

ITCR 2016 Annual PI Meeting Posters

ITCR Posters – New Projects

- 1. Galaxy-P: recent developments and emerging applications** Pratik D. Jagtap, James E. Johnson, Thomas Mc Gowan, Innocent Onsongo, Benjamin Lynch, Candace R. Guerrero, Kevin Murray, Lloyd M. Smith, Michael R. Shortreed, Anthony J. Cesnik, Lennart Martens, Adrian D. Hegeman and Timothy J. Griffin* [Download](#)
- 2. Cravat 4.2: informatics tools for high-throughput analysis of exome variants** Collin Tokheim, Christopher Douville, David Masica, Rick Kim, Rohit Bhattacharya, Noushin Niknafs, Derek Gygax, Kyle Moad, Michael Ryan, Rachel Karchin* [Download](#)
- 3. PDX Integrator – A new resource for cancer research** Terrence Meehan*, Helen Parkinson [Download](#)
4. Informatics tools for tumor heterogeneity in multiplexed fluorescence images Dan Spagnolo, Rekha Gyanchandani, Yousef Al-Kofahi, Andrew Stern, Tim Lezon, Albert Gough, Dan Meyer, Fiona Ginty, Brion Sarachan, Jeffrey Fine, Adrian Lee, D. Lans Taylor, S. Chakra Chennubhotla*
- 5. Informatic tools for single-nucleotide analysis of RNA-seq** Zhuangli Liang, Qing Zhang, Jaegyeon Ahn, Xinshu Xiao* [Download](#)

IMAT Posters

6. Single-cell barcode chips for highly multiplexed miRNA and protein profiling Nayi Wang, Yao Lu, Minsuk Kwak, Maria Kleppe, Steve C. Chapin, Ross Levine, Jun Lu, Patrick S. Doyle*, and Rong Fan*
7. Single-cell sequencing reveals distinct genomic profiles in epithelial and mesenchymal tumor cells Jessica Sang*, Kyunghoon Lee, Hyun Jung Chung, Gavin Zhou, Hakho Lee, Ralph Weissleder, Sunney Xie
8. Highly Multiplexed FISH for In Situ Genomics John Lafrate*, Hunter Elliott*

ITCR Posters – Ongoing Projects

9. Informatics for routine personalized cancer therapy Safa Fathiamini, Amber M. Johnson, Jia Zeng, Alejandro Araya, Vijaykumar Holla, Ann M Bailey, Beate C Litzenburger, Nora S Sanchez, Yekaterina Khotskaya, Hua Xu, Funda Meric-Bernstam, Elmer V Bernstam*, Trevor Cohen
10. The Digital Slide Archive and Histomics TK: Open-Source Resources for Digital Pathology Management and Analysis Lee AD Cooper*, Deepak Chittajallu, Brian Helba, Sanghoon Lee, Mohammed Khalilia, Michael Nalisnik, Jonathan Beezley, Zach Mullen, David Manthey, David A

Gutman

11. Cancer Imaging Phenomics Toolkit (CapTk) Satrhak Pati, Mark Bergman, Despina Kontos, Ragini Verma, Taki Shinohara, Paul Yushkevich, Yong Fan, Christos Davatzikos* [Download](#)

12. Quantitative Image Informatics for Cancer Research Andrey Fedorov*, David Clunie, Ethan Ulrich, Christian Bauer, Michael Onken, Jörg Riesmeier, Xiao Da, Jayashree Kalpathy-Cramer, Karl Helmer, Steve Pieper, John Buatti, Reinhard R. Beichel, Ron Kikinis [Download](#)

13. The UCSC Xena system for integrating and visualizing functional genomics data Jingchun Zhu, Brian Craft, Mary Goldman*, Teresa Swatloski, Melissa Cline, David Haussler [Download](#)

14. Trinity CTAT: A Community Resource for De Novo and Reference-based RNA-Seq Analysis Timothy Tickle*, Asma Bankapur, Carrie Ganote, Ben Fulton, Itay Tirosh, Jenny Chen, Thomas Doak, Robert Henschel, Nathalie Pochet, Catherine Wu, Brian Haas*, Aviv Regev

15. Omni Search: a semantic tool for discovering microRNAs' critical roles in human cancers Jingshan Huang*

16. Cloud-based Image Biomarker Optimization Platform (C-BIBOP) Jayashree Kalpathy-Cramer*, Artem Mamonov, Sandy Napel, Binsheng Zhao, Dmitry Goldgof, Robert Gillies, Bruce Rosen

17. Modeling functional gene regulation in cancer with public ChIP- seq profiles Chongzhi Zang, Shenglin Mei, Clifford Meyer, Qiu Wu, Jingyu Fan, Rongbin Zheng, Qian Qin, Muyuan Zhu, Binbin Wang, Myles Brown, and X. Shirley Liu*

18. Pathology Image Informatics Platform (PIIP) Anant Madabhushi*, Anne Martel, Metin Gurcan, Yu Zhou, Dan Hosseinzadeh, Craig Madho

19. Open-source diffusion MRI for neurosurgical planning Isaiah Norton, Fan Zhang, and Lauren O'Donnell*

20. Linking Diverse Network Sources to Analysis, Visualization, and Publication: Applications of the NDEx Framework Rudolf T. Pillich*, Jing Chen, Vladimir Rynkov, David Welker and Dexter Pratt [Download](#)

21. Gene Pattern Notebooks: an integrative analytical environment for cancer research Michael Reich*, Thorin Tabor, Peter Carr, David Eby, Helga Thorvaldsdóttir, Barbara Hill, Ted Liefeld, Pablo Tamayo, Jill P. Mesirov [Download](#)

22. mint and annotatr: integrating and annotating DNA methylation and hydroxymethylation data Raymond G. Cavalcante, Yanxiao Zhang, Yongseok Park, Snehal Patil, Laura S. Rozek, and Maureen A. Sartor* [Download](#)

23. The Biomedical Evidence Graph to Discover Novel Relations in Cancer Genomics Kyle Ellrott, Ryan Spangler, James Durbin, Jeena Lee, Malisa Smith, Chris Wong, Teresa Swatloski, Yulia Newton, Duncan Mc Coll, Joshua Stuart*

24. Web MeV: Software for Next Generation Genomic Data Analysis Yaoyu Wang*, Antony Partensky, Lev Kuznetsov, Jalil Farid, John Quackenbush

25. Interactive Statistical Resource for Proteomic Analyses Bobbie-Jo Webb-Robertson*, Lisa Bramer, Kelly Stratton, Markus Kobold, Jeff Jensen, Mathew Thomas, Amanda White [Download](#)

26. Bidirectional recurrent neural networks for medical event detection in electronic health records Abhyuday Jagannatha and Hong Yu*

27. Modeling and Validating HL7 FHIR Profiles Using Semantic Web Shape Expressions Harold R. Solbrig, Eric Prud'hommeaux, Deepak K. Sharma, Christopher G. Chute, Guoqian Jiang [Download](#)

28. Tools and Methods for Digital Pathology in Integrative Cancer Research Joel Saltz, Tahsin Kurc, Yi Gao, Erich Bremer, Tammy Di Parma, Jonas Almeida, Fusheng Wang, Furgan Baig, Allen Tannenbaum, Mary Saltz, George Teodoro, Andrew White, Ashish Sharma, Adam Marcus, Richard Cummings, Daniel Brat, Scott Klasky, David Pugmire, Jeremy Logan, Michael Krauthammer

29. Next Generation Clustered Heat Maps (NG-CHMs) for Interactive Exploration of Patterns in Omic Data Bradley M. Broom, Michael C. Ryan, Chris Wakefield, Robert Brown, Futa Ikeda, Mark Stucky, Kavid W. Kane, Rehan, Akbani, James Melott, John N. Weinstein [Download](#)

ITCR Posters – Collaborative Projects

30. Integrating TCGA Clinical Data using metadata-driven tools and NLP Richard C. Kiefer, Guoqian Jiang, Michael K. Davis, Melissa Castine, Girish Chavan, Guergana Savova, and Rebecca Jacobson [Download](#)

31. Cravat/Mu PIT – NDEx Collaboration Dexter Pratt, Rick Kim, Rudolf T. Pillich, Derek Gygax, Jing Chen, Michael Ryan*, Vladimir Rynkov, David Welker and Rachel Karchin* [Download](#)

32. 3D Slicer Pathology and Feature Scape for Linked Radiology/Pathology Image Analysis Competitions Jonas Almeida, Nicole Aucoin, Erich Bremer, Tammy DiPrima, Andrey Fedorov, Yi Gao, Jayashree Kalpathy-Cramer, Ron Kikinis, Tahsin Kurc, Arten Mamonov, Steve Pieper, Jean-Christophe Fillion-Robin, Bruce Rosen, Allen Tannenbaum [Download](#)