

LE CENTRE DE BIOCHIMIE
STRUCTURALE
FÊTE SES

25
ans

The number '25' is rendered in a large, stylized font. The '2' is black with a colorful protein ribbon structure (purple, green, red) overlaid. The '5' is filled with a colorful mosaic pattern. The word 'ans' is written in a white, sans-serif font to the right of the '5'. The background is a solid blue color with white, abstract, swirling lines in the upper right and lower left corners.

PROGRAMME

24-25 Mai 2018

MONTPELLIER

CBS

The CBS logo consists of the letters 'CBS' in a bold, italicized, white sans-serif font. A white DNA double helix is positioned behind the letters, extending from the bottom right towards the top right.



Michel KOCHOYAN

25/05/1958 - 16/05/2016

Graduated from the Ecole Normale Supérieure, "agrégé" in Physics, Michel Kochoyan obtained his PhD in 1987 from the Biophysics department of Ecole Polytechnique, during which he characterized the highly dynamic nature of nucleic acid bases. After a postdoc in Prof. M. Weiss' team at Harvard, he has been recruited as a CNRS research fellow at Ecole Polytechnique and became one of the specialists in Nuclear Magnetic

Resonance applied to the study of both structure and dynamics of nucleic acids, including RNAs. In 1995, he returned to his native region to participate in the development of a new laboratory, the Center for Structural Biochemistry (CBS) in Montpellier, founded and led by Jean-Marc Lhoste. He took over as Director of the CBS in 1999. In 2002 he received the Silver Medal of the CNRS in Chemical Sciences. His iconoclastic way of directing the CBS left much room for individual initiative as well as great scientific freedom for young researchers. While simultaneously managing the construction of a new building and the move of the CBS, he was also the organizer of the largest event in Biophysics that took place in France, the IUPAB / EBSA / SFB congress which gathered more than 1200 researchers in Montpellier in August 2005.

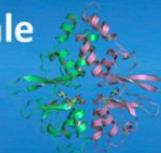
Then began a new career for Michel Kochoyan. He was appointed "Project Manager for Platforms" at the Ministry of Research, then Director of GIS-IBISA in 2007. Within these structures, he set up the structuring of research and service platforms that we know today, that he continued as Chairman of the CNRS committee "Very Large Equipment". Michel Kochoyan seemed perfectly at ease in this role of coordinator, thanks to his great knowledge of the world of French research and his actors, his curiosity and his natural interest for all forms of technologies, as well as his critical and demanding view, never slipping into an overly simplistic elitism.

Michel Kochoyan has left the image of a great actor and servant of research, full of humanity and kindness, and endowed with a sense of humor sharp and communicative. At the CBS, which he had never really left, regularly distilling anecdotes and valuable tips, he left a huge void for everyone he has known as a colleague, companion, or friend.

Centre de Biochimie Structurale

25th anniversary

May 24-25 2018 - Montpellier



Thursday, May 24th 2018

13:00-14:00 Welcoming participants

(Amphitêâtre Rabelais, New Faculty of Medicine)

14:00-17:20 TRIBUTE TO MICHEL KOCHOYAN *(New Faculty of Medicine)*

14:00-14:20 **Cathy Royer** (former CBS Director; RPI, USA)

14:20-15:30 Speeches by **Frédéric Dardel** (University Paris-Descartes), **Erick Dufourc** (CNRS, Paris), **Bruno Robert** (CEA, Saclay), **Joël Bockaert** (Montpellier)

15:30-16:10 **Coffee break**

16:10-17:20 **Tony Wilkinson** (York University, UK),
"Switching on a Phosphatase to Promote Cell Differentiation"

Herman van Tilbeurgh (University Paris-Saclay),
"The essential t6A tRNA modification in the three kingdoms of life"

Sylvie Rimsky (Collège de France, Paris) &
Stefan Arold (KAUST, KSA)
"H-NS: a multi-structured drama in 5 acts."

17:30-18:30 Visit of CBS platforms (group #1, #2 and #3)

19:30-23:00 BANQUET

(with invitation - Faculty of Medicine, historical center)

Animation by the group "Les Grandes Giges"

Traditional and world music

Friday, May 25th 2018

8:30-12:30 25 YEARS OF RESEARCH AT THE CBS

(New Faculty of Medicine)

8:30-9:00 Speeches by **Pierre-Emmanuel Milhiet** (CBS Director) and representative members of tutelary Institutio

9:00-9:40 **Michael Sattler** (Helmholtz Institute, Munich)
"Decoding regulatory protein-RNA interactions by combining NMR and integrative structural biology"

9:40-10:00 **Jean-Philippe Pin** (IGF, Montpellier)
"GPCR dynamics, what the glutamate receptors tell us"

10:00-10:30 « **My poster in 1 min** »

10:30-11:10 Coffee break/ Poster session

11:10-11:50 **John Schwabe** (University of Leicester, UK)
"The machinery of transcriptional repression... and resulting disease when things go wrong..."

11:50-12:10 **Guillaume Drin** (IPMC University, Nice)
"3SPW: a key milestone to reveal new lipids exchange routes in the cell"

12:10-12:30 **Marylène Mougel** (IRIM, Montpellier)
"Imaging the late steps in HIV-1 life cycle"

12:30-14:30 BUFFET (CBS Hall)

13:30- 14:20 **Visit of CBS platforms** (group #4 and #5)

14:30-18:30 25 YEARS OF RESEARCH AT THE CBS

(New Faculty of Medicine)

14:30-15:10 **Helen Saibil** (Birkbeck College, UK)
"Electron microscopy studies of protein aggregation and disaggregation"

15:10-15:30 **Daniel Levy** (Institut Curie, Paris)
"The secret story of in vitro reconstitution of the tetraspanin web at the CBS"

15:30-15:50 **Rachel Cerdan** (DIMNP, Montpellier)
"Structural and functional characterization of Plasmodium CTP:phosphocholine cytidyltransferase, a key enzyme of malaria lipid biosynthesis"

15:50-16:20 **« My poster in 1 min »**

16:20-17:00 Coffee break/ Poster session

17:00-17:40 **Valentina Emiliani** (University Paris-Descartes)
"Toward circuits optogenetics"

17:40-18:00 **Giacomo Cavalli** (IGH, Montpellier)
"The role of polycomb proteins and 3D genome organization in epigenetic regulation of development"

18:00-18:20 **Silvia Zorrilla** (CSIC, Madrid, Spain)
"Mechanisms of essential bacterial regulatory processes enlightened by fluorescence"

18:20-18:30 Concluding remarks

Posters

- #1 **A catch-bond drives stator mechanosensitivity in the bacterial flagellar motor.**
AL Nord, E Gachon, R Perrez-Carrasco, JA Nirody, A Barducci, RM Berry, F Pedaci
- #2 **The contribution of cytoskeleton in (spontaneous curvature)-driven poration of red blood cells.** L Dumas, C Braun-Breton, M Abkarian
- #3 **A novel approach to enable the structural and dynamics characterisation of glutamine homorepeats.** A Urbanek, A Morató, M Popovic, F Allemand, A Fournet, E Delaforge, S Delbecq, N Sibille, P Bernadó
- #4 **A coarse-grained modeling approach for investigating nuclear receptors regulation.**
R Bailly, M Paloni, A Barducci
- #5 **Accurate models of intrinsically disordered proteins using a structure-encoding coil database.** A Estana, P Bernado
- #6 **Adventurous motility of *Myxococcus xanthus* on the single cell and population level.**
S Rombouts, J-B Fiche, L Costa, P-E Milhiet, T Mignot, M Nöllmann
- #7 **An efficient cell-free strategy to produce stable huntingtin for structural studies.**
A Morató, A Urbanek, F Allemand, A Fournet, E Delaforge, S Delbecq, N Sibille, P Bernadó
- #8 **Cell free biosensors for cortisol and kynurenine testing: towards their use in psychiatric population.** I Conejero, J Bonnet
- #9 **Characterization of promoters dynamic range for Integrase expression in *E. coli*.**
M Camacho, A Zúñiga, S Guiziou, J Bonnet
- #10 **Engineering yeast-based biosensors.** M. Meunier, A. Zúñiga, J. Bonnet.
- #11 **Chromatin spatial organization at the intra-TAD level.** J Gurgo, D Cattoni, C Houbron, JB Fiche, O Messina, G Cavalli, F Bantignies, M Nollmann
- #12 **DNA Origami for molecular self-assembly.** N Aissaoui, A Mills, G Bellot
- #13 **FRET-AFM: A novel microscope combining single molecule fluorescence and interaction forces at nanoscale.** O. Saavedra, L. Costa, E. Margeat and P-E Milhiet
- #14 **High-resolution analysis of poly-proline homorepeats in huntingtin protein.** M Popovic, A Urbanek, A Morató, F Allemand, A Fournet, E Delaforge, S Delbecq, N Sibille, P Bernadó
- #15 **Imaging chromatin organization during *Drosophila* embryonic development using multiplex DNA labelling.** S Espinola, A Cardozo Gizzi, O Messina, F Berard, C Houbron, JB Fiche, M Lagha, D Cattoni, M Nöllmann
- #16 **Implementation of integrase-based logic circuits in living organisms.**
S Guiziou, A. Zúñiga, P Mayonove, F Ullinia, V Moreau, M Leclere, J Bonnet
- #17 **Improving ligand screening by exploiting structure ensembles and machine learning.**
M Schneider, J-L Pons, W Bourguet, G Labesse
- #18 **Synthetic receptor platform for the design of signal-transducing linkers in artificial membrane receptors.** HJ Chang, J Gracy, P Mayonove, L Ciandrini, M Cohen-Gonsaud, G Cambray, J Bonnet

- #19 Insights into substrate and inhibitor selectivity among human glucose transporters through comparative modeling and molecular docking.** [R Ferreira](#), JL Pons, G Labesse
- #20 Membrane remodelling during interphase nuclear pore complex assembly.** [A Vial](#), PE Milhiet, C Doucet
- #21 Multiscale molecular modeling of cellular condensates.** [M Paloni](#), R Bailly, A Barducci
- #22 Plasmid and chromosome segregation are coordinated.**
[B Guilhas](#), A Le Gall, JB Fiche, J Rech, JY Bouet, M Nöllmann
- #23 Self-assembly of nanostructures from ten thousand unique components.** [A Mills](#), LL Ong, Y Ke, P Yin, G Bellot
- #24 Single molecule measurements of *E. coli* transcription-termination factor Rho helicase, and its interaction with RNA polymerase.**
[RK Vishwakarma](#), A Nord, F Pedaci, M Boudvillain, E Margeat
- #25 3D Stimulated Emission Depletion Microscopy for Imaging in whole Organisms.**
[M Götz](#), A Le Gall, J-B Fiche, E Margeat, M Nöllmann
- #26 Structural characterization of vasopressin V2 receptor in complex with Gs protein by cryo-electron microscopy.** [J Bous](#), A Ancelin, J Lai Kee Him, H Orcel, R Healey, S Granier, B Mouillac, P Bron
- #27 Systematic optimization of cell-free transcription factor-based biosensors.**
[P Voyvodic](#), A Pandi, J-L Faulon, J Bonnet
- #28 Hemodynamic behavior of sickle cell red blood cells in glass capillaries: phenomenon of auto-margination.** [V Claveria](#), P Connes, L Lanotte,, C Wagner, M Abkarian
- #29 Chromosomal configuration studies on *Bacillus subtilis* cellular cycle.** [H Bononi](#), A Le Gall, M Nöllmann
- #30 Designing of new enzymes for biosynthesis of xenobiotic nucleotide triphosphates.**
[RM Rahimova](#), PA Kaminski, G Labesse
- #31 Recognition of the *Magnaporthe oryzae* effectors AVR-Pia and AVR1-CO39 by the decoy domain of the rice NLR immune receptor RGA5.**
[K de Guillen](#), S Cesari, L Guo, L Mammri, D Ortiz, J Liu, T Kroj, A Padilla
- #32 SOS response activation in *Escherichia coli* by Mrr restriction endonuclease.** [A Bourges](#), OE Torres, A Ghosh, W Tadesse, G Labesse, N Declerck, A Aertsen, C Royer
- #33 Structural study of the *Mycobacterium* RbpA protein: a master regulator of gene expression implicated in drug resistance.** [C Chevillard](#), J Lai Kee Him, A Ancelin, S Trapani, F Hoh, Z Morichaud, O Maskri, L Chaloin, JP Leonetti, K Brodolin, P Bron
- #34 Relationships between Rho and RNA Polymerase in living bacteria.** [C Clerté](#), O Manier, M Soussi, JB Fiche, M Boudvillain, L Bossi, N Figueroa-Bossi, E Margeat
- #35 Cryo Electron Microscopy study of the Caulimo-Mosaic Virus.** [A Ancelin](#), S Trapani, S Blanc, C Fallet, P Bron, F HoH, C Fallet, M Uzest, J Lai Kee Him
- #36 Elucidation of allosteric activation of LicT antiterminator as seen by NMR.** Y Yinshan, A Padilla, K de Guillen, L Mammri, J Gracy, N Declerck, [H Déméné](#)
- #37 Signalization of mu opioid receptor deciphered by liquid state NMR.** R Sounier, I Stayert, T Learemans, C Mas, A Manglik, B Kobilka, W Huang, [H Déméné](#), S Granier

Access

Information : 25ans.cbs.cnrs.fr

