

# CURRICULUM VITAE

SCHWARTZ Laurent

## TITLES :

- Baccalauréat: In science (mention TB), 1976.
- Internat de Strasbourg (1<sup>st</sup> in the class), 1983
- Masters in science (Université Louis Pasteur, Strasbourg), 1985.
- M.D., Faculté de Médecine de Strasbourg, 1985.
- Residency MGH (Harvard University) 1987-1990
- American Boards in Radiation Therapy, 1992.
- French Boards in Radiation Therapy, 1993.
- Chevalier de l'ordre National du Mérite, 1997
- Ph. D., Faculté de Paris Saint-Antoine 1998

## WORKING EXPERIENCE

2000- Present day-Senior staff: Senior staff Assistance Publique des Hôpitaux de Paris

2002- 2016 Senior researcher Ecole Polytechnique

1990- 1993 : Junior staff: Radiation-Oncology Department, Hôpital Tenon ,Paris

1987 - 1990 : Résident: Radiation Therapy Department, Massachusetts General Hospital, Harvard Medical School

1985 - 1987 : Researcher at the National Cancer Institute. Medical Branch, Breast Cancer Section National Institutes of Health,

## Major discoveries:

1) **Inflammation and increased extracellular osmolarity are synonymous**

Is Inflammation a consequence of extracellular osmolarity  
Schwartz L, Guais A, Pooya M, Abolhassani M.  
J Inflamm (Lond). 2009 Jun 23;6:21.

## **2)CO2 is responsible for the toxicity of tobacco smoke**

Schwartz, L., Guais, A., Chaumet-Riffaud, P., Grévillet, G., Sasco, A. J., Molina, T. J., & Abolhassani, M. (2010). Carbon dioxide is largely responsible for the acute inflammatory effects of tobacco smoke. *Inhalation toxicology*, 22(7), 543-551.

## **3) Alzheimer disease is a mechanical disease**

Mechanical stress related to brain atrophy in Alzheimer's disease  
Levy Nogueira M, Lafitte O, Steyaert JM, Bakardjian H, Dubois B, Hampel H, Schwartz L.  
Alzheimers Dement. 2016 (1):11-20

## **4) The effect of hormones is mediated by physical constraints**

Wertz X., Schoevaert, Maitournam H., Chassignet P. Schwartz L.  
The effects of hormones on bone growth is mediated through mechanical stress  
C.R. Biologies 2006, 309, 79-85

## **5) The biology of cancer is a simple consequence of the Warburg effect**

The Warburg effect and the Hallmarks of cancer  
Schwartz L, Supuran CT, Alfarouk KO.  
Anticancer Agents Med Chem. 2017;17(2):164-170.

## **6) The combination of lipoic acid and hydroxycitrate inhibits cancer growth whatever the subtype of cancer**

Screening of well established drugs targeting cancer metabolism: reproducibility of the efficacy of a highly effective drug combination in mice  
Abolhassani M, Guais A, Sanders E, Champion F, Fichtner I, Bonte J, Baronzio G, Fiorentini G, Israël M, Schwartz L.  
Invest New Drugs. 2012 Aug;30(4):1331-42.

## **7) Metabolic treatment appears a very effective cancer treatment**

Out of Warburg effect: an effective cancer treatment targeteting the tumor specific metabolism

Schwartz L, Seyfried T, Alfarouk KO, Da Veiga Moreira J, Fais S.

Semin Cancer Biol. 2017 Jan 22.

## **Publications**

Author of more than 250 papers in peer-reviewed journals (Nature, Cancer Research, Radiation Research....) and 6 books