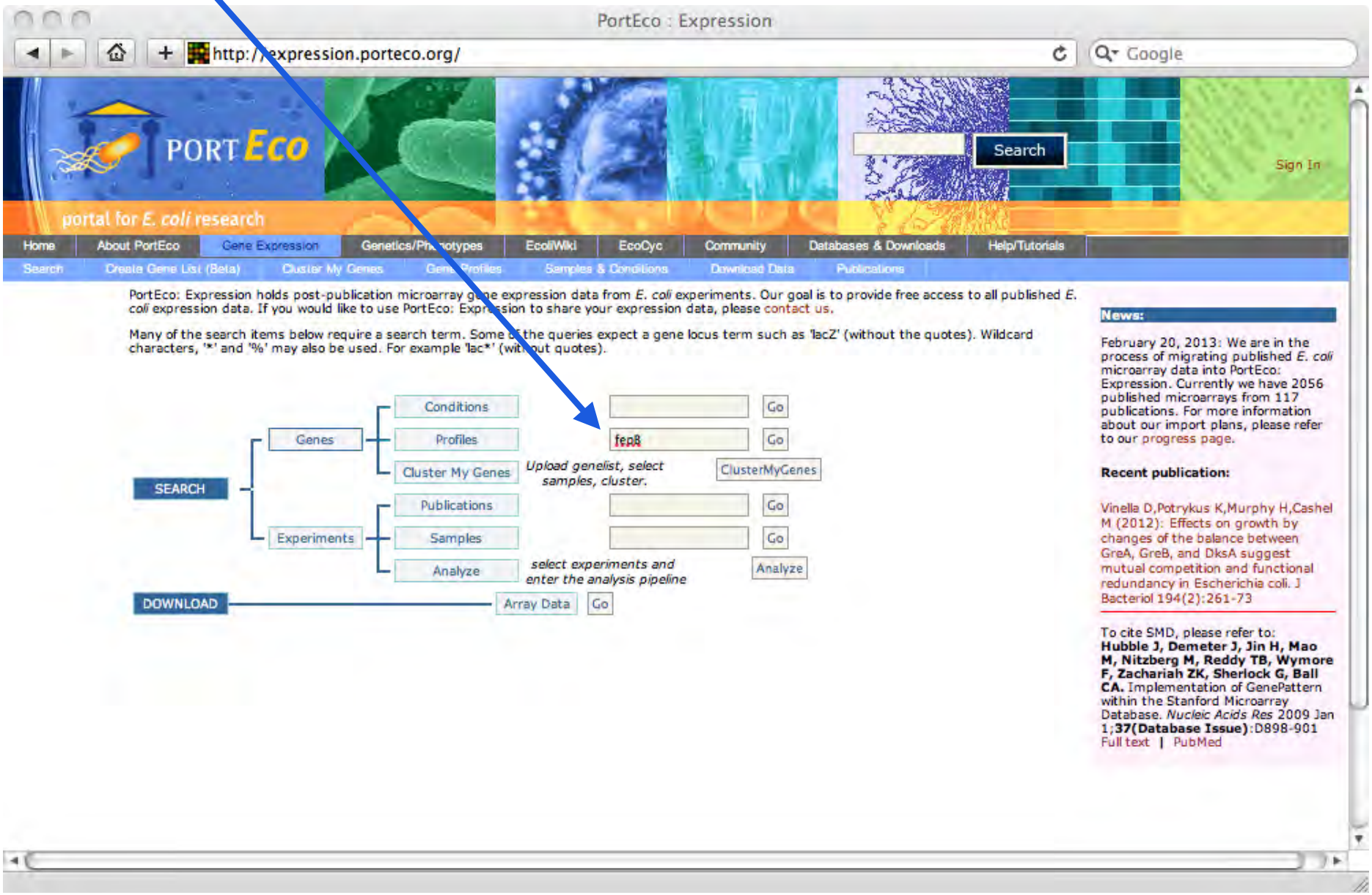
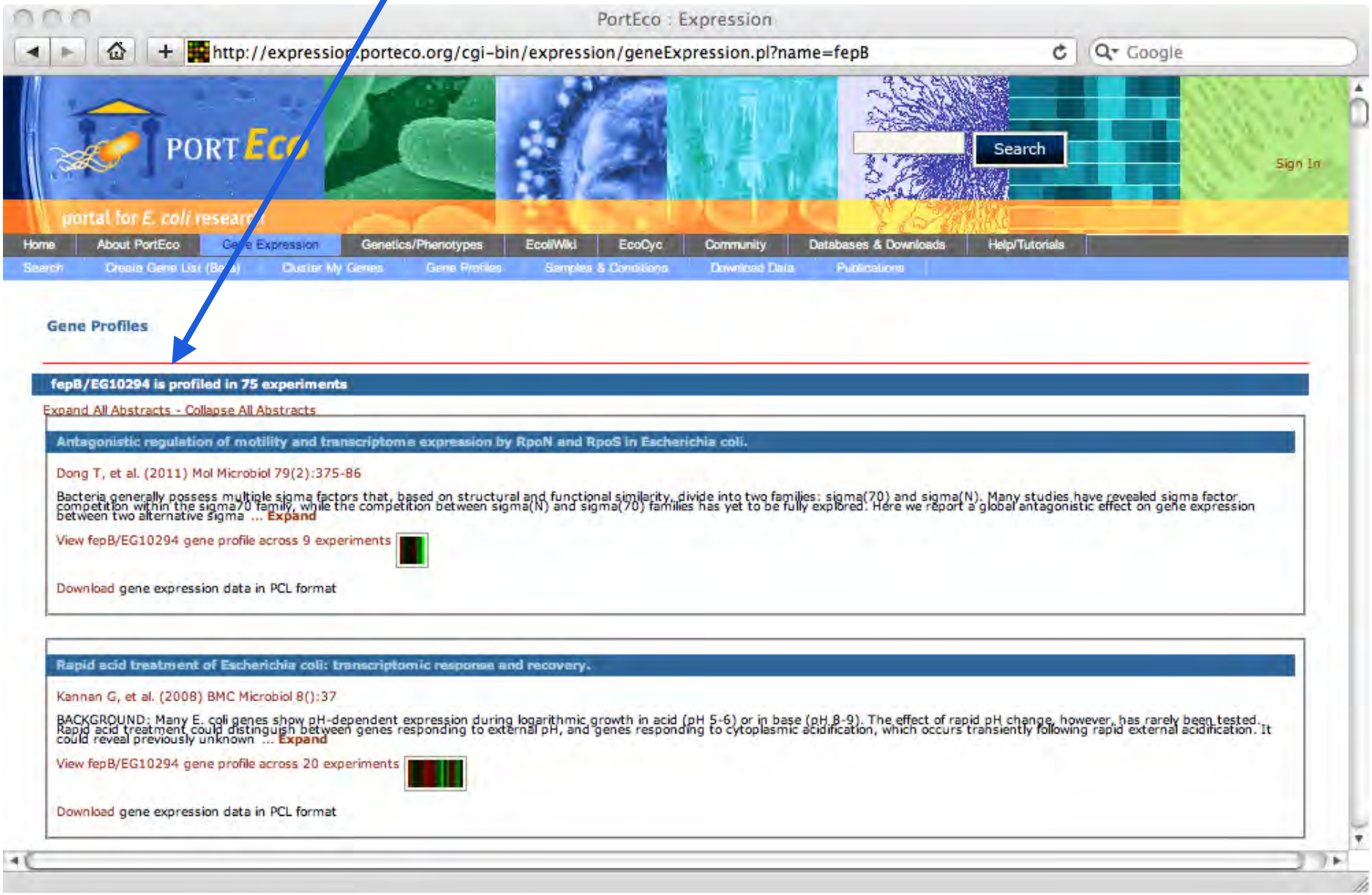
Find papers where a gene is differentially expressed

1) Click here to go to the expression page

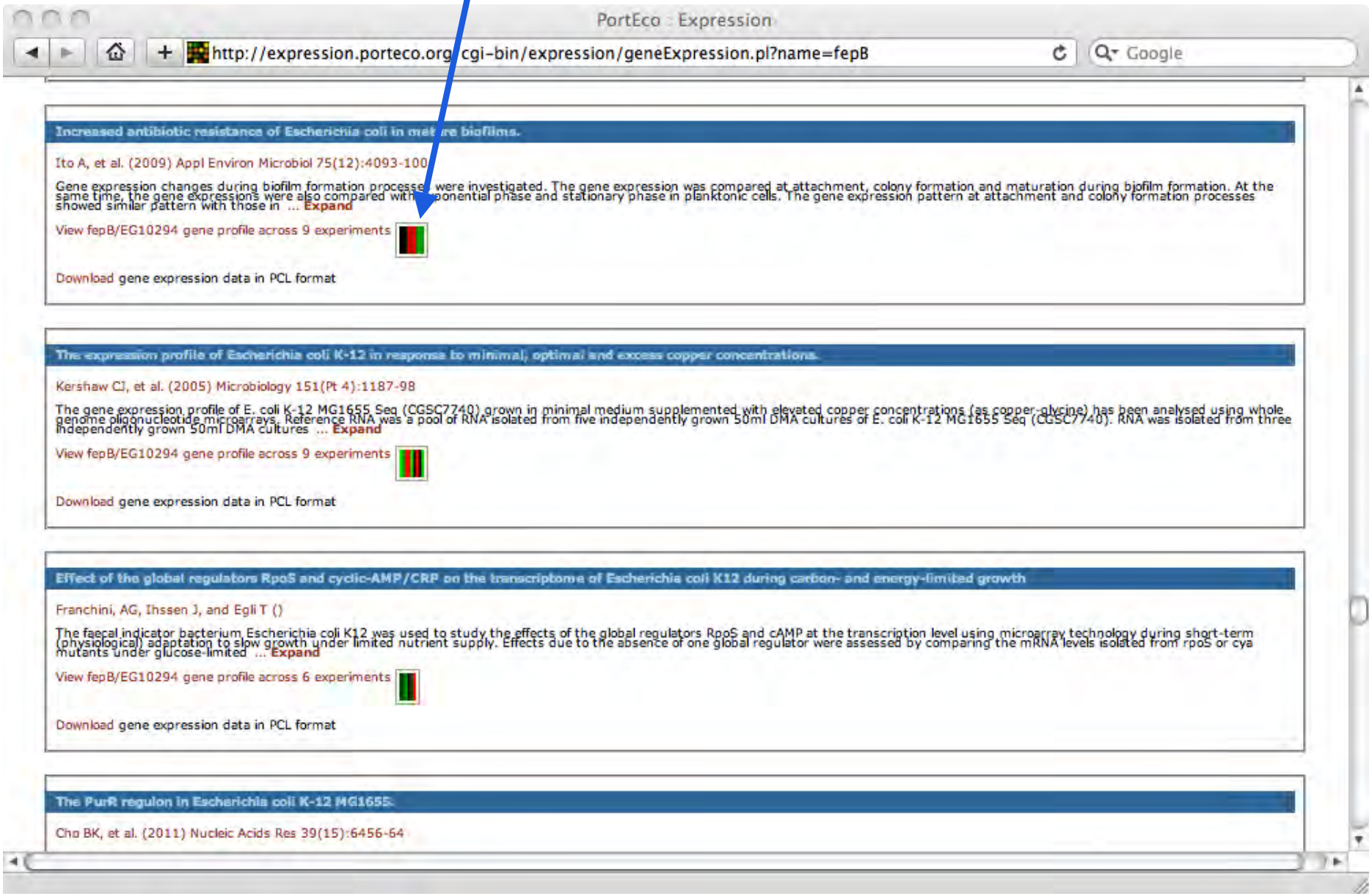
2) Enter the gene name in the Profiles search box and click 'Go'



3) *fepB* is differentially expressed in 75 experiment sets. Scroll down to browse the experiment sets and find one of interest.

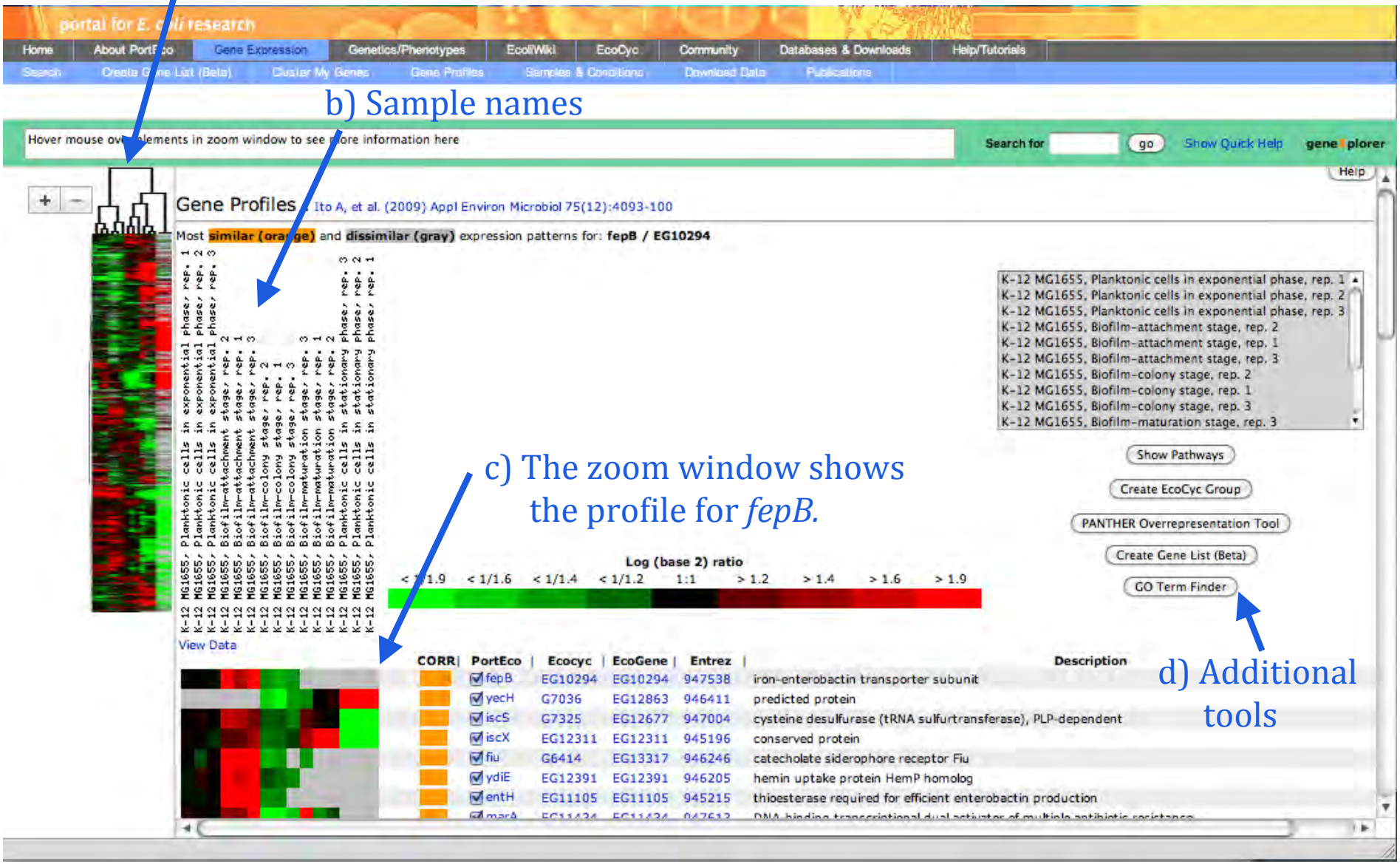


4) Let's look at how *fepB* is expressed during biofilm maturation by clicking on the profile icon for Ito et al. (2009).

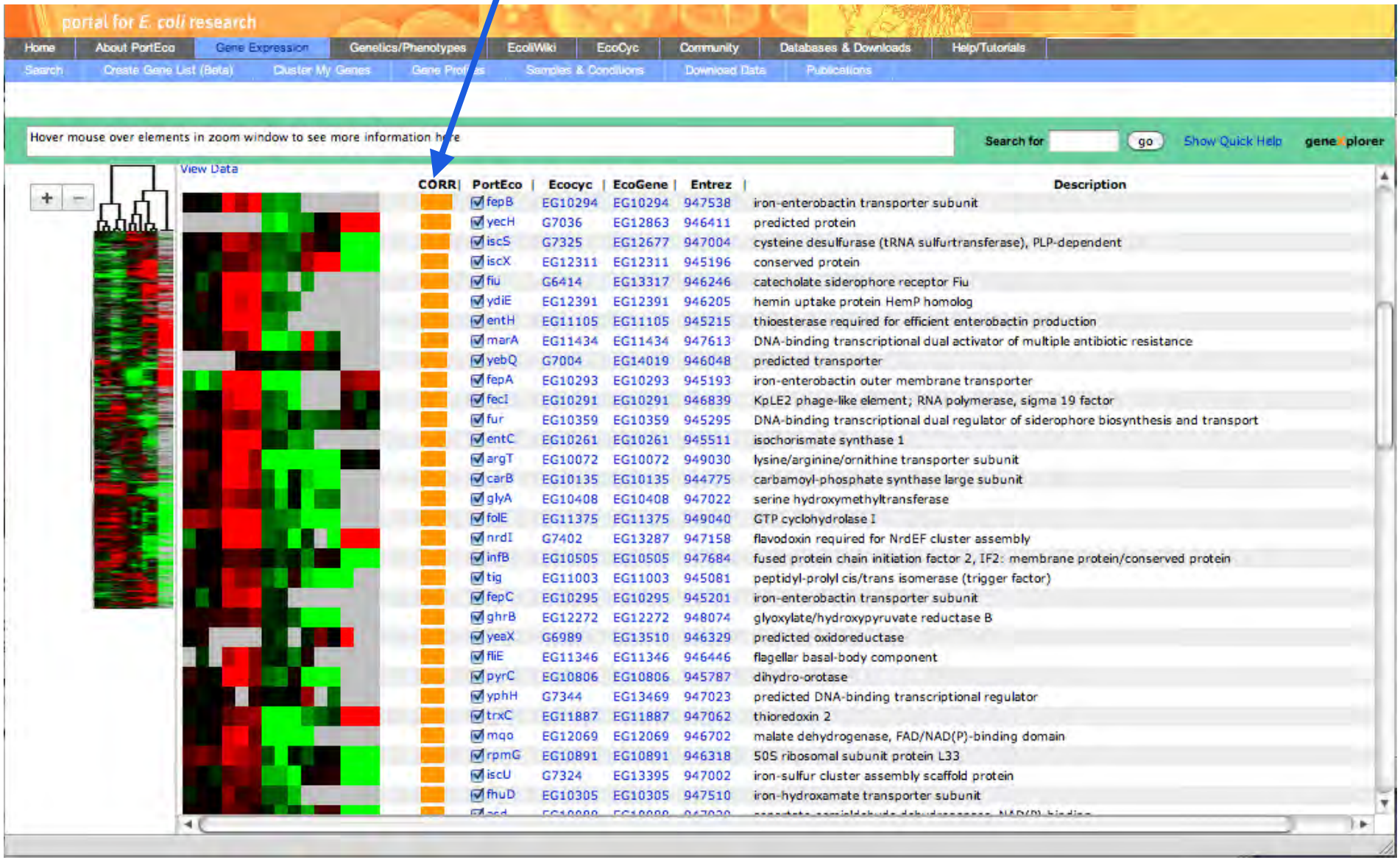


5) Gene profile displaying the $\log_2$ expression ratios across 15 samples.

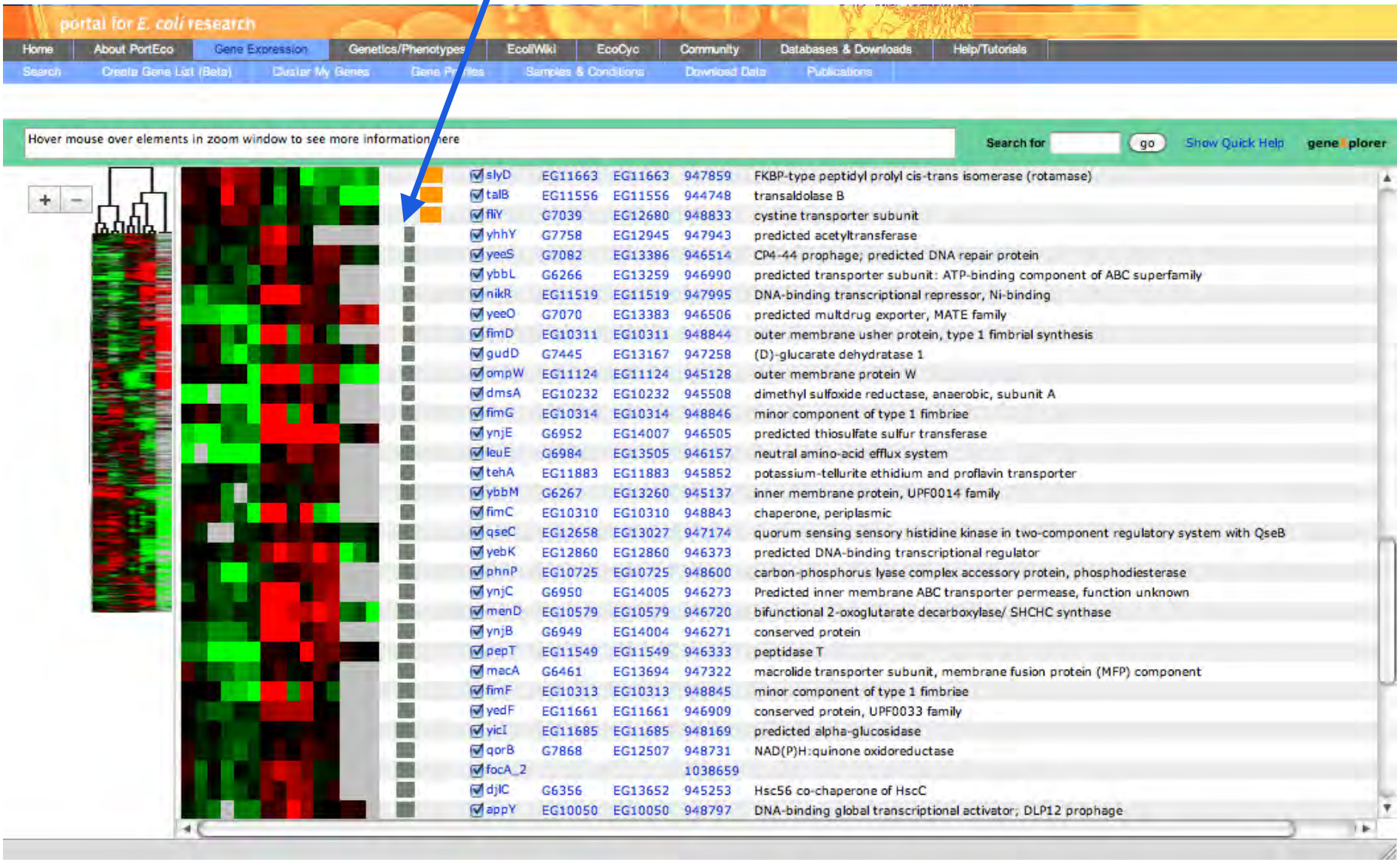
a) Heat map for the entire experiment. Use the '+' and '-' buttons to resize the display.



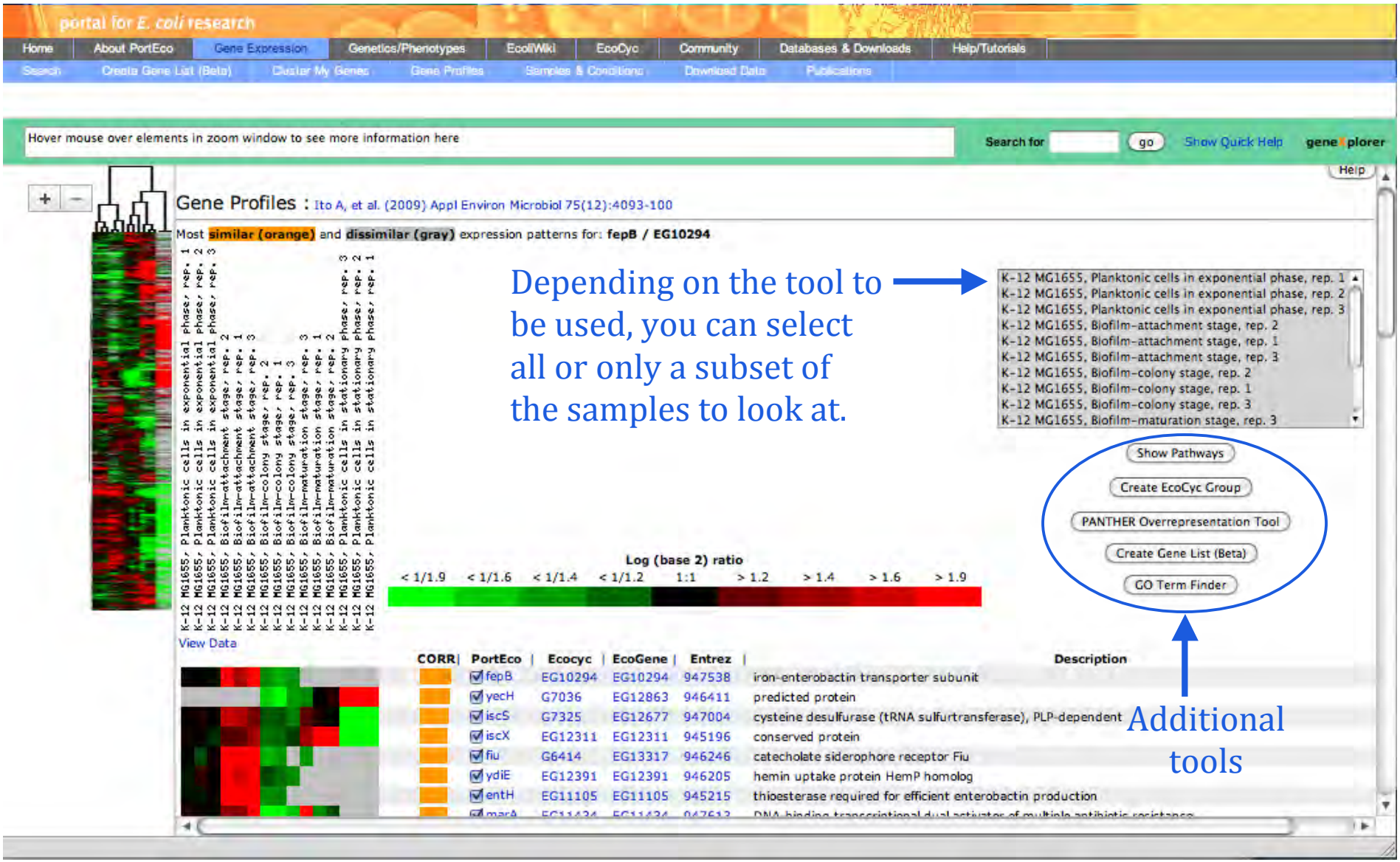
6) This display also shows the $\log_2$ expression ratios for genes whose expression is correlated (this page) or anticorrelated (next page) with *fepB*. Mouse over the orange (or gray) box in the Correlation column to see the correlation coefficient.



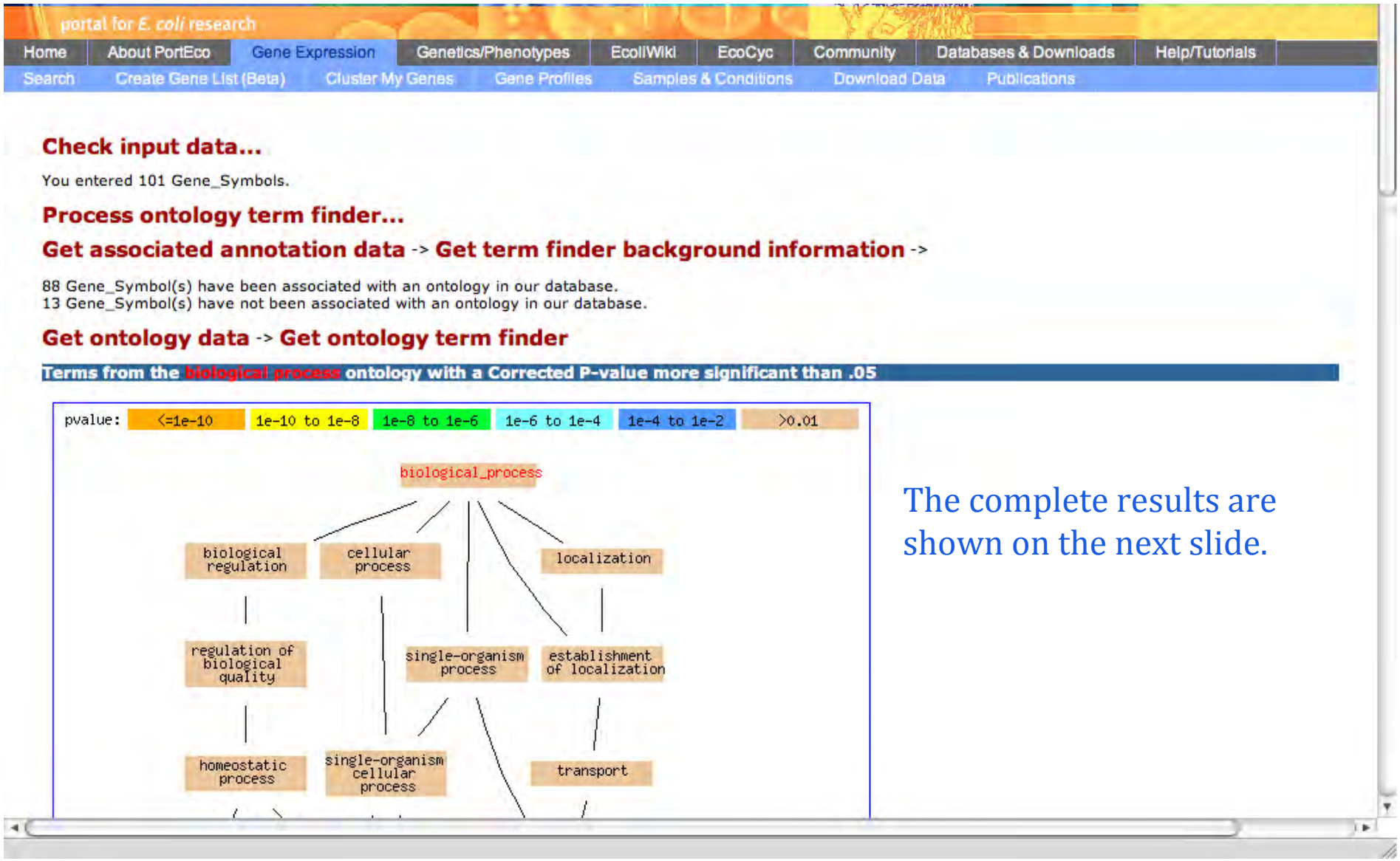
7) Genes whose expression profile is anticorrelated with that of *fepB* are marked by gray boxes.



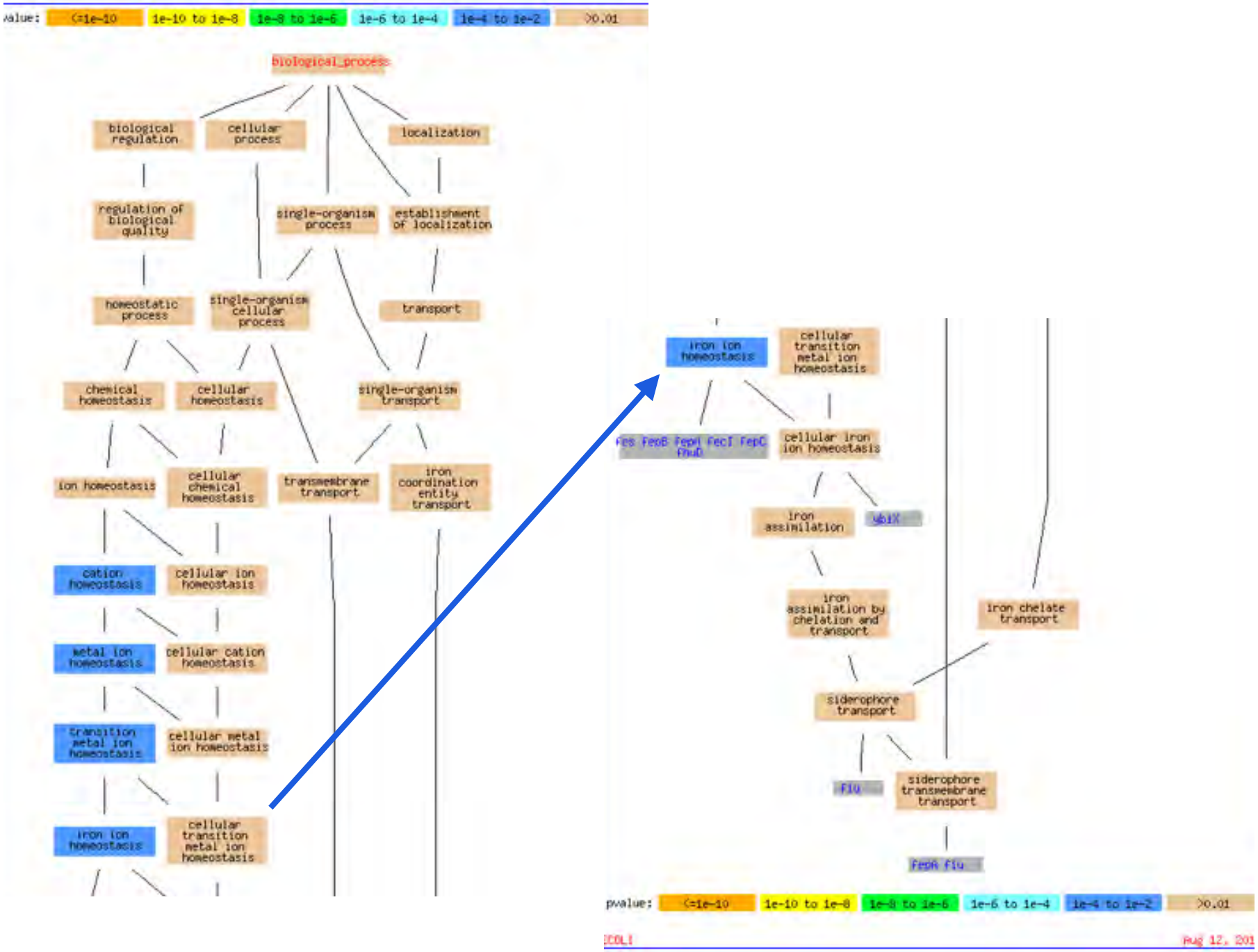
8) The correlated and anticorrelated genes can be examined further using one of the tools highlighted below.
The next slide shows the result of clicking the 'GO Term Finder'.



9) The group of genes including *fepB* and genes expressed like *fepB* is enriched for the biological process of 'iron ion homeostasis'.



The complete results are shown on the next slide.


alue:
<=1e-10
1e-10 to 1e-8
1e-8 to 1e-6
1e-6 to 1e-4
1e-4 to 1e-2
>0.01
biological_process
biological regulation
cellular process
localization
regulation of biological quality
single-organism process
establishment of localization
homeostatic process
single-organism cellular process
transport
chemical homeostasis
cellular homeostasis
single-organism transport
ion homeostasis
cellular chemical homeostasis
transmembrane transport
iron coordination entity transport
cation homeostasis
cellular ion homeostasis
metal ion homeostasis
cellular cation homeostasis
transition metal ion homeostasis
cellular metal ion homeostasis
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iron assimilation by chelation and transport
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siderophore transport
FIU
siderophore transmembrane transport
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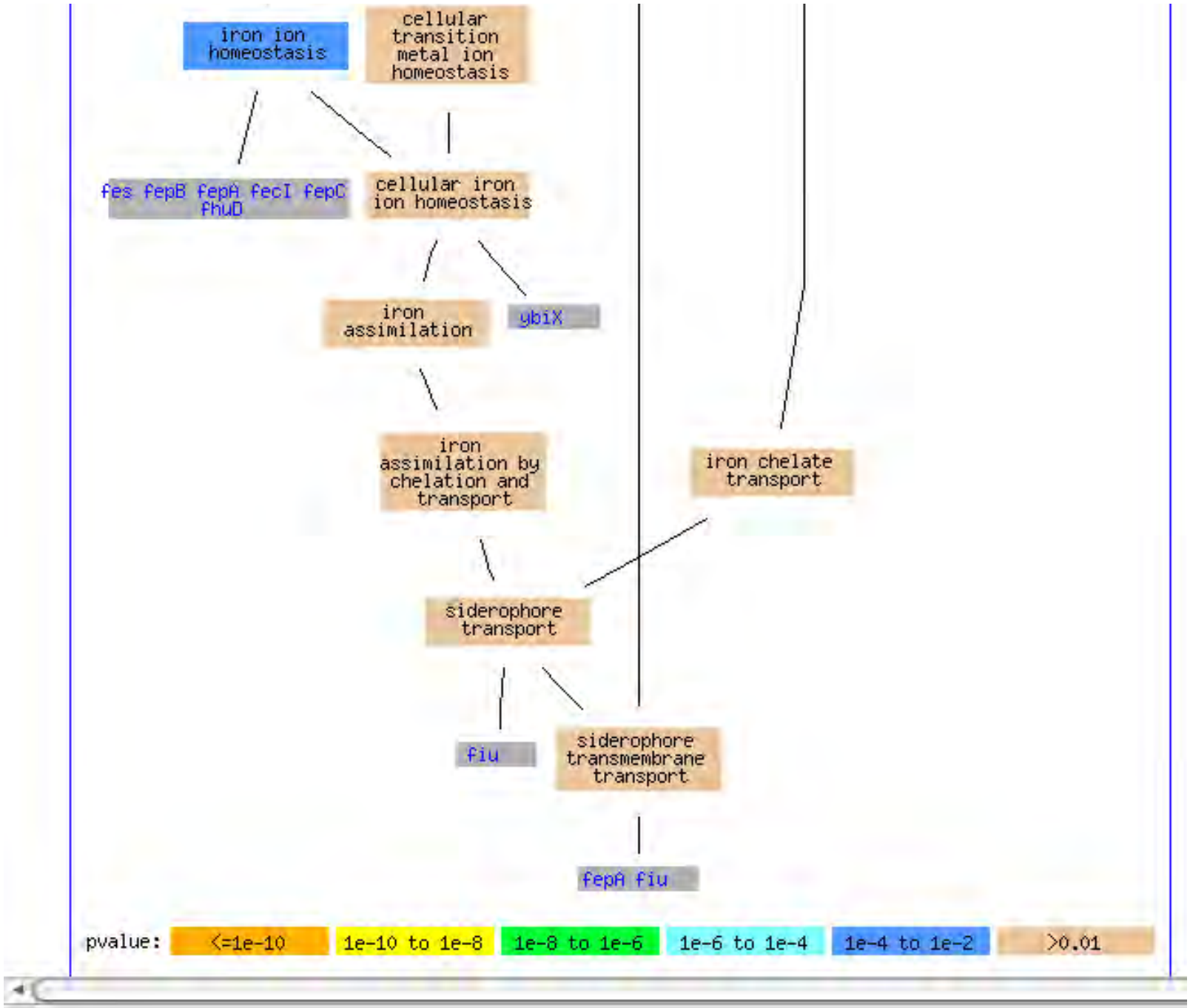
1e-10 to 1e-8
1e-8 to 1e-6
1e-6 to 1e-4
1e-4 to 1e-2
>0.01
Aug 12, 201


iron ion homeostasis
cellular transition metal ion homeostasis
fes fepB fepA fecI fepC fhuD
cellular iron ion homeostasis
iron assimilation
ybiX
iron assimilation by chelation and transport
iron chelate transport
siderophore transport
fiu
siderophore transmembrane transport
fepA fiu
pvalue:
<=1e-10
1e-10 to 1e-8
1e-8 to 1e-6
1e-6 to 1e-4
1e-4 to 1e-2
>0.01