# GetGenome CFP application workshop



Charity registered in England & Wales (No. 1201069)



GetGenome empowers scientists by providing equitable access to genomics technology and genomics-related training and education

# Application assessment process

**SUBMISSION** 

#### **Selection Committee**

- Eligibility
- Score matrix
  - Overall quality of application
  - Safety and purity of organism
  - Project justification, originality and innovation
  - Research priorities

#### GetGenome

- Species (Safety/Importation)
- Number of organisms (Budget)
- Environment (Safety/Research interest)
- Project theme (Research interest)



# The GetGenome CFP Application

Framing 1. Describe your project Conceptualize 2. How would your project benefit from GetGenome support?

personal 3. How would **you** benefit from GetGenome support?



# 1. Describe your project

#### Framing your project

What? Why? Where?

#### Includes -

- Relevant background information
- Theme of research
- Organisms of interest
- Define the problem
- State why your project is important
- State the wider implications

#### Tips

- Narrow the scope start from a broad context and reach a specific question you are trying to answer.
- Get to the point quickly Grab the readers attention.
  Reviewers may decide the outcome in the first few sentences. Make them count.
- Proofread spelling and grammar mistakes are rarely overlooked.
- Consider flow and narrative.



#### 1. Describe your project



Li et al. BMC Genomics (2020) 21:157 https://doi.org/10.1186/s12864-020-6563-7

**BMC** Genomics

#### **RESEARCH ARTICLE**

**Open Access** 

Check for updates

Characterization of plant growth-promoting rhizobacteria from perennial ryegrass and genome mining of novel antimicrobial gene clusters

Zhibo Li<sup>1</sup>, Chunxu Song<sup>1,2</sup>, Yanglei Yi<sup>1,3</sup> and Oscar P. Kuipers<sup>1\*</sup>

#### Theme of research / Why it's important

"PGPRs have been widely reported to be effective in stimulating the growth of plants as well as protecting the plants from pathogens, which could be an alternative for chemical fertilizers and pesticides."

#### Why it's important

"Bacillus and closely related species form a great reservoir of antimicrobials that play very important roles in biocontrol."



1. Describe your project

#### Define the problem

"Antimicrobials produced by *Bacillus* and closely related species are very diverse... most studies focus on protection against plant pathogens and neglect the mammalian pathogens that may enter the body of animals through grazing."

#### Wider implications

"PGPRs that can antagonize both phytopathogens and mammalian pathogens would ensure the safety of this food chain."





Kamoun, S. (2021). Zenodo. https://doi.org/10.5281/zenodo.5594443

#### 2. How would your project benefit from GetGenome support?

 

 Example
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 BMC Genomics

 Example
 Open Access

 Characterization of plant growth-promoting rhizobacteria from perennial ryegrass and genome mining of novel antimicrobial gene clusters
 Image: Cluster Single Single

#### Goal

"Mine genomes of the candidate PGPR strains to find novel biosynthetic gene clusters (BGCs) that are potentially involved in phytopathogen and mammalian pathogen antagonism."

### Hypothesis

"PGPR strains that antagonize plant and mammalian pathogens contain novel BGCs."



2. How would your project benefit from GetGenome support?

#### Rationale

"Antimicrobials are classified into three main groups: nonribosomal peptides (NRPs), polyketides (PKs), and bacteriocins and play important role in biocontrol against diverse pathogens."

"Of the 90 strains screened, 7 displayed antimicrobial activity."

# Experimental plan

Conduct whole-genome sequencing on the 7 strains.

Mine genomes for BGCs.



# Summary

- Determine what the reader would like (need) to know. For example, what species of organism(s) would you like to sequence? How many? Where did they come from?
- Plan your application.

• Frame your project to convey its importance and provide all the necessary background information.

• Use GoHREP to conceptualize your project.



Thank you! Good luck!

