

Pre-clinical Workflow

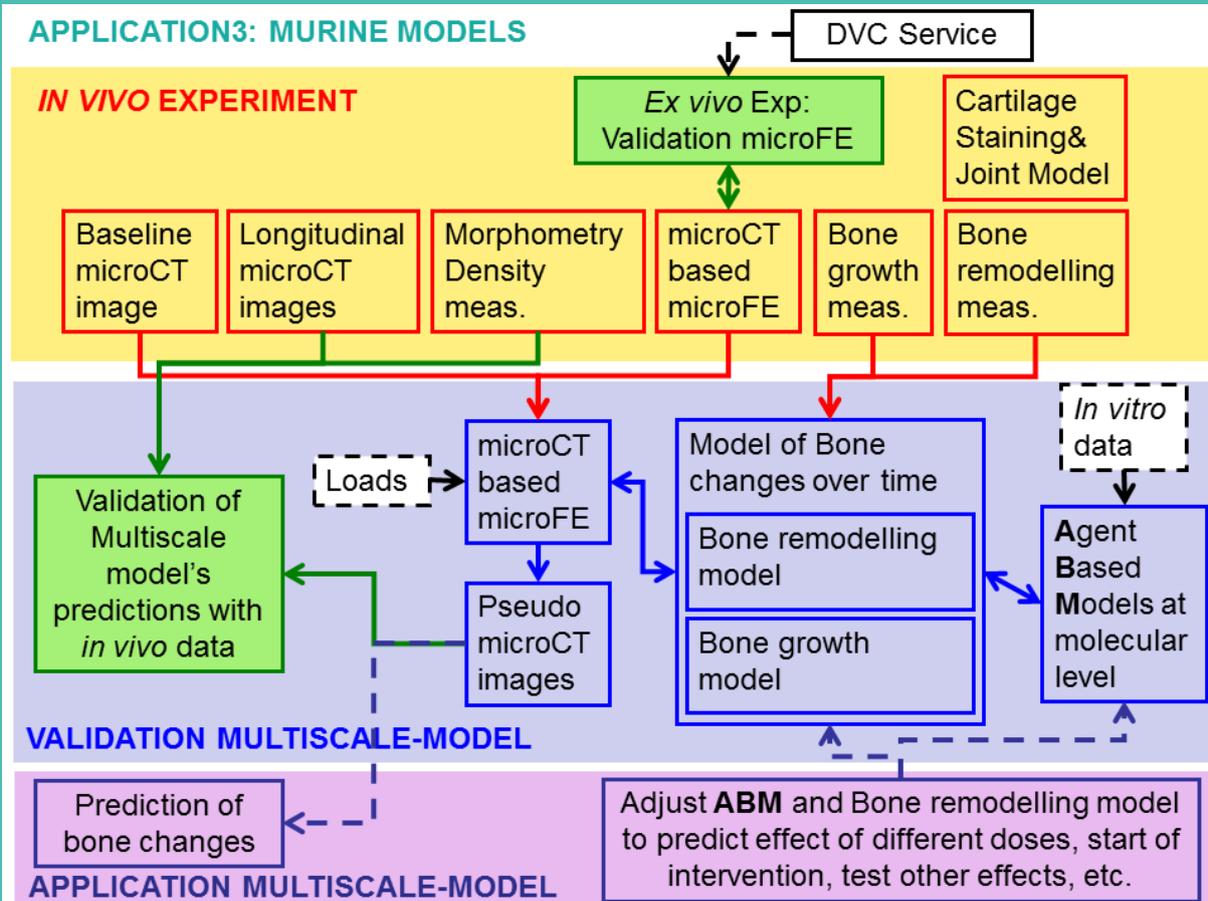


Improving the current preclinical assessment of new interventions is fundamental to optimise the development of new treatments!

Motivation:

The goal of application 3 is to generate a computational and experimental framework to evaluate the effect of novel interventions against diseases of the musculoskeletal system in a preclinical setting, using *in vitro* analyses, *in vivo* longitudinal experiments with a small number of mice and *in silico* approaches including finite element models, bone remodelling algorithms and agent based models at the molecular level.

APPLICATION 3: MURINE MODELS



Pre-clinical Workflow



Dr Enrico Dall'Ara
Oncology&Metabolism
Lead of WP7, WP4

e.dallara@sheffield.ac.uk



Prof Visakan Kadiramanathan
Automatic Control and Systems Eng.

Co-lead in WP6
visakan@sheffield.ac.uk



Prof Tim Skerry
Oncology&Metabolism
Lead of WP5

t.skerry@sheffield.ac.uk



Dr Pinaki Bhattacharia
Mechanical Eng.
Lead of WP9

p.bhattacharya@sheffield.ac.uk



Dr Bryant Roberts
Oncology&Metabolism
PDRA in WP7

b.c.roberts@sheffield.ac.uk



Dr Yang Zhang
Automatic Control and Systems Eng.
PDRA in WP6

Yang.zhang1@sheffield.ac.uk



Dr Vee San Cheong
Mechanical Eng.
PDRA in WP4

v.cheong@sheffield.ac.uk



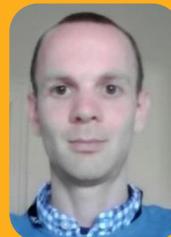
Dr Aban Shuaib
Oncology&Metabolism
PDRA in WP5

Aban.shuaib@sheffield.ac.uk



Dr Sahand Zanjani-pour
Oncology&Metabolism
PDRA in WP7

s.zanjani-pour@sheffield.ac.uk



Mr Will Griffiths
Mechanical Eng.
SD in WP9

w.griffiths@sheffield.ac.uk

Previous Members of MULTISIM who contributed to the Workflow:

Prof Damien Lacroix, Dr Sara Oliviero, Dr Mario Giorgi, Dr Ana Campos Marin, Dr Gareth Fletcher and Dr Gianluca Ascolani.