Unravelling higher order genome organisation [working title]

Results 5: Collaborations

Benjamin L. Moore

July 17, 2015

igmm
INSTITUTE OF GENETICS
& MOLECULAR MEDICINE

MRC Medical Research Council

THE UNIVERSITY OF EDINBURGH

CANCER RESEARCH UK

1 LOCAL CHROMATIN CONFORMATION

1.1 INTRODUCTION

The Hi-C assay provides a genome-wide overview of chromatin conformation, however this broad scope imposes resolution limits inherent to an all-vs-all assay. For a closer look at chromatin conformation within a region of interest, alternative C-based assays such as 3C, 4C and 5C can be employed alongside classical microscopy techniques like FISH.

Here I discuss two collaborative projects involving the use of 4C-seq and 5C data to "zoom in" on two well-studied regions related to limb development: the ZRS enhancer and HoxD gene cluster.

1.2 4C OF THE ZRS ENHANCER

1.2.1 Assay diagnostics

1.2.2 4C / Hi-C comparison

1.2.3 3D modelling

1.3 5C IN THE HOXD REGION

1.3.1 Differential contacts

1.3.2 5C / Hi-C comparison

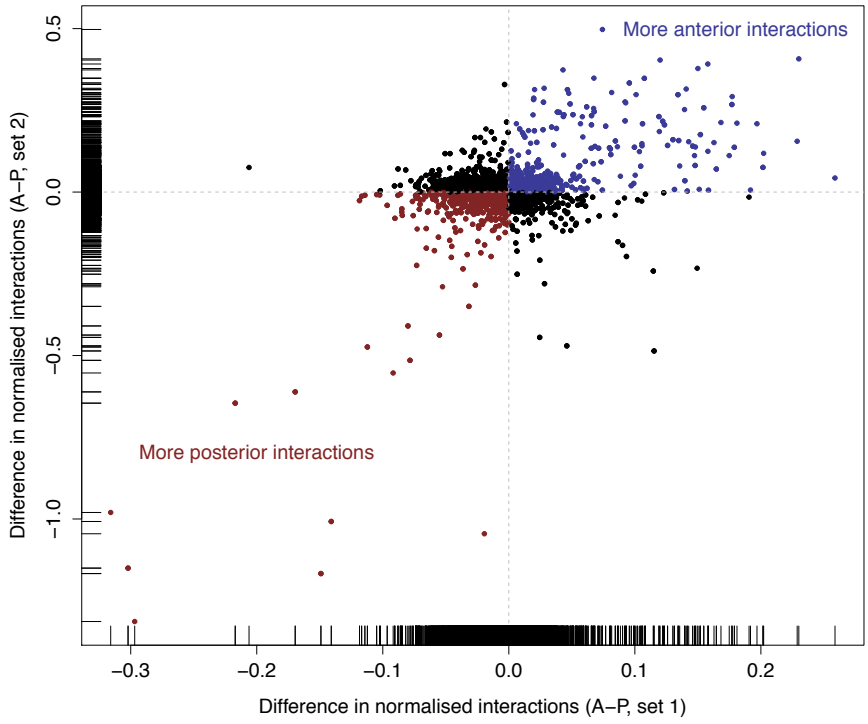

Figure 1: Will we use this stuff? Placeholder

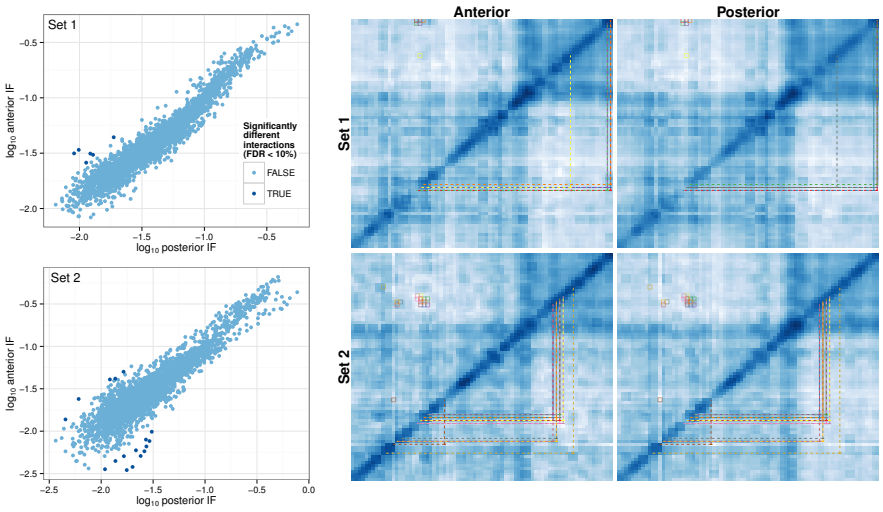

Figure 2: Will we use this stuff? Placeholder

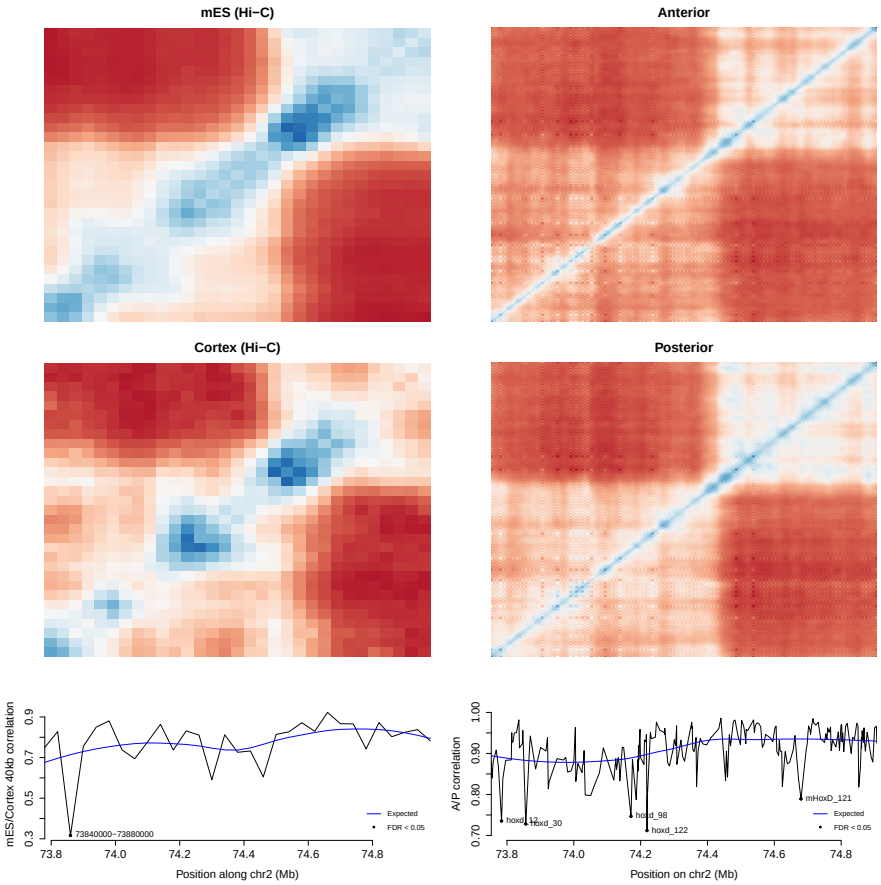

Figure 3: Will we use this stuff? Placeholder