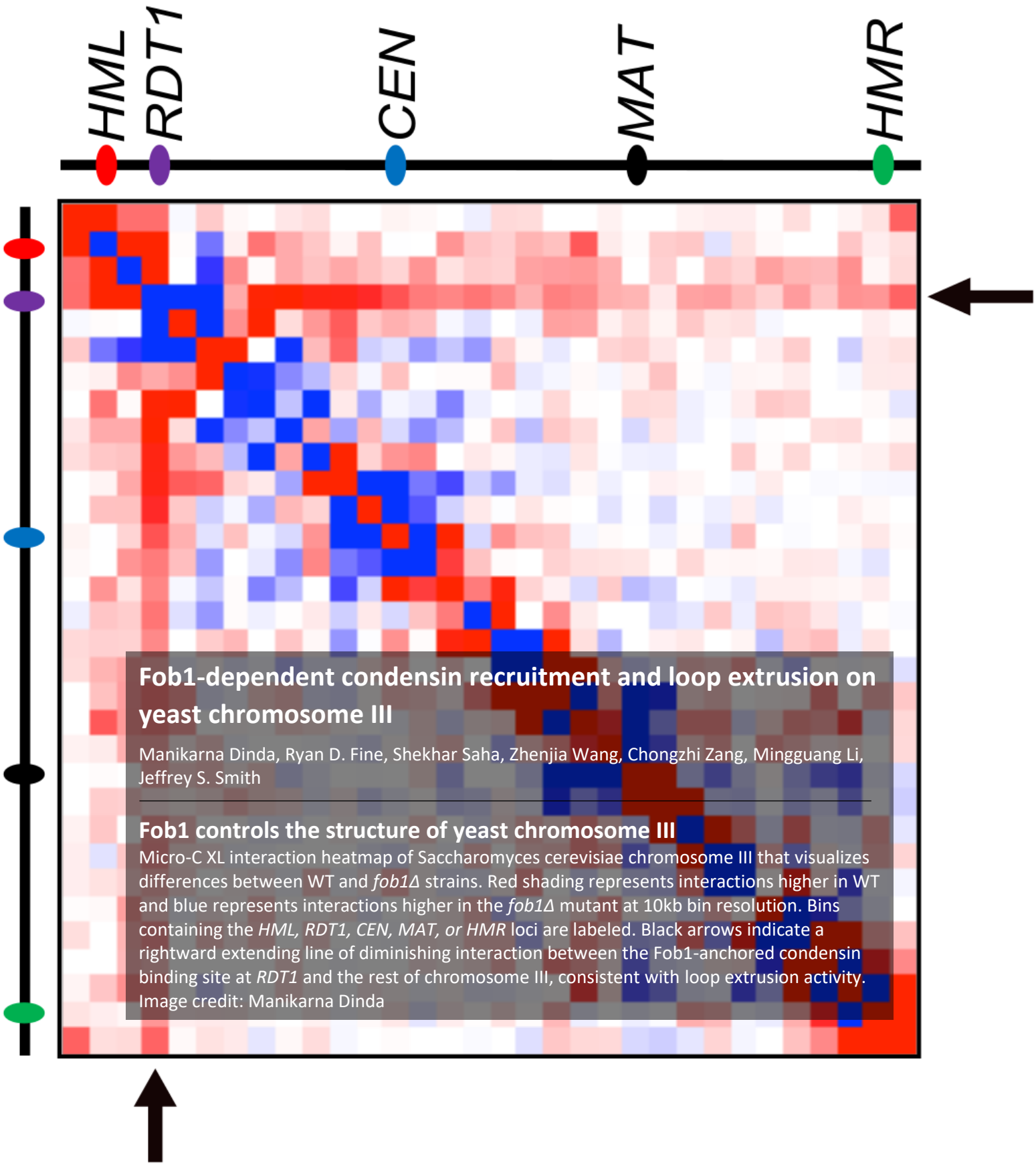
PLOS GENETICS

Public Library of Science | plosgenetics.org | Volume 19 | Issue 4 | April 2023



Fob1-dependent condensin recruitment and loop extrusion on yeast chromosome III

Manikarna Dinda, Ryan D. Fine, Shekhar Saha, Zhenjia Wang, Chongzhi Zang, Mingguang Li, Jeffrey S. Smith

Fob1 controls the structure of yeast chromosome III

Micro-C XL interaction heatmap of Saccharomyces cerevisiae chromosome III that visualizes differences between WT and *fob1Δ* strains. Red shading represents interactions higher in WT and blue represents interactions higher in the *fob1Δ* mutant at 10kb bin resolution. Bins containing the *HML, RDT1, CEN, MAT, or HMR* loci are labeled. Black arrows indicate a rightward extending line of diminishing interaction between the Fob1-anchored condensin binding site at *RDT1* and the rest of chromosome III, consistent with loop extrusion activity. Image credit: Manikarna Dinda