

Inserm

Institut national
de la santé et de la recherche médicale



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Neuroscience-oriented new technologies :

New technologies for studies of sub-groups of neurons : their applications to mouse models of multifactorial psychiatric diseases

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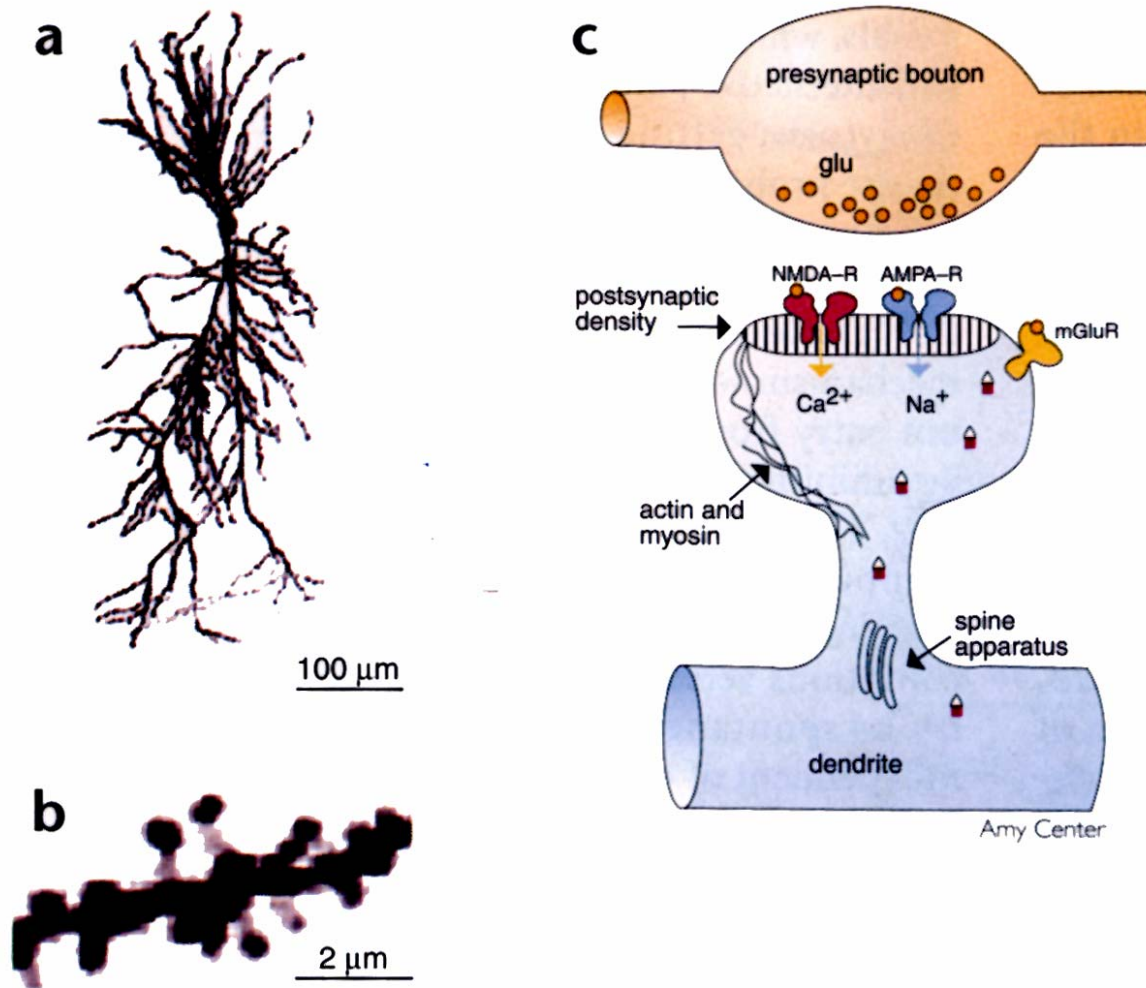
academic lab



TP1 and TP5 Brokerage Event, Paris, May 31st 2005

- **Goals**
 - **identification of sub-groups of neurons :**
 - **differential expression analysis from these identified neurons (control versus transgenic or versus experimentally manipulated : i.e. siRNAs)**
 - **proteomics from identified neurons : single cell**
- > proof of concept : applications to mouse models of multifactorial psychiatric diseases**

Complexity : to study pre and post synaptic regions



Tools to be developed

- *'Chameleon' transgenics (from BACs with GFP, CFP or YFP) -> Academic lab & SME*

for :

(i) Subgroups of central neurons

(ii) Subgroups of interneurons

- *Expression profiling from identified small groups of cells -> Academic lab*

- *Proteomics of small groups of cells/ single cells-> SME*