



2016 ITCR Program Annual Meeting Poster Session

5:10 - 7:30 p.m., Monday, June 13, 2016

Yellowstone Room, 2001

75 Ames Street Building

ITCR Posters – New Projects

1. **Galaxy-P**: recent developments and emerging applications
*Pratik D. Jagtap, James E. Johnson, Thomas McGowan, 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**
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 Gygas, Kyle Moad, Michael Ryan, Rachel Karchin**
3. PDX Integrator - A new resource for cancer research
Terrence Meehan, Helen Parkinson*
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, Jaegyoon Ahn, Xinshu Xiao**

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 HistomicsTK: 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**
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*
13. The UCSC Xena system for integrating and visualizing functional genomics data
Jingchun Zhu, Brian Craft, Mary Goldman, Teresa Swatloski, Melissa Cline, David Haussler*

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. OmniSearch: 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*
21. GenePattern 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*
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**

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 McColl, Joshua Stuart**
24. WebMeV: 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*
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

[ITCR Posters - Collaborative Projects](#)

28. **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
29. Cravat/MuPIT - NDEx Collaboration
Dexter Pratt, Rick Kim, Rudolf T. Pillich, Derek Gygax, Jing Chen, Michael Ryan, Vladimir Rynkov, David Welker and Rachel Karchin**
30. 3DSlicer Pathology and FeatureScape 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

