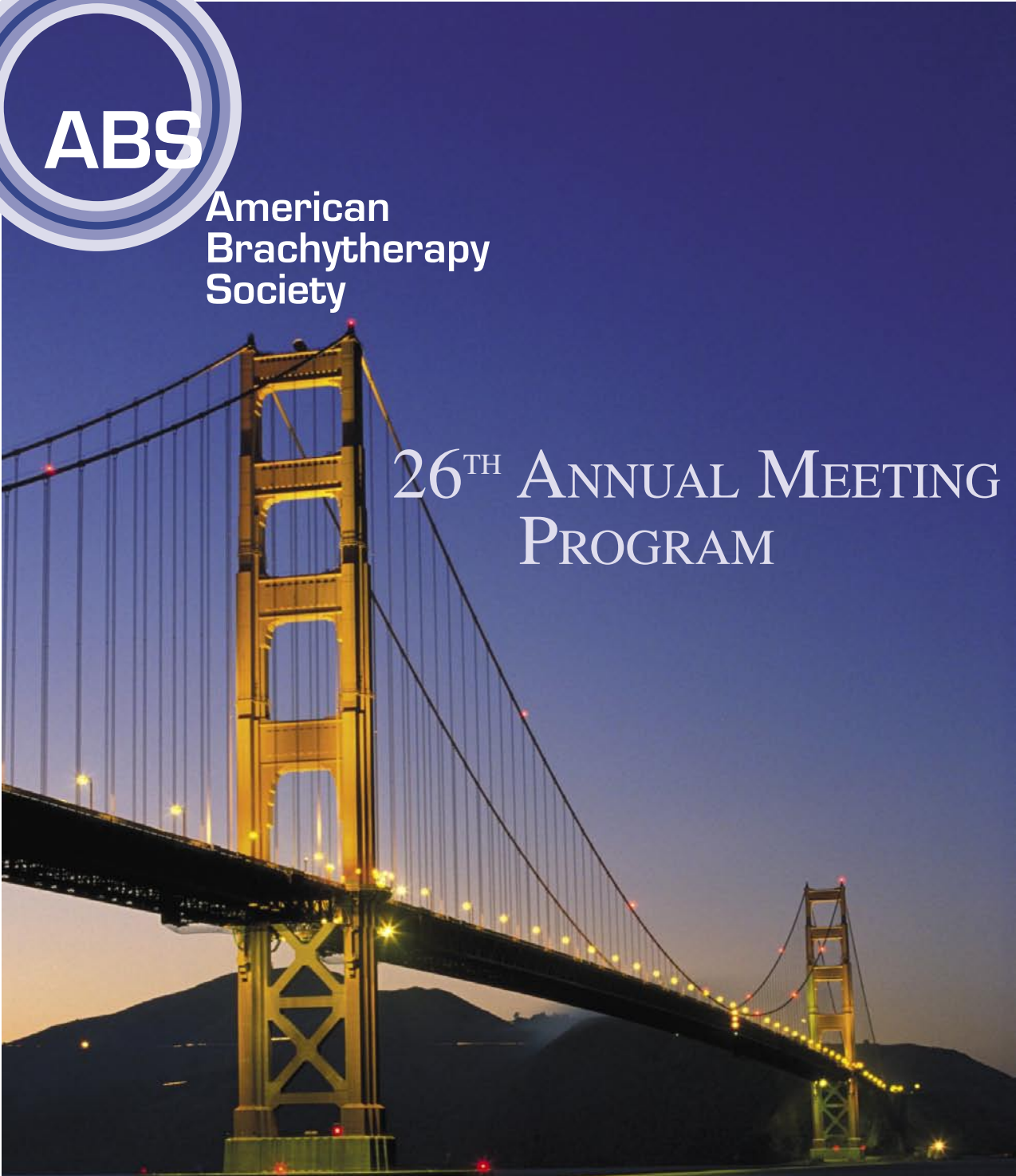




**ABS**

American  
Brachytherapy  
Society



26<sup>TH</sup> ANNUAL MEETING  
PROGRAM

**AMERICAN BRACHYTHERAPY SOCIETY**  
**Hyatt Regency San Francisco**  
**San Francisco, California**  
**June 1–3, 2005**



## **Learning Objectives for 2005 Annual Meeting**

At the conclusion of this symposium, the learner should be able to:

Explain the expanding role of imaging within the practice of brachytherapy. This will be accomplished through the exploration of advances in treatment technique and dosimetric evaluation as well as treatment outcome in gynecologic, breast, prostate and endovascular brachytherapy.

Review all aspects of brachytherapy application, including indications for use, technical considerations, quality assurance programs and outcome evaluations.

## **CME Statement for 2005 Annual Meeting**

This activity has been planned and implemented in accordance with the Essential Areas and Policies of the Accreditation Council for Continuing Medical Education (ACCME) through the joint sponsorship of the School of Medicine, Virginia Commonwealth University, Medical College of Virginia Campus (VCU), and the American Brachytherapy Society (ABS).

The School of Medicine, Virginia Commonwealth University, Medical College of Virginia Campus (VCU) is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education to physicians.

Physicians may claim up to 21.5 hours in Type 1 or Type 2 CME on the Virginia Board of Medicine Continued Competency and Assessment Form required for renewal of an active medical license.

VCU designates this educational activity for a maximum of 21.5 hours in category 1 credit toward the AMA's Physician Recognition Award. Each physician should claim only those hours of credit that he/she actually spent in the activity.

## **Conflict of Interest and Off-Label / Disclosure Statement**

Presenters at this conference will disclose any conflict of interest or their intention to discuss off-label use, if applicable, in accordance with ACCME Standards and FDA requirements. Conflict of interest will be disclosed in print or in the final meeting materials.



American  
Brachytherapy  
Society

## **ABS Past and Future Presidents**

2005	Frank A. Vicini, MD
2004	Michael J. Zelefsky, MD
2003	Beth A. Erickson, MD
2002	Colin Orton, Ph.D.
2001	David Beyer, MD
2000	James Fontanesi
1999	Subir Nag, MD
1998	Kent Wallner, MD
1996-1997	Burton L. Speiser, MD
1995	Arthur T. Porter, MD
1994	John C. Blasko, MD
1993	Louis B. Harrison, MD
1992	Alvaro A. Martinez, MD
1991	Kenneth H. Luk, MD
1990	Peter A. Fleming, MD
1989	Dattatreya Nori, MD
1988	Karen K. Fu, MD
1987	Luis Delclos, MD
1986	Basil S. Hilaris, MD
1985	Don R. Goffinet, MD
1984	A.M. Nisar Syed, MD
1983	Thomas C. Gates, MD
1982	Ajmel A. Puthawala, MD
1981	Paul Y. M. Chan, MD
1980	Aaron G. Fingerhut, MD
1979	David L. Neblett, MS
1978	Harvey S. Frey, MD, Ph.D.

## **Wednesday Night Welcome Reception**

*Everyone is invited to attend the Welcome Reception on Wednesday night at the Hyatt Regency. We hope to see you there!*

## Tuesday, May 31

1:00 pm – 6:00 pm Exhibitor set-up and registration

12:00 noon – 6:00 pm Registration

## Wednesday, June 1

7:00 am – 5:00 pm Registration

7:00 am – 5:00 pm Commercial Exhibits

7:00 – 7:30 am Continental Breakfast

7:30 – 8:30 am **Gynecologic Brachytherapy Refresher Course**  
Akila N. Viswanathan, MD  
Brigham and Women's Cancer Center  
Boston, MA

8:30 – 10:15 am **Issues in Gynecologic Brachytherapy**

Moderator: Patricia J. Eifel, MD  
MD Anderson Cancer Center  
Houston, TX

Panelists: **Patterns of Care for Adjuvant Therapy of Endometrial Cancer: Results of an ABS Survey**  
William Small, Jr., MD  
Northwestern Memorial Hospital  
Chicago, IL

**Future of Pulsed Dose-Rate Techniques**  
Patricia J. Eifel, MD  
MD Anderson Cancer Center  
Houston, TX

**Indications and Techniques for Vaginal Cuff Radiation**  
Manjeet Chadha, MD  
Beth Israel Medical Center  
New York, NY

10:15 – 10:40 am Refreshment Break

10:40 – 11:30 am **Proffered Papers – GYN**



Moderators: Kaled M. Alektiar, MD  
Memorial Sloan-Kettering Cancer Center  
New York, NY

D. Jeffrey Demanes, MD  
California Endocurietherapy Medical Corp.  
Oakland, CA

10:40 am Dose Volume Analyses Of Gastrointestinal Complication After Brachytherapy For Gynecological Malignancy  
I-Chow J. Hsu, MD,<sup>1</sup> Albert Chan, C.M.D, R.T.T.,<sup>1</sup>

10:50 am Physiologic Volume Reduction Of Primary Cervical Carcinoma  
Perry W. Grigsby, MD,<sup>1</sup> Lilie L. Lin, MD,<sup>1</sup> Jane Yang, MD,<sup>2</sup> Imran Zoberi, M.D.,<sup>1</sup>  
Tom R. Miller, MD.<sup>2</sup>

# AL MEETING

- 11:00 am Primary Treatment Of Medically Inoperable Endometrial Cancer With Multi-Channel Uterine (Rotte-Y) Applicator  
Ajay K. Bhatnagar, MD,<sup>1</sup> Sushil Beriwal, MD,<sup>1</sup> Dwight E. Heron, MD,<sup>1</sup> Kristina Gerszten, MD,<sup>1</sup> Raj Selvaraj, Ms,<sup>1</sup> Robert Mogus,<sup>1</sup> John Comerici, MD.<sup>2</sup>
- 11:10 am Mr Image-Guided Interstitial Brachytherapy For Recurrent Endometrial Carcinoma  
Akila N. Viswanathan, MD, MPH,<sup>1</sup> Robert Cormack, PhD,<sup>1</sup> Desmond O'farrell,<sup>1</sup> Cynthia Tanaka,<sup>2</sup> Clare Tempny, MD.<sup>2</sup>
- 11:20 am Intraperitoneal Radioactive Phosphorus (32p) And Vaginal Brachytherapy As Adjuvant Treatment For Uterine Papillary Serous Carcinoma And Clear Cell Carcinoma: The Indiana University Experience  
Achilles J. Fakiris, MD,<sup>1</sup> Marcus E. Randall, MD,<sup>2</sup> Katherine Y. Look, MD<sup>3</sup> David H. Moore, MD,<sup>3</sup> Shailaja R. Reddy, MD,<sup>1</sup> Simon S. Lo, MD,<sup>1</sup> Higinia R. Cardenes, MD, PhD.<sup>1</sup>
- 11:30 am – 12:00 noon ABS Presidential Address:  
Frank A. Vicini, MD
- 12:00 noon – 1:15 pm Lunch: Attendees on their own
- 12:00 noon – 1:00 pm Residents' Luncheon (Sponsored by Oncura)  
Brachytherapy Marketing
- 
- Kent E. Wallner, MD  
Puget Sound Health Care System  
Seattle, WA
- 1:15 – 1:45 pm **Ulrich Henschke Memorial Lecture**  
(Ulrich Henschke Award Sponsored by Best Medical International, Inc.)  
Alvaro A. Martinez, MD  
William Beaumont Hospital  
Royal Oak, MI
-  **Best Medical International, Inc.**  
Established 1977
- 1:45 – 3:15 pm **Update on Breast Brachytherapy Outcome Data/Protocols**
- Moderator: Douglas W. Arthur, MD  
VCU Medical Center  
Richmond, VA
- Panelists: **Update on NSABP B-39/RTOG 0413 Protocol**  
Julia R. White, MD  
Medical College of Wisconsin  
Milwaukee, WI
- European Phase III Protocols**  
Csaba Polgar, MD  
National Institute of Oncology  
Budapest, Hungary
- MammoSite™ RTS Data**  
Martin E. Keisch, MD  
Mt. Sinai Comprehensive Cancer Center  
Miami Beach, FL
- Update of RTOG 95-17 Data**  
Robert R. Kuske, Jr., MD  
Arizona Oncology Services  
Scottsdale, AZ
- 3:15 – 3:40 pm Refreshment Break



# 26TH ANNU

- 3:45 – 4:45 pm      **Proffered Papers – Breast, Head and Neck**
- Co-moderators:      Vijay Kini, MD  
Valley Radiotherapy Associates  
Fullerton, CA
- Rakesh Patel, MD  
University of Wisconsin  
Madison, WI
- Csaba Polgar, MD  
National Institute of Oncology  
Budapest, Hungary
- 3:45 pm      Post-Operative High Dose Rate Brachytherapy In The Management Of Resected  
T1 And T2 Oral Cavity Cancer With Positive Or Close Margins  
David Donath, MD, FRCPMD, FRCP,<sup>1</sup> Felix Nguyen, MD, FRCP,<sup>1</sup>  
Bernard Fortin, MD, FRCP,<sup>1</sup> Louis Guertin, MD, FRCS,<sup>2</sup>
- 3:55 pm      Management Of Oral Tongue Carcinoma With External Beam Radiotherapy And  
Interstitial Brachytherapy Boost: Is Limited Surgery Necessary To Improve Outcome?  
Omur Karakoyun Celik, M.D.,<sup>1</sup> Charles M. Norris, M.D.,<sup>2</sup> Roy Tishler, M.D.,  
<sup>3</sup> Anand Mahadevan, M.D.,<sup>4</sup> John R Clark, M.D.,<sup>5</sup> Paul M Busse, M.D., Ph.D.<sup>1</sup>
- 4:05 pm      A German-Austrian Multicenter Phase II Trial: Interstitial Brachytherapy Only After  
Breast Conserving Surgery – A 4-Year Up-Date Analysis  
Vratislav Strnad, Prof.MD,<sup>1</sup> Oliver J. Ott, MD,<sup>1</sup> Richard Poetter, Prof. MD,  
<sup>2</sup> Guido Hildebrandt, MD,<sup>3</sup> Joe Hammer, MD,<sup>4</sup> Michael Lotter, PhD,<sup>1</sup>  
Rolf Sauer, Prof. MD.<sup>1</sup>
- 4:15 pm      The Allegheny General Hospital Breast Preservation Experience Utilizing Repeat  
Tylectomy And Re-Irradiation Brachytherapy For Isolated In-Breast Tumor Recurrence  
Mark G. Trombetta, M.D.,<sup>1</sup> Thomas B. Julian, M.D.,<sup>2</sup> Tanuja A Bhandari, M.D.,<sup>1</sup>  
E Day Werts, PhD.<sup>1</sup> David S. Parida, M.D.<sup>1</sup>
- 4:25 pm      Long-Term Results Of Accelerated Partial Breast Irradiation (Apbi) Via Interstitial  
Brachytherapy As The Sole Radiation Modality For Treatment Of Early Stage Breast Cancer  
Peter Y. Chen, MD,<sup>1</sup> Frank A. Vicini, MD,<sup>1</sup> Pamela Benitez, MD,<sup>2</sup> Jane Pettinga, MD,<sup>2</sup>  
Michelle Wallace, RN,<sup>1</sup> Alvaro A. Martinez, MD.<sup>1</sup>
- 4:35 pm      Fat Necrosis Following Partial Breast Irradiation Versus Standard Whole Breast  
Radiotherapy: 4-Year Results Of A Randomized Study  
Katalin Lovey, M.D.,<sup>1</sup> Tibor Major, M.Sc., Ph.D.,<sup>1</sup> Janos Fodor, M.D., D.Sc.,<sup>1</sup>  
Zoltan Sulyok, M.D.,<sup>2</sup> Zoltan Takacs-Nagy, M.D.,<sup>1</sup> Csaba Polgar, M.D., Ph.D.<sup>1</sup>
- 4:45 – 5:30 pm      **How To Make Sense of the Data for Local Control in Early Breast Cancer**  
Abram Recht, MD  
Beth Israel Deaconess Medical Center  
Boston, MA
- 6:30 – 7:30 pm      Welcome Reception at the Hyatt Regency

# AL MEETING

## Thursday, June 2

7:00 am – 5:00 pm	Registration
6:30 am – 5:00 pm	Commercial Exhibits
6:30 – 7:00 am	Continental Breakfast
7:00 – 8:00 am	<b>Breast Brachytherapy Refresher Course</b> Douglas W. Arthur, MD VCU Medical Center Richmond, VA
8:00 – 9:30 am	<b>Brachytherapy and the Law</b>
Moderator:	W. Robert Lee, MD Wake Forest University Winston-Salem, NC
Panelists:	<b>Definition of Medical Negligence</b> James W. Saxton, Esq. Chairman, Health Litigation Group Stevens & Lee Lancaster, PA
	<b>Legal Issues in Brachytherapy</b> W. Robert Lee, MD Wake Forest University Winston-Salem, NC
	<b>Prostate Brachytherapy Malpractice Issues</b> Kent E. Wallner, MD Puget Sound Health Care System Seattle, WA
9:30 – 9:55 am	Refreshment Break
9:55 – 10:55 am	<b>The Impact of Imaging on Brachytherapy Treatment Planning</b>
	<b>Using MRI to Enhance the Accuracy of Target Contouring</b> Patrick William McLaughlin, MD The University of Michigan Southfield, MI
	<b>Imaged Based Treatment for Gynecologic Brachytherapy</b> Richard Pötter, MD Medical University of Vienna Vienna, Austria
10:55 am – 12:15 pm	<b>Proffered Papers – Prostate I Outcomes with Prostate Brachtherapy</b>
Moderators:	John Sylvester, MD Seattle Prostate Institute Seattle, WA
10:55 am	Impact Of Percent Positive Core Biopsies On Permanent Prostate Brachytherapy (Ppb) Outcomes By Risk Group Gary M. Kirsh, M.D., <sup>1</sup> Peter R. Fried, M.D. <sup>2</sup>

# 26TH ANNU

- 11:05 am Percentage Positive Biopsies Is Associated With Freedom From Biochemical Recurrence Following Low Dose Rate Prostate Brachytherapy Alone  
Peter J. Rossi, MD,<sup>1</sup> Peter E. Clark, MD,<sup>1</sup> David L. McCullough, MD,<sup>1</sup> W. Robert Lee, MD, MS.<sup>1</sup>
- 11:15 am 20 Gy vs 44 Gy Supplemental Beam Radiation With Pd-103 Prostate Brachytherapy: Early Biochemical Outcomes From A Prospective Randomized Multi-Center Trial  
Peter F. Orio, DO,<sup>1</sup> Kent E. Wallner, MD,<sup>1,2</sup> Gregory Merrick, MD,<sup>3</sup> Lawrence True, MD,<sup>4</sup> Dan Reed, DO,<sup>1</sup> Sutlief Steve, PhD,<sup>2</sup> Wayne Butler, PhD.<sup>3</sup>
- 11:25 am Dose Escalation Using An Hdr Brachytherapy Boost In An Accelerated Treatment Course Improves Overall Survival For Patients With Unfavorable Prostate Cancer  
Alvaro A. Martinez, M.D., F.A.C.R.,<sup>1</sup> Carlos Vargas, M.D.,<sup>1</sup> Thomas P. Boike, B.S.,<sup>1</sup> Gregory Edmundson, M.S.,<sup>1</sup> Peter Y. Chen, M.D.,<sup>1</sup> Gary S. Gustafson, M.D.<sup>1</sup>
- 11:35 am Does Age At Diagnosis Affect Outcome For Men Treated By Brachytherapy Versus Surgery For Clinically Localized Prostate Cancer?  
Jonathan D. Tward, MD, PhD,<sup>1</sup> Aniko Szabo, PhD,<sup>2</sup> Dennis C. Shrieve, MD, PhD,<sup>1</sup> David K. Gaffney, MD, PhD.<sup>1</sup>
- 11:45 am The Impact Of Prostate Brachytherapy On Regional, Racial, And Age-Related Patterns of Treatment For Clinically Localized Prostate Cancer  
Mohamed A. Elshaikh, MD,<sup>1</sup> Laurel A. Copeland, Ph.D.,<sup>2</sup> James Jackson, Ph.D.,<sup>1</sup> Louis A. Penner, Ph.D.,<sup>1</sup> Willie Underwood III, MD.<sup>1</sup>
- 12:15 – 1:40 pm ABS Member Lunch (Sponsored by Nucletron) and ABS Annual Business Meeting (members-only)  **Nucletron**
- 1:40 – 2:00 pm **The Second Era of Prostate Brachytherapy: 1951-1985**  
Jesse Aronowitz, MD  
University of Massachusetts  
Boston, MA
- 2:00 – 3:00 pm **Androgen Deprivation Therapy in Prostate Brachytherapy – Is It Necessary?**
- Moderator: Juanita M. Crook, MD  
Princess Margaret Hospital  
Toronto, Ontario, Canada
- Panelists: Pro:  
Richard G. Stock, MD  
Mt. Sinai Medical Center  
New York, NY
- Con:  
Gregory S. Merrick, MD  
Schiffler Cancer Center  
Wheeling, WV
- 3:00 – 4:00 pm **Combining External Beam and Brachytherapy for Prostate Cancer – How and Why**
- Moderator: Gerard Morton, MD  
Toronto Sunnybrook Regional Cancer Center  
Toronto, Ontario, Canada
- Panelists: Pro:  
Bradley R. Prestidge, MD  
Texas Cancer Clinic  
San Antonio, TX



# AL MEETING

Con:  
John C. Blasko, MD  
Seattle Prostate Institute  
Seattle, WA

4:00 – 5:15 pm

## Quality of Life After Prostate Treatment – What Have We Learned?

Moderator:

Michael J. Zelefsky, MD  
Memorial Sloan-Kettering Cancer Center  
New York, NY

Panelists:

James A. Talcott, MD  
Massachusetts General Hospital Cancer Center  
Boston, MA

Michael J. Zelefsky, MD  
Memorial Sloan-Kettering Cancer Center  
New York, NY

6:30 – 9:30 pm

Gala Event in San Francisco's Carnelian Room (top floor of the Bank of America Building; Sponsored by Varian BrachyTherapy; meet in hotel lobby at 6:15 for bus service)

## Friday, June 3

7:00 – 9:00 am

Registration

7:00 am – noon

Commercial Exhibits

7:00 – 7:30 am

Continental Breakfast

7:00 – 8:00 am

## Prostate Brachytherapy Refresher Course

### Outcomes and Comparisons With Other Modalities

Brian J. Davis, MD  
Mayo Clinic  
Rochester, MN

### Predictors of Toxicity and Management of Side Effects After Brachytherapy

Daniel Ash, MD  
Cookridge Hospital  
Leeds, UK

8:00 – 9:20 am

## Proffered Papers – Prostate II

### Prostate Brachytherapy: Dosimetry Issues and Treatment Modality

Moderators:

Daniel Ash, MD  
Cookridge Hospital  
Leeds, UK

Daniel Shasha, MD  
Phillips Ambulatory Care Center  
New York, NY

8:00 am

A Six Physician Comparison Of Post Prostate Implant Ct Contours To An Mri Standard  
Patrick W. McLaughlin, MD,<sup>1</sup> Vrinda Narayana, PhD,<sup>1</sup> Ted R. Jackson, PhD,<sup>2</sup>  
Juanita M. Crook, MD,<sup>3</sup> William R. Lee, MD,<sup>4</sup> Jeff M. Michalski, MD,<sup>5</sup>  
Bradley R. Prestidge, MD,<sup>6</sup> Michael J. Zelefsky, MD.<sup>7</sup>



- 8:10 am Variability Of Prostate Brachytherapy Preimplant Dosimetry: A Multi-Institutional Analysis  
 Gregory S. Merrick, M.D.,<sup>1</sup> Wayne M. Butler, PH.D.,<sup>1</sup> Kent E. Wallner, M.D.,<sup>1</sup>  
 John C. Blasko, M.D.,<sup>1</sup> Jeff Michalski, M.D.,<sup>1</sup> Jesse Aronowitz, M.D.,<sup>1</sup>  
 Peter Grimm, D.O.,<sup>1</sup> Brian J. Moran, M.D.,<sup>1</sup> Patrick McLaughlin, M.D.,<sup>1</sup>  
 Jacqueline Usher, B.S.,<sup>1</sup> Jonathan Lief, PH.D.,<sup>1</sup> Zachariah Allen, M.S.<sup>1</sup>
- 8:20 am Intraoperative Fluoroscopic-Based Dosimetry In Prostate Brachytherapy Patients  
 Daniel R Reed, DO,<sup>1,2</sup> Kent E. Wallner, MD,<sup>1,2</sup> Sreeram Narayanan, PhD,<sup>1,2</sup>  
 Gregory Merrick, MD,<sup>3</sup> Wayne Butler, PhD,<sup>3</sup> Steve Sutlief, PhD,<sup>2</sup>  
 Paul Cho, PhD.<sup>1,2</sup>
- 8:30 am Dosimetric Comparison Of Three Intra-Operative Computer Planning Options  
 For Permanent Seed Implantation Of The Prostate  
 Adam Raben, MD,<sup>1</sup> Sarah Sammons, BA,<sup>1</sup> Sang Sim, MD,<sup>2</sup> Hansen Chen, MS,<sup>2</sup>  
 Alex Hanlon, PhD,<sup>1</sup> Abhirup Sarkar, MS,<sup>1</sup> Arnold Grebler, MD,<sup>2</sup>  
 Jules Geltzeiler, MD,<sup>2</sup> Bruce Bengel, MD,<sup>1</sup> Andrew Glick, MD,<sup>1</sup> Alex Hanlon, PhD,<sup>1</sup>  
 Paul Koprowski, BA,<sup>1</sup> Viroon Donavanik, MD.<sup>1</sup>
- 8:40 am Prostate Brachytherapy-Induced Urethral Strictures  
 Gregory S. Merrick, MD,<sup>1,2</sup> Wayne M Butler, PHD,<sup>1,2</sup> Kent E. Wallner, MD,<sup>3</sup>  
 Robert W. Galbreath, PHD,<sup>1,2</sup> Richard L. Anderson, RTT, CMD,<sup>1</sup>  
 Zachariah A. Allen, MS.<sup>1,2</sup>
- 8:50 am I-125 Versus Pd-103 For Low Risk Prostate Cancer: Morbidity Outcomes From A  
 Prospective Randomized Multi-Center Controlled Trial  
 Andrew Herstein, <sup>1</sup> Kent Wallner, M.D.,<sup>1,2</sup> Gregory Merrick, M.D.,<sup>3</sup>  
 Paul Mitsuyama, M.D.,<sup>1,2</sup> Julius Armstrong, RTT,<sup>2</sup> Lawrence True, M.D.,<sup>4</sup>  
 William Cavanagh, B.A.,<sup>2</sup> Wayne Butler, PH.D.<sup>3</sup>
- 9:00 am Risk Factors Associated With Urinary Retention Following Permanent 125i  
 Prostate Brachytherapy: A Retrospective Multivariate Analysis Of 1,286  
 Monotherapy Patients  
 David Linstadt, MD,<sup>1</sup> Mark Logsdon, MD,<sup>1</sup> Steve Workman, MD,<sup>2</sup>  
 Larry Goldman, MD,<sup>2</sup> Michael Russo, MD,<sup>2</sup> Deepak Chabra, MD,<sup>2</sup>  
 Dwight Stickney, MD.<sup>1</sup>
- 9:10 am Predictive Factors For Erectile Dysfunction In Men With Prostate Cancer  
 Following Prostate Brachytherapy: Is Dose To The Penile Bulb Important?  
 Graham Macdonald, MD,<sup>1</sup> Mira Keyes, MD,<sup>1</sup> Alexandra Kruk, RTT,<sup>2</sup>  
 Graeme Duncan, MD,<sup>1</sup> Veronika Moravan, Msc,<sup>3</sup> James Morris, MD.<sup>1</sup>
- 9:20– 9:40 am Refreshment Break
- 9:40 – 11:10 am **Proffered Papers - Physics**
- Moderators: Ali S. Meigooni, Ph.D.  
 University of Kentucky Medical Center  
 Lexington, KY
- Phillip Devlin, MD  
 Harvard Medical School  
 Boston, MA
- 9:40 am On The Inadvertent Under-Dosing Of A Complex Spheroid Instilled With P-32  
 Chromic Phosphorous Colloid  
 Charles D. Hechtman, Z Li, Perry Grigsby and Mark Dicocco, Washington University,  
 St. Louis, MO

# AL MEETING

9:52 am Calculated And Measured Brachytherapy Dosimetry Parameters In Water For The Xofig  
Axent X-ray Source: An Electronic Brachytherapy Source  
Mark J. Rivard<sup>1</sup>, Stephen D. Davis<sup>2</sup>, Larry A. DeWerd<sup>2</sup>, Thomas W. Rusch<sup>3</sup> and Steve  
Axelrod<sup>3</sup>. <sup>1</sup>Tufts-New England Medical Center, Boston, MA; <sup>2</sup>University of Wisconsin,  
Madison, WI and <sup>3</sup>Xofig, Inc., Fremont, CA

10:04 am Automatic Calculation Of A Modified Conformal Index (Coin) For Optimal Dose  
Prescription Of Hdr Prostate Implants  
Joseph Hanley, Igor Rebo, Alois M. Ndlovu, Joseph C. Barbiere, John J. Napoli, Alex  
Kapulsky and Glen Gejerman. Hackensack University Medical Center, Hackensack, NJ.

## **Physics Panel: Targeting and Prescription in Prostate Brachytherapy**

Moderator: Phillip M. Devlin, MD  
Harvard Medical School  
Boston, MA

Panelists: **Recent Advances in Image-Guided Targeting in Prostate Brachytherapy**  
Robert Cormack, Ph.D.  
Harvard Medical School  
Boston, MA

**Specification in Prescriptions**  
Wayne M. Butler, Ph.D.  
Wheeling Hospital / Schiffler Cancer Center  
Wheeling, WV

**Reevaluation of Prescribed Doses in Prostate Brachytherapy –  
Historical Developments**  
Jeffrey F. Williamson, Ph.D.  
Virginia Commonwealth University  
Richmond, VA

11:10 am – 12:15 pm **Brachytherapy Economics and Practical Coding Considerations**

Moderator: D. Jeffrey Demanes, MD  
California Endocurietherapy Medical Corp.  
Oakland, CA

Panelists: D. Jeffrey Demanes, MD  
California Endocurietherapy Medical Corp.  
Oakland, CA  
  
James E. Hugh, III, MHA  
American Medical Accounting and Consulting, Inc.  
Marietta, GA

Ron DiGiaino, MBA, BSHA, R.T. (R)(T)  
Revenue Cycle, Inc.  
Austin, TX

12:15 pm Meeting adjourns

\* Speakers, Topics and Times Subject to Change; Views Expressed are  
Not Necessarily the Views of the American Brachytherapy Society.

# 26TH ANNUAL MEETING

## Meeting Space Key

Day	Function	Room(s) / Location
Tuesday – Friday	Registration	Market Street Foyer
Wednesday	Commercial Exhibits/Breaks	Pacific Concourse
Wednesday	General Sessions	Grand Ballroom BC
Wednesday	Speaker Ready Room	Regency B
Wednesday	Residents' Luncheon (for Residents only)	Hospitality Room
Wednesday	Editorial Board Meeting	Marina Room
Wednesday	Welcome Reception	Atrium 3 - 4
Wednesday	Posters	Pacific Concourse, Seacliff AB
Thursday	Commercial Exhibits/Breaks	Pacific Concourse
Thursday	General Sessions	Grand Ballroom BC
Thursday	Speaker Ready Room	Regency B
Thursday	Annual Business Meeting and Member Lunch (members only)	Garden Room
Thursday	Posters	Pacific Concourse, Seacliff AB
Thursday	Gala Event	Carnelian Room, Bank of America Building 6:30 to 9:30 pm Meet in hotel lobby at 6:15 pm for bus service
Friday	Commercial Exhibits/Breaks	Pacific Concourse
Friday	General Sessions	Grand Ballroom BC
Friday	Speaker Ready Room	Regency B
Friday	Posters	Pacific Concourse, Seacliff AB



# 26TH ANNUAL MEETING



## Acknowledgment of 2005 Annual Meeting Commercial Support

The American Brachytherapy Society would like to acknowledge the support, through an unrestricted educational grant, of the following organizations:

**Best Medical International** (Ulrich Henschke Memorial Award, attendee tote bags)

**Cytec Surgical Products** (speaker travel)

**Nucletron** (ABS Membership Luncheon, Judith Stitt paper and poster awards)

**Oncura** (Resident Luncheon, Resident Travel Grant Awards, Resident Prostate  
Brachytherapy Fellowship Program)

**Varian BrachyTherapy** (Gala Event)

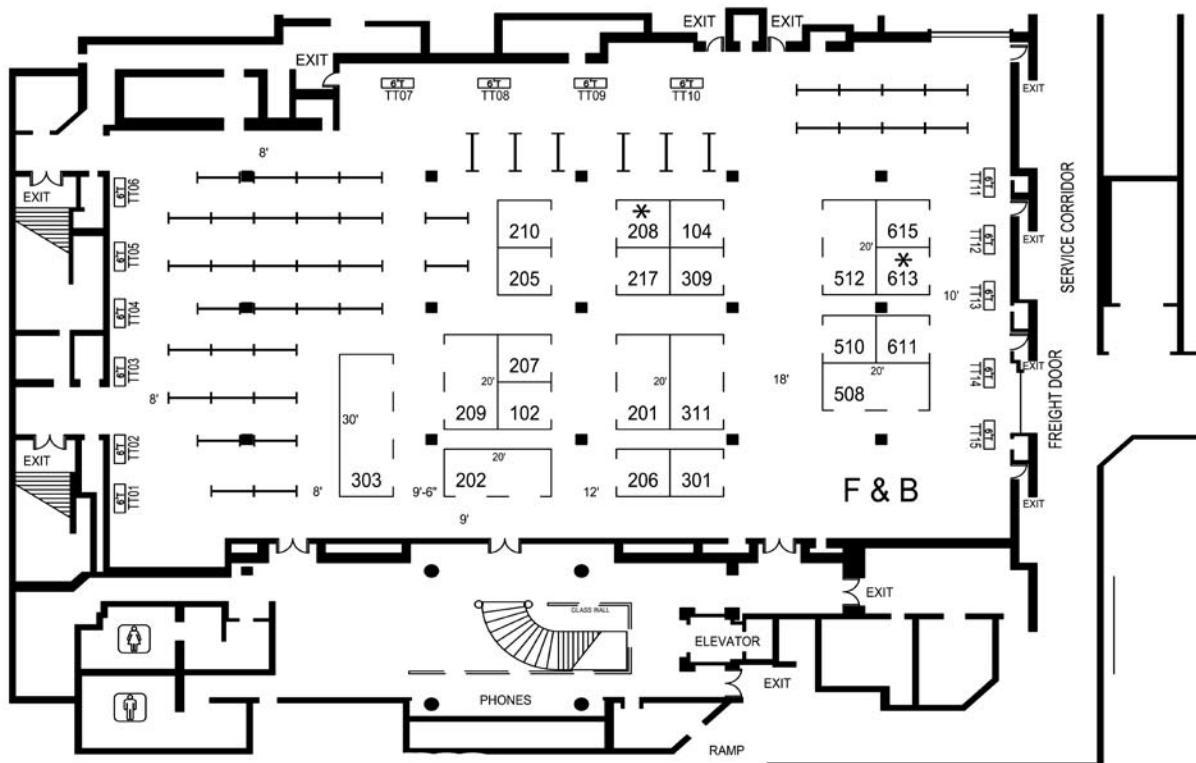
## Annual Meeting Gala Event

*Sponsored by Varian BrachyTherapy*

The ABS would like to acknowledge the support of the 2005 Gala Event by Varian BrachyTherapy, through an unrestricted educational grant. This year's event will be held at the famed Carnelian Room Restaurant on the top floor of the Bank of America World Headquarters building in downtown San Francisco. From the 52nd floor, relax with colleagues and see the sites of the city including the Golden Gate Bridge and the Bay Bridge. Enjoy light food, drinks and music while networking and talking with fellow attendees, exhibitors and guests. This event is included in the registration fee for attendees and guests, however exhibitors are required to register separately at a fee of \$125. Join your colleagues for this year's Gala Event.

# 26TH ANNUAL MEETING

## Pacific Concourse



### 2005 Annual Meeting Exhibitors

The American Brachytherapy Society extends a sincere thank you to all of our corporate supporters and we encourage all attendees to visit with our exhibitors over the course of the meeting.

Company	Booth Number	Tabletop Number
Advanced Care Technologies	512	
Alpha-Omega Services		7
AnazaoHealth Corporation		8
ASTRO	611	
Bard Brachytherapy	301	
Best Medical International	102	
B-K Medical Systems	309	
BSD Medical	104	
Capintec	205	
Computerized Medical Systems (CMS)		2
Cytc Surgical Products (formerly Proxima Therapeutics)	206	
Elsevier Publishing		10
Harvard Medical School Dept. of CME		4
Implant Sciences Corporation	510	
IsoAid LLC	207	
IsoRay Medical		3
Mentor	201	
Mick Radio Nuclear Instruments		9
North American Scientific	202	
Nucletron	508	
Oncura	311	
Pro-Qura		1
RadioMed Corporation	217	
Theragenics Corporation	210	
Varian Brachytherapy	303	
Xoft	209	

# 26TH ANNUAL MEETING

## ABS Board of Directors

President: Frank A. Vicini, MD  
Vice President: Douglas W. Arthur, MD  
Secretary: W. Robert Lee, MD  
Treasurer: Gregory S. Merrick, MD  
Chairman: Michael J. Zelefsky, MD

## Board Members-at-Large

William Bice, Ph.D.  
Patricia J. Eifel, MD  
Michael J. Katin, MD  
Subir Nag, MD

## Annual Meeting Scientific Program Committee

Frank A. Vicini, MD, Scientific Program Chair  
Douglas W. Arthur, MD  
W. Robert Lee, MD  
Bruce R. Thomadsen, Ph.D.  
Michael J. Zelefsky, MD

## Annual Meeting Faculty

Kaled M. Alektiar, MD  
Jesse Aronowitz, MD  
Douglas W. Arthur, MD  
Daniel Ash, MD  
John C. Blasko, MD  
Wayne M. Butler, Ph.D.  
Manjeet Chadha, MD  
Robert Cormack, MD  
Juanita M. Crook, MD  
Brian J. Davis, MD, Ph.D.  
D. Jeffrey Demanes, MD  
Phillip M. Devlin, MD  
Ron Digiaino, MBA, BSHA, R.T. (R)(T)  
Patricia J. Eifel, MD  
James E. Hugh, III, MHA  
Martin E. Keisch, MD  
Vijay R. Kini, MD  
Robert R. Kuske, MD  
W. Robert Lee, MD  
Alvaro Martinez, MD

Patrick W. McLaughlin, MD  
Ali S. Meigooni, Ph.D.  
Gregory S. Merrick, MD  
Gerard C. Morton, MD  
Csaba Polgar, MD  
Richard Potter, MD  
Bradley R. Prestidge, MD  
Abram Recht, MD  
James W. Saxton, Esq.  
Daniel Shasha, MD  
William Small, Jr., MD  
Richard G. Stock, MD  
John E. Sylvester, MD  
James A. Talcott, MD  
Akila N. Viswanathan, MD  
Kent E. Wallner, MD  
Julia R. White, MD  
Jeffrey F. Williamson, Ph.D.  
Michael J. Zelefsky, MD

# 26TH ANNUAL MEETING

## ABS 2005 Awards: Ulrich Henschke Award

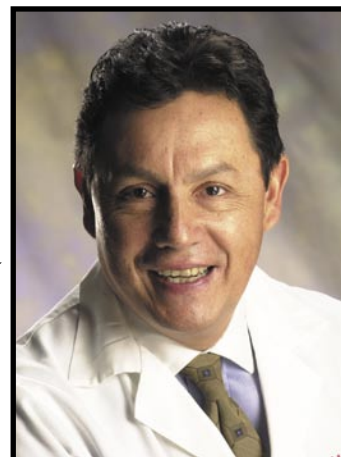
(sponsored by Best Medical International)



**Best Medical International, Inc.**  
Established 1977

## Alvaro Martinez, MD

Dr. Alvaro Martinez, MD, FACR, was born in Colombia, South-America and went to Medical School at The Javeriana University in Bogota, Colombia, graduating in 1968. Dr. Martinez came to the United States and did a residency in Radiation Oncology at Memorial Sloan Kettering Cancer Center, in New York City. He was the Chief Resident from 1973 to 1974, then went to Stanford University in 1974 as an Instructor, and then Assistant Professor, in the Department of Radiology. In 1981, he went to The Mayo Clinic and Mayo Medical School as an Associate Professor. In 1985, he became the Chairman of Radiation Oncology at William Beaumont Hospital and in 1998 was appointed Corporate Chairman of Beaumont Hospitals. He has received numerous honors and Medical Society recognitions. Dr. Martinez is a past-President of the American Brachytherapy Society and a past-President of the Michigan Society of Therapeutic Radiologists. He has served on multiple committees within ASTRO and within many other medical organizations. Dr. Martinez has co-authored more than 250 manuscripts in refereed medical journals, written 48 book chapters, and edited three brachytherapy books.



It is a pleasure to honor Dr. Alvaro Martinez with the 2005 Ulrich Henschke Award.

## Past Ulrich Henschke Medal Recipients

### 1981 Basil Hilaris, MD

### 1981 A.M. Nisar Syed, MD

Primary Irradiation on the Management of Cancer of the Breast

### 1982 Lowell Anderson, PhD

### 1984 Bernard Perquin, MD

Account of French Fellows

### 1984 Eric Hall, DSc

The Biological Basis of Endocurietherapy

### 1985 Samuel Hellman, MD

Preservative Management of Breast Cancer

### 1986 Theodore L. Phillips, MD

Neurobrachytherapy, State of the Art

### 1988 Charles A.F. Joslen, MD

High Activity Source Afterloading in Gynecological Cancer and Its Future Prospects

### 1989 Professor Daniel Chassagre

Results of Oral Cancer Brachytherapy

### 1989 J. Frank Wilson, MD

Combined Modality Treatment with Brachytherapy

### 1990 Jack Fowler, DSc

The Role of Radiation Biology in Brachytherapy

### 1991 Carlos Perez, MD, FACR

A Historic Perspective and Challenges in Brachytherapy of the Uterine Cervix

### 1992 Willet Whitmore, MD

The Memorial Sloan Kettering Experience with 125-I for Prostate Cancer: 1970-1985

### 1993 Alain Gerbault, MD

Brachytherapy for Pediatric Malignancies

### 1994 Ravinder Nath, PhD

New Radionuclide Sources for Brachytherapy

### 1995 Colin Orton, PhD

The Dose-Rate Effect in Brachytherapy: Friend or Foe?

### 1999 Luis Delclos, MD

Irradiation for Malignant Tumors of the Vagina

### 2003 Louis B. Harrison, MD



# 26TH ANNUAL MEETING

## Oncura Prostate Brachytherapy Fellowship Recipients

JC Abdou, MD , Ohio State University  
Daniel Landis, MD, Ph.D., Harvard University  
Laura Millender, MD, University of California San Francisco  
Michael Miller, MD, E. Virginia  
Michael Papagikos, MD, Wake Forest University  
Doug Rivera, MD  
Kevin Sanders, MD, MDACC  
Vipul Thakkar, MD, Cleveland Clinic

## Oncura Resident Travel Grant Award Recipients

### **J. Vito Antonucci, MD**

Clinical Implication of PSA Bounce After Prostate Brachytherapy With or Without Neoadjuvant Androgen Deprivation

### **Ajay K. Bhatnagar, MD**

Image Guided High-Dose Rate Interstitial Brachytherapy (HDRB) for Gynecological Malignancies

### **Cynthia J. Bryant, MD**

Management of Brain Tumors With the Gliasite™ Radiation Therapy System: The Emory Experience

### **Moataz N. El-Ghamry, MD**

Role of Interstitial Brachytherapy for Sphincter Preservation in Patients With Low Lying Rectal and Anal Cancers

### **William Foster, MD**

Impact of Urethral Catheter and Leg Positioning on In Vivo Dosimetry in Patients Undergoing I-125 Seed Implantation

### **Christopher C. Goulet, MD**

Geometrical Characterization of the Prostatic Urethra from CT Data Following Permanent Prostate Brachytherapy: Applications to Trans-Urethral Imaging and Brachytherapy Planning

### **Yasmin Hasan, MD**

Technical Factors Affecting Early Toxicity and Cosmetic Outcome Following MammoSite Brachytherapy – The William Beaumont Hospital Experience

### **James L. Leenstra, MD**

A Comparison of Prostate Dimensions and Volume In Patients Undergoing Radical Retropubic Prostatectomy, External Beam Radiation Therapy, or Permanent Prostate Brachytherapy for Localized Adenocarcinoma

### **Daniel R. Reed, DO**

Rapid Strand™ vs. Loose (Iodine – 125 Seeds): A Prospective Randomized Trial

### **Samuel J. Rhoades, IV, MS**

The Application of 90Sr / 90Y for the Prevention of Abdominal Adhesions

### **Naoyuki G. Saito, MD, PhD**

MRI Based Observations of Anatomic Distortions Secondary to Permanent I-125 Prostate Implantation

### **Vipul V. Thakkar, MD**

Factors Predicting for Acute Urinary Morbidity Following Permanent 125I Implantation of the Prostate: Insights from a Pooled Analysis of Two Prospective, Randomized Trials

# 26TH ANNUAL MEETING

## ABS Posters (located in Pacific Concourse and Seacliff AB)

### Gynecology

#### P-31

#### **DVH ANALYSIS OF IMAGE-BASED BRACHYTHERAPY IN CERVICAL CANCER: POINT A VERSUS GTV PRESCRIPTION**

Robert M Allbright, M.D.,<sup>1</sup> Travers J McLoughlin, M.D.,<sup>1</sup> Albert M Sabbas, Ph.D.,<sup>1</sup> Fridon Kulidzhanov, Ph.D.,<sup>1</sup> Yi-Shin Kuo, M.D.,<sup>2</sup> Thomas A Caputo, M.D.,<sup>2</sup> Dattatreya Nori, M.D., F.A.C.R.<sup>1</sup> <sup>1</sup> *Stich Radiation Center, New York-Presbyterian Hospital, New York, NY;* <sup>2</sup> *Department of Ob/Gyn, Division of Gynecologic Oncology, New York-Presbyterian Hospital, New York, NY.*

#### P-32

#### **INTEGRATED IMAGE-GUIDED HDR BRACHYTHERAPY AND CONCOMITANT COMPLEMENTARY IMRT FOR CANCERS OF THE UTERINE CERVIX**

Jun Duan, Ph.D.,<sup>1</sup> Robert Y Kim, M.D.,<sup>1</sup> Sui Shen, Ph.D.<sup>1</sup> <sup>1</sup> *Radiation Oncology, University of Alabama at Birmingham, Birmingham, AL.*

#### P-33

#### **TOXICITY OF CONCURRENT CISPLATIN AND BRACHYTHERAPY IN THE MANAGEMENT OF CERVIX CANCER**

Richard C Zellars, MD,<sup>1</sup> Robert E Bristow, MD,<sup>2</sup> Robert Giuntoli, MD,<sup>2</sup> Fariba Asrari, MD,<sup>1</sup> Ginger Gardner, MD.<sup>2</sup> <sup>1</sup> *Radiation Oncology and Molecular Radiation Sciences, Sidney Kimmel Comprehensive Cancer Center at Johns Hopkins, Baltimore, MD;* <sup>2</sup> *Kelly Gynecologic Oncology Service, Johns Hopkins Medical Institutions, Baltimore, MD.*

#### P-34

#### **HIGH DOSE RATE INTERSTITIAL BRACHYTHERAPY FOR LOCALLY ADVANCED CERVICAL CANCER**

Thin Phan, MD,<sup>1</sup> Ken Wong, MD,<sup>1</sup> Ajmel Puthawala, MD,<sup>2</sup> Anil Sharma, Ph.D.,<sup>2</sup> Philip Disaia, MD,<sup>3</sup> Michael Berman, MD,<sup>3</sup> Wendy Brewster, MD,<sup>3</sup> Nisar Syed, MD.<sup>2</sup> <sup>1</sup> *Radiation Oncology, UC-Irvine, Orange, CA;* <sup>2</sup> *Radiation Oncology, Long Beach Memorial, Long Beach, CA;* <sup>3</sup> *Obstetrics & Gynecology, UC-Irvine, Orange, CA.*

#### P-35

#### **HDR BRACHYTHERAPY, EXTENDED FIELD IRRADIATION AND CONCURRENT CHEMOTHERAPY IN STAGE IIB CERVICAL CARCINOMA**

Ernest C Hymel, MD, PhD,<sup>1</sup> Mahesh A Varia, MD,<sup>1</sup> Linda Van Le, MD,<sup>2</sup> Paola A Gehrig, MD,<sup>2</sup> John F Boggess, MD.<sup>2</sup> <sup>1</sup> *Department of Radiation Oncology, University of North Carolina, Chapel Hill, NC;* <sup>2</sup> *Obstetrics and Gynecology, University of North Carolina, Chapel Hill, NC.*

#### P-36

#### **ADJUVANT RADIOTHERAPY FOR EARLY STAGE ENDOMETRIAL ADENOCARCINOMA**

O Kenneth Macdonald, MD,<sup>1</sup> William T Sause, MD,<sup>2</sup> R Jeffery Lee, MD,<sup>2</sup> David K Gaffney, MD, PhD.<sup>1</sup> <sup>1</sup> *Radiation Oncology, Huntsman Cancer Hospital at the University of Utah, Salt Lake City, UT;* <sup>2</sup> *Radiation Oncology, Latter-Day Saint Hospital, Salt Lake City, UT.*

#### P-37

#### **BRACHYTHERAPY ALONE FOR INTERMEDIATE RISK ENDOMETRIAL CANCER**

Lilie L Lin, MD,<sup>1</sup> Imran Zoberi, MD,<sup>1</sup> David Mutch, MD,<sup>2</sup> Perry W Grigsby, MD, MBA.<sup>1</sup> <sup>1</sup> *Radiation Oncology, Washington University in St. Louis, Saint Louis, MO;* <sup>2</sup> *Gynecologic Oncology, Washington University in St. Louis, St. Louis, MO.*

# 26TH ANNUAL MEETING

**P-38**

## **IMAGE GUIDED HIGH-DOSE RATE INTERSTITIAL BRACHYTHERAPY (HDRB) FOR GYNECOLOGICAL MALIGNANCIES**

Ajay K Bhatnagar, MD,<sup>1</sup> Sushil Beriwal, MD,<sup>1</sup> Dwight E Heron, MD,<sup>1</sup> Raj S Selvaraj, MS,<sup>1</sup> Robert Mogus, MS,<sup>1</sup> Kristina Gerszten, MD,<sup>1</sup> John Comerci, MD.<sup>2,1</sup> *Radiation Oncology, University of Pittsburgh Cancer Institute, Pittsburgh, PA;* <sup>2</sup> *Gynecology Oncology, University of Pittsburgh Cancer, PA.*

## **Breast**

**P-39**

## **ACUTE TOXICITY ANALYSIS OF BREAST CANCER PATIENTS TREATED WITH ACCELERATED PARTIAL BREAST IRRADIATION (APBI) USING MAMMOSITE COMPARING A 2-DAY VS 5-DAY DOSE SCHEDULE**

Michelle F Wallace, RN, BSN, OCN,<sup>1</sup> Alvaro A Martinez, MD,<sup>1</sup> Peter Y Chen, MD,<sup>1</sup> Michel I Ghilezan, MD,<sup>1</sup> Pamela Benitez, MD,<sup>2</sup> Nancy A Dunn, RN, BS, OCN,<sup>1</sup> Kimberly K Isler, RN, MSN, OCN,<sup>1</sup> Frank A Vicini, MD.<sup>1</sup> *<sup>1</sup> Radiation Oncology, William Beaumont Hospital, Royal Oak, MI;* *<sup>2</sup> Department of Surgical Services, William Beaumont Hospital, Royal Oak, MI.*

**P-40**

## **TECHNICAL FACTORS AFFECTING EARLY TOXICITY AND COSMETIC OUTCOME FOLLOWING MAMMOSITE BRACHYTHERAPY- THE WILLIAM BEAUMONT HOSPITAL EXPERIENCE**

Yasmin Hasan, M.D.,<sup>1</sup> Frank A Vicini, M.D., F.A.C.R.,<sup>1</sup> Peter Y Chen, M.D.,<sup>1</sup> Pamela Benitez, M.D.,<sup>2</sup> Larry L Kestin, M.D.,<sup>1</sup> Michelle Wallace, R.N.,<sup>1</sup> Jane Pettinga, M.D.,<sup>2</sup> Dwight L Fitch, M.D.,<sup>1</sup> Alvaro A Martinez, M.D., F.A.C.R.<sup>1</sup> *<sup>1</sup> Radiation Oncology, William Beaumont Hospital, Royal Oak, MI;* *<sup>2</sup> Department of Surgery, William Beaumont Hospital, Royal Oak, MI.*

**P-41**

## **PERFORMANCE OF AN ELECTRONIC BRACHYTHERAPY SYSTEM FOR ACCELERATED PARTIAL BREAST IRRADIATION IN A GOAT MAMMARY MODEL**

John W Rieke, MD,<sup>1</sup> Darius S Francescatti, MD,<sup>2</sup> Mark J Rivard, PhD,<sup>3</sup> Jacqueline P Williams, PhD,<sup>4</sup> Steve Axelrod, PhD,<sup>5</sup> Robert R Burnside, MS,<sup>5</sup> Eric W Chell, PhD,<sup>5</sup> Steven D Hansen, MS,<sup>5</sup> Thomas W Rusch, PhD,<sup>5</sup> Daren L Stewart,<sup>5</sup> *<sup>1</sup> Radiation Oncology, Puget Sound VAHCS, Seattle, WA;* *<sup>2</sup> Surgery, Rush Medical School, Chicago, IL;* *<sup>3</sup> Radiation Oncology, Tufts-New England Medical Center, Boston, MA;* *<sup>4</sup> Radiation Oncology, University of Rochester Medical Center, Rochester, NY;* *<sup>5</sup> Xoft, Inc., Fremont, CA.*

**P-42**

## **SERIAL COMPUTED TOMOGRAPHIC ASSESSMENT OF MAMMOSITE BALLOON-CAVITY CONFORMITY AND TREATMENT IMPLICATIONS**

Michael A Papagikos, M.D.,<sup>1</sup> Amanda R Havnen, B.S.,<sup>2</sup> Michael V Lawrence, B.S.,<sup>2</sup> Mahta Mirzaei, M.S.,<sup>1</sup> Carolyn R Ferree, M.D.<sup>1</sup> *<sup>1</sup> Radiation Oncology, Wake Forest University School of Medicine, Winston-Salem, NC;* *<sup>2</sup> Biomedical Engineering, Wake Forest University, Winston-Salem, NC.*

**P-44**

## **QUALITY OF LIFE IN PATIENTS DURING AND AFTER MAMMOSITE BRACHYTHERAPY**

Alice F Tsai, M.D.,<sup>1</sup> Dattareyudu Nori, M.D.,<sup>1</sup> Mary K Hayes, M.D.<sup>1,1</sup> *<sup>1</sup> Radiation-Oncology, New York Hospital Weill-Cornell Medical Center, New York, NY.*

**P-45**

## **INVESTIGATION OF SKIN DOSE REDUCTION IN MAMMOSITE® HDR BRACHYTHERAPY USING A MODIFIED, ROTATING APPLICATOR DESIGN**

Amir G Sadeghi, PhD,<sup>1,2</sup> Bradley R Prestidge, MD,<sup>1,2</sup> Scott Winter, BS,<sup>2</sup> Arthur Rosenthal, MD.<sup>3</sup> *<sup>1</sup> Radiation Oncology, Texas Cancer Clinic, San Antonio, TX;* *<sup>2</sup> Radiological Sciences, University of Texas Health Science Center at San Antonio, San Antonio, TX;* *<sup>3</sup> Surgery, Southwest Texas Methodist Hospital, San Antonio, TX.*

# 26TH ANNUAL MEETING

**P-46**

**CONTRALATERAL BREAST DOSE: A PHANTOM STUDY OF ACCELERATED INTRACAVITARY PARTIAL BREAST IRRADIATION AND THE EFFECT OF MIDLINE EXTERNAL LEAD SHIELDING**

Alexandra J Stewart, BM, MRCP,<sup>1</sup> Jorgen L Hansen, MSc,<sup>1</sup> Desmond A O'Farrell, CMD,<sup>1</sup> Robert A Cormack, PhD,<sup>1</sup> Jennifer R Bellon, MD,<sup>1</sup> Subhakar Mutyala, MD,<sup>1</sup> Phillip M Devlin, MD.<sup>1</sup> <sup>1</sup> *Radiation Oncology, Brigham and Women's Hospital, Dana Faber Cancer Institute, Boston, MA.*

**P-47**

**ACCELERATED INTRACAVITARY PARTIAL BREAST IRRADIATION TO THE LEFT BREAST: A WHOLE HEART DOSE VOLUME HISTOGRAM ANALYSIS**

Alexandra J Stewart, BM, MRCP,<sup>1</sup> Desmond A O'Farrell, CMD,<sup>1</sup> Jorgen L Hansen, MSc,<sup>1</sup> Robert A Cormack, PhD,<sup>1</sup> Jennifer R Bellon, MD,<sup>1</sup> Subhakar Mutyala, MD,<sup>1</sup> Phillip M Devlin, MD.<sup>1</sup> <sup>1</sup> *Radiation Oncology, Brigham and Women's Hospital, Dana Faber Cancer Institute, Boston, MA.*

**P-49**

**CHEST WALL DOSE IN MAMMOSITE BREAST BRACHYTHERAPY: RADIOBIOLOGIC ESTIMATIONS OF LATE COMPLICATION RISK BASED ON DOSE-VOLUME CONSIDERATIONS**

Anthony E Dragan, MD,<sup>1</sup> Joseph M Jenrette, MD,<sup>1</sup> Eric G Aguero, MD,<sup>1</sup> Joseph F Harmon, PhD,<sup>1</sup> Jennifer L Harper, MD.<sup>1</sup> <sup>1</sup> *Department of Radiation Oncology, Medical University of South Carolina, Charleston, SC.*

**P-50**

**POST-SURGICAL PLACEMENT OF MAMMOSITE® APPLICATOR USING THE PINPOINT™ CT SCANNER INTEGRATED STEREOTACTIC ARM**

Gene A Cardarelli, MS, MPH,<sup>1,2</sup> Jen-San Tsai, PHD,<sup>1,2</sup> Jess Hiatt, BS,<sup>1,2</sup> Thomas DiPetrillo, MD,<sup>1,2</sup> Melissa Remis, MD,<sup>1,2</sup> Muhammed Y Puthawala, MD,<sup>1,2</sup> Carla Bradford, PHD,<sup>1,2</sup> David Wazer, MD.<sup>1,2</sup> <sup>1</sup> *Radiation Oncology, Rhode Island Hospital, Providence, RI;* <sup>2</sup> *Radiation Oncology, Brown University School of Medicine, Providence, RI.*

## Head and Neck

**P-51**

**TOLERANCE OF CERVICAL SPINAL CORD TO HDR BRACHYTHERAPY AND EXTERNAL BEAM RADIATION IN TREATMENT OF HEAD AND NECK CANCERS**

Bhupesh Parashar, MD,<sup>1</sup> Ravindra Yaparalvi, MS,<sup>1</sup> Madhur Garg, MD,<sup>1</sup> Shalom Kalnicki, MD,<sup>1</sup> Jonathan J Beitler, MD, MBA, FACR.<sup>1</sup> <sup>1</sup> *Radiation Oncology, Montefiore Medical Center, Bronx, NY.*

**P-52**

**EXPERIENCE WITH HIGH DOSE RATE (HDR) BRACHYTHERAPY IN THE TREATMENT OF TUMORS OF THE BASE OF TONGUE**

Zoltan Takacsi-Nagy, MD,<sup>1</sup> Ferenc Oberna, MD,<sup>2</sup> Csaba Polgar, MD PhD,<sup>1</sup> Tibor Major, PhD,<sup>1</sup> Janos Fodor, MD DSc.<sup>1</sup> <sup>1</sup> *Department of Radiotherapy, National Institute of Oncology, Budapest, Hungary;* <sup>2</sup> *Department of Oral Surgery, St.Rokus Hospital, Budapest, Hungary.*

**P-53**

**HDR INTERSTITIAL BRACHYTHERAPY IN RECURRENT AND PREVIOUSLY IRRADIATED HEAD AND NECK CANCERS – PRELIMINARY RESULTS**

Ashwatha Narayana, MD,<sup>1</sup> Gilad Cohen, PhD,<sup>2</sup> Marco Zaider, PhD,<sup>2</sup> Jatin Shah, MD,<sup>3</sup> Ashok Shaha, MD,<sup>3</sup> Dennis Kraus, MD,<sup>3</sup> Michael Zelefsky, MD.<sup>1</sup> <sup>1</sup> *Radiation Oncology, Memorial Sloan Kettering Cancer Center, New York, NY;* <sup>2</sup> *Medical Physics, Memorial Sloan Kettering Cancer Center, New York, NY;* <sup>3</sup> *Head and Neck Surgery, Memorial Sloan Kettering Cancer Center, New York, NY.*



# 26TH ANNUAL MEETING

**P-54**

## **IRIDIUM-192 INTERSTITIAL BRACHYTHERAPY FOR SQUAMOUS CARCINOMA OF THE ORAL TONGUE**

Ying Hitchcock, <sup>1</sup>Jergin Chen, <sup>1</sup>Pramod Sharma, <sup>2</sup>Jonh Moeller, <sup>1</sup>David Gaffney, <sup>1</sup>Jim Rankin, <sup>1</sup>Dennis Shrieve, .  
<sup>1</sup>*Radiation Oncology, Huntsman Cancer Insitute, University of Utah, Salt Lake City, UT;* <sup>2</sup>*Otolaryngology-Head and Neck Surgery, Huntsman Cancer Insitute, University of Utah, Salt Lake City, UT.*

**P-55**

## **A CASE STUDY OF NASOPHARYNGEAL CARCINOMA THAT PROGRESSED IN THE CLIVUS WHILE RECEIVING EXTERNAL BEAM RADIATION CONCURRENTLY WITH CHEMOTHERAPY AND WAS SALVAGED SUCCESSFULLY WITH INTERSTITIAL HIGH DOSE RATE (HDR) BRACHYTHERAPY TO THE CLIVUS AND NASOPHARNYX**

A Akl, M.D.,<sup>1</sup> J Shah, M.D. FRCS(C), S Zafiroff, MS, I Abdulhay, Ph.D., L Boulay, M.S., A Ismail, Ph.D., N Ahmad, M.D., M Agabigum, M.D., R Mikhail, M.D. <sup>1</sup>*Radiation Oncology, Genesys Hurley Cancer Institute, Flint, MI.*

**P-56**

## **RESULTS OF INTERSTITIAL HDR HIGH DOSE RATE BRACHYTHERAPY IN TREATMENT OF EARLY (T1T2) TONGUE CANCER**

A Akl, M.D.,<sup>1</sup> S Zafiroff, MS, I Abdulhay, Ph.D., A Ismail, Ph.D., L Boulay, M.S., N Ahmad, M.D., M Agabigum, M.D., S Marchetta, D.O., R Mikhail, M.D., S Mukkamala, M.D., W Robins, D.O., K Shukairy, M.D., M Ulrich, D.O.  
<sup>1</sup>*Radiation Oncology, Genesys Hurley Cancer Institute, Flint, MI.*

## Physics

**P-57**

## **VALIDATION MEASUREMENTS OF DOSE DELIVERED FROM A NOVEL ELECTRONIC BRACHYTHERAPY X-RAY SOURCE**

Steve Axelrod, PhD,<sup>1</sup> Earl E Dozier, <sup>1</sup>Thomas W Rusch, PhD.<sup>1</sup> <sup>1</sup>*R&D, Xoft, Inc., Fremont, CA.*

**P-58**

## **COMPARISON OF CHEST RADIOGRAPHS, FLUOROSCOPY AND SEED-MIGRATION DETECTOR FOR THE DETECTION OF EMBOLIZED SEEDS TO THE LUNG**

Janelle Morrier, MSc,<sup>1</sup> Mario Chretien, MSc,<sup>1</sup> Luc Beaulieu, PhD.<sup>1</sup> <sup>1</sup>*Radiation-Oncology and Centre de Recherche en Cancérologie, CHUQ, Québec, QC, Canada.*

**P-59**

## **TG-43U1 BASED DOSIMETRIC CHARACTERIZATION OF MODEL 67-6520 CS-137 BRACHYTHERAPY SOURCE**

Ali S Meigooni, Ph.D, Clarissa Wright, B.S., Rebecca F Duncan, M.S., Venkata Rachabaththula, M.S., Rafiq A Koonaa, M.S., Curtis H Baker, B.S. <sup>1</sup>*Radiation Medicine, University of Kentucky, Lexington, KY.*

**P-60**

## **FIRST RESULTS OF THE EQUAL-ESTRO-BRAPHYQS AUDITS FOR BRACHYTHERAPY, GEOMETRIC RECONSTRUCTION TECHNIQUES AND Ir-192 HDR DOSE DELIVERY**

Amelie Roue, <sup>1</sup>Jack Venselaar, PhD,<sup>2</sup> Jan Van Dam, PhD,<sup>1</sup> Hans Svensson, PhD.<sup>3</sup> <sup>1</sup>*EQUAL-ESTRO Laboratory, ESTRO, Villejuif, France;* <sup>2</sup>*Radiotherapy Department, Dr. B. Verbeeten Instituut, Tilburg, Netherlands;* <sup>3</sup>*Radiation Physics Department, University of Umea, Umea, Sweden.*

**P-61**

## **MIXED-FIELD DOSIMETRY FOR A HDR Cf-252 BRACHYTHERAPY SOURCE**

Christopher S Melhus, M.Sc.,<sup>1</sup> Mark J Rivard, Ph.D.<sup>1</sup> <sup>1</sup>*Radiation Oncology, Tufts-New England Medical Center, Boston, MA.*

# 26TH ANNUAL MEETING

**P-62**

## **RADIATION PROTECTION DATA OF NEW BRACHYTHERAPY SOURCES**

Jack Venselaar, PhD,<sup>1</sup> Jose Perez-Calatayud, PhD,<sup>2</sup> Facundo Ballester, PhD,<sup>3</sup> Adrie Bos, PhD,<sup>4</sup> D Granero, PhD.<sup>3</sup>  
<sup>1</sup> Radiotherapy Department, Dr. B. Verbeeten Instituut, Tilburg, Netherlands; <sup>2</sup> Radiotherapy Department, La Fe Hospital, Valencia, Spain; <sup>3</sup> Department of Atomic, Molecular and Nuclear Physics, University of Valencia and IFIC-CSIC, Burjassot, Spain; <sup>4</sup> Faculty of Applied Physics, Delft University of Technology, Delft, Netherlands.

**P-63**

## **RADIOCHROMIC FILM DOSIMETRY FOR I-125 SEED IN SOLID WATER**

Sou-Tung Chiu-Tsao, PhD,<sup>1</sup> Yunsil Ho, PhD,<sup>1</sup> Daniel Shasha, MD,<sup>1</sup> Louis B Harrison, MD.<sup>1</sup> <sup>1</sup> Radiation Oncology, Beth Israel Medical Center & St. Luke's Roosevelt Hospital Center, New York, NY.

**P-65**

## **ERROR ANALYSIS IN MONTE CARLO SIMULATION OF LOW ENERGY BRACHYTHERAPY SOURCES**

Rafiq A Koonan, M.S.,<sup>1</sup> Venkata Rachabathula, M.S.,<sup>2</sup> Shahid B Awan, M.S.,<sup>2</sup> William R Dieter, Ph.D.,<sup>1</sup> Ali S Meigooni, Ph.D.<sup>2</sup> <sup>1</sup> Department of Electrical and Computer Engineering, University of Kentucky, Lexington, KY; <sup>2</sup> Department of Radiation Medicine, University of Kentucky, Lexington, KY.

**P-66**

## **MOSFET AS IN VIVO DOSIMETERS FOR PROSTATE HDR REAL-TIME QUALITY ASSURANCE**

Christine Tremblay, M.Sc.,<sup>1,2</sup> Luc Gingras, Ph.D.,<sup>1,2</sup> Louis Archambault, M.Sc.,<sup>1,2</sup> Mario Chretien, M.Sc.,<sup>1</sup> Andre-Guy Martin, M.D., M.Sc.,<sup>1</sup> Rene Roy, Ph.D.,<sup>2</sup> Luc Beaulieu, Ph.D.<sup>1,2</sup> <sup>1</sup> Département de radio-oncologie, Centre Universitaire de Québec, Pavillon de l'Hôtel-Dieu de Québec, Québec, QC, Canada; <sup>2</sup> Département de Physique, Génie Physique et Optique, Université Laval, Québec, QC, Canada.

**P-67**

## **CONE BEAM CT BASED PLANNING FOR HIGH AND LOW DOSE RATE BRACHYTHERAPY**

Amir G Sadeghi, PhD,<sup>1,2</sup> Bradley R Prestidge, MD,<sup>1,2</sup> Sylvia G Zubyk, MD,<sup>1</sup> William S Bice, PhD.<sup>1,2</sup> <sup>1</sup> Radiation Oncology, Texas Cancer Clinic, San Antonio, TX; <sup>2</sup> Radiological Sciences, University of Texas Health Science Center at San Antonio, San Antonio, TX.

**P-68**

## **DOSIMETRIC COMPARISON BETWEEN HIGH-DOSE-RATE INTERSTITIAL AND MAMMOSITE BALLOON BRACHYTHERAPY FOR BREAST CANCER**

Tibor Major, PhD,<sup>1</sup> Csaba Polgar, MD, PhD,<sup>1</sup> Janos Fodor, MD, PhD, DSc.<sup>1</sup> <sup>1</sup> Radiotherapy Department, National Institute of Oncology, Budapest, Hungary.

## Prostate

**P-69**

## **IMPROVED CLINICAL OUTCOME WITH HIGH DOSE RADIATION: A PROSPECTIVE DOSE ESCALATION TRIAL USING HIGH DOSE RATE BRACHYTHERAPY BOOST**

Thomas P Boike, B.S.,<sup>1</sup> Carlos E Vargas, M.D.,<sup>1</sup> Alvaro A Martinez, M.D., F.A.C.R.,<sup>1</sup> Gregory Edmundson, M.S.,<sup>1</sup> Peter Y Chen, M.D.,<sup>1</sup> Gary S Gustafson, M.D.,<sup>1</sup> Daniel J Krauss, M.D.<sup>1</sup> <sup>1</sup> Radiation Oncology, William Beaumont Hospital, Royal Oak, MI.

**P-70**

## **PROGNOSTIC SIGNIFICANCE OF PERINEURAL INVASION FOLLOWING PROSTATE BRACHYTHERAPY**

Gregory S Merrick, MD,<sup>1,4</sup> Wayne M Butler, PHD,<sup>1,4</sup> Kent E Wallner, MD,<sup>2</sup> Robert W Galbreath, PHD,<sup>1,4</sup> Zachariah A Allen, MS,<sup>1,4</sup> Edward Adamovich, MD.<sup>3</sup> <sup>1</sup> Schiffler Cancer Center, Wheeling Hospital, Wheeling, WV; <sup>2</sup> Puget Sound Health Care System, University of Washington, Seattle, WA; <sup>3</sup> Pathology, Wheeling Hospital, Wheeling, WV; <sup>4</sup> Physics, Wheeling Jesuit University, Wheeling, WV.

# 26TH ANNUAL MEETING

## P-71

### **DOSE CONSTRAINTS IN INVERSE PLANNING HDR PROSTATE BRACHYTHERAPY FOR THE DOSE ESCALATION OF DIL DEFINED BY MR SPECTROSCOPY IMAGING**

Yongbok Kim, Ph.D.,<sup>1</sup> I-Chow J Hsu, M.D.,<sup>1</sup> Etienne Lessard, Ph.D.,<sup>1</sup> John Kurhanewicz, Ph.D.,<sup>2</sup> Susan Moyher Noworolski, Ph.D.,<sup>2</sup> Jean Pouliot, Ph.D.<sup>1,1</sup> *Radiation Oncology, University of California, San Francisco, San Francisco, CA; 2Radiology, University of California, San Francisco, San Francisco, CA.*

## P-72

### **ESTABLISHING THE OPTIMAL BIOCHEMICAL FAILURE DEFINITION FOR PROSTATE BRACHYTHERAPY PATIENTS**

Larry L Kestin, M.D.,<sup>1</sup> Dwight Fitch, M.D.,<sup>1</sup> Tom Boike,<sup>1</sup> Courtney Byrd,<sup>1</sup> Alvaro Martinez, M.D.,<sup>1</sup> Frank Vicini, M.D.<sup>1</sup> *Radiation Oncology, William Beaumont Hospital, Royal Oak, MI.*

## P-73

### **RELATIONSHIP BETWEEN PREIMPLANT INTERNATIONAL PROSTATE SYMPTOM SCORE AND URINARY MORBIDITY FOLLOWING PERMANENT PROSTATE BRACHYTHERAPY**

Sarah Gutman,<sup>1</sup> Gregory S Merrick, MD,<sup>1,2</sup> Wayne M Butler, PHD,<sup>1,2</sup> Kent E Wallner, MD,<sup>1</sup> Zachariah A Allen, MS,<sup>1,2</sup> Robert W Galbreath, PHD.<sup>1,2</sup> *Schiffler Cancer Center, Wheeling Hospital, Wheeling, WV; 2Physics, Wheeling Jesuit University, Wheeling, WV.*

## P-74

### **CLASS SOLUTION FOR INVERSLY PLANNED PERMANENT PROSTATE IMPLANTS TO MIMIC AN EXPERIENCED DOSIMETRIST FOR PRE AND LIVE TREATMENT PLANNING**

Etienne Lessard, Ph.D.,<sup>1</sup> Stefan LS Kwa, Ph.D.,<sup>2</sup> Barby Pickett, CMD,<sup>1</sup> Mack Roach III, MD,<sup>1</sup> Jean Pouliot, Ph.D.<sup>1</sup> *1Department of Radiation Oncology, UCSF Comprehensive Cancer Center, San Francisco, CA; 2Nucletron B.V., Veenendaal, Netherlands.*

## P-75

### **MRI BASED OBSERVATIONS OF ANATOMIC DISTORTIONS SECONDARY TO PERMANENT I-125 PROSTATE IMPLANTATION**

Naoyuki G Saito, M.D., Ph.D.,<sup>1</sup> Vrinda Narayana, Ph.D.,<sup>1,2</sup> Sara A Troyer, B.S.,<sup>1,2</sup> Sally M Berri, B.S.,<sup>1,2</sup> Patrick W McLaughlin, M.D.<sup>1,2</sup> *1Department of Radiation Oncology, University of Michigan, Ann Arbor, MI; 2Department of Radiation Oncology, Providence Hospital, Southfield, MI.*

## P-76

### **A COMPARISON AT 10 YEARS OF HIGH DOSE RATE BRACHYTHERAPY AND EXTERNAL RADIATION WITH AND WITHOUT ANDROGEN SUPPRESSION FOR PROSTATE CANCER**

D Jeffrey Demanes, M.D.,<sup>1</sup> Gillian Altieri, C.M.D.,<sup>1</sup> David Brandt, M.A.,<sup>1</sup> Marie-Claire Barnaba, M.S.N-NP,<sup>1</sup> Lionel Schour, M.D.,<sup>1</sup> Pat Skoolisariyaporn, M.S.<sup>1</sup> *1California Endocurietherapy Cancer Center, California Endocurietherapy Cancer Center, Oakland, CA.*

## P-77

### **DETAILED URETHRAL DOSIMETRY IN THE EVALUATION OF PROSTATE BRACHYTHERAPY-RELATED URINARY MORBIDITY**

Zachariah A Allen, M.S.,<sup>1</sup> Gregory S Merrick, M.D.,<sup>1</sup> Wayne M Butler, PH.D.,<sup>1</sup> Kent E Wallner, M.D.,<sup>1</sup> Brian Kurko, B.S., C.M.D.,<sup>1</sup> Richard L Anderson, B.S., C.M.D.,<sup>1</sup> Brian C Murray, B.S.,<sup>1</sup> Robert W Galbreath, PH.D.<sup>1,1</sup> *Schiffler Cancer Center & Wheeling Jesuit University, Wheeling Hospital, Wheeling, WV.*

# 26TH ANNUAL MEETING

**P-78**

## **PROSTATE VOLUME AND SEED LOCATION AS A FUNCTION OF THE DISTANCE TO THE RECTUM AND URETHRA: DESIGN CONSIDERATIONS FOR TRANS-URETHRAL ULTRASOUND DURING PROSTATE BRACHYTHERAPY**

David R Holmes III, PhD,<sup>1</sup> Brian J Davis, MD, PhD,<sup>2</sup> Christopher C Goulet, MD,<sup>2</sup> Michael G Herman, PhD,<sup>2</sup> Lance A Mynderse, MD,<sup>3</sup> Richard A Robb, PhD.<sup>1</sup> <sup>1</sup> *Biomedical Imaging Resource, Mayo Clinic College of Medicine, Rochester, MN*; <sup>2</sup> *Division of Radiation Oncology, Mayo Clinic, Rochester, MN*; <sup>3</sup> *Department of Urology, Mayo Clinic, Rochester, MN*.

**P-79**

## **EFFECT OF POST-IMPLANT EDEMA ON TREATMENT MARGIN MEASUREMENTS AFTER PROSTATE BRACHYTHERAPY WITH MRI-BASED DOSIMETRY**

Dainel R Reed, DO,<sup>1,2</sup> Kent E Wallner, MD,<sup>1,2</sup> Eric Ford, PhD,<sup>1,2</sup> Gregory Merrick, MD,<sup>3</sup> Wayne Butler, PhD,<sup>3</sup> Sreeram Narayanan, PhD,<sup>1,2</sup> Paul Cho, PhD.<sup>1,2</sup> <sup>1</sup> *Radiation Oncology, Puget Sound Health Care System, Department of Veterans Affairs, Seattle, WA*; <sup>2</sup> *Radiation Oncology, University of Washington Medical Center, Seattle, WA*; <sup>3</sup> *Radiation Oncology, Schiffler Cancer Center, Wheeling, WV*.

**P-80**

## **RELATIONSHIP BETWEEN ISOTOPE, PROSTATE VOLUME AND URINARY MORBIDITY FOLLOWING PROSTATE BRACHYTHERAPY**

Angela Niehaus,<sup>1</sup> Gregory S Merrick, MD,<sup>1,2</sup> Wayne M Butler, PHD,<sup>1,2</sup> Kent E Wallner, MD,<sup>1</sup> Zachariah A Allen, MS,<sup>1,2</sup> Robert W Galbreath, PHD,<sup>1,2</sup> Edward Adamovich, MD.<sup>3</sup> <sup>1</sup> *Schiffler Cancer Center, Wheeling Hospital, Wheeling, WV*; <sup>2</sup> *Physics, Wheeling Jesuit University, Wheeling, WV*; <sup>3</sup> *Pathology, Wheeling Hospital, Wheeling, WV*.

**P-81**

## **IDENTIFICATION OF THE OPTIMAL DOSE FOR HDR BOOST BRACHYTHERAPY BASED ON CLINICAL FAILURES AND MULTIPLE BIOCHEMICAL DEFINITIONS**

Carlos Vargas, MD,<sup>1</sup> Alvaro Martinez, MD,<sup>1</sup> Thomas Boike,<sup>1</sup> Gregory Edmundson, MD,<sup>1</sup> Gary Gustafson, MD,<sup>1</sup> Daniel Krauss, MD,<sup>1</sup> Peter Chen, MD,<sup>1</sup> Courtney Byrd,<sup>1</sup> Larry Kestin, MD.<sup>1</sup> <sup>1</sup> *Radiation Oncology, William Beaumont Hospital, Royal Oak, MI*.

**P-83**

## **RECTAL TOXICITY AFTER I 125 PERMANENT PROSTATE IMPLANTS IN 445 PATIENTS: IS RECTAL AND PROSTATE DOSIMETRY RELATED TO TOXICITY?**

Mira Keyes, MD FRCPC,<sup>1</sup> Veronika Moravan, M.Sc,<sup>2</sup> Mitchell Liu, MDCM,<sup>3</sup> Bojana Jankovic, M.Sc,<sup>4</sup> James Morris, MD FRCPC.<sup>1</sup> <sup>1</sup> *Radiation Oncology, Vancouver Cancer Centre, British Columbia Cancer Agency, Vancouver, BC, Canada*; <sup>2</sup> *Radiation Oncology, Fraser Valley Cancer Centre, British Columbia Cancer Agency, Surrey, BC, Canada*; <sup>3</sup> *Population and Preventive Oncology, British Columbia Cancer Agency, Vancouver, BC, Canada*; <sup>4</sup> *BC Cancer Research Centre, British Columbia Cancer Agency, Vancouver, BC, Canada*.

**P-84**

## **RELATIONSHIP BETWEEN POST-VOID RESIDUAL URINE AND BRACHYTHERAPY-RELATED URINARY MORBIDITY**

Megan Beekman, B.S.,<sup>1</sup> Gregory S Merrick, M.D.,<sup>1</sup> Wayne M Butler, PH.D.,<sup>1</sup> Kent E Wallner, M.D.,<sup>1</sup> Zachariah A Allen, M.S.,<sup>1</sup> Sarah Gutman,<sup>1</sup> Jacqueline Usher, B.S.,<sup>1</sup> Robert W Galbreath, PH.D.<sup>1</sup> <sup>1</sup> *Schiffler Cancer Center & Wheeling Jesuit University, Wheeling Hospital, Wheeling, WV*.

**P-85**

## **BYPASSING THE LEARNING CURVE IN PERMANENT SEED IMPLANTS USING STATE-OF-THE-ART TECHNOLOGY**

Luc Beaulieu, PhD,<sup>1</sup> Dee-Ann Radford, MSc,<sup>2</sup> Sylviane Aubin, MSc,<sup>1</sup> S Angyalfi, MD,<sup>2</sup> Siraj Husain, MD,<sup>2</sup> Ian Kay, PhD,<sup>2</sup> Andre-Guy Martin, MD, MSc,<sup>1</sup> Nicolas Varfalvy, MSc,<sup>1</sup> Eric Vigneault, MD, Msc,<sup>1</sup> Peter Dunscombe, PhD.<sup>2</sup> <sup>1</sup> *Radiation Therapy, Centre Hospitalier Universitaire de Québec, Québec, QC, Canada*; <sup>2</sup> *Radiation Therapy, Tom Baker Cancer Centre, Calgary, AB, Canada*.



# 26TH ANNUAL MEETING

## P-86

### **HIGH DOSE RATE (HDR) PROSTATE BOOST IMPLANT: COMPARISON OF ACUTE AND CHRONIC TOXICITIES BETWEEN THREE DOSE ESCALATION GROUPS**

Grace A Boyea, RN, BSN,<sup>1</sup> Michelle F Wallace, RN, BSN, OCN,<sup>1</sup> Peter Y Chen, MD,<sup>1</sup> Gary S Gustafson, MD,<sup>1</sup> Alvaro A Martinez, MD,<sup>1</sup> Linda Lewis, RN, BSN,<sup>1</sup> Christine Flynn, RN, BSN,<sup>1</sup> Anita Axiak, RN, BSN.<sup>1</sup> <sup>1</sup> *Radiation Oncology, William Beaumont Hospital, Royal Oak, MI.*

## P-87

### **INCIDENCE OF LATE RECTAL MORBIDITY FOLLOWING BRACHYTHERAPY WITH OR WITHOUT CONFORMAL EXTERNAL BEAM RADIATION THERAPY**

Nicolas K Kuritzky, MD,<sup>1</sup> Robert M Allbright, MD,<sup>1</sup> Albert Sabbas, PhD,<sup>1</sup> Samuel Trichter, MS,<sup>1</sup> Dattatreya Nori, MD.<sup>1</sup> <sup>1</sup> *Radiation Oncology, New York Presbyterian Hospital-Weill Cornell Medical Center, New York Hospital, NY.*

## P-88

### **SEVEN YEAR BIOCHEMICAL DISEASE FREE SURVIVAL RATES FOLLOWING PERMANENT PROSTATE BRACHYTHERAPY WITH DOSE ESCALATION TO BIOLOGICAL TUMOR VOLUMES (BTVs) IDENTIFIED WITH SPECT/CT IMAGE FUSION**

Rodney J Ellis, M.D.,<sup>1</sup> Edward Kim, M.D.,<sup>2</sup> Hang Zhou, M.D.,<sup>1</sup> Pingfu Fu, Ph.D.,<sup>3</sup> Valdir Colussi, Ph.D.,<sup>2</sup> Bruce Sodee, M.D.,<sup>4</sup> Patrick Spirnak, M.D.,<sup>1</sup> Kurt Dinchman, M.D.,<sup>1</sup> Martin I Resnick, M.D.<sup>1</sup> <sup>1</sup> *Urology, Case Western Reserve University, Cleveland, OH;* <sup>2</sup> *Radiation Oncology, Case Western Reserve University, Cleveland, OH;* <sup>3</sup> *Biostatistics, Case Western Reserve University, Cleveland, OH;* <sup>4</sup> *Radiology, Case Western Reserve University, Cleveland, OH.*

## P-89

### **THE IMPACT OF PRIMARY GLEASON GRADE ON BIOCHEMICAL OUTCOME FOLLOWING BRACHYTHERAPY FOR HORMONE NAÏVE GLEASON SCORE 7 PROSTATE CANCER**

Gregory S Merrick, M.D.,<sup>1</sup> Wayne M Butler, PH.D.,<sup>1</sup> Kent E Wallner, M.D.,<sup>1</sup> Robert W Galbreath, PH.D.,<sup>1</sup> Zachariah A Allen, M.S.,<sup>1</sup> Edward Adamovich, M.D.<sup>1</sup> <sup>1</sup> *Schiffler Cancer Center & Wheeling Jesuit University, Wheeling Hospital, Wheeling, WV.*

## P-90

### **HIGH DOSE RATE MONOTHERAPY FOR PROSTATE CANCER: CET'S 5 YEAR RESULTS**

D Jeffrey Demanes, M.D.,<sup>1</sup> Gillian Altieri, C.M.D.,<sup>1</sup> David Brandt, M.A.,<sup>1</sup> Marie-Claire Barnaba, M.S.N.-NP,<sup>1</sup> Pat Skoolisariyaporn, M.S.,<sup>1</sup> Lionel Schour, M.D.<sup>1</sup> <sup>1</sup> *California Endocurietherapy Cancer Center, California Endocurietherapy Cancer Center, Oakland, CA.*

## P-91

### **RECTAL MORBIDITY FOLLOWING PERMANENT PROSTATE BRACHYTHERAPY WITH DOSE ESCALATION TO BIOLOGICAL TUMOR VOLUMES (BTVs) IDENTIFIED WITH SPECT/CT IMAGE FUSION**

Rodney J Ellis, M.D.,<sup>1</sup> Edward Kim, M.D.,<sup>2</sup> Hang Zhou, M.D.,<sup>1</sup> Pingfu Fu, Ph.D.,<sup>3</sup> Valdir Colussi, Ph.D.,<sup>2</sup> Bruce Sodee, M.D.,<sup>4</sup> Patrick Spirnak, M.D.,<sup>1</sup> Kurt Dinchman, M.D.,<sup>1</sup> Martin I Resnick, M.D.<sup>1</sup> <sup>1</sup> *Urology, Case Western Reserve University, Cleveland, OH;* <sup>2</sup> *Radiation Oncology, Case Western Reserve University, Cleveland, OH;* <sup>3</sup> *Bio-Statistics, Case Western Reserve University, Cleveland, OH;* <sup>4</sup> *Radiology, Case Western Reserve University, Cleveland, OH.*

## P-92

### **PERMANENT PROSTATE BRACHYTHERAPY I-125 IMPLANTS WITH MORE SEEDS RESULT IN PROSTATE DOSE VOLUME STATISTICS LESS SENSITIVE TO UNCERTAINTY IN SEED PLACEMENT: AN EXTENSIVE SIMULATION STUDY OF NINE CASES**

Yi Su, B.S.,<sup>1</sup> Brian J Davis, M.D., Ph.D.,<sup>2</sup> Michael G Herman, Ph.D.,<sup>2</sup> Armando Manduca, Ph.D.,<sup>3</sup> Richard A Robb, Ph.D.<sup>1</sup> <sup>1</sup> *Biomedical Imaging Resource, Mayo Clinic and Foundation, Rochester, MN;* <sup>2</sup> *Division of Radiation Oncology, Mayo Clinic and Foundation, Rochester, MN;* <sup>3</sup> *Biomathematics Resource, Mayo Clinic and Foundation, Rochester, MN.*

# 26TH ANNUAL MEETING

**P-93**

**EARLY CLINICAL OUTCOME WITH TWO YEARS BIOPSY RESULTS OF HDR PROSTATE BOOST USING INVERSE PLANNING: THE QUEBEC EXPERIENCE**

Eric Vigneault, MD, MSc,<sup>1</sup> Luc Beaulieu, PhD,<sup>1</sup> Francois Harel, MSc,<sup>1</sup> Bernard Lachance, MSc,<sup>1</sup> Etienne Lessard, PhD,<sup>2</sup> Jean Pouliot, PhD,<sup>2</sup> Andre-Guy Martin, MD, Msc.<sup>1</sup> <sup>1</sup>*Radiation Therapy, Centre Hospitalier Universitaire de Québec, Québec, QC, Canada;* <sup>2</sup>*Radiation Oncology, UC San Francisco, San Francisco, CA.*

**P-95**

**IMPACT OF URETHRAL CATHETER AND LEG POSITIONING ON IN VIVO DOSIMETRY IN PATIENTS UNDERGOING I125 SEED IMPLANTATION**

William Foster, MD,<sup>1</sup> Sylviane Aubin, MSc, Luc Beaulieu, PhD, Andre-Guy Martin, MD, Eric Vigneault, MD.  
<sup>1</sup>*Département de radio-oncologie, L'Hôtel-Dieu de Québec, CHUQ, Québec, QC, Canada.*

**P-96**

**INCIDENCE AND CHANGE OVER TIME OF ADVERSE ISODOSE PATTERNS IN PATIENTS UNDERGOING PROSTATE BRACHYTHERAPY**

Daniel R Reed, D.O.,<sup>1,2</sup> Kent E Wallner, M.D.,<sup>2,1</sup> Eric Ford, PhD,<sup>1,2</sup> Sreeram Narayanan, PhD,<sup>1,2</sup> Gregory Merrick, M.D.,<sup>3</sup> Peter Orio, D.O.,<sup>1,2</sup> Paul Cho, PhD.<sup>1,2</sup> <sup>1</sup>*Radiation Oncology, University of Washington Medical Center, Seattle, WA;* <sup>2</sup>*Radiation Oncology, Puget Sound Health Care System, Department of Veterans Affairs, Seattle, WA;* <sup>3</sup>*Radiation Oncology, Schiffler Cancer Center, Wheeling, WV.*

**P-97**

**HIGH DOSE RATE BRACHYTHERAPY OF LARGE VOLUME PROSTATE**

Alvin Korba, M.D.,<sup>1</sup> Aly Razek, M.D.,<sup>1</sup> Saiyid M Shah, Ph.D.,<sup>1</sup> Paul Siami, M.D.,<sup>1</sup> Barbara Smith, RN, BSN, OCN,<sup>1</sup> Arnold Sorensen, B.S.,<sup>1</sup> William C Fisher, M.D.,<sup>1</sup> Douglas Foertsch, M.D.,<sup>1</sup> Thomas Gadiant, M.D.,<sup>1</sup> Phillip M Gilson, M.D.,<sup>1</sup> Bruce W Romick, M.D.,<sup>1</sup> Bill J Samm, M.D.<sup>1</sup> <sup>1</sup>*Tri-State Prostate Cancer Center, Tri-State Prostate Cancer Center/Evansville Cancer Center, Evansville, IN.*

**P-98**

**GEOMETRICAL CHARACTERIZATION OF THE PROSTATIC URETHRA FROM CT DATA FOLLOWING PERMANENT PROSTATE BRACHYTHERAPY: APPLICATIONS TO TRANS-URETHRAL IMAGING AND BRACHYTHERAPY PLANNING**

Christopher C Goulet, MD,<sup>1</sup> David R Holmes III, PhD,<sup>2</sup> Keith M Furutani, PhD,<sup>1</sup> Michael G Herman, PhD,<sup>1</sup> Torrence M Wilson, MD,<sup>3</sup> Richard A Robb, PhD,<sup>2</sup> Brian J Davis, MD, PhD.<sup>1</sup> <sup>1</sup>*Division of Radiation Oncology, Mayo Clinic, Rochester, MN;* <sup>2</sup>*Biomedical Imaging Resource, Mayo Clinic, Rochester, MN;* <sup>3</sup>*Department of Urology, Mayo Clinic, Rochester, MN.*

**P-99**

**A COMPARISON OF PROSTATE DIMENSIONS AND VOLUME IN PATIENTS UNDERGOING RADICAL RETROPUBIC PROSTATECTOMY, EXTERNAL BEAM RADIATION THERAPY, OR PERMANENT PROSTATE BRACHYTHERAPY FOR LOCALIZED ADENOCARCINOMA**

James L Leenstra, M.D.,<sup>1</sup> Brian J Davis, M.D., Ph.D.,<sup>2</sup> David W Hillman, M.S.,<sup>3</sup> Katie L Allen, B.S.,<sup>3</sup> John C Cheville, M.D.,<sup>4</sup> Michael G Herman, Ph.D.,<sup>2</sup> Torrence M Wilson, M.D.,<sup>5</sup> Lance A Mynderse, M.D.,<sup>5</sup> Bernard F King, M.D.<sup>6</sup> <sup>1</sup>*Department of Internal Medicine, Mayo Clinic, Rochester, MN;* <sup>2</sup>*Dvision of Radiation Oncology, Mayo Clinic, Rochester, MN;* <sup>3</sup>*Department of Biostatistics, Mayo Clinic, Rochester, MN;* <sup>4</sup>*Department of Pathology, Mayo Clinic, Rochester, MN;* <sup>5</sup>*Department of Urology, Mayo Clinic, Rochester, MN;* <sup>6</sup>*Department of Radiology, Mayo Clinic, Rochester, MN.*

# 26TH ANNUAL MEETING

## P-100

### EARLY OUTCOME AND DOSIMETRY OF LOW AND INTERMEDIATE RISK PROSTATE CANCER PATIENTS TREATED WITH IODINE 125 FLUOROSCOPIC AND ULTRASOUND GUIDED PERMANENT BRACHYTHERAPY

Brian J Davis, MD, PhD,<sup>1</sup> Torrence M Wilson, MD,<sup>2</sup> Lance A Mynderse, MD,<sup>2</sup> Jeffrey M Slezak, BS,<sup>3</sup> Erik A Bergstralh, BS,<sup>3</sup> Bernard F King, MD,<sup>4</sup> Wayne N LaJoie, CMD, BS,<sup>1</sup> Michael G Herman, PhD.<sup>1,1</sup> *Division of Radiation Oncology, Mayo Clinic, Rochester, MN;* <sup>2</sup> *Department of Urology, Mayo Clinic, Rochester, MN;* <sup>3</sup> *Department of Biostatistics, Mayo Clinic, Rochester, MN;* <sup>4</sup> *Department of Diagnostic Radiology, Mayo Clinic, Rochester, MN.*

## P-101

### FACTORS PREDICTING FOR ACUTE URINARY MORBIDITY FOLLOWING PERMANENT 125I IMPLANTATION OF THE PROSTATE: INSIGHTS FROM A POOLED ANALYSIS OF TWO PROSPECTIVE, RANDOMIZED TRIALS

Vipul V Thakkar, MD,<sup>1</sup> Mohamed Elshaikh, MD,<sup>2</sup> Thomas Carlson, MD,<sup>3</sup> Chandana A Reddy, MS,<sup>1</sup> Kenneth Angermeier, MD,<sup>4</sup> Eric A Klein, MD,<sup>4</sup> James Ulchaker, MD,<sup>4</sup> Nabil Chehade, MD,<sup>5</sup> Andrew Altman, MD,<sup>5</sup> Jay P Ciezki, MD.<sup>1,1</sup> *Department of Radiation Oncology, Cleveland Clinic Foundation, Cleveland, OH;* <sup>2</sup> *Department of Radiation Oncology, University of Michigan, Ann Arbor, MI;* <sup>3</sup> *Department of Radiation Oncology, Wenatchee Valley Medical Center, Wenatchee, WA;* <sup>4</sup> *The Glickman Urologic Institute, Cleveland Clinic Foundation, Cleveland, OH;* <sup>5</sup> *Department of Urology, Kaiser Permanente, Cleveland, OH.*

## P-102

### NUMBER OF CATHETERS, POSITION INSERTION UNCERTAINTY AND OPTIMUM DISTRIBUTION IN HDR BRACHYTHERAPY USING INVERSE PLANNING

Jean Pouliot, Ph.D.,<sup>1</sup> Etienne Lessard, Ph.D.,<sup>1</sup> Luc Beaulieu, Ph.D.,<sup>2</sup> I-Chow Hsu, MD.<sup>1,1</sup> *Department of Radiation Oncology, UCSF Comprehensive Cancer Center, San Francisco, CA;* <sup>2</sup> *Department de Radio-oncologie, Centre Hospitalier Universitaire de Quebec, Quebec City, QC, Canada.*

## P-103

### URETHRAL SPECTROSCOPIC ALARM (USA) PROBE FOR PROSTATE IMPLANTS

Anatoly B Rosenfeld, PhD,<sup>1</sup> Dean L Cutajar, MSc,<sup>2</sup> Michael LF Lerch, PhD,<sup>1</sup> George J Takach, PhD,<sup>1</sup> Joseph A Bucci, MD,<sup>2</sup> Lisa J Duggan, PhD,<sup>2</sup> Marco Zaider, PhD,<sup>3</sup> Michael Zelefsky, MD,<sup>4</sup> Gilad N Cohen, MSc.<sup>3,1</sup> *Centre for Medical Radiation Physics, University of Wollongong, Wollongong, Australia;* <sup>2</sup> *Institute for Prostate Cancer, St. George Cancer Care Centre, Kogarah, Australia;* <sup>3</sup> *Department of Medical Physics, MSKCC, New York, NY;* <sup>4</sup> *Department of Radiation Oncology, MSKCC, New York, NY.*

## P-104

### DOSIMETRIC COMPARISON OF INTRA-OPERATIVE AND PRE-PLANNING TECHNIQUES FOR 3D ULTRASOUND IMAGE GUIDED PERMANENT SEED PROSTATE BRACHYTHERAPY

Dee-Ann Radford Evans, MSc,<sup>1</sup> Steve Angyalfi, MD,<sup>2,3</sup> Siraj Husain, MD,<sup>2,3</sup> Ian Kay, PhD,<sup>1,3</sup> Peter Dunscombe, PhD.<sup>1,3,1</sup> *Department of Medical Physics, Tom Baker Cancer Centre, Calgary, AB, Canada;* <sup>2</sup> *Department of Radiation Oncology, Tom Baker Cancer Centre, Calgary, AB, Canada;* <sup>3</sup> *Department of Oncology, University of Calgary, Calgary, AB, Canada.*

## P-106

### A QUALITY OF LIFE (QOL) ASSESSMENT OF PROSTATE CANCER PATIENTS UNDERGOING DIFFERENT RADIATION TREATMENT MODALITIES

Kathleen A Saputo, RN, BSN,<sup>1</sup> Kimberly K Isler, RN, MSN, OCN,<sup>1</sup> Michelle F Wallace, RN, BSN, OCN,<sup>1</sup> Grace A Boyea, RN, BSN,<sup>1</sup> Christine J Flynn, RN, BSN,<sup>1</sup> Mamtha Balasubramaniam, MS,<sup>2</sup> Alvaro A Martinez, MD.<sup>1</sup> *Radiation Oncology, William Beaumont Hospital, Royal Oak, MI;* <sup>2</sup> *Division of Biostatistics, Research Institute, William Beaumont Hospital, Royal Oak, MI.*

# 26TH ANNUAL MEETING

## P-107

### **EFFICACY OF NEOADJUVANT DUTASTERIDE AND BICALUTAMIDE AS A CYTOREDUCTIVE REGIMEN PRIOR TO PERMANENT INTERSTITIAL BRACHYTHERAPY**

Gregory S Merrick, MD,<sup>1,2</sup> Wayne M Butler, PHD,<sup>1,2</sup> Kent E Wallner, MD,<sup>3</sup> Robert W Galbreath, PHD,<sup>1,2</sup> Robert Coram, R.Ph., MBA.<sup>1</sup> <sup>1</sup>*Schiffler Cancer Center, Wheeling Hospital, Wheeling, WV;* <sup>2</sup>*Physics, Wheeling Jesuit University, Wheeling, WV;* <sup>3</sup>*Puget Sound Health Care Corporation, University of Washington, Seattle, WA.*

## P-108

### **RAPID STRAND™ VS. LOOSE (IODINE-125 SEEDS): A PROSPECTIVE RANDOMIZED TRIAL**

Daniel R Reed, DO,<sup>1</sup> Kent E Wallner, MD,<sup>1,2</sup> Amy Mueller, MD,<sup>2</sup> Eric Ford, PhD,<sup>1,2</sup> Steve Sutlief, PhD,<sup>2</sup> Greg Merrick, MD,<sup>3</sup> Paul Cho, PhD.<sup>1</sup> <sup>1</sup>*Radiation Oncology, University of Washington, Seattle, WA;* <sup>2</sup>*Radiation Oncology, Puget Sound Health Care System, Department of Veterans Affairs, Seattle, WA;* <sup>3</sup>*Radiation Oncology, Schiffler Cancer Center, Wheeling, WV.*

## P-109

### **LDR vs. HDR BRACHYTHERAPY FOR GLEASON 7 ADENOCARCINOMA OF THE PROSTATE**

Theodore CM Lo, M.D.,<sup>1</sup> Patricia L Cronin,<sup>1</sup> Robert A Roth, M.D.<sup>2</sup> <sup>1</sup>*Radiation Oncology, Lahey Clinic Medical Center, Burlington, MA;* <sup>2</sup>*Urology, Lahey Clinic Medical Center, Burlington, MA.*

## P-110

### **SALVAGE HDR PROSTATE BRACHYTHERAPY FOR LOCAL RECURRENCE AFTER RADIOTHERAPY**

I-Chow J Hsu, MD,<sup>1</sup> Katsuto Shinohara, MD,<sup>2</sup> Vivian Weinberg, Ph.D.,<sup>1</sup> Alexander R Gottschalk, MD,<sup>1</sup> Jean Pouliot, Ph.D.,<sup>1</sup> Mack Roach, MD.<sup>1</sup> <sup>1</sup>*Radiation Oncology, University of California San Francisco, San Francisco, CA;* <sup>2</sup>*Urology, University of California San Francisco, San Francisco, CA.*

## P-111

### **PROSTATE MR SPECTROSCOPY IMAGE REGISTRATION USING BIOMECHANICAL MODELING OF TISSUE DEFORMATIONS DUE TO ENDORECTAL PROBE INSERTION**

Ron Alterovitz, M.S.,<sup>1</sup> Yongbok Kim, Ph.D.,<sup>2</sup> John Kurhanewicz, Ph.D.,<sup>3</sup> Jean Pouliot, Ph.D.,<sup>2</sup> I-Chow Hsu, M.D.,<sup>2</sup> Ken Goldberg, Ph.D.<sup>4</sup> <sup>1</sup>*Department of Industrial Engineering and Operations Research, University of California, Berkeley, Berkeley, CA;* <sup>2</sup>*Department of Radiation Oncology, University of California, San Francisco, San Francisco, CA;* <sup>3</sup>*Magnetic Resonance Science Center, University of California, San Francisco, San Francisco, CA;* <sup>4</sup>*Departments of IEOR and EECS, University of California, Berkeley, Berkeley, CA.*

## P-112

### **BETTER ACUTE AND LATE GU TOXICITY PROFILE INCLUDING ERECTILE DYSFUNCTION (ED) WITH HDR BRACHYTHERAPY COMPARED WITH PD103 SEEDS IMPLANT BASED ON CLINICAL DATA AND QUALITY OF LIFE (QOL) ASSESSMENT IN EARLY PROSTATE CANCER PATIENTS**

Michel Ghilezan,<sup>1</sup> Gary Gustafson,<sup>1</sup> Carlos Vargas,<sup>1</sup> Kimberly Isler,<sup>1</sup> Mamtha Balasubramaniam,<sup>1</sup> Michelle Wallace,<sup>1</sup> Alvaro Martinez,<sup>1</sup> <sup>1</sup>*Radiation Oncology, William Beaumont Hospital, Royal Oak, MI.*

## P-113

### **CLINICAL EFFICACY OF COMPUTER OPTIMIZED THREE DIMENSIONAL HIGH DOSE RATE PROSTATE BRACHYTHERAPY**

Yoshiya Yamada, MD, FRCPC,<sup>1</sup> Sudershan Bhatia, MD,<sup>1</sup> Gilad Cohen, MS,<sup>2</sup> Marco Zaider, PhD,<sup>2</sup> James Eastham, MD,<sup>3</sup> Sherri M Donat, MD,<sup>3</sup> Farhang Rabbani, MD,<sup>3</sup> Michael J Zelefsky, MD.<sup>1</sup> <sup>1</sup>*Radiation Oncology, Memorial Sloan Kettering Cancer Center, New York, NY;* <sup>2</sup>*Medical Physics, Memorial Sloan Kettering Cancer Center, New York, NY;* <sup>3</sup>*Surgery, Memorial Sloan Kettering Cancer Center, New York, NY.*

## P-114

### **TECHNIQUES IN REDUCTION OF SEED MIGRATION AFTER PROSTATE PERMANENT BRACHYTHERAPY**

Qin-Sheng Chen, Ph.D.,<sup>1</sup> Henry F Blair, M.D.<sup>1</sup> <sup>1</sup>*Radiation Oncology, Cleveland Clinic Foundation, Mayfield Heights, OH.*

# 26TH ANNUAL MEETING

**P-115**

## **COMBINED HYPOFRACTIONATED HIGH DOSE RATE BRACHYTHERAPY (HDRBT) AND 3D EXTERNAL BEAM RADIOTHERAPY IN PATIENTS WITH INTERMEDIATE RISK PROSTATE CANCER**

Marie Duclos, Radiation Oncologist, Armen Aprikian, Urologist, Micheal Evans, Medical Physicist, Fabio Curry, Fellow, Marc David, Radiation Oncologist, Sergio Faria, Radiation Oncologist, Georges Shenouda, Radiation Oncologist, Luis Souhami, Radiation Oncologist. <sup>1</sup>Radiation Oncology, McGill University, Montreal, QC, Canada; <sup>2</sup>Urology, McGill University, Montreal, QC, Canada; <sup>3</sup>Radiation Oncology, McGill University, Montreal, QC, Canada; <sup>4</sup>Radiation Oncology, McGill University, Montreal, QC, Canada.

**P-116**

## **HDR AND LDR BRACHYTHERAPY FOR FAVORABLE PROSTATE CANCER: AN ANALYSIS BASED ON DIFFERENT BIOCHEMICAL FAILURE DEFINITIONS**

K Kenneth Chao, MD,<sup>1</sup> Carlos E Vargas, MD,<sup>1</sup> Dwight L Fitch, MD,<sup>1</sup> Thomas Boike, <sup>1</sup> Courtney Byrd, <sup>1</sup> Daniel J Krauss, MD,<sup>1</sup> Gary S Gustafson, MD,<sup>1</sup> Frank A Vicini, MD FACR,<sup>1</sup> Alvaro A Martinez, MD FACR,<sup>1</sup> Larry L Kestin, MD.<sup>1</sup> <sup>1</sup>Radiation Oncology, William Beaumont Hospital, Royal Oak, MI.

### Benign

**P-117**

## **FIRST-IN-MAN EXPERIENCE WITH THE THERASIGHT™ OCULAR BRACHYTHERAPY SYSTEM FOR TREATMENT OF AMD**

Ian R Crocker, MD,<sup>1</sup> Thomas Ciulla, MD,<sup>2</sup> Elizabeth K Butker, M.Sc.,<sup>1</sup> Gabriela Burian, MD,<sup>3</sup> Baker Hubbard III, MD.<sup>3</sup> <sup>1</sup>Radiation Oncology, Emory University School of Medicine, Atlanta, GA; <sup>2</sup>Ophthalmology, Midwest Eye Institute, Indianapolis, IN; <sup>3</sup>Ophthalmology, Emory University School of Medicine, Atlanta, GA.

### Colorectal

**P-118**

## **ROLE OF INTERSTITIAL BRACHYTHERAPY FOR SPHINCTER PRESERVATION IN PATIENTS WITH LOW LYING RECTAL AND ANAL CANCERS**

Moataz N El-Ghamry, M.D.,<sup>1</sup> Subir Nag, M.D.,<sup>1</sup> John Winston, M.D.,<sup>2</sup> Mark Arnold, M.D.<sup>2</sup> <sup>1</sup>Radiation Oncology, Ohio State University, James Cancer Hospital, Columbus, OH; <sup>2</sup>General Surgery, Ohio State University Medical Center, Columbus, OH.

**P-119**

## **THE FEASIBILITY OF HIGH-DOSE-RATE (HDR) INTERSTITIAL BRACHYTHERAPY FOR PREVIOUSLY IRRADIATED RECURRENT ANAL CARCINOMA**

Tony Y Eng, MD.<sup>1,2</sup> <sup>1</sup>Department of Radiation Oncology, University of Texas Health Science Center at San Antonio, San Antonio, TX; <sup>2</sup>Department of Radiation Oncology, Cancer Therapy and Research Center, San Antonio, TX.

### CNS

**P-120**

## **MANAGEMENT OF BRAIN TUMORS WITH THE GLIASITE™ RADIATION THERAPY SYSTEM: THE EMORY EXPERIENCE**

Cynthia J Bryant, MD,<sup>1</sup> Jeffrey J Olson, MD,<sup>2</sup> Elizabeth K Butker, MS,<sup>1</sup> Robert B Marcus, MD,<sup>1</sup> Ian R Crocker, MD.<sup>1</sup> <sup>1</sup>Radiation Oncology, Emory University School of Medicine, Atlanta, GA; <sup>2</sup>Neurosurgery, Emory University School of Medicine, Atlanta, GA.

**P-121**

## **RISK FACTORS FOR LOCAL INFECTIOUS COMPLICATIONS OF GLIASITE BALLOON BRACHYTHERAPY FOR BRAIN TUMORS: IMPLICATIONS FOR CLINICAL PRACTICE**

Rajni Singh, DO, David L Sherr, MD, Dattatreya Nori, MD. <sup>1</sup>Radiation Oncology, New York Weill Cornell Medical Center, New York, NY.



# 26TH ANNUAL MEETING

## Biology

**P-122**

### **TIMING OF HDR BOOST AND EXTERNAL BEAM RADIOTHERAPY FOR LOCALIZED PROSTATE CANCER: A SERIES OF EXPLORATORY CALCULATIONS INVOLVING HYPOXIA**

Giuseppe Sanguineti, MD,<sup>1</sup> Alan Nahum, PhD.<sup>2,1</sup> *Radiation Oncology, University of Texas Medical Branch, Galveston, TX; 2Physics, Clatterbridge Centre for Oncology, Bebington, United Kingdom.*

## Soft Tissue Sarcoma

**P-123**

### **INTERSTITIAL BRACHYTHERAPY FOR THE PERIOPERATIVE TREATMENT OF SOFT TISSUE SARCOMAS WITH POSITIVE OR CLOSE MARGINS**

Shalin J Shah, MD,<sup>1</sup> Adnan Danish, MD,<sup>1</sup> James Butler, MD,<sup>1</sup> Jonathan Beitler, MD,<sup>2</sup> Madhur Garg, MD.<sup>1</sup>  
*<sup>1</sup>Department of Radiation Oncology, Montefiore Medical Center, Bronx, NY; <sup>2</sup> Department of Radiation Oncology, Staten Island University Hospital, Staten Island, NY.*

**P-125**

### **FOLLOWUP OF 27 PATIENTS TREATED WITH LDR Cf-252**

Mark J Rivard, Ph.D.,<sup>1</sup> John E Mignano, M.D., Ph.D.,<sup>1</sup> Rajiv Patel, M.D.<sup>2</sup> Renu K Sharma, M.Sc.<sup>2,1</sup> *Radiation Oncology, Tufts-New England Medical Center, Boston, MA; 2Radiation Oncology, Harper Hospital, Detroit, MI.*

**P-126**

### **RESECTION AND BRACHYTHERAPY FOR RECURRENT SOFT TISSUE SARCOMA ARISING IN A PREVIOUSLY IRRADIATED FIELD**

Mylin A Torres, MD,<sup>1</sup> Matthew T Ballo, MD,<sup>1</sup> Charles E Butler, MD,<sup>2</sup> Barry W Feig, MD,<sup>3</sup> Howard N Langstein, MD,<sup>2</sup> Valerae O Lewis, MD,<sup>4</sup> Peter W Pisters, MD,<sup>3</sup> Gunar K Zagars, MD.<sup>1</sup> *<sup>1</sup>Radiation Oncology, MD Anderson Cancer Center, Houston, TX; <sup>2</sup>Plastic Surgery, MD Anderson Cancer Center, Houston, TX; <sup>3</sup>Surgical Oncology, MD Anderson Cancer Center, Houston, TX; <sup>4</sup>Orthopedic Oncology, MD Anderson Cancer Center, Houston, TX.*

## Other

**P-127**

### **THE APPLICATION OF 90Sr / 90Y FOR THE PREVENTION OF ABDOMINAL ADHESIONS**

Samuel J Rhoades IV, MS,<sup>1,2</sup> Melissa M Blough, PhD,<sup>1,2</sup> James M Hevezi, PhD.<sup>1,2,1</sup> *Radiological Sciences, University of Texas Health Science Center, San Antonio, TX; 2Medical Physics, Cancer Therapy & Research Center, San Antonio, TX*



# FUTURE MEETINGS



## **2005 ABS Gyn School**

**July 29-30, 2005**

**Knickerbocker Hotel**

**Chicago, Illinois**



## **2006 ABS Annual Meeting**

**May 10-12, 2006**

**Philadelphia Marriott**

**Philadelphia, Pennsylvania**



## **2007 ABS Annual Meeting**

**April 29-May 1, 2007**

**Sheraton Hotel**

**Chicago, Illinois**

## **2008 ABS/GEC-ESTRO Joint Meeting**



American Brachytherapy Society

# Hyatt Regency San Francisco Floor Plans

