Cancer Heterogeneity, Plasticity and Resistance to Therapies

Hétérogénéité, Plasticité et Résistance aux Thérapies des Cancers



Dec. 2019 - Jan. - Feb. 2020, # 2

Edito

Here is the second issue with the questionnaire to know your feedback, opinion, comments and suggestions so that this liaison letter is friendly and can take off slowly. Because, I hope, the current formula is intended to evolve over the next four years and to expand.

The organization is getting clearer, some points are still to be finalized. At Cancer, Bruno LESAGE has settled since mid-October and the team of Christelle CAUFFIER and Nicolas POTTIER will arrive in December.

The new year will be marked by the official debut of Canther and OncoLille institute; a new page will be to write. In the meantime, I wish you a nice holiday season.

Isabelle VAN SEUNINGEN Laboratory Director



You can transmit your comments,suggestions to: marie-paule.ducourouble@inserm.fr



Metabolism

Organization - Administration

The CNRS and Inserm will be the principal trustees associated by convention with Univ. Lille, University Hospital of Lille and the Pasteur Institute of Lille (IPL) which will be the main supervision of the teams located on their site in the form of Pasteur ERL (Labeled research team). The Oscar Lambret Center (COL) and the IRCL will be partners.

The Canther unit, which is not a center, is composed of 5 research teams, 1 common support team and technical facilities whose managers can be contacted for any information:

Molecular biology - Gene Editing 2D-3D cellular models L3 Laboratories - Vectorization Microscopy – Immunohistochemistry Animal Models Drug Screening

Request for an IE to be formulated at the CNRS
Request for an IE formulated at Inserm
Nathalie Martin (IBL) & Mouloud Souidi (Cancer)
Belinda Duchêne (Cancer)
David Hannebicque (IBL)
Xavier Thuru (IRCL)
Jérôme Kluza (IRCL)

The rules of procedure will be established on the basis proposed by the CNRS. The decree that governs the organization and operation of the CNRS stipulates that the research units have consultative laboratories, advisory bodies in which the personnel are represented. Elections are scheduled for April 2020.

Given this, it is suggested calling the regularly meetings organized in the teams: lab or team meeting.

The denomination "Director Board", abbreviated as CoDir, corresponds to the meeting of the five team leaders and the general secretary.





Finance



The breakdown of the allocations by the principal trustees will be as follows:

- for research teams: 75% of the university endowment and 60% of each CNRS and Inserm endowment, ie 65% of the total amount of credits allocated for operation, small and medium-sized equipment and missions.
- for the common part, the expenses of the secretary, gas, waste disposal, regulatory controls, maintenance: 25% of the university endowment and 40% of each endowment CNRS and Inserm, ie 35% of the total amount of endowments.

The amount allocated to each team will be calculated according to the number of FTEs (full-time equivalent) according to this rule: 1 FTE per researcher, post-doctoral fellow supervising a doctoral student or technical staff, research engineer with a HDR (ability to conduct researchers) and supervisor; 0.5 FTE per teacher-researcher, 0.3 FTE for a university hospital; 0.2 per hospital.

A 5% levy will be calculated only on the operation research contracts and deducted from the staffing of the team to constitute an envelope intended to help the emergence of an inter-team project, the purchase of common equipments...

Five Ws and How?

This acronym summarizes a method of questioning, known since antiquity, which allows to define the circumstances of a situation, to go around all the constraints:

Who ? What? Where? When?

How? How many?

Why ? To do what ?

I keep six honest serving-men (They taught me all knew); Their name are What and Why and When And How and Where and Who...

> Rudyard Kiling (1865 - 1936)

A poem accompanying the tale of " The Elephant's Child "
in " Just So Storie for Little Children " (1902)."



Logistics - Equipment

At the Canther GA in November, a statement of requests for equipment was presented.

Have been ordered and are in use:

- a DNA Single Cell sequencer and a PCR machine at the Genomic facility (CBP, CHU),
- a cell clarifier (IRCL),
- a protein analyzer at the Drug Screening plateau (IRCL).

Are ordered:

- a O_2 analyzer and cell acidification at the Metabolism plateau (IRCL),
- a multiparametric IHC and ISH automate at the Histology facility of Faculty of Medicine (Research pole),
- a thermophoresis apparatus at the Drug Screening plateau (IRCL).

The following were proposed for purchase for the 2020-2022 envelope:

- for immunohistology: a slide sticker,
- for 3D cellular imaging: Zeiss CellDiscoverer 7,
- for the genomic platform , a Tapestri Single Cell DNA Panels,
- a radioactivity counter,
- a Spectramax and a Celigo S and a Step One PCR machine.

Promega attaches a label
BACK Colissimo
deliveries with boxes of polystyrene?

Play you the game of returning to participate in recycling?





Interna Relations

Cancer Heterogeneity, Plasticity and Resistance to Therapies - Canther

IVS Team - Mucins, Cancer & Drug Resistance (MUCRES)

Role of MUC1 and MUC4 mucins in chemoresistance.

Epigenetic plasticity of the tumor cell

Esogastric cancers recurrence molecular profiling (compared to primary tumor) for better patient management.

DT Team - Efficacity & Resistance to anti-tumor targeted Therapies (TARGET)

of MET activation

Molecular mechanisms Anticipation of resistance to targeted therapies

Strategy of tumor suppressor re-expression by NMD regulation.

Metastasis organotropism in protaste and lung cancers.

in lung cancer.

in lung cancer.

XLB team - Cell Plasticity & Cancer (CANET)

Mechanisms of cancer cell plasticity in tumor resistance to therapies.

Characterization of disseminated/metastatic tumor cells.

Mechanisms of therapy resistance in H3.3K27M-mutated pediatric gliomas.

Intelligent computing in oncogenomics and cellular networks.

CA team - Senescence, Fibrosis & Cancer (SENFIB)

Search for common pathways controlling the establishement of senescence and fibrosis.

Decipher mechanisms by which senescence and fibrosis Finding new targets for seno-fibrolytics amongst non-coding RNA.

could favor the first steps of carcinogenesis.

BQ team - Factors of Persistence of leukemic Cells (HEMOPATHIES)

Predicting prognosis.

Understanding the long-term equilibrium Between the host and dormant leukemia cells. Therapeutic developments.

The at sign @, called "arobase" (feminine name) or "a commercial" in French, was already used before the sixteenth century. Present on keyboards typewriters since the late nineteenth century, but abandoned over time. 1971, it was chosen when sending the first electronic message between machines.



Broadly broadcast any event, animation (seminar, demonstration, demand...) via the mailing list:

> umr-canther@univ-lille.fr (moderator: chan.lagadec@inserm.fr)



External Relations

The unique signature charter of any scientific document imposes different mentions:

- 1 Unit and institution (must not appear: faculty, department, institute ... structures);
- 2 First Univ. Lille, the national institute in alphabetical order then the local: Univ. Lille, CNRS, Inserm, CHU Lille, Institut Pasteur, COL, IRCL;
- 3 Standardization of the research unit: label and / or acronym, name developed;
- 4 Address: F-59000 Lille, France (regardless of the precise location);
- 5 Separation of fields by a comma.

The syntax of the signature can be:

- monoline :
- 1. Univ. Lille, CNRS, Inserm, CHU Lille, Institut Pasteur de Lille, UMR 9020, UMR-S 1277 Canther Cancers Heterogeneity, Plasticity and Resistance to Therapies, F-59000 Lille France
- multiline :
- 1. Univ. Lille, UMR 9020 UMR-S 1277 Canther Cancers Heterogeneity, Plasticity and Resistance to Therapies, F-59000 Lille France
- 2. CNRS, UMR 9020, F-59000 Lille France
- 3. Inserm, UMR-S 1277, F-59000 Lille France
- 4. CHU Lille, (Service or Department name), F-59000 Lille France
- 5. Institut Pasteur de Lille, F-59000 Lille France
- 6. Centre Oscar Lambret, F-59000 Lille, France
- 7. Institut de Recherche contre le Cancer de Lille, F-59000 Lille, France



Research Establishments) constituted by 10 thematic insti- Unit). tutes. At CNRS, the INSB (National Institute of Biological tation of the scientific policy; Inserm Cancer Institute is and Normandy) represent the CNRS (Regional delegate: mentation of scientific policy.

institution of a scientific, cultural and professional Estab- (scientific interest groups, that are governed by a constitulishment), IPL (Pasteur Institute of Lille) and IRCL are pri-tive convention as they are not an operating structure). vate foundations recognized as being of public utility. The COL (Oscar Lambret Center) is one of 18 CRCCs (Cancer

The CNRS (National Center for Scientific Re- Research Center) grouped within Unicancer; this private search, CEO: Antoine PETIT) and INSERM institution of collective interest to non-profit participates in (National Health and Medical Research Insti- public service hospital with the University Hospital of Lille tute, CEO: Gilles BLOCH) institutions are EPSTs (CHU). The IBL (Institute of Biology of Lille) is a structure (Public Institution of Scientific and Technical created by the CNRS to support the hosted UR (Research

In Lille, the DR18 (Haut-de-France regional delega-Sciences, Dir André LE BIVIC) is in charge of the implemention) and the Nord-Ouest delegation (Hauts de France directed by Alain EYCHÈNE) is responsible for the imple- Christophe MULLER) and Inserm (Regional delegate: Samir OULD ALI), respectively. They supervise UMRs (Mixed Re-The Univ. Lille (University of Lille) is an EPSCP (public search Units), UMSs (Mixed Service Units) and GIS

Institutions have different electronic management systems.

The financial management software packages are SAFIr (Inserm), GESLAB (CNRS) and Sifac (Lille University). The GAUSS portal managed by UGAP is used for CNRS and Inserm credits, but not for Univ. Lille who developed EasyL-

At Inserm, EVA allows the management of all structural evaluation processes and researchers, GAIA is adapted to recruitment and evaluation processes of engineers and technicians and absences and leaves are managed in SIRENE. At CNRS, AGATE allows the management of absences and holidays, SIRRHUS career files of engineers and techni-

ARIANE allows Inserm to formulate and submit credit applications, while for the CNRS it is the combination of two platforms (requests and HR questions & storage space for agents), it is also a site for the census of trips and ad hoc missions abroad for all French nationals.













Dec. - Jan. - Feb. 2020

#	Mon	Tue	Wed	Thu	Fri	Sat	Sun
48							1
49	2	3	4	5	6	7	8
50	9	10	11	12	13	14	15
51	16	17	18	19	20	21	22
52	23	24	25	26	27	28	29
	30	31					

06-12: Lille, world capital of design, first French city to be distinguished by the World Design Organization.

21-12 - 06-01: Christmas vacation.

13-01: M2 - Render of the bibliographies whose subject was drawn on 06-01.

#	Mon	Tue	Wed	Thu	Fri	Sat	Sun
01			1	2	3	4	5
02	6	7	8	9	10	11	12
03	13	14	15	16	17	18	19
04	20	21	22	23	24	25	26
0.5	27	28	29	30	31		

20 au 24-01: M2 - Defense of the bibliographies; 1st semester deliberation on 28-01.

10 au 14-02: M2 - Mid-term presentation of the research project.

29-02: Extra day

(leap year, because 2020 is divisible by 4 and not divisible by 100.)

#	Mon	Tue	Wed	Thu	Fri	Sat	Sun
05						1	2
06	3	4	5	6	7	8	9
07	10	11	12	13	14	15	16
08	17	18	19	20	21	22	23
09	24	25	26	27	28	29	

■ 14-02: Canther's Kick Off Day

15-02 - 02-03: Winter vacation. 24-02 - 02-03: Academic break.

11 or 12-03: 2nd PhD Day