

19th

Annual Meeting Cancéropôle Grand Sud-Ouest

November 22-24, 2023

Congress Center / Arcachon



PROGRAM



www.canceropole-gso.org



Wednesday 22nd November

12h30 – 13h45: Welcome lunch

13h45-14h00: Opening ceremony

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

14h00-15h45: SPATIAL BIOLOGY

Chairs: Julien FAGET & Frédéric LOPEZ

Lecture: Charles-Antoine DUTERTRE, *Gustave Roussy Institute, Villejuif* - **Heterogeneity and spatial organisation of Tumour-Associated Mononuclear Phagocytes**

- Hamid-Reza REZVANI, *Bordeaux Institute of Oncology (BRIC), Bordeaux* - Single-cell analysis of skin pre-cancerous and cancerous lesions reveals differences in their metabolic profile and immune cell types
- Abdelmounim ESSABAR, *Toulouse Cancer Research Center (CRCT), Toulouse* - Tools for analysing spatial data in the context of immuno-oncology

15h45-16h05: CANCER RESEARCH IN POITIERS AT A GLANCE

Aubin PENNA, *Laboratory Channels and Connexins in Cancer and Cell Stemness (4CS), Poitiers*

16h05 – 17h15: Poster session & Coffee break

17h15-18h45: 3 parallel workshops

THERAPEUTIC INNOVATION AND BIOMARKERS: FLASH POSTERS

Chairs: Fabrice LALLOUE & Véronique GIGOUX

- Diego BARBA, *Montpellier Cancer Research Institute (IRCM), Montpellier* - Development of pH-modulated antibodies, that recognize immune system checkpoints.
- Marie BOUTAUD, *Control of cell Activation in Tumor Progression and Therapeutic Resistance, (CAPTuR) Limoges* - Metformin Treatment Reduces CRC Aggressiveness in a Glucose-Independent Manner: An In Vitro and Ex Vivo Study
- David BRACQUEMOND, *Montpellier Cancer Research Institute (IRCM), Montpellier* - Overcoming osimertinib resistance in EGFR-driven-MET amplified lung cancer
- Lydia DIF, *Bordeaux Institute of Oncology (BRIC), Bordeaux* - Fascin-1 inhibitors decrease hepatoblastoma cells tumorigenicity via YAP 1
- Isabel GALEANO-OTERO, *Bordeaux Institute of Oncology (BRIC), Bordeaux* - Evaluation of tumor heterogeneity in colorectal cancer and its implication in metastatic process
- Gaëlle GUILLON, *Montpellier Cancer Research Institute (IRCM), Montpellier* - Targeting the TNBC tumour microenvironment with Exatecan-conjugated anti-Cathepsin-D ADC
- Leila KHAJAVI, *Cancer Research Center of Toulouse (CRCT), Toulouse* - Transcriptomic Profiling of the Non-Small Cell Lung Cancer (NSCLC) Microenvironment Identifies a Duality in Natural Killer Cell Behavior
- Fang LIU, *Montpellier Cancer Research Institute (IRCM), Montpellier* - Improving the TA99 immunomodulatory effect with combination therapies using a new controlled delivery technology in oncology
- Nicolas MATTEI, *Pharmacology and Structural Biology Institute (IPBS), Toulouse* - Study of irreversible electroporation-induced cell death in spheroids derived from a murine hepatoma cell line
- Alexia MIRANDOLA, *Montpellier Cancer Research Institute (IRCM), Montpellier* - Persistence of netosis in resected colon cancer patient and impact on circulating DNA applications and post-surgery colon cancer management care
- Léa RIMAILHO, *Cancer Research Center of Toulouse (CRCT), Toulouse* - Role of CD39 on $\gamma\delta$ T cells as a positive marker of anti-CD20-induced ADCC of non-Hodgkins lymphoma cells
- Mathis TRIQUARD, *PROgression et Dissémination CÉRébrales des cellules Tumorales (PRODICET) Poitiers University, Poitiers* - Role of Exosomes in the Brain Dissemination of Tumor Cells derived from Breast Cancer (Locoregional and Distant)





GENOME EDITING & CRISP'R SCREEN

Chair: Guillaume BOSSIS & Eric JULIEN



Lecture: **Irmela JEREMIAS**, *Helmholtz Zentrum München, Munich (Germany)* - Characterizing drug targets using CRISPR/Cas9 screens in PDX leukemia models *in vivo*

- **Aurélie BEDEL**, *BoRdeaux Institute of Oncology (BRIC), Bordeaux* - CRISPR-Cas9 side effects: risk of genomic instability
- **Dominique HELMLINGER**, *Centre for Biochemical and Macromolecular Research (CRBM), Montpellier* - New insights into transcription co-activator functions from conditional perturbations
- **Samuel AMINTAS**, *BoRdeaux Institute of Oncology (BRIC), Bordeaux* - The CRISPR/CAS Technology for the detection of rare KRAS mutant alleles

HEALTH TECHNOLOGIES : FLASH POSTERS

Chairs: Audrey FERRAND & Bertrand LIAGRE



- **Israa AL JAMAL**, *Institut de Chimie des Milieux et Matériaux de Poitiers (IC2MP), Poitiers* - Study of cellular communication processes induced by artificial cell-cell interactions for the development of novel cell-based therapy
- **Chloé BAZILE**, *Cancer Research Center of Toulouse (CRCT), Toulouse* - Therapeutic targeting of pro-tumoral Tumor-Associated Macrophage by vectorized anti-folate receptor beta magnetic nanoparticles
- **Manon PORTA**, *Littoral, ENvironment and Societies (LIENSs), La Rochelle* - Bioactive λ -Carrageenan oligosaccharides coated ferrite nanoparticles as potential anticancer nanodrugs
- **Marcelo HURTADO**, *Cancer Research Center of Toulouse (CRCT), Toulouse* - Transcriptional regulatory networks unravel cell states from immune cell type deconvolution and uncovers cell niches predictive of cancer progression
- **Aurélien MAZET**, *Laboratory for the Bioengineering of Tissues (BioTis), Bordeaux* - Bioprinting early-stage pancreatic cancer models: a new tool to decipher tumor initiation mechanisms
- **Camille DOUILLET**, *Photonics, Numerical and Nanosciences Laboratory (LP2N), Bordeaux* - Gut-in-caps: exploring the biophysical cues that drive self-organization of Caco2 cells into patho-physiological models of the intestinal epithelium
- **Malvina MARKU**, *Cancer Research Center of Toulouse (CRCT), Toulouse* - From gene regulatory network inference to dynamical modelling: revealing cell behaviour through network modelling in Chronic Lymphocytic

18h45 – 20h00: Icebreaker & Poster session

Thursday 23rd November

08h30 – 09h00: Welcome coffee

09h00-11h00: CHEMISTRY & CANCER

Chairs: Bertrand LIAGRE & Philippe POURQUIER

Lecture: **Dario NERI**, *ETH, Zurich (Switzerland)* - **From encoded combinatorial libraries to clinical-stage targeted therapeutics**

- **Marie LOPEZ**, *ETaC, Toulouse and Institut des Biomolécules Max Mousseron (IBMM), Montpellier* - GRP94 chaperone identified as a new target of adenosine-cytosine bisubstrate analogues in cancer cells using affinity based chemical probes
- **Justine JOURNAUX**, *Toulouse Cancer Research Center (CRCT), Toulouse* - Thermal and mechanical stresses generated by magnetic nanoparticles upon magnetic field exposure induce immunogenic cell death in pancreatic adenocarcinoma
- **David LEGER**, *Laboratoire des Agroressources, Biomolécules et Chimie pour l'Innovation en Santé (LABCIS), Limoges* - Effects of metalation on the PDT activity of arene ruthenium porphyrin-based photosensitizers on prostate cancer
- **Sébastien BRITTON**, *Pharmacology and Structural Biology Institute (IPBS), Toulouse* - Deciphering and exploiting the mechanism of action of a large family of natural and bioinspired cytotoxic

11h00 – 12h00: Poster session & Coffee break

12h15 – 14h00: Lunch break

14h00-16h00: 2 parallel workshops

CELL SIGNALING, MICROENVIRONMENT AND TARGETING

Chairs: Violaine MOREAU & Antonio MARAVER

Lecture: **Roger GOMIS**, *Institute for Research in Biomedicine (Barcelona, Spain)* - **ER+ breast cancer metastasis cell fate mapping**

- **Benoît THIBAULT**, *Toulouse Cancer Research Center (CRCT), Toulouse* - Inflammation-induced epithelial plasticity can be bypassed through Vps34 inactivation to limit pancreatic cancer initiation
- **Jennifer FALCONI**, *Institut de Recherche en Cancérologie de Montpellier (IRCM), Montpellier* - Tumor-derived cytokine, Upd3, promotes gut atrophy in a *Drosophila* larvae model of cachexia
- **Thomas BOYER**, *Immunoconcept, Bordeaux* - Immunosuppressive Myeloid Cells foster Cancer Stem Cell (CSC) emergence through TGF- β
- **Lucile ROUYER**, *Bordeaux Institute of Oncology (BRIC), Bordeaux* - Cancer cells transfer invasive properties through tracks
- **Gilles FAVRE**, *Toulouse Cancer Research Center (CRCT), Toulouse* - In silico-based strategy for the discovery of direct small molecule inhibitors of mutant RAS





GENOME DYNAMICS & EXPRESSION



Chairs: Jean-Christophe ANDRAU & Derek McCUSKER

Lecture: **Francis BARR**, Trinity College & University of Oxford, United Kingdom - **Mitotic mechanisms generating and sensing aneuploidy**

- **Frédéric BECKOUET**, Center for Integrative Biology (CBI), Toulouse - Mechanisms regulating cohesin dependent loops
- **Nezih KARASU**, Institute of Molecular Genetics of Montpellier (IGMM), Montpellier - G-quadruplexes involvement in mammalian genome organization and stability
- **Sophie PERON**, Control of the Immune B Response and Lymphoproliferations (CRIBL), Limoges - IgH 3'RR recombination uncovers a non-germinal center imprint and c-MYC-dependent IgH rearrangement in unmutated chronic lymphocytic leukemia
- **Domitille CHALOPIN-FILLOT**, Institute of Cellular Biochemistry and Genetics (IBGC), Bordeaux - Exploiting the dark matter of single-cell transcriptomes to encompass suppressive myeloid cell differentiation in hepatocellular carcinoma

16h00 – 17h00: Coffee break

17h00-18h30: ENVIRONMENTAL STRESS

Chair: Cyrille DELPIERRE

Lecture: **Marc CHADEAU-HYAM**, Imperial College, London (United Kingdom) - **Exposome Analytics: Definitions, Challenges and Applications**

18h30 – 19h15: PRESTIGE CONFERENCE

Chairs: Eric JULIEN & Marc PIRCHER

Lecture: **Jacques ARNOULD**, French Spatial Agency (Paris) – **Is the patient an extraterrestrial ?**

Friday 24th November

08h00 – 08h30: Welcome coffee

08h30-10h00: 2 parallel workshops

IMMUNOTHERAPY

Chairs: Bruno SEGUI & Abdel-Majid KHATIB

Lecture: **Joan SEOANE**, Vall d'Hebron Institute of Oncology (VHIO) & Universitat Autònoma de Barcelona (UAB), Barcelona, Spain - **Understanding the impact of the tumor microenvironment on immunotherapies**

- **Nicolas LARMONIER**, Immunoconcept, Bordeaux - The multifaceted tumor-promoting functions of myeloid cells
- **Ludovic MARTINET**, Toulouse Cancer Research Center (CRCT), Toulouse - T cell Immunotherapy: thinking beyond inhibitory receptors
- **Camille DANTZER**, Bordeaux Institute of Oncology (BRIC), Bordeaux - Repression of exosome secretion by mutated β -catenin contributes to immune escape in hepatocellular carcinoma



10h00 – 10h45: Coffee break

10h45-12h30: ALTERNATIVE MODELS TO ANIMAL TESTING

Chairs: Audrey FERRAND & Gaëlle RECHER

Lecture: **Agathe FIGAROL**, FEMTO-ST (Besançon) - **Development of a physiological microsystem, from a blood-brain barrier-on-chip to a vascularized glioblastoma-on-chip**

- **Léa MAGNE**, Institut de Recherche en Santé Digestive (IRSD), Toulouse - Mechanical interplays between mitotic spindle orientation of colonic epithelial cells and extracellular matrix deformations
- **Thomas BESSEDE**, Institut de Recherche en Cancérologie de Montpellier (IRCM), Montpellier - Sensitizing the PDAC tumor microenvironment to immune checkpoint therapies: characterization of a PDAC 3D model to decipher immune infiltration
- **Margot MACHU**, Institut de Recherche en Cancérologie de Montpellier (IRCM), Montpellier - Combination of immune checkpoint inhibitors with chemotherapies in new biological models of upper tract urothelial carcinomas
- **Alexia DE CARO**, Institute of Pharmacology and Structural Biology (IPBS), Toulouse - Anti-tumor efficacy of new high-frequency electrical protocols in a 3D in vitro colorectal cancer model
- **Joudi EL MIR**, Bordeaux Institute of Oncology (BRIC), Bordeaux - *Xenopus laevis* is an attractive model for studying the pigmentary abnormalities in xeroderma pigmentosum type C

12h30-13h00: POSTER AWARDS SESSION – CLOSING CEREMONY

SESSIONS



08h30-10h00 : PATIENTS FRAGILES OU PATIENTS VULNERABLES (1)

Modération : Brigitte TRETARRE et Cyrille DELPIERRE

Conférence : **Guy LAUNOY**, Université de Caen Normandie – **Inégalités sociales en cancérologie. Approches quantitatives pour éclairer la politique publique**

- **Cyrille DELPIERRE**, Centre d'Epidémiologie et de Recherche en Santé des Populations, Toulouse - Accès à l'oncofertilité des femmes atteintes de cancer du sein : de l'observation à l'intervention
- **Isabelle INGRAND**, CHU, Poitiers

10h45-12h30 : PATIENTS FRAGILES OU PATIENTS VULNERABLES (2)

Modération : Brigitte TRETARRE et Cyrille DELPIERRE

Conférence : **Daniel SATGE**, Institut Debrest d'Epidémiologie et de Santé Publique & OncoDEFI (Montpellier) – **Cancers des personnes avec déficience intellectuelle**

- **Brigitte TRETARRE**, Registre des Tumeurs de l'Hérault, Montpellier - Etude CENTRUM: Impact de la centralisation de la prise en charge des cancers du rectum



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 copilotes et les membres des Bureaux des Groupes de Travail,
- les membres du Comité de Pilotage Scientifique,

pour leur participation et leur implication dans l'élaboration du programme de ces
19^{èmes} Journées et la qualité scientifique des présentations.

LES FORMATIONS DU CANCERPOLE GRAND SUD-OUEST

Prochaine édition 2024

DEVELOPPEMENT D'UN MEDICAMENT

Organisée en alternant cours et ateliers, cette formation a pour objectif de former ensemble des jeunes médecins (internes, chefs de clinique), pharmaciens (internes) et chercheurs (fin de thèse, post-doctorants et titulaires) sur les différents aspects du développement d'un médicament en cancérologie. Elle bénéficie du soutien institutionnel de plusieurs entreprises du médicament.

PRECEDENTES EDITIONS :

- 2015 : Développement d'un médicament, de la biologie à la clinique
- 2017 : Développement d'un médicament : les anticorps thérapeutiques et l'immunothérapie



WORKSHOP JEUNES CHERCHEURS

Le Workshop Jeunes Chercheurs a objectif d'améliorer la qualité des travaux et des publications de jeunes chercheurs. Il réunit des experts de renom et des jeunes chercheurs (post-doctorants seniors et jeunes titulaires) sélectionnés sur leurs travaux, en format résidentiel, afin de favoriser les échanges et de permettre aux jeunes chercheurs de bénéficier d'un coaching de qualité.

PRECEDENTES EDITIONS :

- 2014 : Genomic instability in Cancer
- 2015 : Signaling in Cancer
- 2017 : Nanomedicine in Cancer
- 2017 : Genome dynamics and Cancer
- 2018 : Signaling in Cancer
- 2020 : BioFabrication and Cancer
- 2022 : Genome dynamics and Cancer
- 2023 : Signaling, Microenvironment and Targeting

Prochaine édition : Nanomedicine in Cancer, du 7 au 8 décembre 2023 à Carcassonne

LES PROGRAMMES DE SOUTIEN, SOUMISSION EN LIGNE AU FIL DE L'EAU



MOBILITE TECHNOLOGIQUE

OBJECTIF Acquérir une technologie originale, qu'elle soit ou non déjà présente dans le GSO.

SEJOUR 3 mois maximum **FINANCEMENT** 4 k€ maximum

ORGANISATION DE SEMINAIRES



CRITERES Séminaires organisés sur le territoire du GSO ou par des chercheurs du GSO et ouverts à l'ensemble de la communauté scientifique du GSO

FINANCEMENT 2 k€ maximum sous forme de subvention, de prise en charge d'un conférencier ou d'inscriptions d'étudiants et de jeunes chercheurs



COLLABORATION TRANSFRONTALIERE

OBJECTIF Organiser la réunion d'équipes de recherche afin de construire un projet de recherche et servir de tremplin pour l'obtention de financements

PAYS ELIGIBLES Pays du Sud-Ouest européen : Espagne et Portugal

FINANCEMENT 4 k€ maximum pour un déplacement ou un cycle de déplacements sur une période d'un an impliquant plusieurs chercheurs du GSO

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With the support of :

