NATIONAL CANCER INSTITUTE

DIVISION OF CANCER PREVENTION

Cancer Prevention Fellowship Program

# 2016 Summer Curriculum in Cancer Prevention

# MOLECULAR PREVENTION COURSE

**AUGUST 1- 5, 2016**

## SYLLABUS

# Molecular Prevention Course Syllabus

Date: August 1 – August 5, 2016

Time: Course begins daily at 9:30 am

Location: 6001 Executive Boulevard
Rooms C & D
Rockville, MD 20852
Check-in/Security Desk – (301) 435-1470

Course Director: Lisa B. Signorello, ScD, ScM

Course Coordinators: Aili Ellen Evert
Emilia Kaslow-Zieve

Course presented by: Cancer Prevention Fellowship Program

David E. Nelson, MD, MPH
Director

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## Monday, August 1

| | | |
|---|---|---|
| 9:30 am – 9:45 am | Welcoming Remarks/Course Overview | Lisa B. Signorello, ScD, ScM |
| 9:45 am - 11:00 am | Molecular Basis of Carcinogenesis | Goli Samimi, PhD, MPH |
| 11:00 am - 11:30 am | *Break* | |
| 11:30 am - 12:45 pm | Molecular Pathology in Prevention Research | Mark Sherman, MD |
| 12:45 pm - 1:45 pm | *Lunch* | |
| 1:45 pm – 3:00 pm | Applying Molecular Markers within Population-Based | Gretchen Gierach, PhD, MPH |

## Tuesday, August 2

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|---|---|---|
| 9:30 am - 10:45 am | NCI's Early Detection Research Network | Sudhir Srivastava, PhD, MPH |
| 10:45 am - 11:15 am | *Break* | |
| 11:15 am - 12:30 pm | Epigenetics in the Precision Medicine Era | Lifang Hou, MD, PhD, MS |
| 12:30 pm - 1:30 pm | *Lunch* | |
| 1:30 pm - 2:45 pm | Telomeres and Cancer | Bari Ballew, PhD |

## Wednesday, August 3

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|---|---|---|
| 9:30 am - 10:45 am | Nutrigenomics | Sharon Ross, PhD, MPH |
| 10:45 am - 11:15 am | *Break* | |
| 11:15 am - 12:30 pm | Image-based Phenotyping using Radiomics | Hugo Aerts, PhD, MSc |
| 12:30 pm - 1:30 pm | *Lunch* | |
| 1:30 pm - 2:45 pm | microRNAs (miRNAs) and Long Non-coding RNAs (lncRNAs) | Ashish Lal, PhD |
| 3:00 pm | Group Photos | |

## Thursday, August 4

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|---|---|---|
| 9:30 am - 10:45 am | Human Microbiome and Cancer Prevention | Emily Vogtmann, PhD, MPH |
| 10:45 am - 11:15 am | *Break* | |
| 11:15 am - 12:30 pm | Metabolomics and Cancer | Mary Playdon, PhD, MPH |
| 12:30 pm - 1:30 pm | *Lunch* | |
| 1:30 pm - 2:45 pm | Cancer Moonshot – The Genomic Data Commons and Precision Prevention | Warren Kibbe, PhD |

## Friday, August 5

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|---|---|---|
| 9:30 am - 10:45 am | Reproducibilty in 'Omics Studies | Lisa McShane, PhD |
| 10:45 am - 11:15 am | *Break* | |
| 11:15 am - 12:30 pm | Cancer Immunoprevention | Sasha Stanton, MD, PhD |
| 12:30 pm - 1:30 pm | *Lunch* | |
| 1:30 pm - 2:45 pm | Translational Genomics | Stephen Chanock, MD |
| 2:45 pm | Closing Remarks | Lisa B. Signorello, ScD, ScM |