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LECTURE SERIES & WORKSHOPS

TRANSLATIONAL BIOINFORMATICS AND SYSTEMS BIOMEDICINE

01

FEBRUARY 2018
Thursday

LECTURE
📍 **Maison des Sciences Humaines**
"Blackbox room"
(11, porte des Sciences - L-4366 Esch-sur-Alzette)

MEET THE SPEAKER*
Light snacks provided
Maison des Sciences Humaines
Room N°2.07

4.00 - 5.00 pm   **5.00 - 6.30** pm

1   2   3   4   5   6   7   8

*Please register by sending a mail to florence.henry@lih.lu

SPEAKER
Prof Jessica Tenenbaum

Assistant Professor, Department of Biostatistics and Bioinformatics, Division of Translational Biomedical Informatics, Duke University School of Medicine, Durham, NC, USA

HOST:
Department of Oncology
RESPONSIBLE LIH SCIENTISTS:
Dr Francisco Azuaje
(francisco.azuaje@lih.lu)

Léon-Charles Tranchevent
(leon-charles.tranchevent@lih.lu)

www.lih.lu

TRANSLATIONAL BIOINFORMATICS IN THE PRECISION MEDICINE ERA

ABSTRACT

The field of translational bioinformatics is at an exciting stage of progression. The past decade has seen the establishment of TBI as a widely recognized discipline unto itself, and the launch of a number of large-scale initiatives that TBI has enabled around the globe. The recent explosion of molecular data coupled with clinical data on actual patients holds the potential to define an entirely new taxonomy of disease. In this new taxonomy, disease would be classified not solely by macroscopic symptoms many of which have been observed for centuries, but rather based on underlying molecular and environmental causes. This paradigm shift, enabled by novel methods for the generation, storage, analysis, and visualization of "big data" in biology and medicine, promises to do nothing short of rewrite the textbook of medicine moving forward. As technology continues to advance, assay costs to decrease, and as methods are further refined, the next decade is likely to feature increasingly pervasive examples of applied translational bioinformatics, both in healthcare and other areas of day to day life. In this talk I will highlight success stories and outstanding achievements in, or enabled by, translational bioinformatics. I will describe some important caveats and obstacles we face in this rapidly advancing field, as well as some ideas on how to address those hurdles. Finally, I will explore some of the tremendous opportunities we face in the years ahead.

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