igbmc
institut de génétique et de biologie moléculaire et cellulaire

Structural Biology in Strasbourg, a tribute to Dino Moras

June, 12th 2019

Auditorium IGBMC

Speakers :

Pierre Chambon
IGBMC, Strasbourg Illkirch, France

Jean-Marc Egly
IGBMC, Strasbourg Illkirch, France

Jack Johnson
The Scripps Research Institute, La Jolla

Bruno Klaholz
IGBMC, Strasbourg Illkirch, France

Jean-Marie Lehn
ISIS, Strasbourg, France

Anders Liljas
CMPS, Lund University, Sweden

Jean-Louis Mandel
IGBMC, Strasbourg Illkirch, France

David Stuart
Oxford University, Oxford, UK

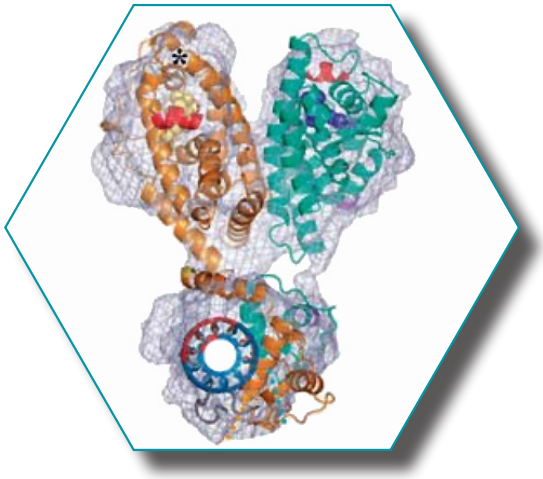
Akio Takenaka
Chiba Institute of Technology, Narashino, Japan

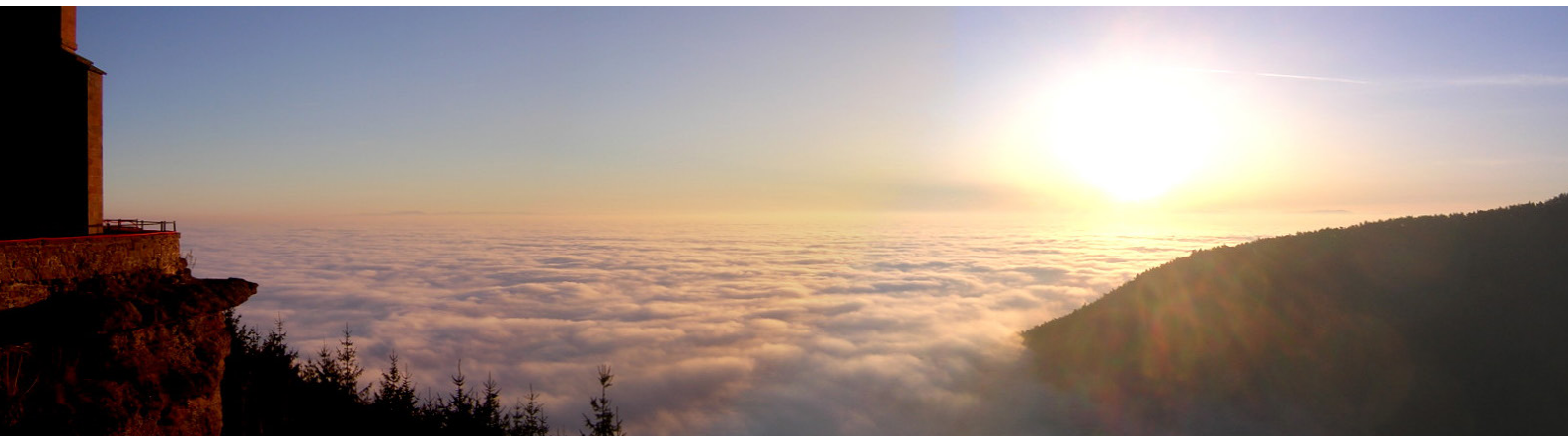
Eric Westhof
IBMC, Strasbourg, France

Shigeyuki Yokoyama
RIKEN, Yokohama City, Japan

Marat Yusupov
IGBMC, Strasbourg Illkirch, France

Giuseppe Zaccai
IBS, Grenoble, France





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cnrs Inserm Université de Strasbourg

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The Institute of Genetics and Molecular and Cellular Biology (IGBMC) organizes the symposium entitled "**Structural Biology in Strasbourg, a tribute to Dino Moras**" on Wednesday, June 12, 2019 to pay tribute to the scientific endeavor of Professor Dino MORAS, a leading researcher, recognized at the international level for its expertise in Structural Biology.

Member of the French Academy of Sciences and former director of the IGBMC, **Dino Moras** introduced **biological crystallography** in Strasbourg and promoted the development of **Structural Biology** in France. With his team, he devoted himself to understanding at the atomic level, the **transmission of genetic information from DNA into proteins**. He studied the aminoacylation reaction of the transfer RNAs, one of the key steps in the translation of genetic information and highlighted in particular, the partitioning of **aminoacyl-tRNA synthetases** into two classes and determined the first atomic structure of a complex between a transfer RNA and a class II enzyme. He also elucidated the mechanism of error correction in class II synthetases.

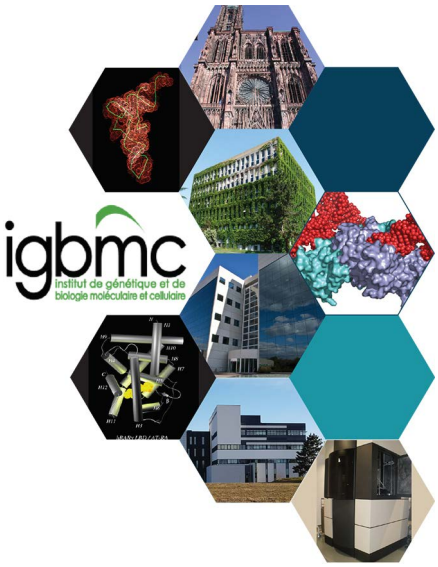
Later focusing on the structural study of **nuclear hormone receptors** and the regulation of transcription, Dino Moras determined the first **crystallographic structure** of the ligand binding domain of a nuclear receptor, extending this discovery to **receptors of retinoids** derived from vitamin A (RXR, RAR) and that of vitamin D (VDR). He also studied the structure of different functional states of the receptors to understand their regulation mechanisms. He analyzed the architecture of these biomolecules in solution and showed the **role of DNA in the spatial organization of functional complexes**.

On the forefront of innovative technological developments, he promoted the development of **cryo electron microscopy** in Strasbourg and anticipated the driving role of this method in current structural biology.

Guest speakers will illustrate the recent achievements of this imaging method for the understanding of molecular machines in biology.

This **international conference**, that will bring together scientific colleagues and former members of his laboratory, will be an opportunity to put into perspective the various advances as well as current and future structural biology challenges around the themes that have illuminated its career.

Access to presentations and discussions will be open to all scientists.



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Program

9:00-12:30 Morning session

09:00-09:30 – Introduction – Moderator: Patrick Schultz

Bertrand Séraphin	IGBMC Welcome
Catherine Florentz	University of Strasbourg Welcome
Jean-Louis Mandel	Introduction

09:30-12:30 - Conferences - Moderator: Eric Westhof

09:30-09:45	*In memoriam* Michael G. Rossmann	
09:45-10:15	A journey with Dino	**Jean-Marie Lehn**
10:15-10:30	The versatile GU pair	**Eric Westhof**
10:30-11:15	*Coffee break - supported by* NovAliX	
11:15-11:45	The molecular dance of life; realizing the vision	**David Stuart**
11:45-12:15	Biophysical Studies of an RNA Virus particle and its Maturation: Insights into an Elegantly Programmed Nano-machine	**Jack Johnson**

12:30-14:00 *Lunch Buffet*

14:00-17:30 Afternoon session

14:00-16:45 - Conferences - Moderator: Jean Marc Egly

14:00-14:15	TFIIH, côté structure !	**Jean Marc Egly**
14:15-14:35	Structural Basis for Strict Selection of the Cognate tRNAs and Amino Acids by Aminoacyl-tRNA Synthetases	**Shigeyuki Yokoyama**
14:35-14:55	Fascinated by the translation mechanism of genes	**Akio Takenaka**
14:55-15:10	Neutrons and the Synthetase-tRNA dance	**Giuseppe Zaccai**
15:10-15:25	The enigmatic ribosome stalk	**Anders Liljas**
15:25-16:00	*Coffee break*	
16:00-16:20	Towards integrated structural biology of transcription and translation complexes	**Bruno Klaholz**
16:20-16:40	Ribosome crystallography	**Marat Yusupov**

16:45-17:30 - Conclusions

Pierre Chambon

Dino Moras

17:30 *Cocktail reception*

NovAliX

Drug Discovery research services

Chemistry

Innovative collaborative models: flexibility and cost efficiency

Route scouting

Chemical process research

Biology

Single particle Cryo-EM platform

Protein X-Ray Crystallography services

Large biophysical platform:

NMR, Biacore-SPR, Native-MS, HDX, ITC, nano-DSF

Drug Discovery

Medicinal chemistry

Novel scaffolds

Natural fragments library

SAMPLE COLLECTION		SalivaSecure™ Nucleic Acid Collection Kit	Sample Collection
NUCLEIC ACID ISOLATION		chemagen™ Technology	Nucleic Acid Isolation
QUANTITATION OF NUCLEIC ACIDS		VICTOR Nivo® Plate Reader	High-throughput Quantification of Nucleic Acids
VISUAL QC & SIZING OF NUCLEIC ACIDS		LabChip® GX Touch™ Nucleic Acid Analyzer	Size & Quality Assesment
LIBRARY PREPARATION REAGENTS		NEXTFLEX® Library Prep Kits	Library prep for Illumina® & Ion Torrent™ Sequencing Platforms
AUTOMATED LIBRARY PREPARATION		Sciclone® G3 NGSx iQ™ Workstation	Automated High-throughput Sequencing Sample Preparation
		Sciclone® G3 NGSx Workstation	Automated Benchtop Moderate to High-throughput Sequencing Sample Preparation
		Zephyr® G3 NGS Workstation	
		JANUS® G3 NGS Express Workstation	Automated Benchtop Low to Moderate-throughput Sequencing Sample Preparation
LIBRARY QUALITY CONTROL		LabChip® GX Touch™ Nucleic Acid Analyzer	Quantitative Size QC for DNA & RNA

L'histoire d'INFORS SARL débute en 1990, cette filiale française de la société INFORS HT assure la distribution des bioréacteurs, incubateurs agités et logiciels de bioprocédés développés et produits à Bottmingen (Suisse).

La forte créativité d'INFORS HT se traduit par la conception d'équipements de laboratoire originaux et aboutis qui posent les bases des standards technologiques du moment.

L'équipe d'INFORS France sérieuse et compétente est là pour vous servir en tant que partenaire et continue de vous garantir un support de qualité assuré par un personnel interne qualifié.

L'écoute constante des besoins du marché et l'excellence des équipes de développement d'INFORS se traduisent par la mise sur le marché en 2019 du nouvel incubateur agité Multitron, appareil de sa classe le plus performant.

Coordonnées de la filiale française d' INFORS HT

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