

18^{èmes}

Journées Cancéropôle Grand Sud-Ouest

November 30-December 02, 2022

Congress Center / La Grande-Motte



PROGRAM



www.canceropole-gso.org



Wednesday 30th November

12h30 – 13h45: Welcome lunch

13h45-14h00: Opening ceremony

Nadine HOUËDE, *Scientific director of Cancéropôle Grand Sud-Ouest*

14h00-14h40: OPENING SESSION

Chairs: Pierre CORDELIER & Claude SARDET

Lecture: Manuel SERRANO, *Institute for Research in Biomedicine (Barcelona, Spain)* - Understanding and manipulating cellular reprogramming in vivo

14h40-16h00: NEW INSIGHTS IN CELL DEATH CONTROL

Chairs: Pierre CORDELIER & Claude SARDET

Lecture: Pedro FRIEDMANN ANGELI, *Rudolf Virchow Zentrum, University of Würzburg (Germany)* - Metabolic control of Membrane Redox State: A Matter of Life and Death

- Alexandre DAVID, *Institute of Functional Genomics (IGF), Montpellier* - The aminoglycoside streptomycin triggers mitochondria-dependant ferroptotic cell death of tumor initiating cells

17h00-18h30: 3 parallel workshops

TRANSLATIONAL RESEARCH, FROM BIOLOGY TO THE CLINIC: FLASH POSTERS

Chairs: Marlène DUFRESNE & Fabrice LALLOUE



EMERGENT PROJECT

- Aurore DANIGO, *University of Limoges* - Blockade of CCK2R prevents the onset of vincristine-induced sensory neuropathy in mice

FLASH POSTERS

- Marine BRUCIAMACCHIE, *Montpellier Cancer Research Institute (IRCM), Montpellier* - Synergistic effect of FOLFIRINOX with an ATR inhibitor on pancreatic tumor cells and its microenvironment
- Boutaina CHANDOURI-FAIZE, *Control of cell Activation in Tumor Progression and Therapeutic Resistance, (CAPTuR) Limoges* - Cancer Stem Cell glycosylation markers: A promising biomarker for prognosis and disease progression
- Jean DESCARPENTRIE, *Bordeaux Institute of Oncology (BRIC), Bordeaux* - Role of Furin in Colon Cancer Stem Cells Phenotype in KRAS and BRAF-Mutated Colon Tumors
- Amandine DESETTE, *Poitiers University* - Biological and molecular characterization of cancer stem cells in brain metastases from colorectal cancer
- Pénélope DESROYS DU ROURE, *Montpellier Cancer Research Institute (IRCM), Montpellier* - Therapeutic efficiency of Fc-engineered human anti-cathepsin D antibody in mono and combotherapy in triple negative breast cancer
- Alexandra FAUVRE, *Montpellier Cancer Research Institute (IRCM), Montpellier* - Platinum-based chemotherapy induce inflammation via a non-canonical STING pathway independent on cGAS and interferon production
- Alexia FRANCOIS, *Bordeaux Institute of Oncology (BRIC), Bordeaux* - Repression of protein maturation inhibits PD-1 expression and enhances tumor clearance and TILS : virtual ligand screening and drug repurposing approach
- Elsa FRISTOT, *Structural Biology Center (CBS), Montpellier* - Programming lactic acid bacteria for cancer therapy
- Tinhinan LAHLOU, *Institute for Functionals Genomics (IGF), Montpellier* - Unravelling the role of early dissemination in colorectal cancer
- Chloé PORCHERON, *Bordeaux Institute of Oncology (BRIC), Bordeaux* - Sensitization of pancreatic cancer to radiotherapy and chemotherapy by proprotein convertase inhibition
- Zeinab TARHINI, *Control of cell Activation in Tumor Progression and Therapeutic Resistance (CAPTuR), Limoges* - The Effect of Benzodiazepine and Benzodiazepine-related Drugs on Survival after Surgery for Colorectal Cancer
- Marie BOUTAUD, *Control of cell Activation in Tumor Progression and Therapeutic Resistance (CAPTuR), Limoges* - Evaluation of a Metformin treatment on CRC cell lines and on a patients' cohort exhibiting different stages



16h00 – 17h00: Poster session & Coffee break

17h00-18h30: 3 parallel workshops

NUCLEAR BODIES & PHASE SEPARATION IN CANCER



Chair: Guillaume BOSSIS and Fabian ERDEL

Lecture: **Valérie LALLEMAND-BREITENBACH**, *Centre Interdisciplinaire de Recherche en Biologie du Collège de France, Paris - PML bodies, from leukemia cure to biophysics insight*

- **Fernando MUZZOPAPPA**, *Centre for Integrative Biology of Toulouse (CBI), Toulouse* - Identifying phase separation in nuclear compartmentalization
- **Jihane BASBOUS**, *Institute of Human Genetics (IGH), Montpellier* - TopBP1 condensation: a targetable molecular switch in the ATR signaling pathway
- **Liliana KRASINSKA**, *Institute of Molecular Genetics of Montpellier (IGMM), Montpellier* - The cell cycle as a phase separation cycle controlled by protein phosphorylation

HEALTH TECHNOLOGIES



Chair: Anne-Marie GUE

IMAGING CANCER

- **Elisabeth BELLARD**, *Institute of Pharmacology and Structural Biology (IPBS), Toulouse* - How intravital microscopy helps us to study cancer events
- **Dounia EL HAMRANI**, *IHU Liryc, Bordeaux* - Combination of MRI-guided HIFU, bioluminescence imaging and transgenic mouse model to assess efficiency of noninvasive thermal therapies for solid tumors and their microenvironments

4 selected talks for “Ma techno en 180 secondes” (flash-posters):

- **Chloé ROYET**, *Institut des “Biomolécules Max Mousseron” (IBMM), Montpellier* - Fluorescent Peptide Biosensors Reporters of Kinase Activities: profiling signatures in human tumour biopsies through a multiplex approach for cancer diagnostics
- **Chloé BESSIERE**, *Cancer Research Center of Toulouse (CRCT), Toulouse* - TranSipedia: a novel framework for large scale RNAseq data analysis with applications in cancer from research to diagnosis
- **Pawan KUMAR**, *Laboratory of Pathogen Host Interactions (LPHI), Montpellier* - Estimating spatial distribution of oxygen and hypoxia in tumor microenvironment: a mechanistic approach
- **Florian COGONI**, *Informatics Research Institute of Toulouse (IRIT), Toulouse* - Involving the biologists in the design of in silico models

18h30 – 19h30: Icebreaker & Poster session

Thursday 1st December

08h00 – 08h30: Welcome coffee

08h30-10h00: HETEROGENEITY & SINGLE CELL

Chairs: Julie PANNEQUIN & Mary POUPOT

Lecture: Céline VALLOT, Curie Institute (Paris) - Epigenomic evolution of breast cancers in response to treatment

- Emeline BOET, Cancer Research Center of Toulouse (CRCT), Toulouse - Drug persisters arise from transcriptionally and mitochondrially distinct stem cell subpopulations in acute myeloid leukemia
- Julie GIRAUD, University of Bordeaux, CNRS, ImmunoConcEpT, UMR 5164, Bordeaux - TREM1+ CD163+ myeloid cells are potent immunosuppressive cells and associate with poor survival in human liver cancer
- Ghita CHABAB, Montpellier Cancer Research Institute (IRCM), Montpellier - Regulatory gamma delta T cells in solid cancer : characterization, role and ecosystem
- Juan-Pablo CERAPIO-ARROYO, Cancer Research Center of Toulouse (CRCT), Toulouse - Single-cell transcriptomics for a better understanding of tumor infiltrating heterogeneity

10h00 – 11h00: Poster session & Coffee break

11h00-12h45: INNOVATIONS IN INTRACELLULAR TARGETTING

Chairs: Sébastien BRITTON & Anthony MARTIN

Lecture: Alessandro CIULLI, School of Life Sciences, University of Dundee (United Kingdom) - Targeted Protein Degradation as a Cancer Therapeutic Modality

- Eric TRINQUET, Perkin Elmer (Codolet) - The use of the HTRF and AlphaLISA technologies to support compounds identification and characterization in Targeted-Protein Degradation
- Krzysztof ROGOWSKI, Institute of Human Genetics (IGH), Montpellier - Targeting microtubule detyrosination activity of VASOHIBINS as a new therapeutic approach for cancer and neurodegeneration
- Francesco CALZAFERRI, Institut des Biomolécules Max Mousseron (IBMM), Montpellier - Novel strategies to study epigenetic mechanisms in cancer
- Nicolas BERY, Cancer Research Center of Toulouse (CRCT), Toulouse - Targeting hard-to-drug oncoproteins with intracellular antibodies

SESSIONS



14h30-16h00 : NOUVEAUX DISPOSITIFS NUMERIQUES DE PREVENTION

Modération : Cyrille DELPIERRE

- Florence COUSSON-GELIE, Centre Epidaure et laboratoire Epsilon, Montpellier - Epidaure Market, évaluation de l'efficacité et de la transférabilité d'une intervention en milieu scolaire visant à améliorer les choix alimentaires équilibrés et durables chez des collégiens
- Claire LAFAY-CHEBASSIER, Université de Poitiers et CHU de Poitiers - Etudes pilotes multi-méthodes évaluant l'intérêt d'une intervention musicale associée à un substitut nicotinique versus substitut nicotinique seul sur le craving lié au sevrage tabagique
- Stéphane GUETIN, Music Care - Le soin par la musique : Music Care© un dispositif médical innovant dans le domaine de la prévention

17h00-18h30 : NOUVEAUX DISPOSITIFS NUMERIQUES DE DEPISTAGE

Modération : Florence SORDES

- Marie POISEUIL, Bordeaux Population Health - Dépist&vous
- Nadim FARES, CHU Toulouse - Predict-O: Projet d'Evaluation personnalisée du risque et Dépistage Individualisé du Cancer - Toulouse



12h45 – 14h00: Lunch break

14h00-14h30: AFTERNOON OPENING SESSION

Chair: Hervé SEITZ

Lecture: **Gregory HANNON**, *Cambridge Institute, Cancer Research United Kingdom* - **FOXC2 promotes vascular mimicry and resistance to anti-angiogenic therapy**

14h30-16h00: 3 parallel workshops

GENOME DYNAMICS AND CANCER



Chairs: Jean-Christophe ANDRAU & Eric JULIEN

- **Pierre CORDELIER**, *Cancer Research Center of Toulouse (CRCT), Toulouse* - Cytidine deaminase controls replicative stress and protects cancer cells from DNA-targeting drugs
- **Bérengère PRADET-BALADE**, *Centre for Biochemical and Macromolecular Research (CRBM), Montpellier* - Targeting RUVBL1/2 chaperones in colorectal cancer
- **Cyril ESNAULT**, *Institute of Molecular Genetics of Montpellier (IGMM), Montpellier* - Mechanical regulation of bivalent gene expression via the nuclear lamina
- **Claire VARGAS**, *Cancer Research Center of Toulouse (CRCT), Toulouse* - The E3 ubiquitin ligase TRIP12 induces the formation of heterochromatin altering gene expression and DNA damage repair independently of its catalytic activity

Lecture: **Gregory HANNON**, *Cambridge Institute, Cancer Research United Kingdom* - **A small RNA-based innate immune system guards the integrity of germ cell genomes**

NANOCANCER, NEW DEVICES FOR THERAPY



Chairs: Véronique GIGOUX & Olivier SANDRE

Lecture: **Géraldine LE DUC**, *NH TherAguiX (Meylan)* - **From workbench to Phase 2 clinical trials : development of the nanodrug candidate AGuIX - history and perspectives**

- **Yannick CREMILLIEUX**, *Institute of Molecular Sciences (ISM), Bordeaux* - Where, when et how many: MRI for theranostic AguiX nanoparticles
- **Marie MORILLE**, *Institute Charles Gerhardt (ICGM), Montpellier* - Pharmaceutical development to enhance small Extracellular Vesicles (sEV) therapeutic potential
- **Loubna LAIB**, *Cancer Research Center of Toulouse (CRCT), Toulouse* - Targeted thermal or mechanical nanotherapy of pancreatic adenocarcinoma

16h00 – 17h00: Coffee break

17h00-18h30: AGING & STEM CELLS

Chairs: Eric JULIEN

Lecture: **Clemens SCHMITT**, *Johannes Kepler University (Linz, Austria), Max-Delbrück-Center for Molecular Medicine and Molecular Cancer Research Center (MKFZ), Charité - Universitätsmedizin (Berlin, Germany)* - **Cancerstemflammaging – state/fate impact of cancer cell senescence**

- **Jean-Marc LEMAITRE**, *Institute for Regenerative Medicine and Biotherapy (IRMB), Montpellier* - A single short reprogramming early in life improves fitness and increases lifespan in old age

Lecture: **Maël LEMOINE**, *ImmunoConcEpt (Bordeaux)* - Stem cells, aging & cancer across species

18h30 – 19h15: PRESTIGE CONFERENCE

Chair: Maël LEMOINE

Lecture: **Frédéric THOMAS**, *Infectious diseases and vectors: ecology, genetics, evolution and control (MIVEGEC, UMR 5290), Montpellier* - **Evolution & Cancer**

Friday 2nd December

08h00 – 08h30: Welcome coffee

08h30-10h00: 3 parallel workshops

CELL SIGNALING & THERAPEUTIC TARGETS



Chairs: Violaine MOREAU & Guillaume BOSSIS

Lecture: **Célio POUPONNOT**, Curie Institute (Orsay) - EIF2A represents the central node of UPR-mediated cell death in high-risk medulloblastoma

- **Olivier CALVAYRAC**, Cancer Research Center of Toulouse (CRCT), Toulouse - Farnesyltransferase inhibition overcomes the adaptive resistance to targeted therapy in lung cancer
- **Thomas BESSEDE**, Montpellier Cancer Research Institute (IRCM), Montpellier - Sensitizing the tumor microenvironment to immune checkpoint therapy through monoclonal antibody-based therapeutic combinations in pancreatic cancer
- **Loélia BABIN**, Cancer Research Center of Toulouse (CRCT), Toulouse - De novo generation of the NPM-ALK fusion recapitulates the pleiotropic phenotypes of ALK+ ALCL pathogenesis and reveals the ROR2 receptor as target for tumor cells
- **Frédéric LAGARRIGUE**, Institute of Pharmacology and Structural Biology (IPBS), Toulouse - Towards new approaches to target integrins in immune cells: the case of tumor-associated macrophages

RADIOTHERAPY & RESISTANCE



Chairs: Sandrine DABERNAT & Véronique VENDRELY

Lecture: **Jean BOURHIS**, Lausanne University Hospital and Lausanne University, (Switzerland) – Flash radiotherapy

- **Véronique VENDRELY**, Bordeaux Institute of Oncology (BRIC), Bordeaux - Radiosensitization of digestive tumors by bioactive food components
- **Jean-Pierre POUGET**, Montpellier Cancer Research Institute (IRCM), Montpellier - Role of extracellular vesicles during bystander cytotoxicity and bystander immunity of Targeted radionuclide therapy
- **Elizabeth COHEN-JONATHAN MOYAL**, Cancer Research Center of Toulouse (CRCT), Toulouse - Glioblastoma heterogeneity : a model for resistance

SESSIONS



08h30-10h30 : NOUVEAUX DISPOSITIFS NUMERIQUES DE PRISE EN CHARGE

Modération : Sylviane DARQUY

- **Clément SICARD**, Thess Corporate - Thess : Dispositif de sécurisation et délivrance des traitements oraux
- **Rémi IZOULET**, CHU Toulouse - Un robot d'assistance sociale auprès d'enfants hospitalisés en isolement protecteur
- **Hélène BUCHE**, Laboratoire Epsilon, Montpellier - La réalité virtuelle : un outil de soutien pertinent dans la relation de soins en chimiothérapie ?



10h00 – 10h45: Coffee break

10h45-11h15: INSTITUT NATIONAL DU CANCER CONFERENCE

Bruno QUESNEL, Directeur du pôle recherche et innovation de l'Institut national du cancer et directeur de l'institut multi-organismes d'Aviesan

11h15-13h00: UROLOGICAL CANCERS

Chair: Nadine HOUEDE

Lecture: **Andrea ALIMONTI**, ETH Zürich (Switzerland) - Novel drivers of castration-resistant prostate cancer

- **Guilhem ROUBAUD**, Bergonié Institute, Bordeaux - Prostate cancers and immunotherapies : hot or cold tumors?
- **Philippe POURQUIER**, Cancer Research Institute of Montpellier (IRCM), Montpellier - The role of PXR (Pregnane X receptor) and drug metabolism in the resistance of castration-resistant prostate cancers to kinase inhibitors
- **Delphine MILHAS**, Institute of Pharmacology and Structural Biology (IPBS), Toulouse - Collagen remodeling leads to inflammation-free expansion of periprostatic adipose tissue and promotes prostate cancer progression
- **Fatima ALHOURANI**, Montpellier Cancer Research Institute (IRCM), Montpellier - Molecular characterization of the combined chemotherapy of SUV4-20h epigenetic enzymes inhibitor with Topoisomerase II poisons in metastatic prostate cancer

13h00-13h15: POSTER AWARDS SESSION – CLOSING CEREMONY

13h15 – 14h00: Lunch



L'équipe du Cancéropôle Grand Sud-Ouest remercie vivement

- les conférenciers et les modérateurs des sessions,
- les coordonnateurs et les membres des Comités de Pilotage des Axes,
- les membres du Comité de Pilotage Scientifique,

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18^{èmes} Journées et la qualité scientifique des présentations.

18^{èmes}

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Ces journées bénéficient du soutien de :



Pierre Fabre

