**EASTBIO Thematic Training meetings – Rules of Life**
**Meeting 1 – ‘Bending the Rules of Life’**

**Hosts**: Andrew Nicoll (Edinburgh), Tamsin Woodman (Edinburgh), Simon Harnqvist (Edinburgh)

**Date**: Monday 12th December 2022, 10:30-16:30 (starting from 11:00)

**Venue**: Swann Building Floor 7, Kings Buildings Campus, University of Edinburgh

**Meeting description**:

This meeting will be the first in a series of meetings for the EASTBIO 22/23 cohort in *‘Understanding the Rules of Life’*. The theme of this meeting is ‘**Bending the Rules of Life**’, with an emphasis on these rules on a ‘**Molecular level**’.

This day will involve a ‘Get-to-know-each-other’ session where we will discuss our projects and what rules of life we may be ‘bending’ or even ‘breaking’. There will be two guest talks: one about bending the rules of life in synthetic biology by **Dr Nadanai Laohakunakorn**; and the other about bending the rules of life in the modelling of biochemical reactions by **Prof Ramon Grima**; both followed by an audience-led Q&A.

Our computational workshop will provide an ideal opportunity to apply some of the computational skills we have learned from the past few masterclasses as well as push the limits on how far we can bend the rules of life from a modelling perspective. We will conclude by summarising the theme of our meeting, how our outlook on the *‘Rules of Life’* may have changed, and how this may inform future research in our respective fields.

**Meeting schedule**:

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| 10:00-10:30 | Setup and early arrivals |
| 10:30-11:00 | Arrivals (including commuters) Tea/coffee/breakfast |
| 11:00-11:45 | *Start*‘Get-to-know-each-other’ session* PhD icebreaker bingo
* PhD Project Pictionary
* Rules of Life brainstorming
* What rules of life will you bending (or even breaking) in your projects?
* What rules of life are often bent in your field?
* What rules of life can we break, and what rules shouldn’t we break and why?
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| 11:45-12:15 | Talk on Synthetic Biology by Dr Nadanai Laohakunakorn (University of Edinburgh) |
| 12:15-12:30 | First talk Q&A |
| 12:30-13:30 | *Lunch* (in Swann 7th floor café) – **catering provided** |
| 13:30-13:35 | Aims of afternoon sessions – computational work, groups, figures, |
| 13:35-14:05 | Talk on Modelling & Computation by Prof Ramon Grima (University of Edinburgh) |
| 14:05-14:20 | Second talk Q&A |
| 14:20-15:10 | First part of computational exercise |
| 15:10-15:30 | *Tea break* |
| 15:30-16:15 | Second part of computational exerciseMore modelling biochemical reactions, groups present the model they have been working on, what rules did you bend/break? |
| 16:15-16:30 | Closing remarks and competition winnersRecap bending the rules of life – what have you learnt? |
| 16:30 | *Departures* |
| 17:00 | Optional social – food and pub |

For the computational workshop we will be using the software COPASI (**CO**mplex **PA**thway **SI**mulator) which can be downloaded from [here](https://copasi.org/Download/), please choose the appropriate version for your operating system. We can also download this during the session itself if needed. Thanks!

For further queries, you can email Andrew Nicoll a.g.nicoll@sms.ed.ac.uk, Tamsin Woodman t.woodman@sms.ed.ac.uk, or Simon Harnqvist simon.harnqvist@ed.ac.uk.