Integration of Relational and Hierarchical Network Information for Protein Function Prediction
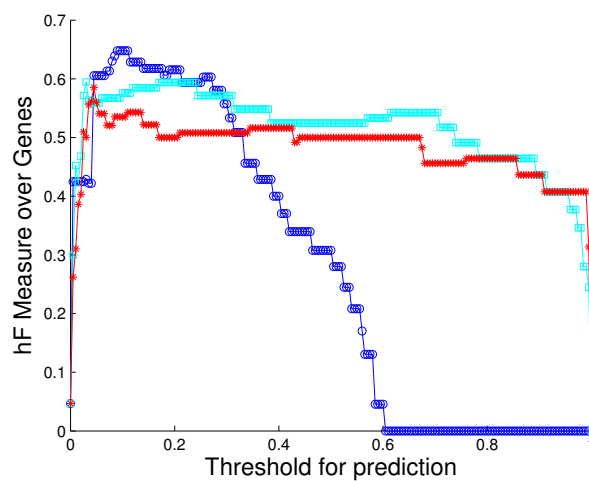
Additional file - 2

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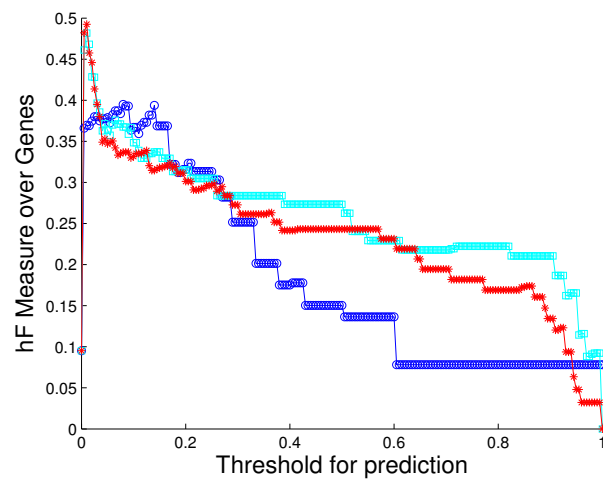
Colors: HBN (red); BN (light blue); NN (blue).

1. **Hierarchy root: GO:0006139, nucleobase, nucleoside, nucleotide and nucleic acid metabolism**
   Number of terms in hierarchy = 154
   Number of terms predicted = 58
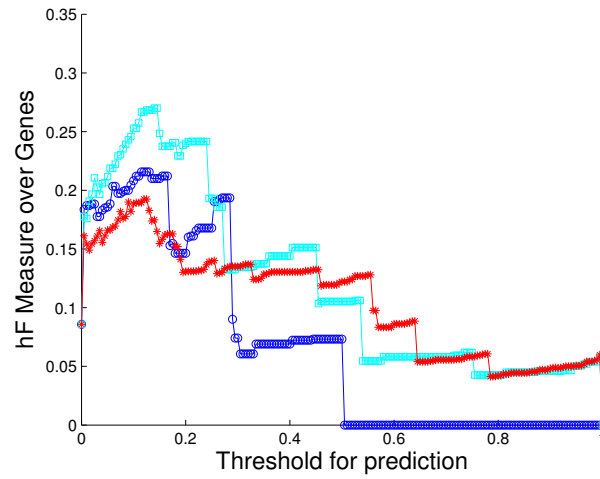   **Number of genes predicted = 31**

2. **Hierarchy root: GO:0008150, biological process**
   Number of terms in hierarchy = 70
   Number of terms predicted = 40
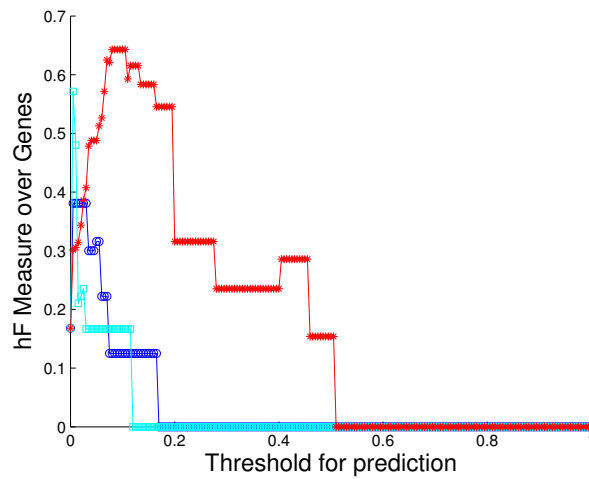   **Number of genes predicted = 58**
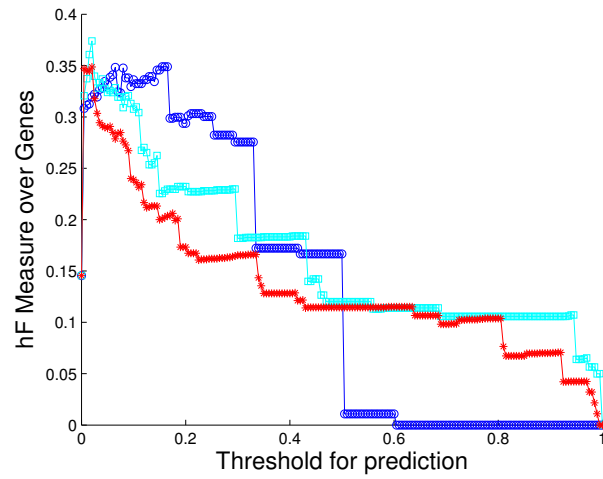
3. **Hierarchy root: GO:0009987, cellular process**
   Number of terms in hierarchy = 47
   Number of terms predicted = 33
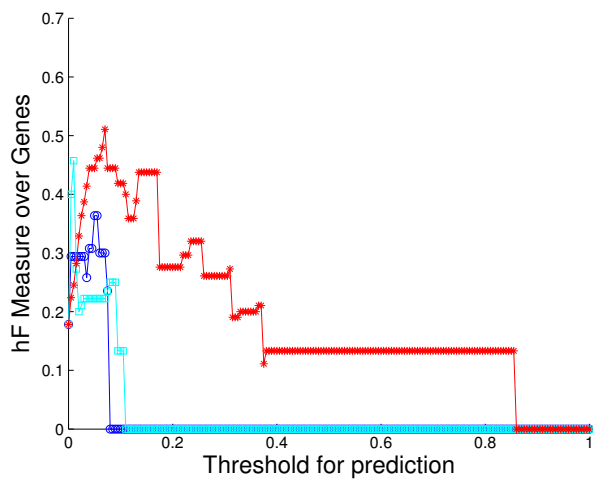   **Number of genes predicted = 74**

4. **Hierarchy root: GO:0016043, cell organization and biogenesis**
   Number of terms in hierarchy = 53
   Number of terms predicted = 40
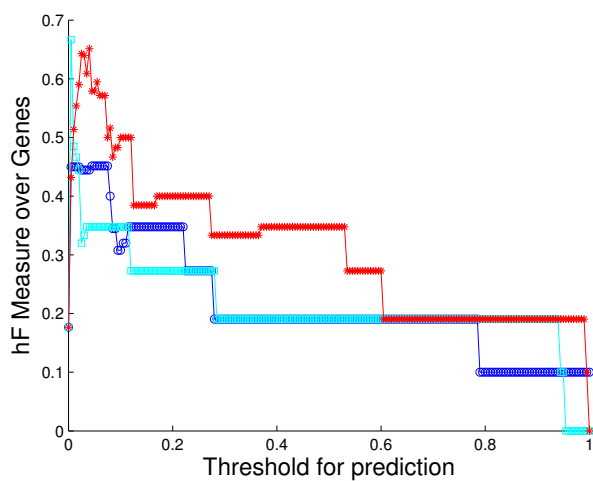   **Number of genes predicted = 34**

5. **Hierarchy root: GO:0019219, regulation of nucleobase, nucleoside, nucleotide and nucleic acid metabolism**
   Number of terms in hierarchy = 32
   Number of terms predicted = 15
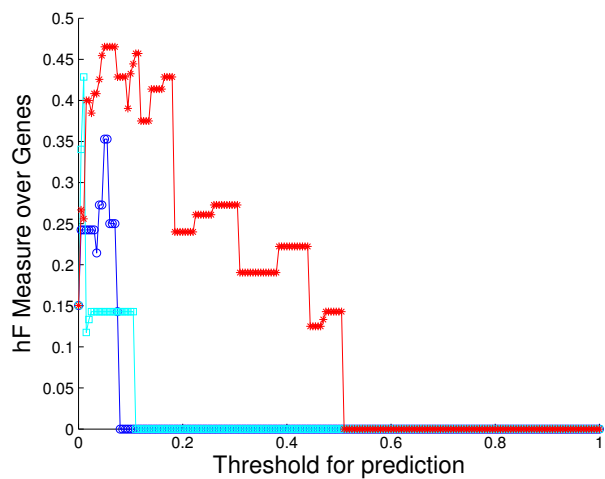   **Number of genes predicted = 8**

6. **Hierarchy root: GO:0019222, regulation of metabolism**
   Number of terms in hierarchy = 33
   Number of terms predicted = 13
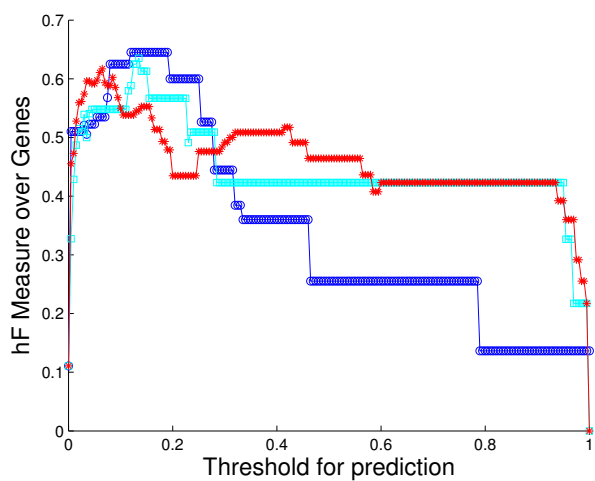   **Number of genes predicted = 11**

7. **Hierarchy root: GO:0019538, protein metabolism**
   Number of terms in hierarchy = 36
   Number of terms predicted = 14
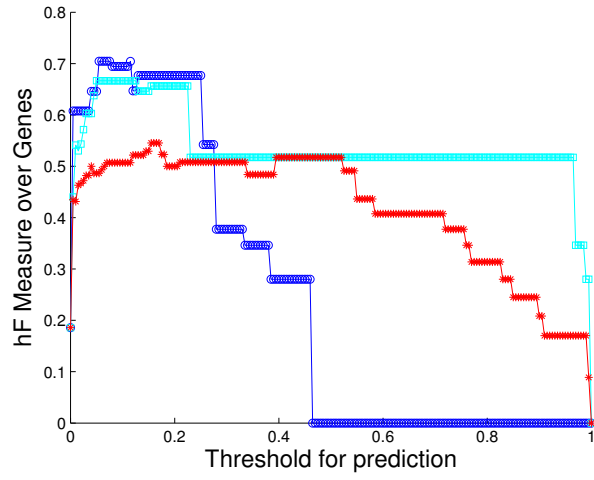   **Number of genes predicted = 14**

8. **Hierarchy root: GO:0031323, regulation of cellular metabolism**
   Number of terms in hierarchy = 33
   Number of terms predicted = 16
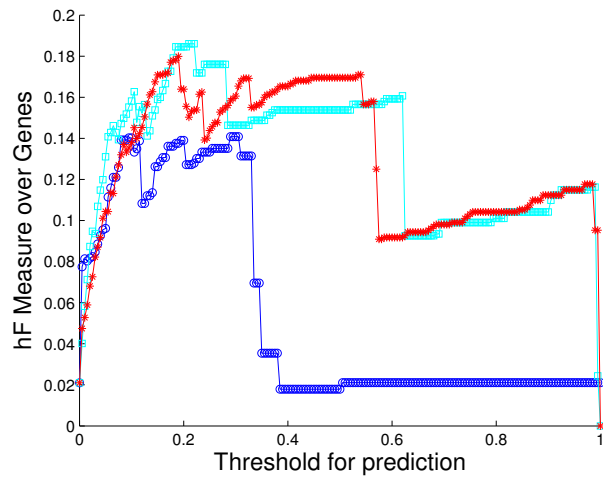   **Number of genes predicted = 10**

9. **Hierarchy root: GO:0043170, macromolecule matabolism**
   Number of terms in hierarchy = 73
   Number of terms predicted = 35
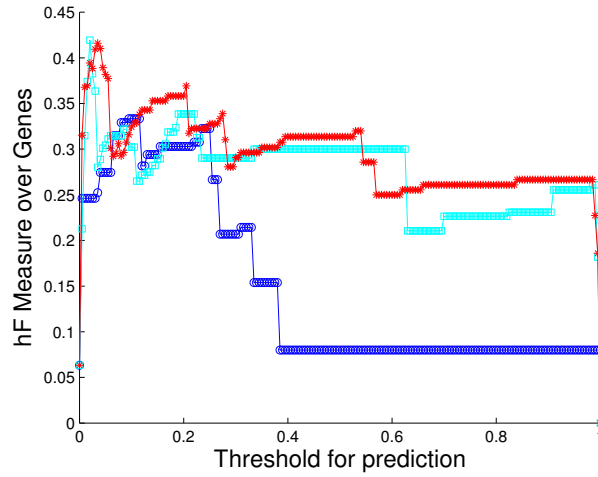   **Number of genes predicted = 20**

10. **Hierarchy root: GO:0043283, biopolymer metabolism**
    Number of terms in hierarchy = 53
    Number of terms predicted = 35
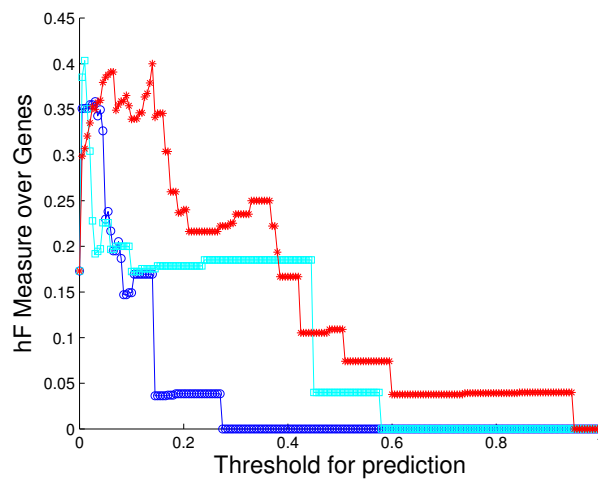   **Number of genes predicted = 12**

11. **Hierarchy root: GO:0044237, cellular metabolism**
    Number of terms in hierarchy = 266
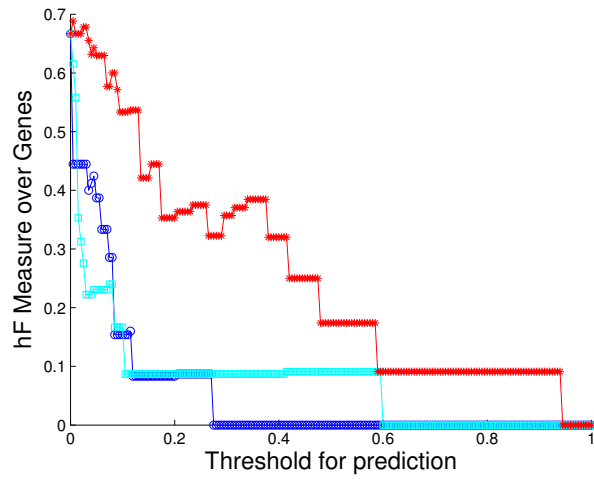   **Number of terms predicted = 148**
    Number of genes predicted = 51

12. **Hierarchy root: GO:0044238, primary metabolism**
    Number of terms in hierarchy = 266
    Number of terms predicted = 149
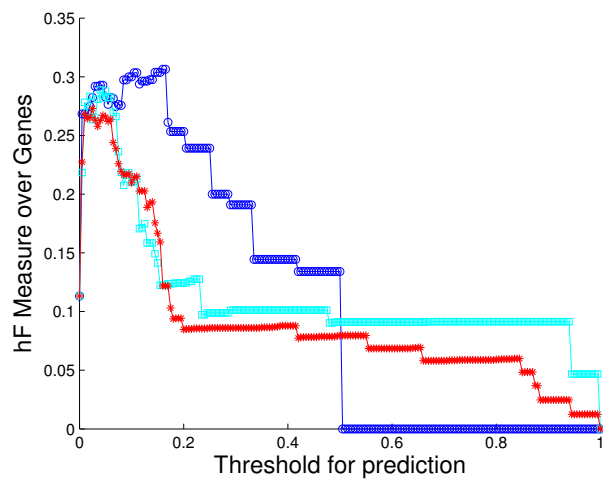   **Number of genes predicted = 8**

13. **Hierarchy root: GO:0050789, regulation of biological process**
    Number of terms in hierarchy = 42
    Number of terms predicted = 18
    Number of genes predicted = 27

14. **Hierarchy root: GO:0050794, regulation of cellular process**
    Number of terms in hierarchy = 7
    Number of terms predicted = 2
    Number of genes predicted = 21
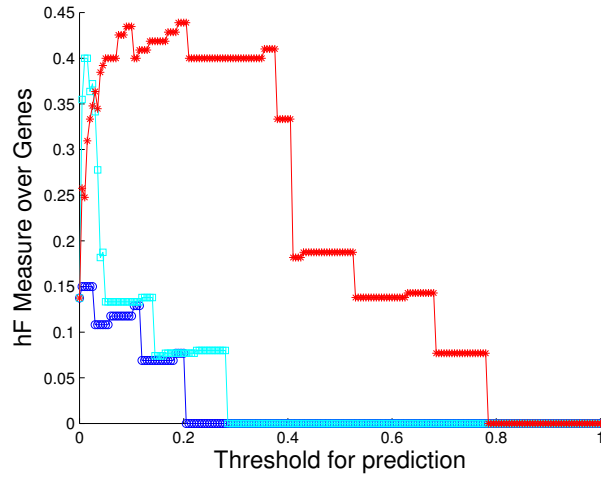

15. **Hierarchy root: GO:0050875, cellular physiological process**
    Number of terms in hierarchy = 83
    Number of terms predicted = 58
    Number of genes predicted = 46

16. **Hierarchy root: GO:0050896, response to stimulus**
    Number of terms in hierarchy = 72
    Number of terms predicted = 39
    Number of genes predicted = 8

17. **Hierarchy root: GO:0051234, establishment of localization**
    Number of terms in hierarchy = 8
    Number of terms predicted = 5
    Number of genes predicted = 12