

Benchmarking eukaryotic expression

Friday, October 17, 2014

18

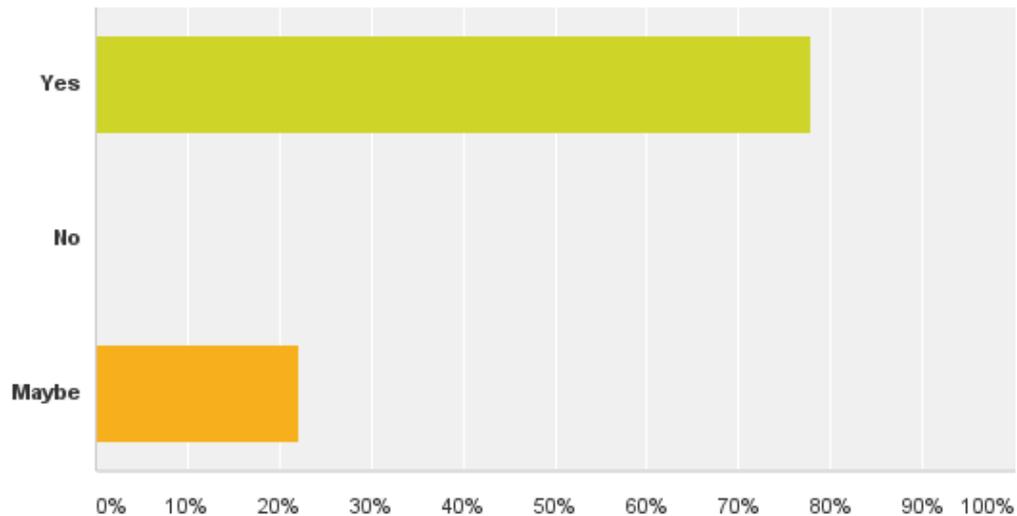
Total Responses

Date Created: Tuesday, September 16, 2014

Complete Responses: 18

Q1: Would you participate in a eukaryotic expression benchmarking effort?

Answered: 18 Skipped: 0



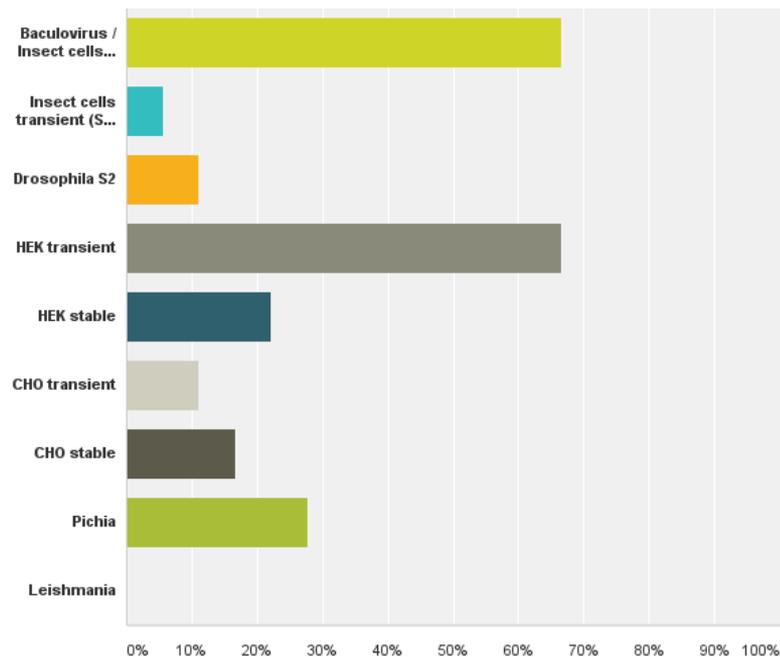
Q1: Would you participate in a eukaryotic expression benchmarking effort?

Answered: 18 Skipped: 0

Answer Choices	Responses
Yes	77.78% 14
No	0.00% 0
Maybe	22.22% 4
Total	18

Q3: Which expression system(s) would you like to benchmark? (you can select more than 1) Please note that we can't compare everything with everything and need to focus on one or two systems per round (there might be more benchmarking studies if we manage to do the first one successfully). The goal is not to find the best expression system for a specific target but to compare the performance of the setup in the participating labs with the others.

Answered: 18 Skipped: 0



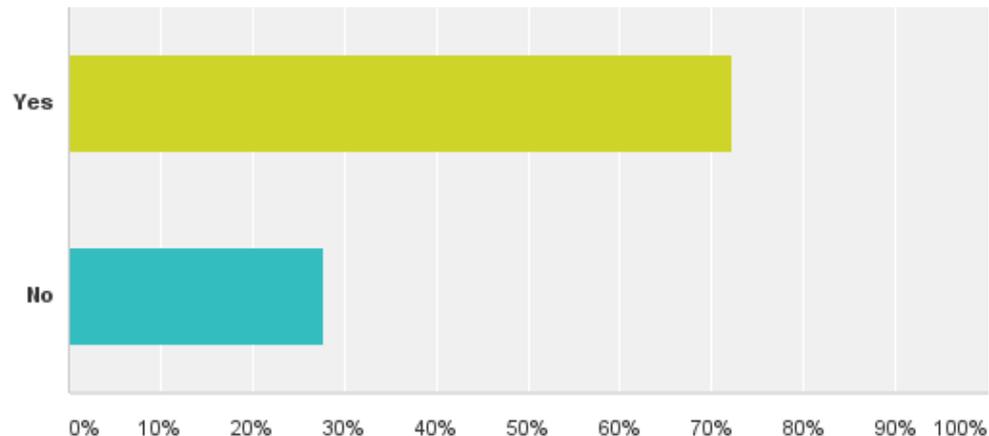
Q3: Which expression system(s) would you like to benchmark? (you can select more than 1) Please note that we can't compare everything with everything and need to focus on one or two systems per round (there might be more benchmarking studies if we manage to do the first one successfully). The goal is not to find the best expression system for a specific target but to compare the performance of the setup in the participating labs with the others.

Answered: 18 Skipped: 0

Answer Choices	Responses
Baculovirus / Insect cells (Sf9, Sf21, Hi5)	66.67% 12
Insect cells transient (Sf9, Sf21, Hi5)	5.56% 1
Drosophila S2	11.11% 2
HEK transient	66.67% 12
HEK stable	22.22% 4
CHO transient	11.11% 2
CHO stable	16.67% 3
Pichia	27.78% 5
Leishmania	0.00% 0
Total Respondents: 18	

Q4: Could you contribute target constructs? Ideally, we should have well expressing as well as low expression constructs. We could also include tricky ones that your lab did not manage to get expressed so we might find out if different labs find different results for these cases.

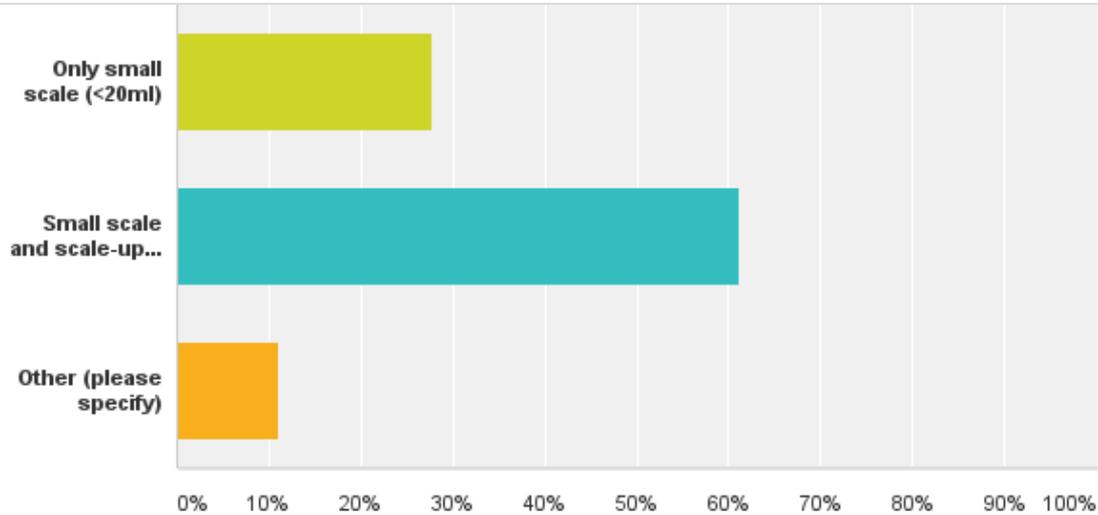
Answered: 18 Skipped: 0



Answer Choices	Responses	
Yes	72.22%	13
No	27.78%	5
Total		18

Q6: What production scale would you like to test?

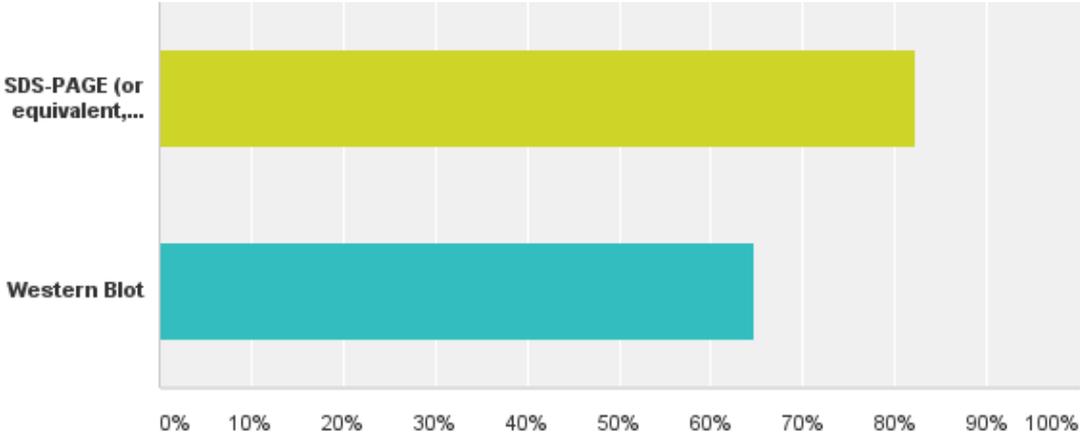
Answered: 18 Skipped: 0



Answer Choices	Responses
Only small scale (<20ml)	27.78% 5
Small scale and scale-up to 500-1000ml	61.11% 11
Other (please specify)	11.11% 2
Total	18

Q7: What would be required to analyse and compare the results of an expression benchmarking study? Note, that at this stage purification will not be included in the analysis since this would add an extra level of complexity and would make it more difficult to identify the bottlenecks for the expression or purification. Please select the analysis method(s) that should be used (in your opinion).

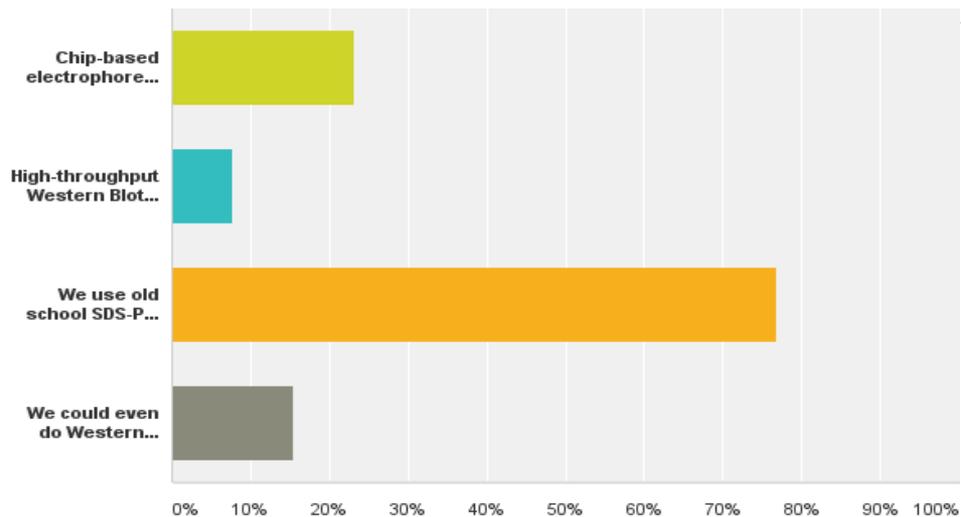
Answered: 17 Skipped: 1



Answer Choices	Responses	
SDS-PAGE (or equivalent, e.g. Caliper)	82.35%	14
Western Blot	64.71%	11
Total Respondents: 17		

Q8: Would you volunteer to collect all aliquots from the samples of participating labs to run the analysis on your automated analysis system, e.g. Caliper?

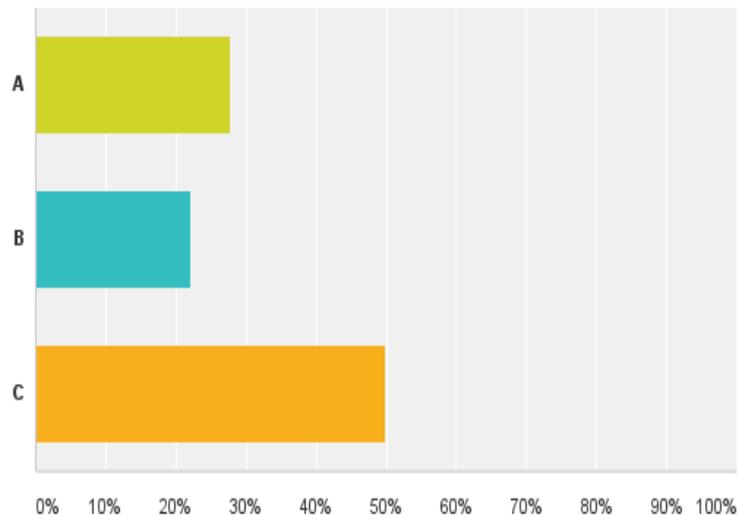
Answered: 13 Skipped: 5



Answer Choices	Responses
Chip-based electrophoresis (Caliper or similar)	23.08% 3
High-throughput Western Blot instrument (e.g. SimpleWestern)	7.69% 1
We use old school SDS-PAGE and could offer running the gels for all samples	76.92% 10
We could even do Western Blots for all of them	15.38% 2
Total Respondents: 13	

Q9: For a purification benchmarking we could either use:
A: One or more samples (i.e. frozen cell pellets) produced by one lab and sent out to the participants to be purified and assayed for purity and activity.
B: Once the expression bottlenecks are identified (and ideally removed), each lab expresses a selection of target constructs and purifies them in their own lab and we compare those results.
C: Mix of both A and B

Answered: 18 Skipped: 0



Answer Choices	Responses
A	27.78% 5
B	22.22% 4
C	50.00% 9
Total	18

Q9: For a purification benchmarking we could either use:

A: One or more samples (i.e. frozen cell pellets) produced by one lab and sent out to the participants to be purified and assayed for purity and activity.

B: Once the expression bottlenecks are identified (and ideally removed), each lab expresses a selection of target constructs and purifies them in their own lab and we compare those results.

C: Mix of both A and B

Answered: 18 Skipped: 0

Answer Choices	Responses
A	27.78% 5
B	22.22% 4
C	50.00% 9
Total	18