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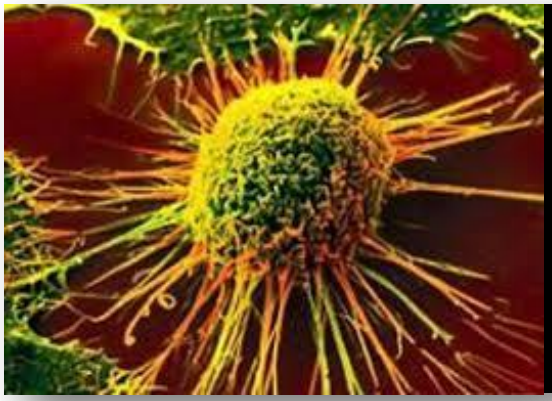
Microarray

Technology



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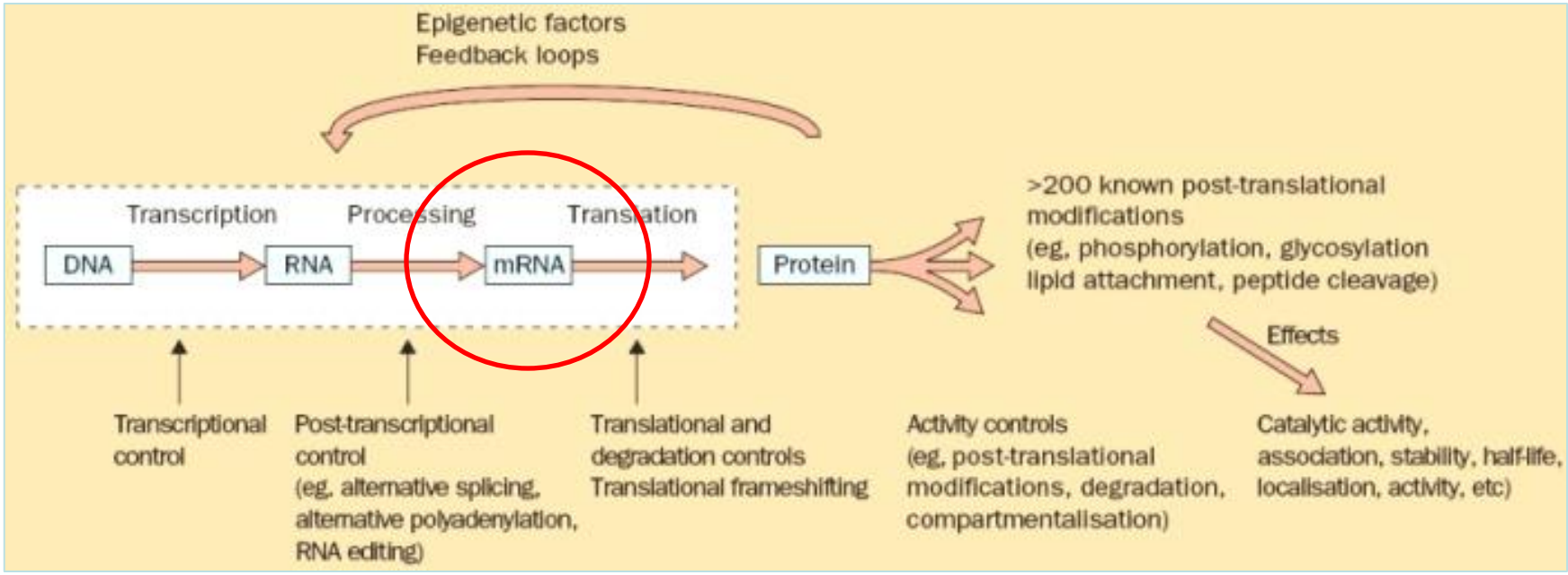

Banks et al. Nature 2000

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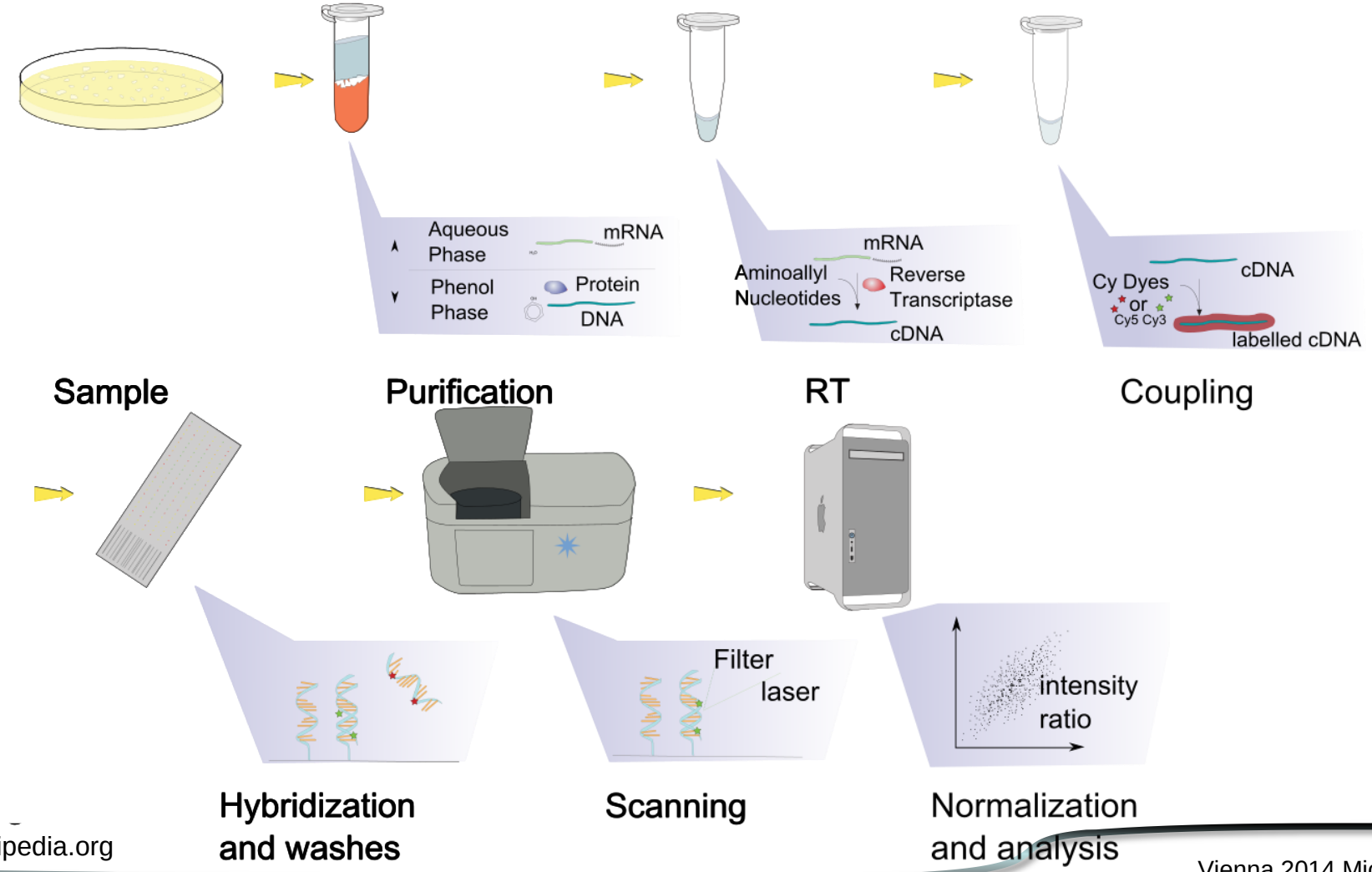
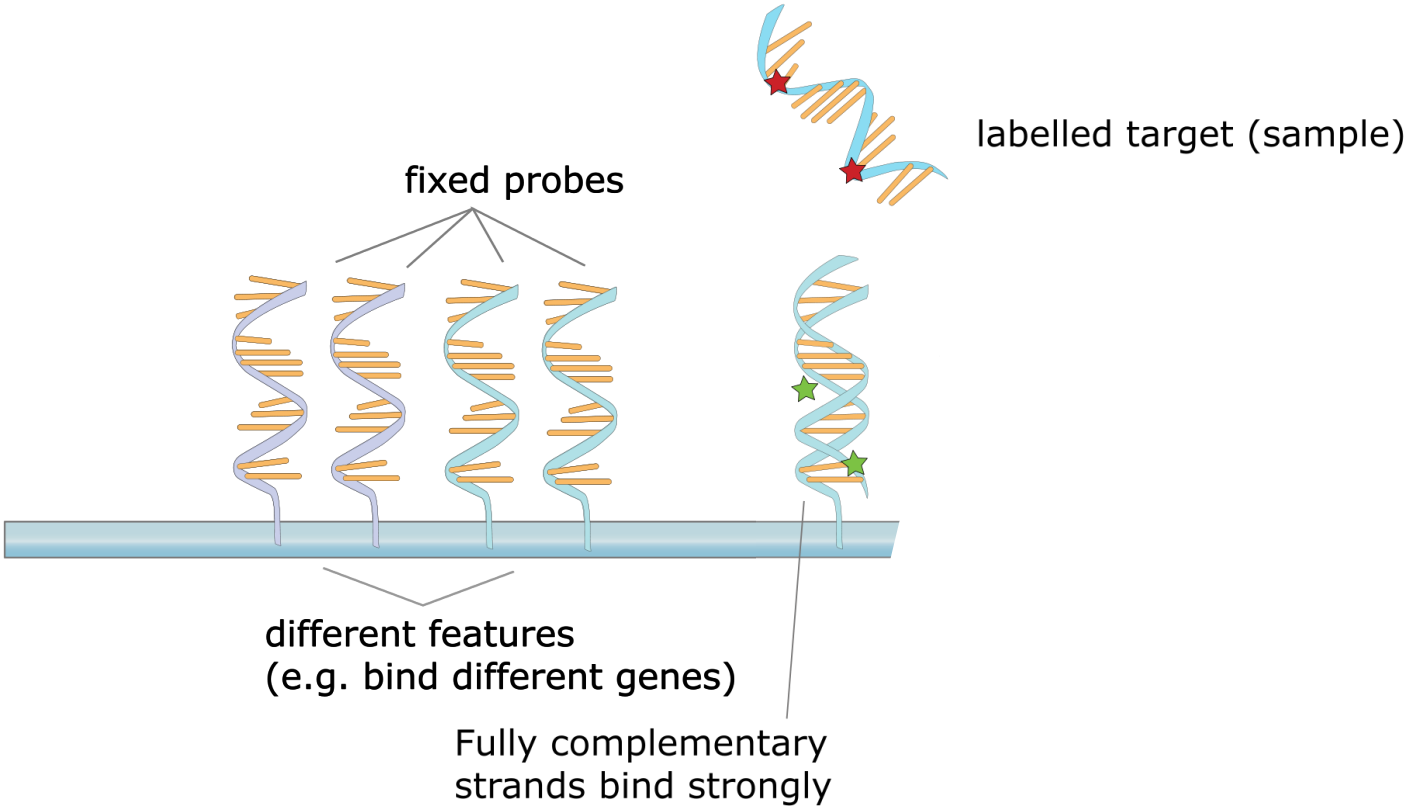


www.wikipedia.org

Principle



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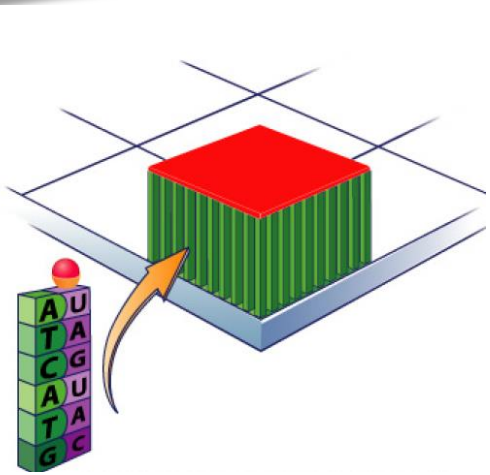
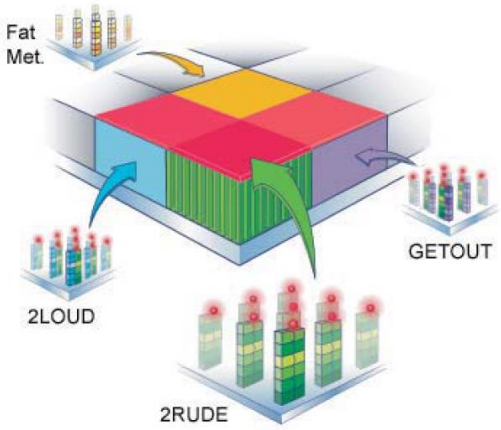
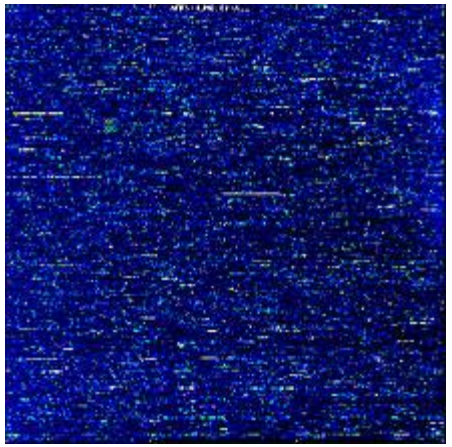
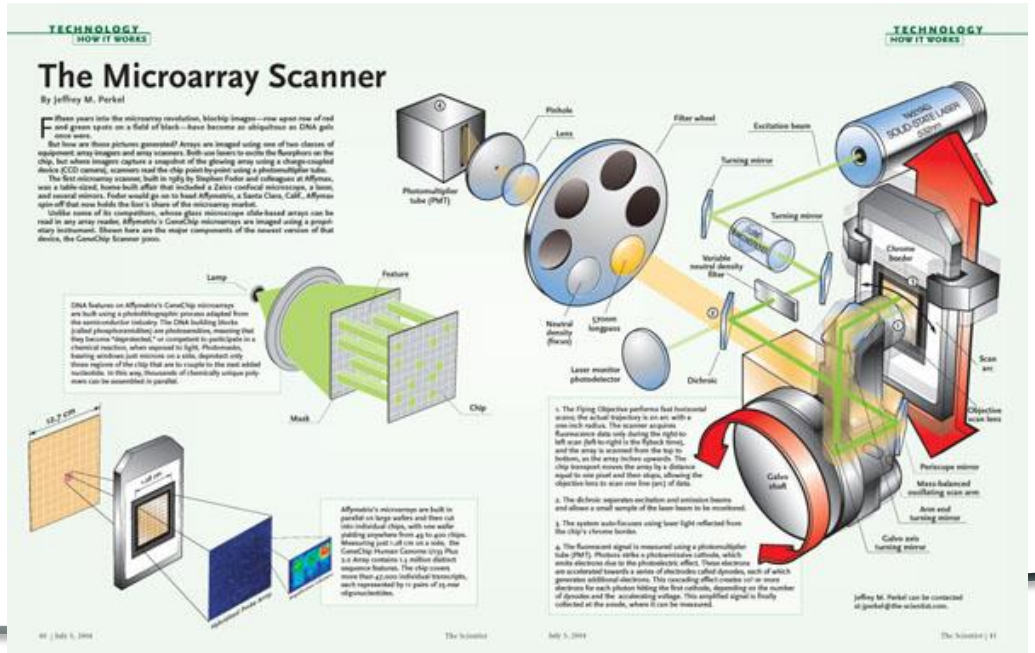
Principle









http://www.the-scientist.com/?articles.view/articleNo/15785/title/The-Microarray-Scanner/

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Data processing

Experimental design

http://statsarray.com/bioinformatic-services/expression-analysis/

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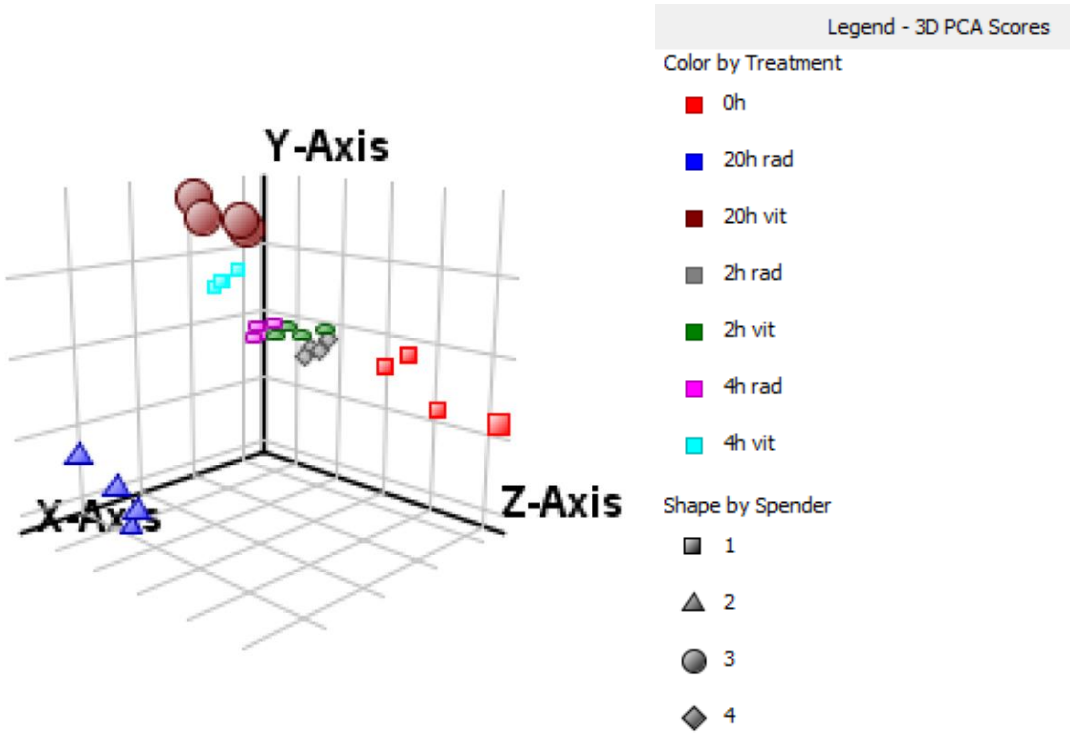
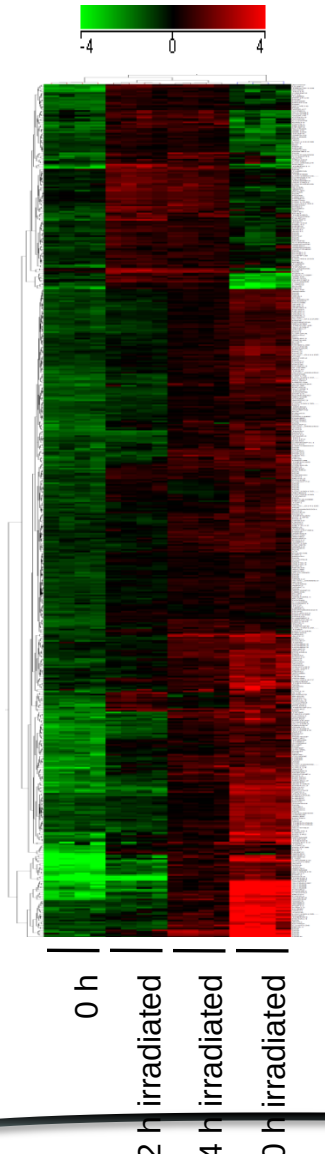
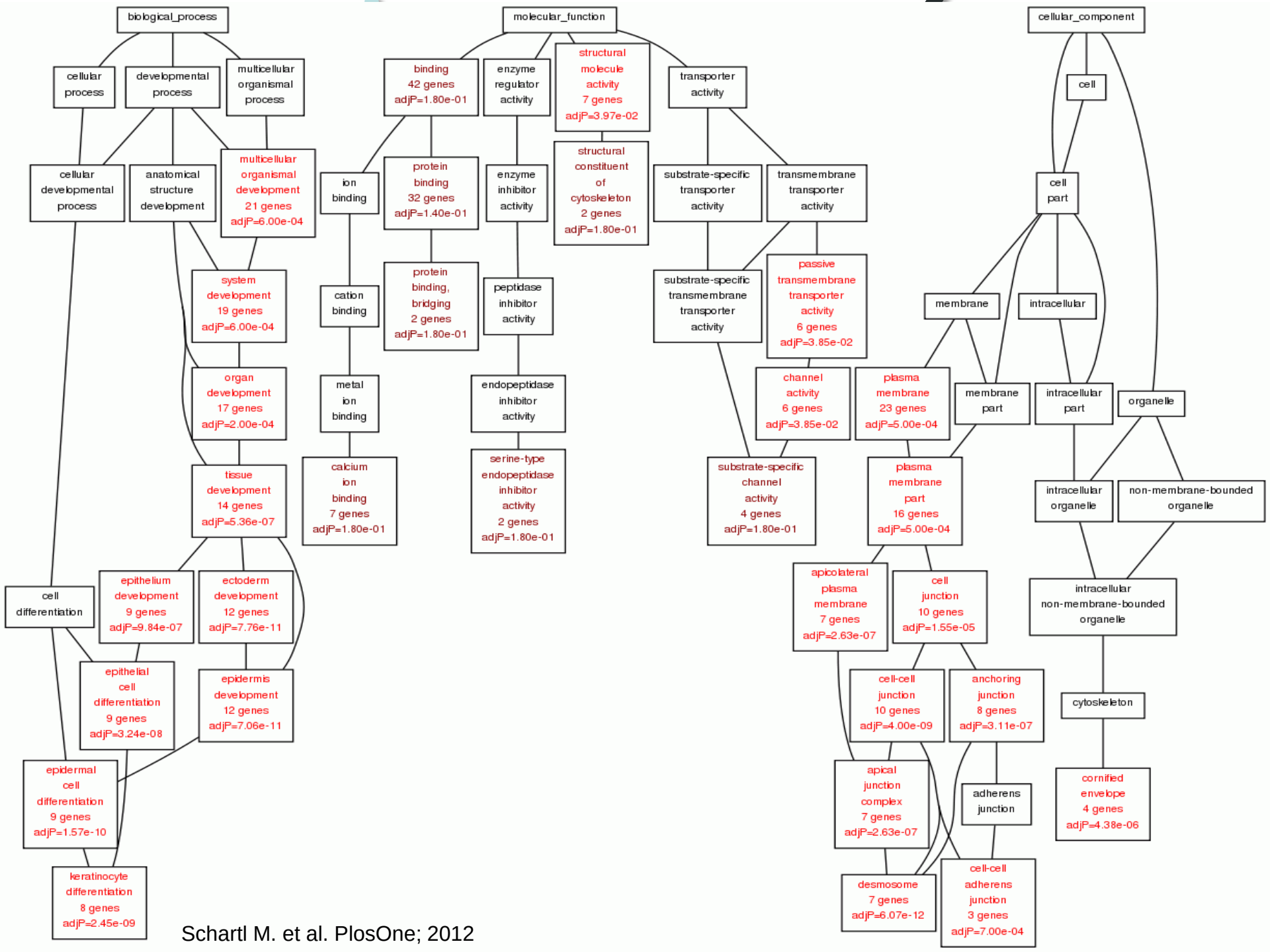
Clustering

Principal Component Analysis







Schartl M. et al. PlosOne; 2012

Take Home Messages for Microarrays:

- suitable technique to get an overview of cellular processes
- easy to use; fast results
- good screening tool
- imprecise data of low expressed genes
- need follow up validation (RT-PCR)
- problem of data analysis (e.g. normalization; >70.000 data points per chip, alpha bias…)

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Thank you for your attention