NINR Boot Camp
Precision Health: From 'Omics' to Data Science

Monday July 25, 2016
Introduction & Significance of Precision Health

Time:	Topics:	Presenter:
8:00–8:30am	Meet, Greet, Coffee	
8:30–9:00am	Program Opener & Introductions	Mary Engler, PhD, RN, MS Training Director, National Institute of Nursing Research
9:00 – 9:30am	Welcome & Program Overview	Patricia Grady, PhD, RN, FAAN Director, National Institute of Nursing Research
9:30–10:30am	Morning Keynote: Precision Health and Advancing Human Health	Leroy Hood, MD, PhD President and Co-founder, Institute for Systems Biology
10:30 – 10:45am	BREAK	
10:45 – 11:45am	Advancing Precision Health: A Nursing informatics research perspective	Suzanne Bakken, PhD, RN, FAAN, FACMI Professor and Director of the Center for Evidence-based Practice, Columbia University
11:45 – 12:45	Nutrigenomics and Precision Health	José M Ordovás, Ph.D. Director and Professor Nutrition and Genomics, USDA at Tufts University
12:45 – 1:45pm	LUNCH	
1:45 – 2:45pm	Pharmacogenomics in Precision Health	Deanna L. Kroetz, PhD, Professor, University of California, San Francisco
2:45 – 3:45pm	Translational Bioinformatics	Zhongming Zhao, PhD, MS Dr. Doris L. Ross Professor & Director, Center for Precision Health, School of Bioinformatics, University of Texas Health Science Center at Houston
3:45 – 4:00pm	BREAK	
4:00 – 5:00 pm	Afternoon Keynote: Precision Health vs Precision Medicine	Lloyd Minor, MD Carl and Elizabeth Naumann Dean, Stanford University School of Medicine
5:00– 5:15pm	Questions / Closing Remarks	

NINR Boot Camp
Precision Health: From 'Omics' to Data Science

Tuesday July 26, 2016
Clinical Omics

Time:	Topics:	Presenter:
8:00 – 8:30am	Coffee & Networking	
8:30–9:30am	Clinomics at the Mayo Clinic: New Frontiers in Patient Care	Eric D. Wieben, PhD Professor and Co-Director of Clinomics, Mayo Clinic
9:30 –10:30am	Microbiome, Cancer, and Cancer Therapy	Giorgio Trinchieri, MD Senior Investigator Cancer and Inflammation Program, National Cancer Institute, NIH
10:30 – 10:45 am	BREAK	
10:45-11:45am	The Impact of Precision Medicine on Outcomes, Quality and Safety Monitored by Nurses	Kathleen McCormick, PhD, RN, FACMI, FAAN, FHIMSS, HIMSS Principal/Owner, SciMind, LLC
11:45 – 12:45	Pharmacogenomics: Discovery to Implementation and Back	Richard Weinshilboum, MD, Professor of Pharmacology and Medicine and Mary Lou and John H. Dasburg Professor of Cancer Genomics Research at Mayo Clinic
12:45-1:45pm	LUNCH	
1:45 – 3:15pm	Breakout Session 1: 1. Clinomics 2. Microbiome 3. Nursing Informatics 4. Pharmacogenomics	
3:30– 5:00pm	Breakout Session 2: Bioinformatics / Big Data	Medha Bhagwat, PhD Bioinformatics Support Program Coordinator/Informationist NIH Library
5:00 – 5:15pm	Questions / Closing Remarks	

NINR Boot Camp
Precision Health: From 'Omics' to Data Science

Wednesday July 27, 2016
Ethical, Legal, and Social Implications;
Omics and Informatics

Time:	Topics:	Presenter:
8:00 – 8:30am	Coffee & Networking	
8:30–9:30am	The Ethics of Return of Results in Translational Genomics	TBD
9:30 –10:30am	At the Frontier of Big Data and Patient-Centered Care: PROs, PGD and Personalized Experiments	Erin Holve, PhD MPH MPP Senior Director, AcademyHealth
10:30 – 10:45am	BREAK	
10:45–11:45	Your Genomic Privacy and Other Ethical Issues in Big Data Biology	Pilar N. Ossorio, PhD, JD Professor of Law and Bioethics, University of Wisconsin
11:45 – 12:45	Ethical Aspects of Team Science in Clinical Research	Connie Ulrich, PhD, RN Professor of Bioethics and Nursing University of Pennsylvania
12:45 – 1:45	LUNCH	
1:45 – 2:45pm	Clinical Research Informatics	TBD
2:45 – 3:45 pm	TBD	Susan Cheng, MD Physician, Brigham and Women's Hospital & Assistant Professor of Medicine, Harvard Medical School
3:45 – 4:00 pm	BREAK	
4:00 – 5:00 pm	Biomedical Informatics	TBD
4:45 – 5:00pm	Closing Remarks / Questions	

NINR Boot Camp
Precision Health: From 'Omics' to Data Science

Thursday July 28, 2016
Data Science and Bioinformatics: Genomics and the EHR

Time:	Topics:	Presenter:
8:00 – 8:30am	Coffee & Networking	
8:30–9:30am	Clinical Decision Support and Analytics	TBD
9:30 –10:30am	Do our genes determine what we should eat?	Ahmed El-Sohemy, PhD Professor and Canada Research Chair in Nutrigenomics, University of Toronto
10:30 – 10:45am	BREAK	
10:45–11:45	TBD	Nicholas Marko, MD Chief Data Officer, Geisinger Health System
11:45 – 12:45	Precision Health at the INOVA Health Care System	Benjamin D. Solomon, MD Chief, Division of Medical Genomics, INOVA
12:45 – 1:45	LUNCH	
1:45 – 3:00pm	Breakout Session 1: 1. Clinical Decision Support and Analytics 2. Nutrigenomics 3. The Geisinger & INOVA Models for Precision Health 4. Tour NIH Clinical Center	
3:15 – 4:45pm	Breakout Session 2: 1. Clinical Decision Support and Analytics 2. Nutrigenomics 3. The Geisinger & INOVA Models for Precision Health 4. Tour NIH Clinical Center	
4:45 – 5:00pm	Closing Remarks / Questions	

NINR Boot Camp
Precision Health: From 'Omics' to Data Science

Friday July 29, 2016
Opportunities for Training and Research Funding
and Hands-On Data Science Methods Training

Time:	Topics:	Presenter:
8:30–12:00	Funding Opportunities at NIH	Program Officers from NIH NINR NLM NCATS NCI NHLBI
12:00 – 1:00pm	LUNCH	
1:00 – 2:15pm	Data Science: R and Statistics	Lisa Federer Research Data Informationist, NIH Library
2:15 – 2:30	BREAK	
2:30 – 3:45pm	Statistical Methods for Functional Genomics	TBD
3:45 – 4:45pm	Closing Remarks	TBD