1 Detection of early-stage pancreatic cancer in Kras–mutated transgenic mice by [18F]FEL-PET: Comparison with pancreatitis. Mian Alauddin, The University of Texas MD Anderson Cancer Center, Houston, TX, USA.

2 The quantum paradigm and its importance for understanding the real mechanisms of operation for PET and MRI imaging and the use of PET and MRI imaging for cancer detection. Keith Allen, Society of Brain Mapping, Los Angeles, CA, USA.

3, PR09 Characterization of a dual-labeled somatostatin analog for fluorescence-guided surgery. Ali Azhdarinia, Institute of Molecular Medicine, McGovern Medical School, Houston, TX, USA.

4 Cherenkov and bioluminescence imaging with the LightPath Imaging System. Kvar Black, Washington University School of Medicine, St. Louis, MO, USA.

5 Preclinical evaluation of a new radiolabeled peptide for PET imaging of GPC3 expression in hepatocellular carcinoma. Kai Chen, University of Southern California, Los Angeles, CA, USA.


7 Targeting glutamine metabolism through inhibition of GLS1 enhances therapeutic efficacy of EGFR-targeted antibodies in colorectal cancer. Allison Cohen, Vanderbilt University Medical Center, Nashville, TN, United States.

8 [18F]HX4 PET demonstrates the hypoxia-modulating capacities of metformin and acts as a prognostic biomarker for survival in a NSCLC xenograft mouse model. Sven De Bruycker, Molecular Imaging Center Antwerp, University of Antwerp, Antwerp, Belgium.

12 Radiolabeled caspase-3 substrates for non-invasive imaging of apoptosis by PET/CT. Brian Engel, The University of Texas MD Anderson Cancer Center, Houston, TX, USA.

13; PR12 Transferrin-based PET measures MYC activity in prostate cancer: from bench to bedside. Michael Evans, UCSF, San Francisco, CA, USA.

14 Imaging PD-L1 expression levels with zirconium-89 immunoPET. Michael Evans, UCSF, San Francisco, CA, USA.

15 Assessment of murine colorectal cancer by micro-ultrasound using three dimensional reconstruction and non-linear contrast imaging. Jessica Freeling, The University of South Dakota, Vermillion, SD, USA.

16; PR08 Nucleoside Diphosphate Kinase-3 (NME3) enhances TLR5-induced NF-κB activation in tumor cells. Caleb Gonzalez, The University of Texas MD Anderson Cancer Center, Houston, TX, USA.
17 Directed evolution of imaging agents and therapeutics targeting LC3 and autophagy. Joshua Gray, Department of Cancer Systems Imaging, The University of Texas MD Anderson Cancer Center, Houston, TX, USA.

18 An advanced paradigm for molecular imaging and radionuclide therapy of cancer. Bennett Greenspan, Augusta University, Augusta, GA, USA.

19 Molecular imaging of physiological random processes for in silico prediction of treatment efficacy. Nick Henscheid, University of Arizona, Tucson, AZ, USA.

20 Novel targeted radionuclide therapy achieves complete responses in a syngeneic model of T-cell NHL. Reinier Hernandez, University of Wisconsin-Madison, Madison, WI, US.

21 Development of a PET/NIRF smart probe for selectively imaging astrocytic gliomas. Kenneth Hettie, Stanford University, Stanford, CA, USA.

22 Neurotensin receptor-1 expression in human prostate cancer and lymph node metastases. Elif Hindié, 1CNRS, INCIA, UMR 5287, F-33000 Bordeaux, France.

23 Monitoring preclinical cancer models: Multilateral evaluation of innovating the discovery of therapeutics. Peng Huang, Okayama University, Okayama, Japan.

24 Association between dedicated breast PET and MR imaging textural features in primary invasive breast cancers. Ella Jones, UCSF, San Francisco, CA, USA.


27 Let there be light: Variability in bioluminescent response of luciferase substrates in brain tumor imaging. Minjee Kim, University of Minnesota, Minneapolis, MN, USA.

28 An Activatable NIR Fluorescent Rhodol for Hypoxia Imaging. Jessica Klockow, Stanford University, Stanford, CA, USA.

29 Rapid, molecularly targeted ex vivo tumor delineation on preclinical and clinical oral and esophageal cancer samples using a fluorescent PARP inhibitor. Susanne Kossatz, Memorial Sloan Kettering Cancer Center, New York, NY, USA.

30; PR07 18F-fluorooestradiol imaging of estrogen receptor alpha gene mutation Y537S in breast cancer. Manoj Kumar, University of Wisconsin-Madison, Madison, WI, USA.

31 18F-Fluorooestradiol (FES) PET: A case study of quantitative imaging biomarker development. Brenda Kurland, University of Pittsburgh, Pittsburgh, PA, USA.
32 Identification of gene signatures corresponding to 18F- fluorocholine uptake in hepatocellular carcinoma. Sandi Kwee, The Queen's Medical Center, Honolulu, HI, USA.

33; PR06 Improved MC1R-targeted molecular imaging for metastatic melanoma by up-regulation of MC1R expression with MAPK pathway inhibitors and epigenetic modulators. Mengshi Li, University of Iowa, Iowa City, IA, USA.

36; PR05 Dose optimization of 177Lu-labeled phosphoramidate-based PSMA inhibitor with an albumin-binding motif (CTT1403) and therapeutic efficacy comparison to 177Lu-PSMA-617. Xiaoxi Ling, University of Pittsburgh, Pittsburgh, PA, USA.

37 64Cu-Labeled DGEA-RGD heterodimer for microPET imaging of prostate cancer. Peter Conti, University of Southern California, Los Angeles, CA, USA.

38 Radiation Dosimetry of 64Cu-BaBaSar-RGD2 Determined from Whole-Body PET/CT in Non-Human Primates. Peter Conti, University of Southern California, Los Angeles, CA, USA.

39 Development of 89Zr-atezolizumab for PET imaging of PD-L1 levels in the tumor microenvironment. Mark Longtine, Stanford University, Stanford, CA, United States.

40 Quantitative Assessment of Antibody Distribution in a First-in-Human Clinical Trial of Pancreatic Cancers. Guolan Lu, Stanford University, Stanford, CA, United States.

41 Real-time imaging of senescence in tumors with DNA damage. Xiaowei Ma, University of New Mexico, Albuquerque, NM, USA.

42 The disintegrin vicrostatin (VCN) is an effective PET imaging agent to monitor ovarian cancer growth and progression. Stephen Swenson, Department of Biochemistry & Molecular Medicine, Keck School of Medicine, University of Southern California, Los Angeles, CA, USA.

43; PR01 Systems level visualization of activated T cell dynamics enables early classification of response to local cancer immunotherapy. Aaron Mayer, Stanford University, Stanford, CA, USA.

44 PET tracers targeting glutamine metabolism to enhance precision cancer medicine. Michael Nickels, Vanderbilt University Medical Center, Nashville, TN, USA.

45 PET imaging of tumor PD-L1 status using 89Zr-DFO-6E11. Carsten H Nielsen, Dept. of Clinical Physiology, Nuclear Medicine & PET and Cluster for Molecular Imaging, Dept. of Biomedical Sciences, Rigshospitalet and University of Copenhagen, Copenhagen, Denmark.

46; PR02 Development of a minibody that binds PD-L1 in high affinity for immunoPET. Shubahnchi Nigam, University of Pittsburgh, Pittsburgh, PA, USA.

47 PET imaging using an apoptosis probe, [Cu-64]-NODAGA-Duramycin, for therapy assessment in solid tumors. Lea Nyiranshuti, University of Pittsburgh, Department of Medicine, Pittsburgh, PA, USA.
### Poster Session

**Thursday, February 15, 2018**  
12:30–2:30 p.m.

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<td>48</td>
<td>Imaging immunotherapy resistance in melanoma in vitro and in vivo employing magnetic resonance.</td>
<td>Shivanand Pudakalakatti, The University of Texas MD Anderson Cancer Center, Houston, TX, USA.</td>
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<td>49</td>
<td>NMR spectroscopy based blood test to diagnose brain cancer at early stages.</td>
<td>Shivanand Pudakalakatti, The University of Texas MD Anderson Cancer Center, Houston, TX, USA.</td>
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<td>50</td>
<td>Evaluation of new PET tracers for in vivo imaging of PD-L1 expression in non-human primate.</td>
<td>Daniel Rubins, Merck, West Point, PA, USA.</td>
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<tr>
<td>51</td>
<td>Preclinical evaluation of new PET tracers for in vivo imaging of PD-L1 expression.</td>
<td>Daniel Rubins, Merck, West Point, PA, USA.</td>
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<td>52</td>
<td>Differential diagnosis in pancreatic lesions with Octreoscan.</td>
<td>Fernanda Salomao Costa, Hospital Procardiaco, Rio de Janeiro, Brazil.</td>
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<td>53; PR14</td>
<td>Metabolic evolution of patient-derived glioblastoma xenografts through in vivo hyperpolarized 13C magnetic resonance spectroscopic imaging and ex vivo nuclear magnetic resonance spectroscopy.</td>
<td>Travis Salzillo, The University of Texas MD Anderson Cancer Center, Houston, TX, USA.</td>
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<td>54; PR03</td>
<td>Comparison of positron-emission tomography reporter gene imaging systems in adoptive T cell therapy of cancer.</td>
<td>Noriko Sato, National Cancer Institute, Bethesda, MD, USA.</td>
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<td>55</td>
<td>SUMMIT: a functional proteomics platform for lead compound generation and target identification.</td>
<td>Marc Seaman, Blue Ridge Biosciences, Earlysville, VA, USA.</td>
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<td>56</td>
<td>Multi-modal imaging of biological responses to nano immunotherapy and checkpoint blockade in a murine model of breast cancer.</td>
<td>Reed Selwyn, University of New Mexico, Albuquerque, NM, USA.</td>
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<td>57</td>
<td>Various applications of CUBIC 3D imaging for cancer research.</td>
<td>Kei Takahashi, The University of Tokyo, Tokyo, Japan.</td>
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<td>58</td>
<td>Sensitivity and specificity Study of Panitumumab-IRDye800 as targeted agent for image guided surgery in patients with head and neck cancer.</td>
<td>Nutte (Tarn) Teraphongphom, Stanford University, Stanford, CA, USA.</td>
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<td>60</td>
<td>Cancer targeting using exosomal lipids toward detection enhancement of microlesion.</td>
<td>Yuki Toda, Department of Clinical and Translational Physiology, Kyoto Pharmaceutical University, Kyoto, Kinki, Japan.</td>
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<td>61; PR04</td>
<td>MRI quantification of SPIO-labeled immune cell recruitment to tumors in murine cervical and breast cancer models.</td>
<td>Marie-Laurence Tremblay, IWK Health Center, BIOTIC, Halifax, NS, Canada.</td>
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Poster Session
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62 Dimeric and monomeric glucose-transporters (GLUT-1) targeting conjugates for imaging and alpha-emitter therapy of metastatic melanoma. Izabela Tworowska, RadioMedix Inc, Houston, TX, USA.

63 Can we use near-infrared fluorescence imaging of panitumumab-IRDye800 to predict intraoperative lymph node status in patients with head and neck cancer. Nynke van den Berg, Stanford University, Stanford, CA, USA.

64 Magnetization transfer MRI performed during neoadjuvant therapy of breast cancer correlates with declines in tumor size. Jack Virostko, University of Texas at Austin, Austin, TX, USA.

65 PR13 Imaging Hypoxia-Driven Regulation of GLUT1, GLUT2 and GLUT5 in Breast Cancer. Melinda Wuest, Dept. of Oncology, University of Alberta, Edmonton, AB, Canada.

66 A novel strategy for in vivo estimation of protease activity distribution with multispectral photoacoustic imaging. Cheng Liu, Hong Kong Polytechnic University, Kowloon, Hong Kong.