

## Guidelines for Affymetrix experiment design

**Try to reduce as much as possible any source of potential biological variation that is not directly related to the biological question you are asking. This is important since the arrays will reveal any variation between samples (even RNA extraction methods!!!).**

### **For tissues culture cells or yeast:**

Use identical batches of medium, serum, antibiotics etc..  
Try to grow cells in parallel, rather than growing cells different days.  
Use same OD, dilutions etc...

### **For animals:**

Use same sex, same or very close age, same strain, same mating type, etc...(unless you want to study sex specific gene expression!).

### **For RNA extraction:**

Use identical extraction procedures for all samples to be compared.  
Start with similar tissue weight, identical cell numbers or OD for yeast.

### **Number of replicates:**

The number of replicates is an important issue.

We strongly recommend to perform at least three biological independent replicates for each condition to be tested. **This number represents a minimum and is subject to increase for systems with high inherent biological variability.**

For further information or details, please contact the platform manager or staff:  
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