

LECTURE SERIES & WORKSHOPS

TRANSLATIONAL BIOINFORMATICS AND SYSTEMS BIOMEDICINE

21

MAR. 2019

Thursday



LECTURE

Maison des Sciences
Humaines
"Blackbox" room
(11, Porte des Sciences
L-4366 Esch-sur-Alzette)

MEET THE SPEAKER*

Maison des Sciences
Humaines
Room N°0.205

4.30 - 5.30 pm

5.30 - 6.15 pm

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



SPEAKER

Dr Fátima AL-SHAHROUR

Head of Bioinformatics Unit,
Spanish National Cancer Research
Centre (CNIO), Madrid, Spain

HOST:

LIH

RESPONSIBLE SCIENTIST:

Francisco Azuaje
(francisco.azuaje@lih.lu)

IDENTIFYING DRUGGABLE GENETIC DEPENDENCIES FOR PERSONALIZED CANCER THERAPY

ABSTRACT

The paradigm of personalized medicine is the identification of the appropriate drug for the right patient, using molecular profiles. In Oncology, it is well established that the anticancer drugs are effective in only a small subset of patients. Moreover, many of the new targeted therapies inhibit specific proteins, and they are only effective in tumors that are genetically altered. Consequently, the success of personalized treatment depends on each individual molecular profile, which a priori can be considered as very heterogeneous.

Here, we present new computational approaches based on the analysis and integration of genomic data (mutations, copy number variations or gene expression levels), with functional data (protein essentiality) and pharmacological data. These methods aim to identify those vulnerable molecular alterations that drive tumor progression and could be druggable based on the patient's molecular profile, and propose an individualized therapeutic strategy to guide clinical decision making for cancer patients.

<https://bioinformatics.cnio.es>

<https://www.pandrugs.org>

www.lih.lu
www.uni.lu

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