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LECTURE SERIES & WORKSHOPS

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07 DEC 2017 Thursday

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LECTURE*

UniLU Belval Campus Maison du Savoir 2, av. de l'Université Light lunch provided after the lecture

12

11.00 - 12.00 pm

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

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SPEAKER Prof. Jean-Pierre KOCHER

Director of the Data Science and Bioinformatics Programmes at Mayo Clinic, Chair of the Division of Biomedical Statistics and Informatics, Vice Chair of the Department of Health Sciences Research at Mayo Clinic, Arizona (MCA) and Associate Chair of the Department of Biomedical Informatics at Arizona State University (ASU)

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

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DEPLOYING LOW-COVERAGE WHOLE GENOME SEQUENCING IN THE PRACTICE: A TRANSLATIONAL JOURNEY FROM BIOINFORMATICS RESEARCH TO CLINICAL TEST

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ABSTRACT

Low-Coverage Whole Genome Sequencing (LC-WGS) has recently be implemented in clinical laboratories at Mayo is one of the sequencing protocols that has been translated into clinical applications. The first successful test is the Non-Invasive Prenatal Test that is becoming routinely used to fetal trisomy detection. Other clinical applications are underway. I will describe the analytical workflows put in place to analyze LC-WGS data and report trisomy. I will also describe how the analytics has been extended to the stratification of ovarian tumors. This new application of LC-WGS is currently being translated into a clinical test.

