ASSOCIATION FOR MOLECULAR PATHOLOGY

**2017 Molecular Pathology Outreach Course**

***AMPlicons: A Practical Molecular Toolkit and Case Studies***

Wednesday, November 15, 2017  
*Location: TBD*

Salt Lake City, UT

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| **TIME** | **SESSION** | **SPEAKER** |
| **7:30am** | **Registration and Continental Breakfast** |  |
| **8:30am** | **Welcome and Introductions** | ***Annette S. Kim, MD, PhD*** *Brigham & Women’s Hospital* |
| **8:35am** | **Contemporary Topics in Molecular Diagnostics** | ***Federico A Monzon, MD*** Castle Biosciences |
| **9:25am** | **Break (SEW leaves)** |  |
| **9:30am** | **Types of Methodologies and Pre-Analytic Considerations** | ***Anna Yemelyanova, MD*** *University of Texas MD Anderson Cancer Center* |

**CASE STUDIES:**

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| **CASE STUDIES: Non-template Amplification ("Prete-a-utilizer")** | | |
| **10:00am** | 1. Cleavase Probe amplification for FVL and Prothrombin 2. MLPA for CF 3. TMA for GC or HPV 4. Oligo hybridization-based methodology | ***Cynthia Jackson, PhD*** *Rhode Island Hospital*  ***Mark Ewalt, MD*** *Cedars Sinai Medical Center*  ***Jeffrey Gagan, MD, PhD*** *Brigham & Women’s Hospital*  ***Sophie Arbefeville, MD***  University of Minnesota Medical Clinic |
| **10:50am** | **Break** |  |

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| **CASE STUDIES: Specialized PCR Methods** | | |
| **11:05am** | 1. Trinucleotide 2. BCR-ABL1 3. PCR on a film for ID 4. STR applications | ***Kristy Crooks, PhD*** *University of North Carolina at Chapel Hill*  ***Anthony N. Snow, MD***  *University of Iowa Hospitals & Clinics*  ***Kevin Alby, PhD***  *Hospital of the University of Pennsylvania*  ***Roy Lee, MD*** *The Cleveland Clinic Foundation* |
| **12:00pm** | **LUNCH** |  |

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| **CASE STUDIES: Non-invasive or Cell Free DNA testing** | | |
| **1:15pm** | 1. ddPCR cfDNA EGFR testing 2. NIPT | ***Annette S. Kim, MD, PhD*** *Brigham & Women’s Hospital*  ***Roberta Sitnik, PhD*** *Hospital Israelita Albert Einstein* |

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| **CASE STUDIES: Basic SNV Detection by NGS** | | |
| **1:45pm** | 1. NGS SNVs in hemepath 2. Difficult to sequence areas in constitutional genetics | ***Jennifer Dunlap, MD***  *Oregon Health & Science University*  ***Avni Santani, PhD***  *Children’s Hospital of Philadelphia* |
| **2:15pm** | **Break** |  |

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| **CASE STUDIES: Detection of Fusions** | | |
| **2:30pm** | 1. multiplex Anchor Archer RNA-based fusions detection for solid tumors 2. DNA-based fusion detection | ***Anthony N. Snow, MD***  *University of Iowa Hospitals & Clinics*  ***Jason Rosenbaum, MD*** *Hospital of the University of Pennsylvania* |

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| **CASE STUDIES: Copy Number Assessments** | | |
| **3:00pm** | 1. aSNP , aCGH 2. CNVs by NGS | ***Kristy Crooks, PhD*** *University of North Carolina at Chapel Hill*  ***Jeremy Segal, MD, PhD*** *University of Chicago* |

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| **3:30pm** | **Closing Remarks and Questions** | ***Annette S. Kim, MD, PhD*** *Brigham & Women’s Hospital* |
| **3:45pm** | **Adjourn** |  |