Supplemental Figure SF3 (2 x 24 pages)
Page A. Conditional probabilities (Pr(E|I)) per intensity bin of 0.25 log2 intensity units calculated for the indicated egg.
Page B. Histogram of log2 intensity values of low-variance and high-variance probes for the indicated egg. The height of the bars indicate the number of probes present in a bin of 0.25 log2 intensity units. The cut-off above which a probe is considered to be expresses in this egg is indicated by a vertical black line.
Gene expression (log2)

Frequency

Low Variance
High Variance

Cut Off: 7.25

Egg 1 Mother 1
Egg 2 mother 1

Gene expression (log2)

estimated p(Expressed|Intensity)
Egg 2 mother 1

Cut Off: 7.05

- Low Variance
- High Variance
Egg 3 mother 1

Gene expression (log2)

estimated p(Expressed|Intensity)
Gene expression (log2)

Frequency

Low Variance
High Variance

Egg 3 mother 1
Cut Off: 6.85
Gene expression (log2) estimated $p(\text{Expressed} | \text{Intensity})$
Egg 4 mother 1
Cut Off: 6.95

- Red: Low Variance
- Blue: High Variance

Gene expression (log2) vs. Frequency

- X-axis: Gene expression (log2)
- Y-axis: Frequency
Gene expression (log2)

Frequency

5 10 15 20

0 5,000 10,000 15,000 20,000 25,000

Low Variance

High Variance

Egg 5 mother 1

Cut Off: 6.95
Gene expression (log2)
estimated $p(\text{Expressed}|\text{Intensity})$

Egg 1 mother 2
Gene expression (log2)

Frequency

Cut Off: 7.05

Egg 1 mother 2

Low Variance
High Variance
estimated $p(\text{Expressed}|\text{Intensity})$ vs Gene expression (log2)

Egg 2 mother 2

A
Egg 2 mother 2
Cut Off: 6.95

Low Variance
High Variance
Egg 3 mother 2

Gene expression (log2)

estimated p(Expressed|Intensity)
Gene expression (log2)

Frequency

5 10 15 20

0 5,000 10,000 15,000 20,000 25,000

Low Variance

High Variance

Egg 3 mother 2

Cut Off: 7.55
Egg 4 mother 2

Gene expression (log2)

estimated p(Expressed|Intensity)
Gene expression (log2)

Frequency

Low Variance
High Variance

Cut Off: 6.65

Egg 4 mother 2

B
Estimated $p(\text{Expressed}|\text{Intensity})$ vs. Gene expression (log2).
Egg 5 mother 2
Cut Off: 6.85

Low Variance
High Variance
Gene expression (log2)

estimated $p(\text{Expressed}|\text{Intensity})$
Gene expression (log2)

Frequency

Low Variance

High Variance

Egg 1 mother 3

Cut Off: 7.25

Low Variance

High Variance
Gene expression (log2) vs. estimated p(Expressed|Intensity)
Egg 3 mother 3
Cut Off: 7.45

Low Variance
High Variance
Egg 4 mother 3
Cut Off: 6.95

Low Variance
High Variance

Gene expression (log2)
Frequency

Low Variance
High Variance
Egg 5 mother 3

Cut Off: 6.85

- Low Variance
- High Variance
Egg 1 mother 4

estimated p(Expressed|Intensity) vs. Gene expression (log2)
Gene expression (log2)

Frequency

Low Variance
High Variance

Egg 1 mother 4

Cut Off: 7.45
Gene expression (log2)

estimated $p(\text{Expressed} | \text{Intensity})$
Gene expression (log2)

Frequency

Low Variance
High Variance

Egg 2 mother 4
Cut Off: 7.25
Egg 3 mother 4

Gene expression (log2)

estimated p(Expressed|Intensity)
Gene expression (log2)

Frequency

Low Variance
High Variance

Egg 3 mother 4

Cut Off: 7.25
Egg 4 mother 4

Gene expression (log2)

estimated p(Expressed|Intensity)
Gene expression (log2)

Frequency

5 10 15 20

0 5,000 10,000 15,000 20,000 25,000

Low Variance

High Variance

Egg 4 mother 4

Cut Off: 7.25
Egg 5 mother 4

Gene expression (log2)

estimated p(Expressed|Intensity)
Gene expression (log2)

Frequency

Low Variance

High Variance

Cut Off: 7.45

egg 5 mother 4
Egg 1 mother 5

Gene expression (log2)

estimated p(Expressed|Intensity)
Egg 1 mother 5

Cut Off: 7.15

Low Variance
High Variance

Gene expression (log2)
Frequency

Low Variance
High Variance
Egg 2 mother 5

Gene expression (log2)

Estimated $p(\text{Expressed}|\text{Intensity})$
Egg 2 mother 5

Cut Off: 6.85

Low Variance
High Variance
Egg 3 mother 5

Estimated $p(\text{Expressed} | \text{Intensity})$

Gene expression (log2)
Gene expression (log2)

Frequency

Low Variance
High Variance

Cut Off: 7.25

Egg 3 mother 5

B
Egg 4 mother 5

estimated p(Expressed|Intensity)

Gene expression (log2)
Gene expression (log2)

Frequency

Low Variance

High Variance

Cut Off: 7.05

Egg 4 mother 5