

Improving Cancer Diagnosis and Care: The Clinical Application of Computational Methods in Precision Oncology

OCTOBER 29 – 30, 2018

Keck Center of the National Academies
500 Fifth Street, NW
Washington, DC Room 100

DRAFT WORKSHOP AGENDA

October 29, 2018	
7:30 am	Registration and Breakfast
8:00 am	<p>Welcome from the National Cancer Policy Forum and the Board on Mathematical Sciences and Analytics Christopher Cogle, University of Florida Chair, Workshop Planning Committee</p> <p>David Chu, Institute for Defense Analyses Member, Board on Mathematical Sciences and Analytics</p>
8:15 am	<p>Session 1: Workshop Overview Moderator: Hedvig Hricak, Memorial Sloan Kettering Cancer Center</p> <p>Precision Oncology: The Optimism and Pessimism from Keyboard to Bedside</p> <ul style="list-style-type: none"> • Christopher Cogle, University of Florida <p>Brief Review of <i>Improving Cancer Diagnosis and Care: Patient Access to Oncologic Imaging and Pathology Expertise and Technologies</i> (February 2018 National Cancer Policy Forum Workshop)</p> <ul style="list-style-type: none"> • Hedvig Hricak, Memorial Sloan Kettering Cancer Center <p>Keynote: A Roadmap for Translating Precision Oncology into Clinical Practice</p> <ul style="list-style-type: none"> • Atul Butte, University of California, San Francisco (presenting remotely) <p>Panel Discussion</p>
10:00 am	Break
10:15 am	<p>Session 2: Defining Unmet Needs and Challenges of Precision Oncology in Clinical Practice Moderator: Christopher Cogle, University of Florida</p>

	<p>Overview of the Challenges and Opportunities of Using High Dimensional Data in Precision Oncology</p> <p>Diagnosis and Prognosis</p> <ul style="list-style-type: none"> • Constantine Gatsonis, Brown University <p>Treatment Selection and Prediction</p> <ul style="list-style-type: none"> • Keith Flaherty, Massachusetts General Hospital Cancer Center <p>The Risks of Bias and Inequities in Precision Oncology Care</p> <ul style="list-style-type: none"> • Kadija Ferryman, Data & Society Research Institute <p>Patient Understanding of Precision Oncology</p> <ul style="list-style-type: none"> • Galen Joseph, University of California, San Francisco <p>Panel Discussion</p>
12:15 pm	Lunch
1:00 pm	<p>Session 3: Data Considerations for Precision Oncology Care</p> <p>Moderator: Amy Abernethy, Flatiron Health</p> <p>Envisioning Critical Features of Datasets for Precision Oncology Care</p> <ul style="list-style-type: none"> • Amy Abernethy, Flatiron Health <p>Opportunities and Lessons Learned from AACR's Project GENIE</p> <ul style="list-style-type: none"> • Mia Levy, Vanderbilt University <p>Data Standardization and Harmonization</p> <ul style="list-style-type: none"> • Sean Khozin, Food and Drug Administration <p>Data Governance, Privacy, and Security</p> <ul style="list-style-type: none"> • Deven McGraw, Ciitizen <p>Panel Discussion</p> <p>Include speakers and</p> <ul style="list-style-type: none"> • David Magnus, Stanford University and All of Us Research Program
3:00 pm	Break
3:15 pm	<p>Session 4: Analysis and Interpretation of Computational Methods for Precision Oncology Care</p> <p>Moderator: Constantine Gatsonis, Brown University</p> <p>Conceptual Strategies for Reproducibility of Precision Oncology Data and Methods</p> <ul style="list-style-type: none"> • Steven Goodman, Stanford School of Medicine

	<p>Overview of Statistical and Machine Learning Methods in Interpreting High-Dimensional Data for Precision Oncology</p> <ul style="list-style-type: none"> Giovanni Parmigiani, Dana-Farber Cancer Institute <p>Oversight and Regulation of Tools and Methods Used in Precision Oncology Care</p> <ul style="list-style-type: none"> Lisa McShane, National Cancer Institute Nicholas Petrick, Food and Drug Administration <p>Beyond Oncology: What Disciplines and Expertise Areas are Needed to Improve the Development and Translation of Computational Methods for Precision Oncology Care?</p> <ul style="list-style-type: none"> Pratik Shah, MIT Media Lab <p>Panel Discussion</p>
5:30 pm	Adjourn Day 1
5:35 pm	Reception
October 30, 2018	
7:30 am	Registration and Breakfast
8:00 am	<p>Session 5: Clinical Application of Precision Oncology: Improving the Translation of Omics Technologies in Cancer Care Moderator: Mia Levy, Vanderbilt University</p> <p>Demonstrating Clinical Utility in Cancer Patient Management</p> <ul style="list-style-type: none"> Lincoln Nadauld, Intermountain Healthcare <p>Health Care Delivery Models and Infrastructure for Precision Oncology Care</p> <ul style="list-style-type: none"> Howard McLeod, Moffitt Cancer Center <p>Scaling Precision Oncology Care: Lessons Learned from Implementing Artificial Intelligence Across Health Care and Community Settings</p> <ul style="list-style-type: none"> George "Holt" Oliver, Parkland Center for Clinical Innovation <p>Health Insurance Coverage Issues</p> <ul style="list-style-type: none"> Lee N. Newcomer, Lee N. Newcomer Consulting <p>Panel Discussion Include speakers and</p> <ul style="list-style-type: none"> Michael Kelley, Duke University and Department of Veterans Affairs Lukas Amler, Genentech

10:00 am	Break
10:15 am	<p>Session 6: Panel Discussion: Stakeholder Perspectives of the Path Forward Moderator: David Magnus, Stanford University</p> <ul style="list-style-type: none"> • Richard Schilsky, American Society of Clinical Oncology • Frank F. Weichold, Food and Drug Administration • Bray Patrick-Lake, Duke University and All of Us Research Program • Deven McGraw, Ciitizen • Lisa McShane, National Cancer Institute • Lee N. Newcomer, Lee N. Newcomer Consulting • Joseph Chin, Centers for Medicare & Medicaid Services • Lukas Amler, Genentech
11:30 am	<p>Workshop Wrap Up Christopher Cogle, University of Florida Planning Committee Chair</p>
11:45 am	Adjourn