

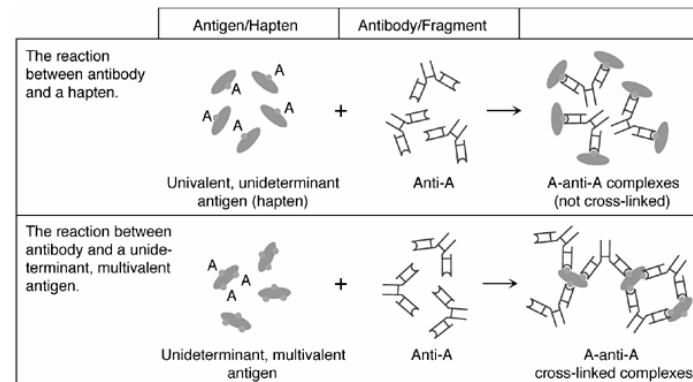
## Utilisation des anticorps *in vitro* principes et techniques

Adrien Six (adrien.six@upmc.fr)

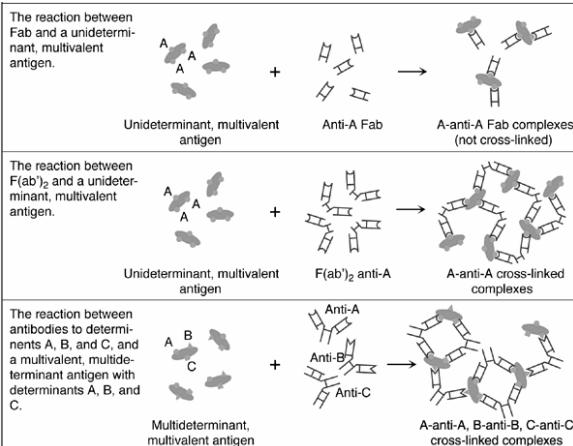
Université Pierre et Marie Curie

octobre 2006

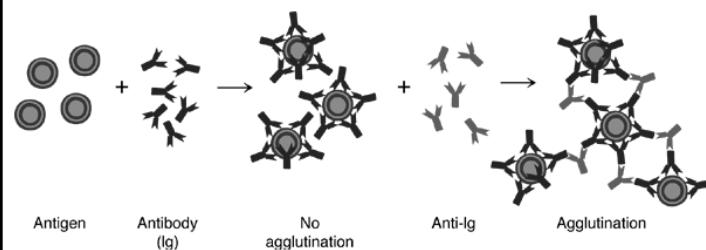
## Réaction antigène/anticorps



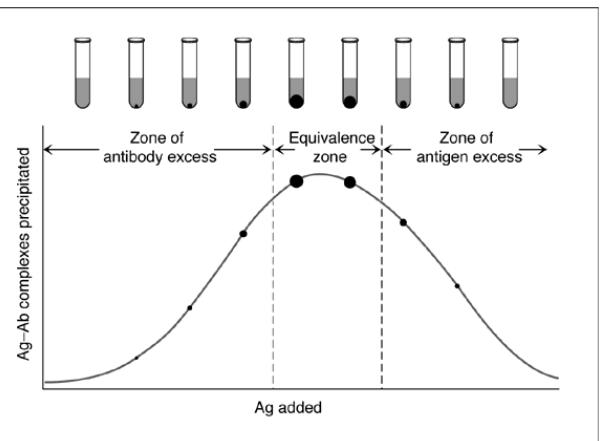
## Réaction antigène/anticorps



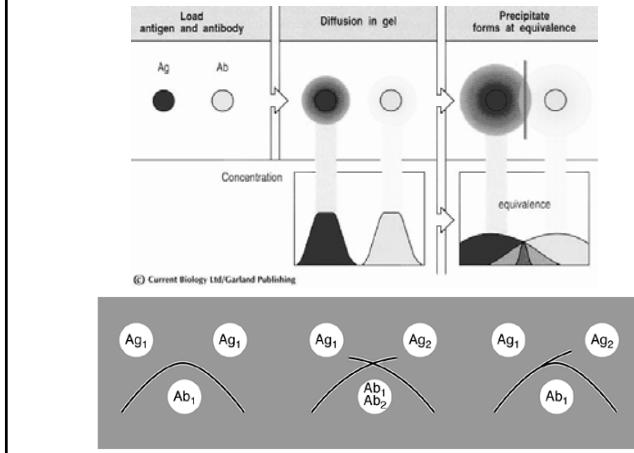
## Réaction d'agglutination



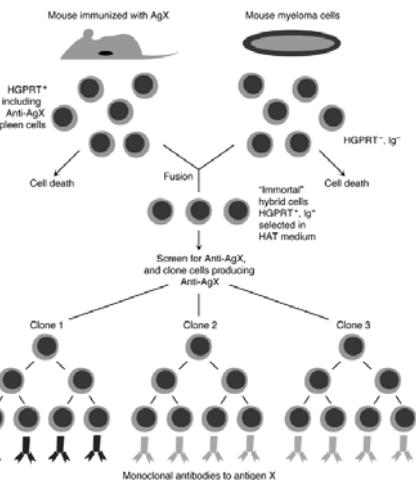
## Précipitation en milieu liquide



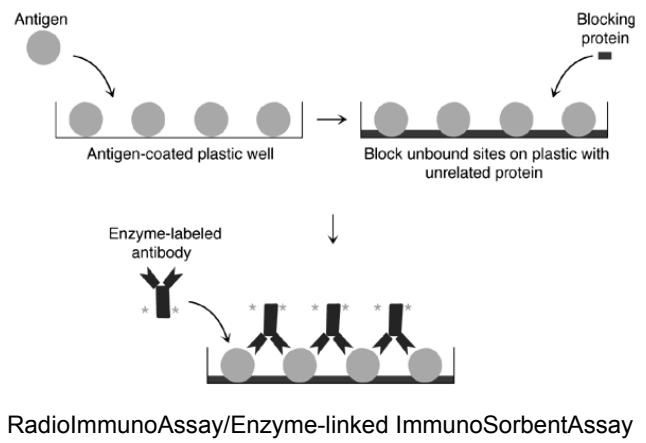
## Précipitation en milieu solide

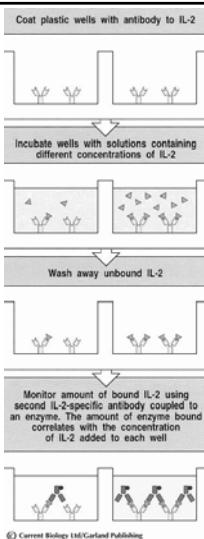


## Production d'anticorps monoclonaux

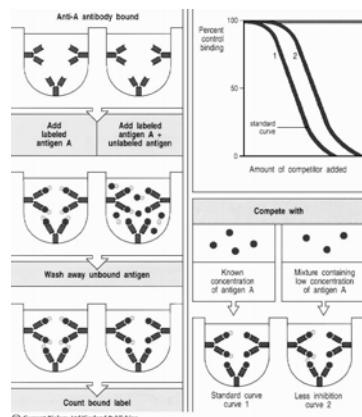


## RIA/ELISA



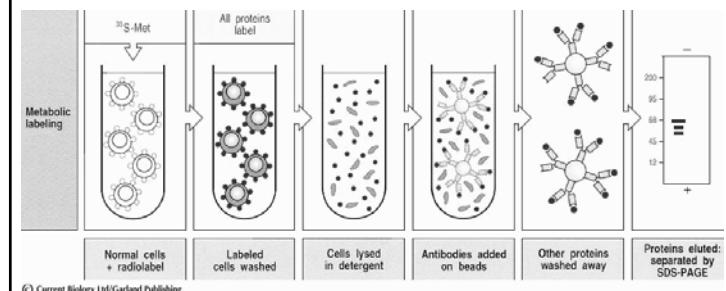


## Sandwich/Compétition



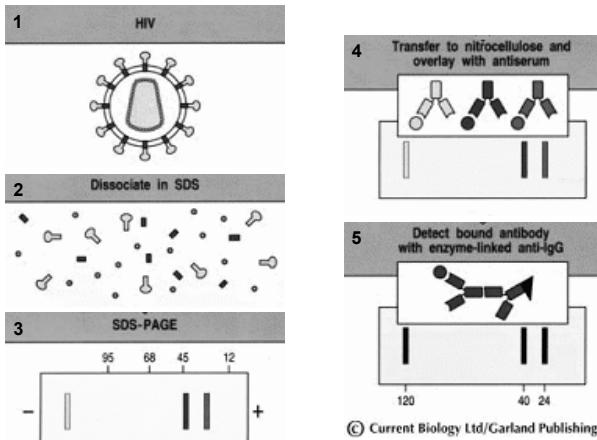
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## Immunoprecipitation



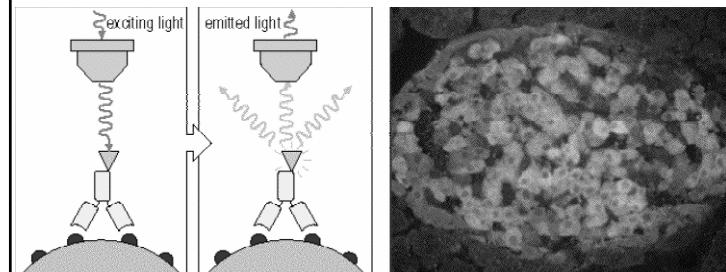
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## Western blot



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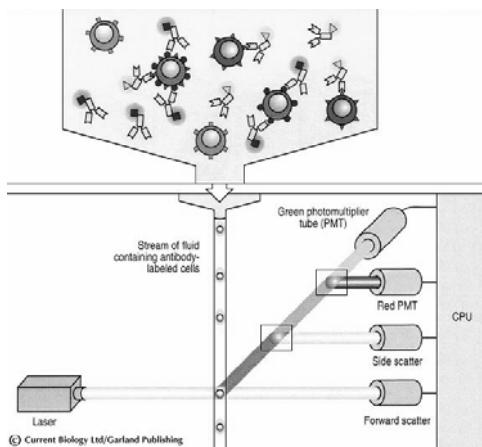
## Immunofluorescence



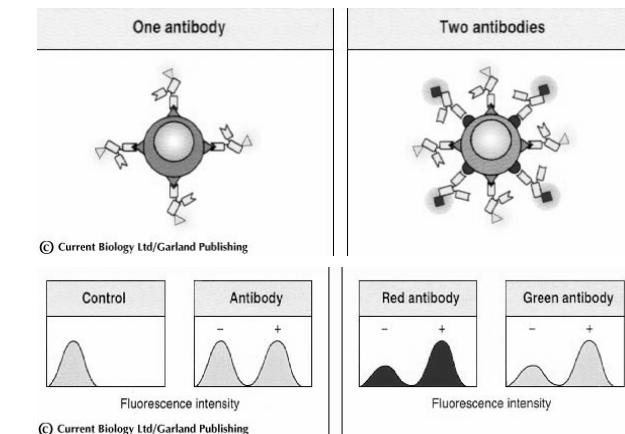
### Coupe de pancréas:

Anticorps « vert » dirigé contre GAD (glutamic acid decarboxylase) marque les cellules  $\beta$  des îlots de Langerhans  
Anticorps « orange » dirigé contre l'hormone glucagon marque les cellules  $\alpha$ .

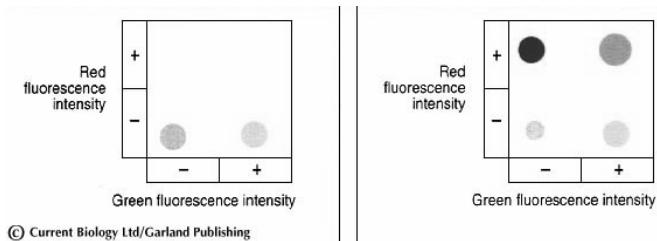
## Cytométrie de flux (1)



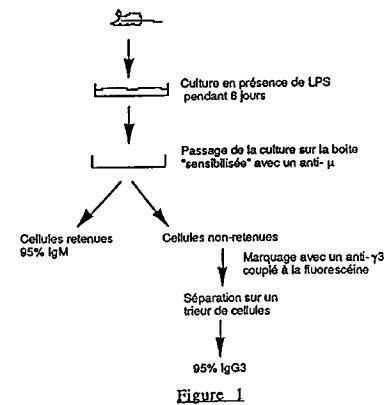
## Cytométrie de flux (2)



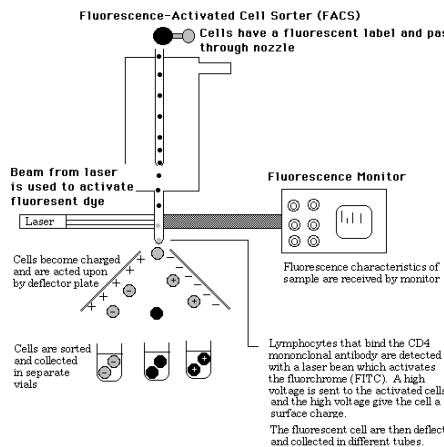
## Cytométrie de flux (3)



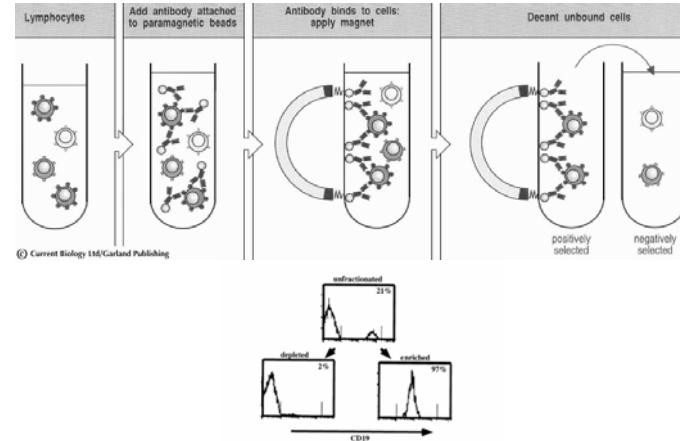
## Tri cellulaire par « panning »



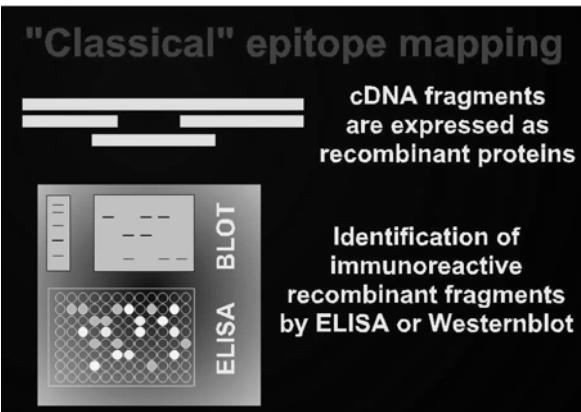
## Tri cellulaire par cytométrie



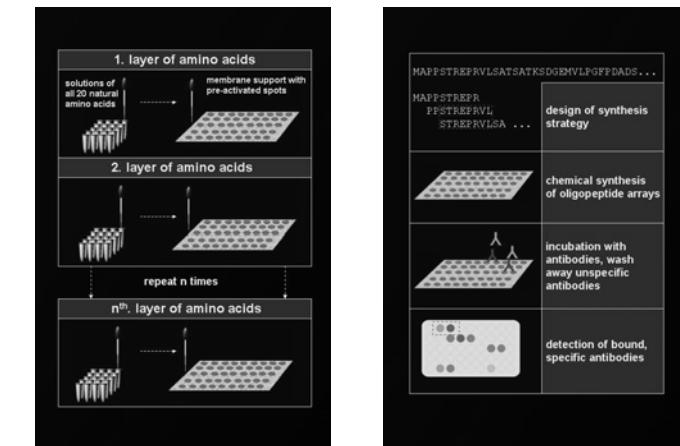
## Tri cellulaire magnétique



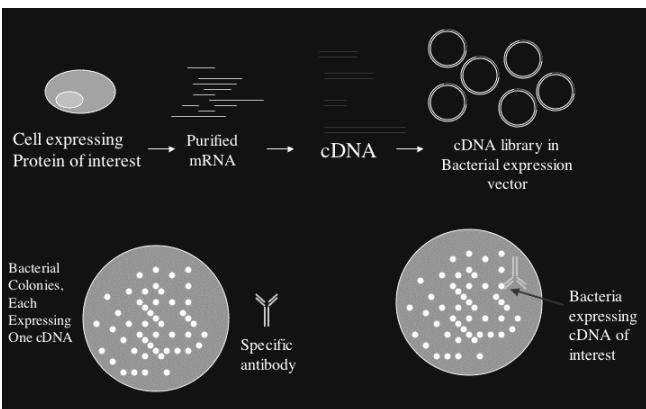
## Cartographie épitopique (1)



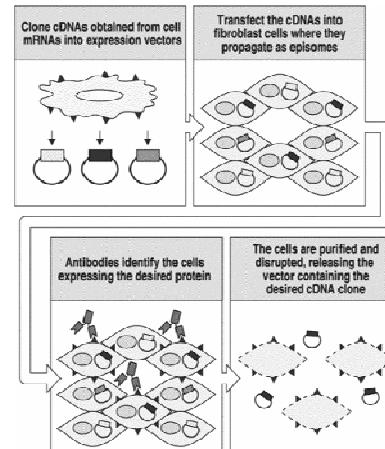
## Cartographie épitopique (2)



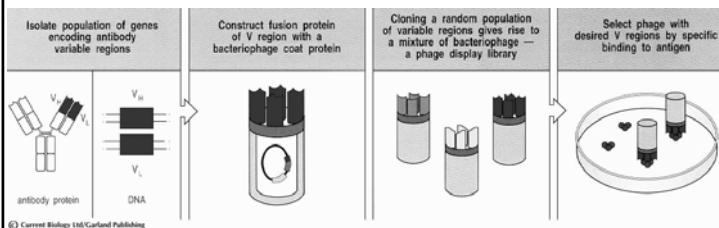
## Clonage et criblage (1)



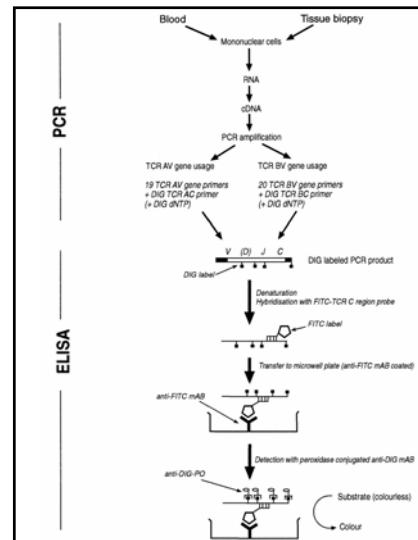
## Clonage et criblage (2)



## Clonage et criblage (3)

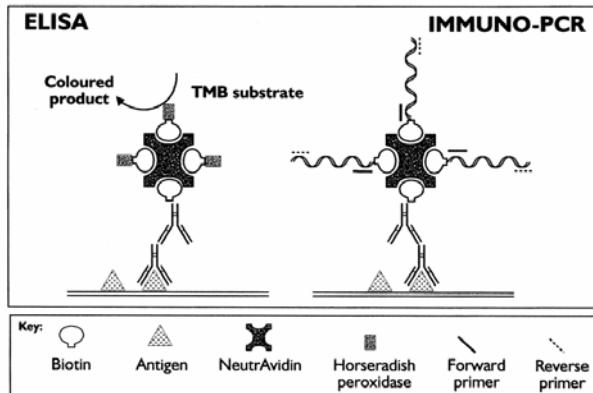


## PCR-ELISA



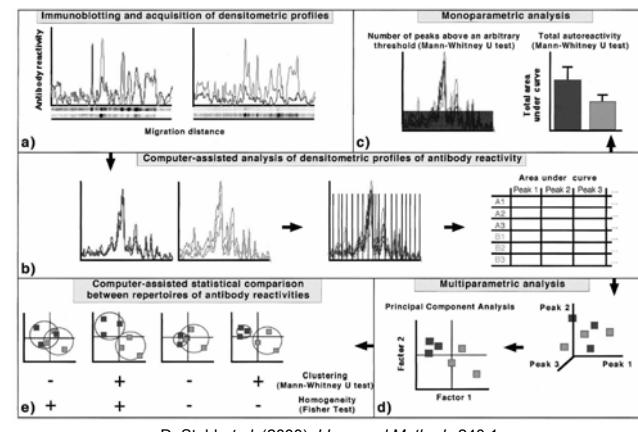
A. VanderBorgh *et al.* (1999)  
*J. Immunol. Methods* 223:47

## Immuno-PCR



M. C. Case et al. (1999) *J. Immunol. Methods* 223:93.

## Panama-blot



## Immunoproteomics

Francisco J. Quintana, Peter H. Hagedorn, Gad Elizur, Yifat Merbl, Eytan Domany, and Irun R. Cohen.

Functional immunomics: Microarray analysis of IgG autoantibody repertoires predicts the future response of mice to induced diabetes.

PNAS 101:14615-14621, 2004.