



Multiscale
Complex
Genomics



Multiscale Complex Genomics



Project Acronym: MuG

Project title: Multi-Scale Complex Genomics (MuG)

Call: H2020-EINFRA-2015-1

Topic: EINFRA-9-2015

Project Number: 676556

Project Coordinator: Institute for Research in Biomedicine (IRB Barcelona)

Project start date: 1/11/2015

Duration: 36 months

Milestone 29: ABC data analysed and DNA sequence-dependent flexibility data obtained

Lead beneficiary: The University of Nottingham (UNOT)

Dissemination level: PUBLIC

Due date: 01/04/2017

Actual submission date: 31/03/2016

The large set of MD simulation data described in [MS29](#), which represents the most complete available source of information on the sequence-dependent behaviour of B-DNA in solution, has been analysed in terms of DNA flexibility.

This analysis has furthered our understanding of the complex dependence of DNA structure and flexibility on its sequence: the results have been made available in the MuG section of the [BIGNASim repository](#) as well as in the MuG Interactive [Flexibility Browser](#) , both of which are available through the MuG VRE.

This new data, obtained from simulation using the latest and most refined force field for DNA simulations (parmBSC1), complement the information produced in [MS22](#), providing a significant improvement in accuracy.