

GRISBi

Groupement de Recherche Interdisciplinaire sur les Systèmes Biologiques

5th GRISBI Meeting 14th and 15th October 2013 at the Genopolys Amphitheater

(114 rue de la Cardonille, Montpellier - Campus IGH and IGF)

Program

Monday October 14th

- 14h00-14h20: Arrival14h20-14h30: Welcome
- Session: "Molecular Systems I"
 - o 14h30-15h20: Fernando MORENO HERRERO (CNB, CSIC, Madrid) Single molecule approaches to study double-stranded DNA break resection
 - 15h20-15h40: Camille PREVEL (CRBM and IBMM)
 Tools for detection and targeting CDK4/cyclin D application to lung cancer, melanoma and lymphoma
 - 15h40-16h00: Hussein NASRALLAH (CBS)
 High-Speed AFM study of the dynamics of GM1 nanodomains diffusing
 within supported lipid bilayers
 - o 16h00-16h20: Nathalie DECLERCK (CBS)

 Quantification and modeling of the stochastic activity of bacterial promoters at the single cell, single molecule level using fluorescence fluctuation microscopy
- 16h20-16h50: Coffee break at Genopolys
- Session: "Modeling approaches I"
 - 16h50-17h40: Gregory BATT (INRIA Paris-Rocquencourt)
 Cells driven by computers: long-term model predictive control of gene expression in yeast
 - 17h40-18h00: Partho SEN (DIMNP)
 Kinetic modelling of glycerophospholipid metabolism in Plasmodium
 knowlesi
 revealed crucial steps and mode of regulation.
 - o 18h00-18h20: Luca CIANDRINI (DIMNP-L2C)

 Quantifying gene expression at the level of translation
- 19h00-22h00: Dinner Buffet and Poster Session at CBS

Tuesday October 15th

- Session: "Modeling approaches II"
 - 9h00-9h50: Igor KULIC (Institut Charles Sadron, Strasbourg)
 Biofilament confotronics
 - o 9h50-10h10: Jean-Charles WALTER (L2C) Winding properties of polymers: a model for single bio-macromolecules?
 - o 10h10-10h30: John PALMERI (L2C) DNA under force
- 10h30-11h00: Coffee break at Genopolys
- Session: "Molecular Systems II"
 - o 11h00-11h20: Simon CABELLO-AGUILAR (IEM):

Polynucleotides slow translocation and discrimination through α -hemolysin inside a single track-etched nanopore designed by atomic layer deposition

- o 11h20-11h40: Linnéa OLOFSSON-FILION (CBS):
 - Specific regulation of transition rates between active and inactive states of the metabotropic glutamate receptor defines agonist efficacy
- 11h40-12h00: Sathish RAMAKRISHNAN (L2C)
 Mechanism of material specific peptides for optical biosensors
- o 12h00-12h20: Diego CATTONI (CBS)

 SpollIE mechanism of directional translocation involves target search coupled to

 sequence-dependent motor stimulation
- 12h20-14h00: Lunch Buffet and Poster Session at CBS
- Session: "Cellular Systems I"
 - o 14h00-14h50: Aurelien BANCAUD (LAAS, Toulouse)
 Conformation and dynamics of DNA in confined environments: cross-talk
 between chromosomes and polymers in nanofludic channels
 - 14h50-15h10: Antoine LE GALL (CBS)
 Architecture and dynamics of the SopABC partition system of the F-plasmid in E.coli
 - 15h10-15h30: Ouafa BENZINA (L2C)
 Changes induced by peripheral nerve injury in the morphology and nanomechanics of sensory neurons
- 15h30-16h00: Coffee break at Genopolys
- Session: "Cellular Systems II"
 - 16h00-16h20:Gladys MASSIERA (L2C)
 Malaria parasite preinvasion motility
 - o 16h20-16h40: Pierre-Yves COLLART DUTILLEUL (LBSN)

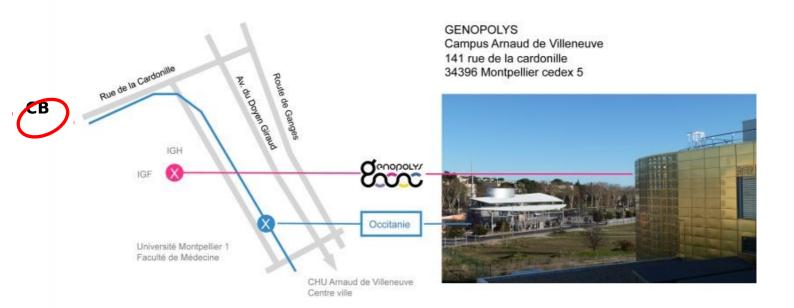
Adhesion and differentiation of mesenchymal stem cells of the dental pulp on porous silicon: optimization of pore size and surface functionalization

- 16h40-17h00: Christophe GOZE-BAC (L2C)
 NMR imaging: instrumentation and applications
- 17h00-17h05: Concluding Remarks and Greetings



GRISBi

Groupement de Recherche Interdisciplinaire sur les Systèmes Biologiques



Accès à GENOPOLYS:

Tram ligne 1, direction Mosson, arrêt Occitanie Bus ligne 6, direction Euromédecine, arrêt Occitanie

Coordonnées G.P.S. latitude: N 43° 38' 4" longitude: E 3° 50' 50"

DINNER, LUNCH and POSTER SESSIONS

will take place at the Centre de Biochimie Structurale - CBS,

near Genopolys Amphytheater