





Mini-symposium Al and data science for biology

We are pleased to announce the mini-symposium **on June 23 from 9:15 a.m. to 1 p.m. at the Jussieu campus** which will focus on Artificial Intelligence and data science for biology. This mini-symposium, organized by the *i-Bio* Initiative and the SCAI Institute, will give you the opportunity to discover some of the new perspectives offered by AI in different fields of biology. Following the interdisciplinary spirit of the *i-Bio* initiative, the presentations will be accessible for a broad audience.

Participation is free, but for the organization, please register with this form: <u>https://forms.gle/</u><u>m8jBj9kWSvUKPff77</u>.

Organizers: Martin Weigt and Jeanne Trinquier Laboratory of Computational and Quantitative Biology, Sorbonne University - CNRS

martin.weigt@upmc.fr jeanne.trinquier@sorbonne-universite.fr

Timetable:

9:15 - 9:25 Introduction :

Catherine Jessus *i-Bio Director*

Developmental Biology Laboratory, Sorbonne University - CNRS

Martin Weigt

Laboratory of Computational and Quantitative Biology, Sorbonne University - CNRS

9:25 - 10:15 Keynote speaker : Jean-Philippe Vert

Deep embedding and alignment of biological sequences

Google Brain, Mines ParisTech CBIO

10:15 - 10:40 Flora Jay

Creating artificial human genomes using generative models

Laboratory for Computer Science, Paris-Saclay University - CNRS

10:40 - 10:55 Alexandra Lefebvre

Probabilistic graphical models applied to familial genetics

PhD student, Laboratory for Probabilities, Statistics and Modelization, Sorbonne University - CNRS

10:55 - 11:15 Coffee break

11:15 - 11:40 Julien Mozziconacci

Deep learning for genomics

Laboratory of Structure and Instability of Genomes, National Museum of Natural History - CNRS

11:40 - 11:55 Laurent David
<u>IMPRINT: motifs and augMented sequence space for PRotein partner IdeNTification</u>
PhD student, Laboratory of Computational and Quantitative Biology, Sorbonne University - CNRS

11:55 - 12:20 David Bikard <u>Generating functional protein variants with variational auto-encoders</u> *Synthetic Biology, Institut Pasteur*

12:20 - 12:35 Jeanne Trinquier <u>Generative modeling of protein sequences</u> PhD student, Laboratory of Computational and Quantitative Biology, Sorbonne University - CNRS

12:35 - 13:00 Christophe Zimmer <u>Deep learning for biomedical imaging</u> *Imaging and modeling, Institut Pasteur*

i-bio website: <u>http://ibio.sorbonne-universite.fr/</u> Scai website: <u>https://scai.sorbonne-universite.fr/</u>