



## Gordon Research Conference on Glial Cells: The Quality of French Research in the Spotlight

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This year, the 8th edition of the *Gordon Research Conference* devoted to glial cells was held in Ventura, California. These highly prestigious conferences bring together the world's top researchers in a given field.

Glial cells are, beside neurons, the other cellular components of the brain. It should be remembered that it was only towards the end of the 19th century that the existence of neurons was recognized, thanks to the work of Santiago Ramon y Cajal, which was based on a technical innovation developed by the medical doctor and Italian pathologist Camillo Golgi. This discovery earned them both the Nobel Prize in Physiology or Medicine in 1906. For several decades, neuroscientists have devoted themselves almost exclusively to the study of neurons, considered to be the "noble" components of the brain. Glial cells were also known for a very long time but considered as simple support cells. It is now known that they are involved in important ways in most brain processes and are even considered as possible therapeutic targets. One of the reasons for the relative lack of interest in glial cells was the lack of specific tools to understand their functions, whereas the tools for the study of neurons had developed considerably.

However, there has long been a high-quality research on glial cells in France, which study most aspects of the biology of these cells. This is witnessed by the strong representation of French research at Ventura this year with Serge Charpak and Etienne Audinat (Université Paris-Descartes), Stéphane Oliet (Neurocentre Magendie, Bordeaux), Sonia Garel (Ecole Normale Supérieure) and Gilles Bonvento (CEA- MIRCEN), as well as several young postdoctoral researchers currently in the United States or Canada after a thesis in France.

Recent technological advances, particularly in the field of genetics and imaging, now permit detailed mechanistic studies of the role of glial cells. Particularly noteworthy is the work of the Baljit Khakh group (UCLA) who demonstrated this role by using genetically modified mice in which glial cell activity can be selectively inhibited.

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Picture: ©Inserm - Des astrocytes (cellules gliales) en culture