



CALYM / IMAGINE WORKSHOP 2018

Paris, January 19, 2018

**TRANSLATING NEXT GENERATION GENOMICS
IN PRECISION MEDICINE**

*IMAGINE Institute, Necker Hospital,
24, Boulevard de Montparnasse
75015 Paris, France*

CALYM / IMAGINE WORKSHOP 2018

The CALYM Carnot institute and the IMAGINE Associated Carnot Institute jointly organize an international workshop focused on **"TRANSLATING NEXT GENERATION GENOMICS IN PRECISION MEDICINE"** held at the IMAGINE Institute, Necker Hospital in Paris on January 19, 2018.

From CRISPR/CAS9 to single-cell technologies, from liquid biopsies to multi-OMICS today's swift technological advances in genetics and genomics are currently setting the stage for tomorrow's revolution in patient care. The aim of this joint **CALYM / IMAGINE Carnot workshop** is **to bring together academic and industrial players** to discuss how these genetic advances can be used to develop innovative therapies in lymphoma and primary immune deficiencies.



PROGRAM

9:00 WELCOME COFFEE

9:30 INTRODUCTION: IMAGINE & CALYM Carnot institute
Stanislas Lyonnet, Romain Marlange & Olivier Hermine (IMAGINE)
Gilles Salles & Bertrand Nadel (CALYM)

MORNING SESSIONS

Somatic and germline genetics: what can we learn from each other?

9:45 Imagine biomedical data warehouse: presentation and applications for primary immune deficiencies - Nicolas Garcelon (IMAGINE)

10:15 Functional assessment of human genetic variants using multi-omics data integration - Antonio Rausell (IMAGINE)

10:45 COFFEE BREAK

11:00 Current tools for bioinformatics and statistical analysis of lymphoma genomics datasets - Bruno Tesson & Jean-Philippe Jais (CALYM)

11:30 ROUND TABLE

From constitutional to somatic genetics, from primary immune deficiency to lymphoma: how to integrate tools and cross-fertilize fields?

Nicolas Garcelon (IMAGINE), Antonio Rausell (IMAGINE), Bruno Tesson (CALYM), Jean-Philippe Jais (CALYM), Sylvain Latour (IMAGINE) - Moderator: Olivier Hermine (IMAGINE)

12:15 LUNCH BREAK

AFTERNOON SESSIONS

Identification of therapeutic targets and biomarkers in lymphoma using new genomics technologies

13:45 CRISPR/Cas9 Screens

- CRISPR/Cas9-based genome editing approaches for beta-hemoglobinopathies - Annarita Miccio (IMAGINE)
- Use of whole-genome CRISPR/Cas9 screen for therapeutic target identification in mature T-cell malignancies - Emmanuel Bachy (CALYM)

14:45 Single cell analysis

- Revealing the tumor ecosystem in follicular lymphoma by CyTOF - Andrew Weng (Vancouver, Canada)
- Integrative single cell analysis: a new prism to decipher follicular lymphoma heterogeneity - Pierre Milpied (CALYM)

15:45 COFFEE BREAK

16:00 Liquid biopsies

- Tumor monitoring and risk assessment in non-Hodgkin lymphomas from circulating tumor DNA - David Kurtz (Alizadeh Lab, Stanford, USA)
- Combined genotype analysis of tumor and cell-free DNA by ultra-deep targeted sequencing: correlation with PET-scan imaging in prospective cohorts of diffuse large B-cell lymphoma and Hodgkin lymphoma - Fabrice Jardin (CALYM)

17:00 ROUND TABLE

Translating genetics into predictive/theranostic biomarkers: now and tomorrow

Stephen J. Blackemore (Epizyme), Alessandra Cesano (Nanostring), Emmanuel Martin (IntegraGen)
Moderators: Gilles Salles & Philippe Gaulard (CALYM)

17:45 WORKSHOP CONCLUDE

18:00 COCKTAIL



CALYM is the consortium for the acceleration of innovation and its transfer in the field of lymphoma, 6th cancer worldwide and the 1st blood cancer. It brings together LYSA, a cooperative group, international leader of lymphoma research, LYSARC, the largest European academic clinical research operation organization, devoted to lymphoma and 13 leading French research entities with unique preclinical and clinical research experience and expertise in this cancer field. In April 2011, CALYM obtained the prestigious “Carnot institute” certification (www.instituts-carnot.eu/) from the French Ministry of Higher Education and Research (MESR), acknowledging its capacity for, and experience in, collaborative research with the socio-economic stakeholders, particularly the life science industry. In 2016, MESR audit established CALYM as a sustainable Carnot structure.

www.calym.org



Open since 2014, **IMAGINE** is a research and innovative healthcare institute of a new type, affiliated with Paris Descartes University, the Inserm national institute for medical research and the Paris Public Hospitals Group (Assistance Publique-Hôpitaux de Paris). Located on the campus of the Necker Enfants Malades Hospital in Paris, it brings together over 900 researchers, doctors and healthcare personnel, with an innovative vision: to cure genetic diseases. Continuity between research and medical care is supported by a patient-centered organization, resulting in speeding up progress in research and accelerating its translation into new treatments. IMAGINE Institute is also deeply involved in partnering with industry, especially for the development of innovative therapeutic and diagnostic approaches. In July 2017, **IMAGINE Institute has been recognized as Tremplin Carnot** by the French Ministry of Higher Education and Research, demonstrating its potential to obtain the “Carnot institute” certification within the next three years.

www.institutimagine.org