

Cellular innovations and new concepts in synthetic microbiology

Philippe Bouloc Directeur de Recherche, CNRS 12BC

Ombeline Rossier

Maître de conférences, Univ Paris-Saclay I2BC

Cellular innovations and new concepts in synthetic microbiology: outline of the week

- In Gif-sur-Yvette for 5 days
- Program of the week sent by email
 - 9 conferences
 - 1 round table discussion
 - 5 workshops :
 - > Getting started in defining a research project
 - > Tips for writing a research proposal

Expectations

Attendance is required to all the events this week.

Participation: we have invited speakers to interact with you. We/they
expect many questions. Your participation will be graded.

• If you have a prior engagement (interview, move, doctor's appointment...), let us know well in advance by e-mail.

Workshops: Defining a research project

- Defining a research project requires:
 - (1) a good knowledge of the state of the art
 - (2) asking the right questions
 - (3) making sure that the designed experiments help you answer these questions
- It takes years of practice but you only have a few weeks... and a lot of help for your peers and instructors!
- Working in groups you will try to define your research project.
- At the end of each conference, ask yourself: "Could I use one of these techniques/models/scientific questions in my research project?"

Designing and defending a research project

- M2 students will develop a research project in synthetic biology
- Evaluation of:
 - a written report with the following deadlines:
 - draft on Monday Nov 4th
 - final report on Monday Dec 9th
 - an oral defense on Wednesday Dec 18th
 - 10-min presentation followed by 20 min of questions
 - All the students attend the oral presentation => Mini-colloquium in front of peers.
- Working individually or in pairs (recommended)

Deadlines for Emails

- Report draft: send a PDF version before 13:00 on Monday 4th Nov
- Feedback from instructors on the draft by 20.11.2024
- Final report: send a PDF version before 13:00 on Monday 9th Dec
- Slides for Oral presentation: send a PDF version before 20:00 on Tuesday 17th Dec
- Send the files by email to:
 - Philippe Bouloc philippe Bouloc@i2bc.paris-saclay.fr
 - Ombeline Rossier <u>ombeline.rossier@universite-paris-saclay.fr</u>

Criteria for the evaluation of the research project:

- Clarity of research objectives Define the purpose of the project (e.g. fundamental knowledge, health, depollution, agri-food...) and define the research aims
- Originality Design an original approach.
- Feasibility Define a scientific approach (experimental approach, means implemented) based on current tools (=> realistic), and that is coherent / logical.
- Mastery of the scientific context and the state of the art in the field
- Discussion of ethical/societal/philosophical issues related to the project

Example of a call for proposals from ANR



Titre

Résumés scientifiques

- Résumé (non confidentiel) en français (1000 caractères maximum)
- Résumé (non confidentiel) en anglais (1000 caractères maximum)

5 mots-clés

Le descriptif de la pré-proposition doit être déposé sur le site de soumission au **format PDF** et comprend un **maximum de 5 pages** (non scanné, généré à partir d'un logiciel de traitement de texte) sans aucune protection. Le nombre de pages s'entend TOUT COMPRIS, AUCUNE annexe ne sera acceptée. **Le site de soumission refusera le téléchargement d'un document ne répondant pas à ces exigences**.

Il est recommandé d'utiliser une mise en page permettant une lecture confortable du document (page A4, times 11 ou équivalent, interligne simple, marges 2 cm, numérotation des pages).

Guidelines for the written report

- In English or in French (according to your preference)
- Title
- 5 keywords
- Summary in English (max. 1000 characters)
- Project description format:
 - PDF, **5 pages maximum**, unprotected, ALL INCLUDED (Text, Figures, References)
 - A4 format, Font: Times or Calibri 11, single line spacing, 2 cm margins, page numbering
- Recommended structure :
 - Scientific background
 - Objectives
 - Experimental approach (modelization can be included when appropriate)
 - Expected Results/Potential Outlook
 - Discussion of ethical/societal/philosophical issues

Guidelines & evaluation criteria for the oral defense

- In English
- Quality of the presentation
 - Clarity of slides
 - Clarity of speech
 - Logical development
 - Adjustment to audience
- Time management
 - 10 min total
 - Fair distribution of speaking time
- Answers to questions (20 min)

Learn to collaborate...and communicate

• If there are some issues in the team (communication issues, unmet expectations, feelings of unbalanced workload, etc...), talk about it early within the team.