Cancer and Cancer Treatments on Cognitive Functions: At the Era of Comprehensive Mechanisms

Friday 8th, JULY 22, Paris, 9:00 AM - 6:15 PM

ESPACE VOCATION HAUSSMANN SAINT-LAZARE
92, rue Saint-Lazare 75009 PARIS Tél : 01 45 62 17 18

Call for abstracts : Abstract submission deadline: 13 May 2022, 23:59 CET

Organizers: Hélène Castel (Univ Rouen, Inserm), Florence Joly (F. Baclesse Caen, Inserm), Bénédicte Giffard (Univ Caen, Inserm), Véronique Pancré (Cancéropôle Nord-Ouest, Lille)

Advances in diagnostic and therapeutic strategies in oncology have significantly increased the chance of survival of cancer patients, even those with metastatic disease. However, Cancer Related Cognitive Impairment (CRCI) is frequently reported in patients treated for non-central nervous system cancer, particularly during and after chemotherapy. These cognitive deficits, are characterized by impairment of short-term and working memory, attention, executive functions, and/or processing speed. First research have primarily focused on neuropsychological tests and clinical data with chemotherapy. Since then, a growing body of literature has highlighted the potential effects of cancer itself, and a new era is emerging on the role of other cancer treatments e.g., new modalities of radiotherapy, hormone therapies, targeted therapies, and immunotherapy on neurological functions, an important issue in terms of quality of life (QoL). Even now, it remains uncertain whether cognitive deficits result from the treatment, the cancer itself, and/or the psychological challenges of coping with cancer in the context of improved survival, or whether factors such as age, genetic polymorphisms, and psycho-social components or sleep disorders may predispose to a higher risk of cognitive impairment. To better understand the pathophysiology and neurobiological mechanisms of CRCI and the direct impact of the different cancer treatments, animal models have been developed to investigate selective and combined effects of the disease and treatment on neurocognitive function, the influence of parameters such as stress, mood and aging on cognitive impairment, while human brain imaging helped document mechanisms involved in CRCI. The growing demand for CRCI management from patients led to studies testing cognitive rehabilitation in cancer patients.

![FENS Forum 2022 — 9-13 July 2022 | Paris, France — fens.org/2022 — Société des Neurosciences — European neuroscience meets the world]

https://forum.fens.org/

Satellite FENS Meeting Conference Theme

Call for abstracts

This meeting organized by the Cancéropôle Nord-Ouest, The French Plateform Cancer and Cognition, and the University of Rouen Normandie deals with knowledge on translational research including clinical, imaging and animal models about CRCI. The objective is to bring together international specialists of the impact of cancer and treatments on brain function, addressing neuropsychological, neurobiological, and pathophysiological mechanisms, towards the search for predictive biomarkers and prevention tools.

Submit abstracts

Abstracts will be considered and included in the final scientific program after selection by the scientific committee, as oral communications (10 min) or flash communications (3 min).
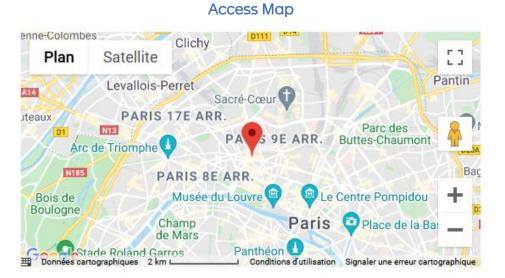
Abstract submission deadline: May 13, 2022, 23:59 CET

Registration Fees: 70 euros

Deadline for registrations : June 15, 2022

Maximum 100 attendees

Abstract submission and registrations from March 1, 2022
https://www.escape.canceropole-nordouest.org/#/manifestation/subscription/46

Access Map

https://www.espaces-vocation.com/
92, rue Saint-Lazare 75009 PARIS Tél : 01 45 62 17 18

Satellite FENS Meeting Conference Theme

PROGRAM

9h00-9h15: Welcome and Introduction

9h15-10h00: Plenary Lecture PL1

Florence JOLY, *Baclesse Center and Caen CHU hospital, Inserm ANTICIPE, Cancer and Cognition Platform, Cancéropôle Nord-Ouest, France*

Impact of new cancer therapies on cognition

10h00-12h15: Session 1: Cerebral mechanisms of cancer-related cognitive impairment
Chairman: Hélène Castel

- **10h00-10h30: Keynote Lecture KN1**

Sabine DEPREZ, *Translational MRI, LKI - KU Leuven Cancer Institute, Leuven, Belgium*

Insights from neuroimaging on cancer-related cognitive impairment, brain changes and possible recovery

- **10h30-10h50: Invited Talk IT1**

Hélène Castel, *Inserm Director of Research, Université Rouen Normandie, Inserm CBG, Cancer and Cognition Platform, Cancéropôle Nord-Ouest, France*

Meaningful preclinical models should establish the complex links between cancer, new therapies and brain function

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10h50-11h10: Coffee break- 20 min

11h10-12h00: Selected communication from abstracts SO1
[50 min]

12h00-13h30: Lunch

13h30-15h00: Session 2: Cancer and memory, sleep and cerebral correlates
Chairman: Bénédicte Giffard

- **13h30-14h00: Keynote Lecture KN2**

Alison MARY, *Center for Research in Cognition and Neurosciences (CRCN), Université libre de Bruxelles, Belgium.*

Sleep and memory: contribution of functional neuroimaging

- 14h00-14h20: Invited Talk IT2

Bénédicte Giffard, *Université Caen Normandie, NIMH Inserm, Platform Cancer and Cognition, France*

Prospective memory consolidation and the impact of sleep in breast cancer

- 14h20-15h00: Selected communication from abstracts SO2
[40 min]

15h00-15h20: Coffee break- 20 min

Session 3: Radiotherapy, brain tumors and cognition
Chairman: Samuel Valable

- 15h20-15h50: Keynote lecture KN3

Damien Ricard, *Service de Neurologie Hôpital d'Instruction des Armées PERCY, Service de Santé des Armées, Clamart Centre Borelli UMR 9010/Université Paris-Saclay, France*

Cognition in patients with brain tumors, how to care?

- 15h50-16h10 : Invited talk IT3

Samuel Valable, *Directeur de Recherche CNRS, ISTCT UMR 6030-CNRS, CEA, Université de Caen-Normandie, France*

Mutiparametric and multiscale assessment of the brain reactions to conventional and recently developed radiation therapies

- 16h10-17h00: Selected communication from abstracts SO3
[50 min]

17h00: Plenary Lecture PL2

S.B. Sanne Schagen, *Division of Psychosocial Research & Epidemiology, The Netherlands Cancer Institute, Professor, Brain and Cognition Group, Psychology, University of Amsterdam, The Netherlands.*

How neuropsychology can impact cancer care

18h00: Closing event