



## Café des Sciences #78 : A Disruptive Innovation in Oncology with Dr. Remy Brossel

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Dr. Rémy Brossel, Medical Oncologist and CSO and Founder of **Cell Constraint & Cancer**, a Biotech dedicated to in vivo application of Physical Oncology, will talk on Tuesday November 1, 2016 at 6:30pm about a new way to treat cancer using constraint fields to cause physical disruption to the cells.

- **When:** Tuesday November 1, 2016 from 6:30pm to 8:30pm
- **Where:** CIC Boston, Milky Way room, 17th floor, 50 Milk Street Boston, MA 02109 ([Map](#))
- **Registration**
- **Presentation in french** – networking to follow

### About the speaker

**Rémy Brossel** is a Medical Oncologist and a Physicist graduated at Paris University and Medical School. Remy is currently CSO and Founder of Cell Constraint & Cancer a Biotech dedicated to in vivo application of Physical Oncology. Remy has been previously Product Manager at Technion and Project Manager at Schering (Contrast Media and Biotech products) and has been founder and Medical Director of Biologie et Industrie a CRO dedicated to early clinical research on Cancer treatments for last two decades.

### About the presentation

Cancer has some of the biggest unmet needs in the healthcare industry and is one the leading causes of death in the US. Physical oncology also known as "mechanobiology" appeared 10 years ago in the United States through the development of advanced technologies at the interface of biology and engineering. It focuses on the way that physical forces and changes in cell or tissue mechanics contribute to development, physiology, and disease.

Dr. Remy Brossel and his team in France have discovered a new way to treat cancer using constraint fields to cause physical disruption to the cells. The proof of concept was validated in April 2016 to show there is a significant difference of growth between treated tumors and control groups using gradient fields. Results were published as "Action of Mechanical Cues in vivo on the Growth of a Subcutaneously Grafted Tumor" (Published 21 April 2016, PLoS One, R Brossel et al). The approach uses a combination of two medical devices: A generator for gradient of magnetic field and magnetized iron nanoparticles. Nanoparticles are located around the tumor and act as 'BioActuators' transforming magnetic energy into mechanical energy. The therapeutic agent is the Constraint Field.

More information about the research: <http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0152885>