Director’s Corner

Dear Members of the Division of Precision and Computational Diagnostics (PCD),

Welcome to the third issue of our Divisional Newsletter. The last month of the year has been filled with numerous activities including intramural and extramural events. We continue to grow and are delighted to have welcomed new staff in our Division (Chris Orr in the Center for Personalized Diagnostics) and Latricia Lewis-Bunch in Cytogenetics. Also, hearty congratulations go to the Milano family on the arrival of their new baby on December 15.

We also had many members participate in the Association for Molecular Pathology’s 2016 conference that was held in Charlotte, NC, with a record number of scholarly presentations featured from our Division. Congratulations to Caren Gentile for being selected as a winner of the prestigious AMP Technologist Award! I am very proud of all who attended and/or contributed and the efforts put forth towards posters and presentations.

Please continue to offer ideas for activities that bring to light the diverse and far-reaching impact of our Division to the Department of Pathology and Laboratory Medicine, Penn Medicine and the field of Genomic Diagnostics.

I hope you all enjoyed the Holidays and I am looking forward to an exciting 2017.

Sincerely,
Kojo S. J. Elenitoba-Johnson, M.D.

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Gentile is AMP Award Winner

Caren Gentile, Genomic Development Specialist in the Molecular Pathology Laboratory, was the recipient of the Technologist Poster Award at this year’s Association for Molecular Pathology’s Annual Meeting. This award honors the three best posters presented by non-doctoral technologist or medical technologist AMP members. Caren’s poster, entitled “Hepatitis C Virus Genotyping of Organ Donor Samples to Aid in Transplantation of HCV-positive Organs,” is a collaboration between the PCD and the Penn Renal and Transplant groups. Other authors from the PCD included Vivianna Van Deerlin, MD, PhD, and senior author (formerly PCD fellow) Midhat Farooqi, MD, PhD. In addition to her poster, Caren also delivered a presentation on the same topic. Congratulations to Caren and the rest of the team!
Association for Molecular Pathology (AMP) 2016 Annual Meeting

**Corporate Workshop Platform Presentations**

“Lowering the Bar to Raise the Stakes: Using Unique Molecular Barcoding Identifiers to Lower Reporting Frequencies in Tumors and to Improve Variant Detection” Presenting Author: Karthik Ganapathy, MS

“Evaluation of Quantidex qPCR BCR ABL IS Kit” Presenting Author: Christopher Watt, MD, PhD

**Molecular Pathology Outreach Course**

“JAK2 Testing” Presenting Author: Jason Rosenbaum, MD

**Annual Meeting Platform Presentations**

(*Also presented as posters)

“Hepatitis C Virus Genotyping of Organ Donor Samples to Aid in Transplantation of HCV-positive Organs” Presenting Author: Caren Gentile, MS, Additional Authors: David S. Goldberg, MD, MSCE, Peter P. Reese, MD, MSCE, Richard D. Hasz, MFS, Lynsey Cecere, MPA, Vivianna M. Van Deerlin, MD, PhD, Midhat S. Farooqi, MD, PhD

“Mutational Shift in Acute Myeloid Leukemia (AML) Relative to Therapy and Disease Progression” Presenting Author: Priya Velu, MD, PhD, Additional Authors: Chris Hsiung, PhD, Kia Salafian, Adam Bagg, MD, Selina Luger, MD, Jennifer Morrissette, PhD

**Annual Meeting Poster Presentations**

“Lessons Learned on How to Grow a Next-Generation Sequencing Diagnostic Laboratory” Presenting Author: Joseph Milano, MBA, PA (ASCP) Additional Authors: Alan J. Fox, MS, David B. Lieberman, MS, Barnett Li, BS, Shrey Sukhadia, MS, Robert D. Daber, PhD, Jianhua Zhao, PhD Jennifer JD Morrissette, PhD

“Analytic Approach for Complete and Mixed Engraftment Analysis using Commercial Software” Presenting Author: Lea Surrey, MD Additional Authors: Jennifer R. Smith, BA, Daniel Lubin, MD, Vivianna Van Deerlin, MD PhD, Christopher D. Watt, MD, PhD

“Lowering the Bar to Raise the Stakes: Using Unique Molecular Barcoding Identifiers to Lower Reporting Frequencies in Tumors and to Improve Variant Detection” Presenting Author: Karthik Ganapathy, MS Additional Authors: Alan Fox, MS, Ashkan Bigdeli, MS, Shrey Sukhadia, MS, Robert Babak Faryabi, PhD, Jennifer JD Morrissette, PhD

“BCR-ABL1 molecular responses at 12-18 months predict long-term event-free survival in patients with tyrosine kinase inhibitor (TKI)-treated chronic myelogenous leukemia (CML)” Presenting Author: Richard Press, MD, PhD Additional Authors: Christopher Watt, MD, PhD, Li Cai, PhD, Vivianna Van Deerlin, MD, PhD, Jacquelyn Roth, PhD, Caren Gentile, MS, Alison Loren, MD, MS, Garrett Eickelberg, BAS

“Computational framework for accurate characterization of FLT3-ITD structural variants” Presenting Author: Robert Babak Faryabi, PhD Additional Authors: Gregory Schwartz, PhD, Yeqiao Zhou, MSc, Anne Lehman, PhD, Jennifer Morrissette, PhD, Kojo Elenitoba-Johnson, MD, Martin Carroll, MD
“Next Generation Sequencing Reveals Genomic Heterogeneity of ALK Fusion Breakpoints in Non-Small Cell Lung Cancer”
Presenting Author: Jason N. Rosenbaum, MD
Additional Authors: Ryan Bloom, PhD, Jon Armstrong, Jeff Hiken, PhD, Julie Branson, Catherine E. Cottrell, PhD, John D. Pfeifer, MD, PhD, Eric J. Duncavage, MD

“The Show Must Go On: Evaluating and Improving a Clinical Bioinformatics Pipeline Developed for Amplicon Based NGS assays”
Presenting Author: Shrey Sukhadia, MS
Additional Authors: Alan J. Fox, MS, David B. Lieberman, MS, Barnett Li, BS, Robert D. Daber, PhD, Jianhua Zhao, PhD, Jennifer JD Morrissette, PhD

“Acute Myeloid Leukemia with Concurrent Double CEBPA Mutation and FLT3 Internal Tandem Duplication”
Presenting Author: Craig Soderquist, MD
Additional Authors: Christine McMahon, MD, Adam Bagg, MD, Kojo Elenitoba-Johnson, MD, Selina Luger, MD, Alexander Perl, MD, MS, Martin Carroll MD, Jennifer Morrissette, PhD

Presenting Author: EunRan Suh, PhD
Additional Authors: Eran Bram, PhD, Kamyab Javanmardi, BS, Kimberly Nicholson, BS, MHA, Kristen Culp, BS, Julie Kroesting, MS, Jon Kemppainen, BA, Kaitlyn Grando, Vivianna M Van Deerlin, MD, PhD, and Gary J Latham, PhD

“Improvements in Workflow after Verification and Implementation of the cobas® HPV Test”
Presenting Author: Jacquelyn L. Windon, MD, Jennifer Strubinger, MS, MT (ASCP), Alicia Carlin, BA, MB (ASCP), Caren Gentile, MS, Christopher D. Watt, MD, PhD, Cindy M. McGrath, MD, Vivianna M. Van Deerlin, MD, PhD

“The Show Must Go On: Evaluating and Improving a Clinical Bioinformatics Pipeline Developed for Amplicon Based NGS assays”
Presenting Author: Shrey Sukhadia, MS
Additional Authors: Alan J. Fox, MS, David B. Lieberman, MS, Barnett Li, BS, Robert D. Daber, PhD, Jianhua Zhao, PhD, Jennifer JD Morrissette, PhD

“Integration of Rapid Molecular Testing for Influenza and RSV into Existing Diagnostic Workflow”
Presenting Author: Yang Li, MD, PhD,
Additional Authors: Kevin Alby, PhD, Christopher D. Watt, MD, PhD, Jacquelyn J. Roth, PhD

“Validation of the GenMark RUO eSensor® HCVg Direct Test for Hepatitis C Virus Genotyping”
Presenting Author: Midhat Farooqi, MD, PhD
Additional Authors: Caren Gentile, MS, Jacquelyn J. Roth, PhD, Vivianna M. Van Deerlin, MD, PhD

“Supporting Brain Tumor Clinical Trials: EGFRvIII-Directed CAR T Therapy in Glioblastoma”
Presenting Author: MacLean Nasrallah, MD, PhD
Additional Authors: Zev A. Binder, MD, PhD, Jianhua Zhao, PhD, Maria Martinez-Lage, MD, Derek Oldridge, MA, Arati Desai, MD, MAS, Eileen Maloney, MSN, RN, CNRP, Carl June, MD, Donald M. O’Rourke, MD, MA, Marcela V. Maus, MD, PhD, Jennifer Morrissette, PhD
Happy Holidays and Best Wishes for the New Year!

The PLM Activities committee members kicked off the holiday season like Santa's elves! They hand-delivered $175 in gift cards and over 250 toys, games, and books to the children in the Child Life, Education & Creative Arts Therapy Department at the Children's Hospital of Philadelphia in December! All of these gifts were donated by the generous staff in the Department of Pathology and Laboratory Medicine.

Latricia Lewis-Bunch: Latricia has a longtime history in the Cytogenetics field. She has worked as a cytogenetics technologist at the Children’s Hospital of Philadelphia since 2004, and helped our cytogenetics lab as a per diem employee a couple of years ago. Vania Aikawa said, “Latricia is very smart, dedicated, and good-humored! We are so happy to have her back as part of our crew!”

Congratulations to Joe Milano (Administrative Director) and his wife on the birth of their son, Alex.

Contributors

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Vania Aikawa
Suanne Gardiner
Jacquelyn Roth, PhD
Caren Gentile, MS
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Do you have comments, suggestions, or content for the newsletter? Please contact Jackie Roth or Laura Pritchard; jacquelyn.roth@uphs.upenn.edu or laura.pritchard@uphs.upenn.edu