# DYNALIFE

# Training School on "The Riddle of the Genetic Code"



### Mülheim an der Ruhr (Germany)





Funded by the European Union

#### About Dynalife COST Action

The training course on the mysteries of the genetic code will take place in Mülheim an der Ruhr from May 1 to 3, 2024. The venue is the conference center "Die Wolfsburg", where the trainers and trainees will also be accommodated. The topic - the enigma of the genetic code - is a central theme of the DYNALIFE COST project and is particularly important for the WG1 and WG2 groups. Several of the goals of the DYNALIFE project deal with the genetic code, e.g. developing and testing the various models and theories on genetic coding with state-of-the-art biological data and modern methods from statistics and data science in general. The idea of the training school is therefore to provide a platform for the DYNALIFE community to learn and study the facets of the genetic code. Six trainers will each give a half-day introduction to their area of expertise around the genetic code (topics range from theoretical properties of the genetic code to statistical methods for studying the genetic code and genetic data to applications in biology). The lecturers will prepare lectures and exercises or practical studies at a level suitable for young researchers. The school is primarily aimed at PhD students or young researchers, but is also open to established researchers in working groups WG1 and WG2 who wish to broaden their knowledge in the field to advance their research within DYNALIFE.

#### Tuesday: April 30, 2024

14.30 - 18.00	Gathering together, discussion, preparation by trainers
18.00 - 19.30	Dinner
19.30 - 21.00	Get together

#### Wednesday: May 1, 2024

8.00 - 9.00	Breakfast
9.00 – 12.00	<b>Branko Dragovich</b> (Serbia) How and Why Similar Codons Code the Same or Similar Amino Acids?
12.00 - 14.30	Lunch Break
14.30 - 18.00	<b>Adam Kun</b> (Hungary) Prebiotic evolution of the genetic code - stages and mutations
16.00 – 16.30	Coffee Break
18.00 – 19.30	Dinner
19.30 – 21.00	Discussion/ social gathering

#### Thursday: May 2, 2024

8.00 - 9.00	Breakfast
9.00 - 12.00	<b>Christian Michel</b> (France) The riddle of the circular code
12.00 - 14.30	Lunch Break
14.30 - 18.00	<b>Simone Giannerini</b> (Italy) The mathematical structure of the genetic code: degeneracy, symmetry and error correction
16.00 - 16.30	Coffee Break
18.00 - 19.30	Dinner
19.30 - 21.00	Discussion/ social gathering

#### Friday: May 3, 2024

8.00 - 9.00	Breakfast
9.00 - 12.00	<b>Omar Paredes</b> (Mexico) The informational architecture of living systems: Insights from non- coding regions
12.00 - 14.30	Lunch Break
14.30 - 18.00	<b>Robert Prinz</b> (Germany) Introduction to Biological Codes. Diversity, Characterisation, Formalization, Quantification, (challenges) for mathematicians & computer scientists
16.00 - 16.30	Coffee Break
18.00 - 19.30	Dinner
19.30 - 21.00	Discussion/ social gathering

#### Saturday: May 4, 2024

8.00 - 9.00	Breakfast
	Departure

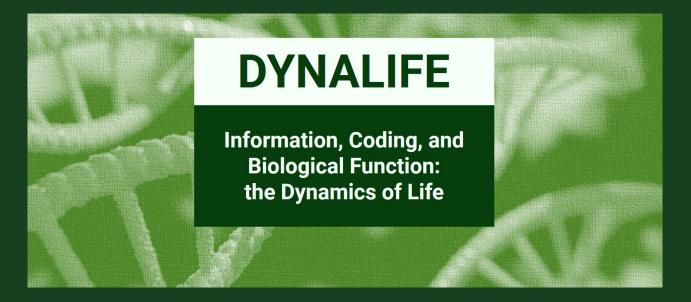
#### Organizers

- •Elena Fimmel (<u>e.fimmel@hs-mannheim.de</u>)
- •Lutz Strüngmann (I.struengmann@hs-mannheim.de)





Funded by the European Union



## COST Action CA21169 www.dynalife.eu



hochschule mannheim

