

## Inserm Workshop 266

### Introduction à l'Apprentissage automatique de la Biologie à la Santé Introduction to Machine Learning from Biology to Health

11-13 octobre 2021 ■ **October 11-13 2021** ■ on Zoom

Lundi 11 octobre 2021 ■ **Monday October, 11<sup>th</sup> 2021**

PDT	EDT	CEST	SESSION I: Introduction to Machine Learning
07:00 07:15	10:00 10:15	<b>16:00</b> <b>16:15</b>	Welcome and presentation by the organizers
07:00 07:15	10:15 17:00	<b>16:15</b> <b>17:00</b>	Introduction 1 to Machine Learning <b>Chloé-Agathe Azencott (MINES ParisTech / Institut Curie, Paris, France)</b>
08:00 08:15	11:00 11:45	<b>17:00</b> <b>17:45</b>	Introduction 2 to Machine Learning <b>Liva Ralaivola (LIS, Marseille, France)</b>
08:45 09:00	11:45 12:00	<b>17:45</b> <b>18:00</b>	<b>15' Break</b>
09:00 09:45	12:00 12:45	<b>18:00</b> <b>18:45</b>	Deep Learning for System Biology <b>Trey Ideker (UCSD, California, USA)</b>
09:45 10:15	12:45 13:15	<b>18:45</b> <b>19:15</b>	<b>Meet the speakers</b>

Mardi 12 octobre 2021 ■ **Tuesday October, 12<sup>th</sup> 2021**

PDT	EDT	CEST	SESSION II: Machine Learning for Genomics
00:15 01:00	03:15 04:00	<b>09:15</b> <b>10:00</b>	Analysis Single Cell Data with ML <b>Oliver Stegle (DKFZ, Germany)</b>
01:00 01:45	04:00 04:45	<b>10:00</b> <b>10:45</b>	Machine Learning methods for modelling regulatory sequence <b>Laurent Bréhélin (LIRMM, Toulouse, France)</b>
01:45 02:00	04:45 05:00	<b>10:45</b> <b>11:00</b>	<b>15' Break</b>
02:00 02:45	05:00 05:45	<b>11:00</b> <b>11:45</b>	Deep learning applied to Gene Expression analyses <b>Aleksej Zelezniak (Chalmers, Sweden)</b>
02:45 03:15	05:45 06:15	<b>11:45</b> <b>12:15</b>	<b>Meet the speakers</b>

PDT	EDT	CEST	SESSION II: Machine Learning for function prediction
05:00 05:45	08:00 08:45	<b>14:00</b> <b>14:45</b>	Finding protein function with machine Learning <b>Burkhard Rost (Technical University of Munich, Germany)</b>
05:45 06:30	08:45 09:30	<b>14:45</b> <b>15:30</b>	Deep learning models to predict protein-RNA interactions <b>Annalisa Marsico (Institute of Computational Biology (ICB) Helmholtz Zentrum München, Germany)</b>
06:30 06:45	09:30 09:45	<b>15:30</b> <b>15:45</b>	<b>15' Break</b>
06:45 07:30	09:45 10:30	<b>15:45</b> <b>16:30</b>	Using Deep neural network in clinical data sharing <b>Casey S. Greene (University Pennsylvania, USA)</b>
07:30 08:00	10:30 11:00	<b>16:30</b> <b>17:00</b>	<b>Meet the speakers</b>

Mercredi 13 octobre 2021 ■ **Wednesday October, 13th 2021**

PDT	EDT	CEST	SESSION IV : Machine Learning for Imaging and Language
00:15 01:00	03:15 04:00	<b>09:15</b> <b>10:00</b>	Applying deep learning to biomedical imaging <b>Christophe Zimmer (Institut Pasteur, Paris, France)</b>
01:00 01:45	04:00 04:45	<b>10:00</b> <b>10:45</b>	Learning meaningful representations of life <b>Paul Villoutreix (LIS, Marseille, France)</b>
01:45 02:00	04:45 05:00	<b>10:45</b> <b>11:00</b>	<b>15' Break</b>
02:00 02:45	05:00 05:45	<b>11:00</b> <b>11:45</b>	Deciphering the neural and acoustical bases of communication with data-driven methods <b>Etienne Thoret (Institute of Language, Communication and the Brain, Aix-en-Provence, France)</b>
02:45 03:15	05:45 06:15	<b>11:45</b> <b>12:15</b>	<b>Meet the speakers</b>