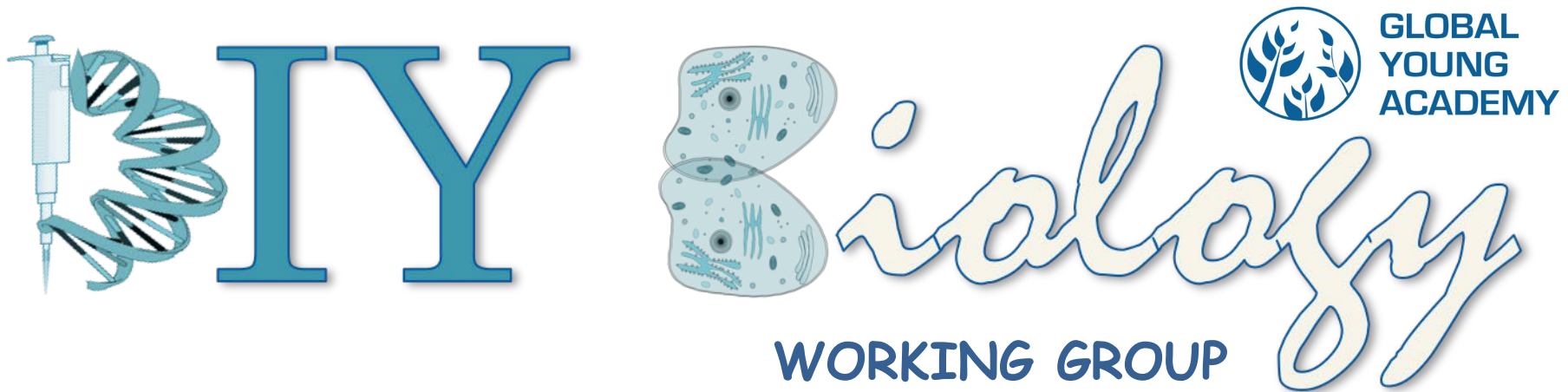


# BWC Global Forum

*Gene Drives and Engineered Ecology:*

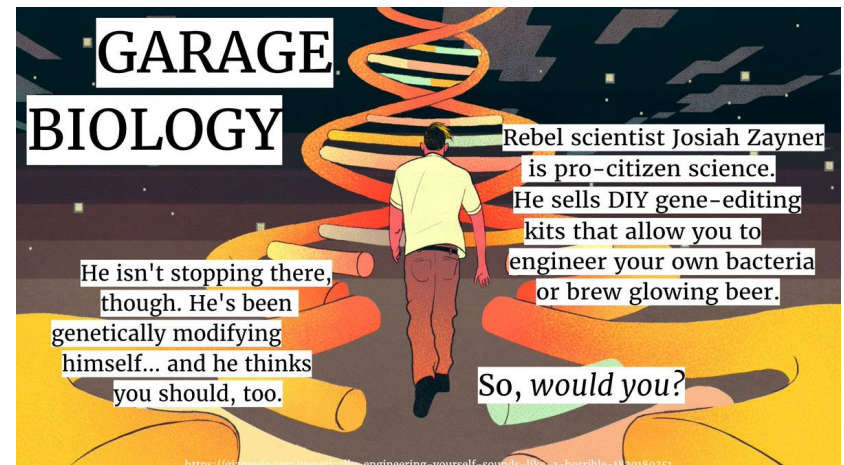
*What can we expect from these advancing capabilities  
and what are their implications for the BWC?*



Alexander (Sasha) Kagansky, PhD, GYA member  
FEFU-Vladivostok and MIPT-Moscow, Russia

# What is the problem?

- DIY Biology potentially introduces **innovative life science solutions**.
- However, the community is largely **unregulated**.
- **Many questions with limited answers:**  
Who are they? Where are they? What are they capable of achieving? What are their motivations? etc.
- Potential **lack of safety and ethics training** raises concerns.
- **Do the risks outweigh the potential benefits?**

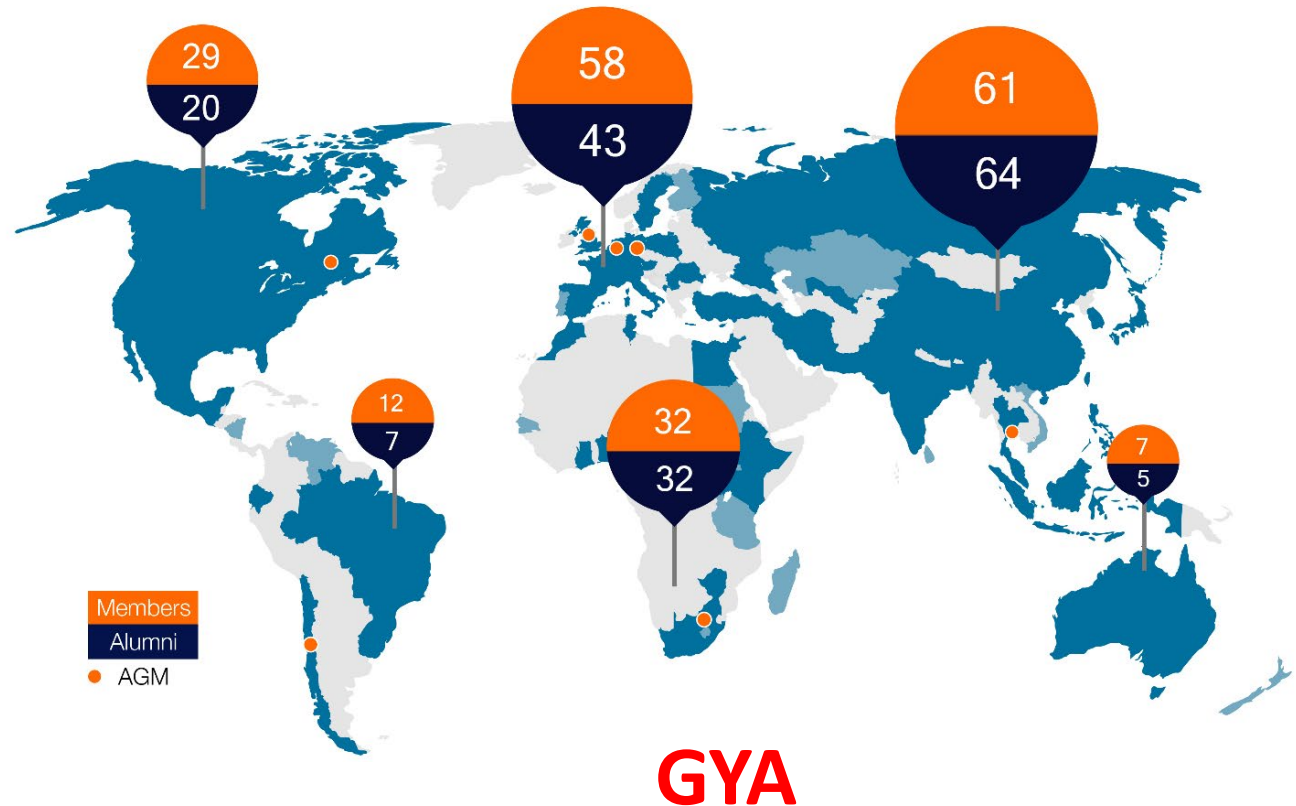




GLOBAL  
YOUNG  
ACADEMY

# We need to nurture youth from the young age

European Academies



The National  
Academies of

SCIENCES  
ENGINEERING  
MEDICINE

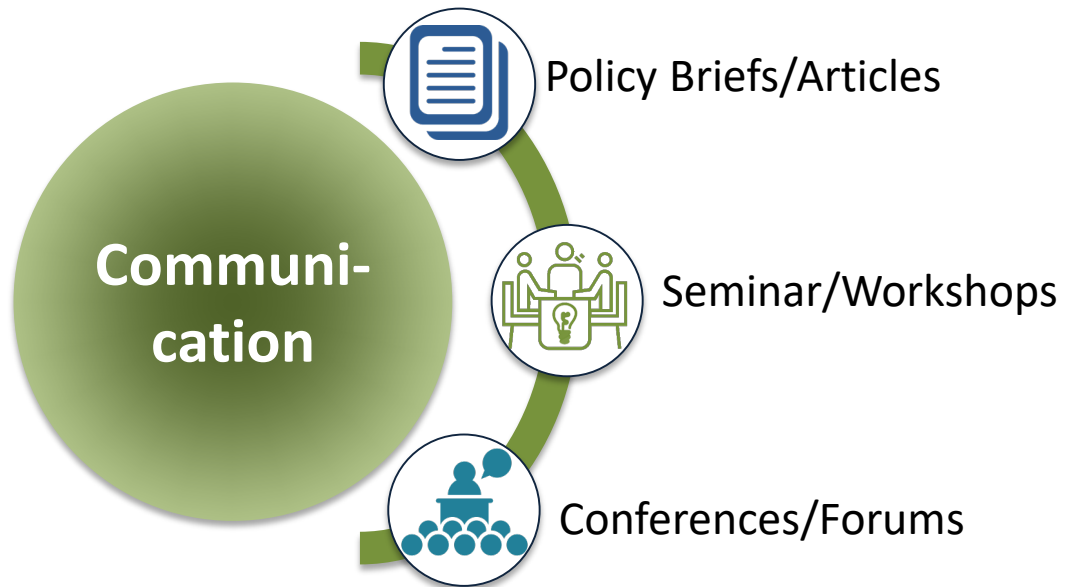
GOVERNANCE OF DUAL USE  
RESEARCH IN THE LIFE SCIENCES:  
AN INTERNATIONAL WORKSHOP

# What is our approach?



Improving Our Understanding of & Engagement with the DIY Biology Community

Communicating Opportunities & Challenges, Providing Science Advice & Fostering a Culture of Responsible Conduct of Research





VolkswagenStiftung



GLOBAL  
YOUNG  
ACADEMY



Global DIY Biology Survey

<https://www.surveymonkey.com/r/diybio>

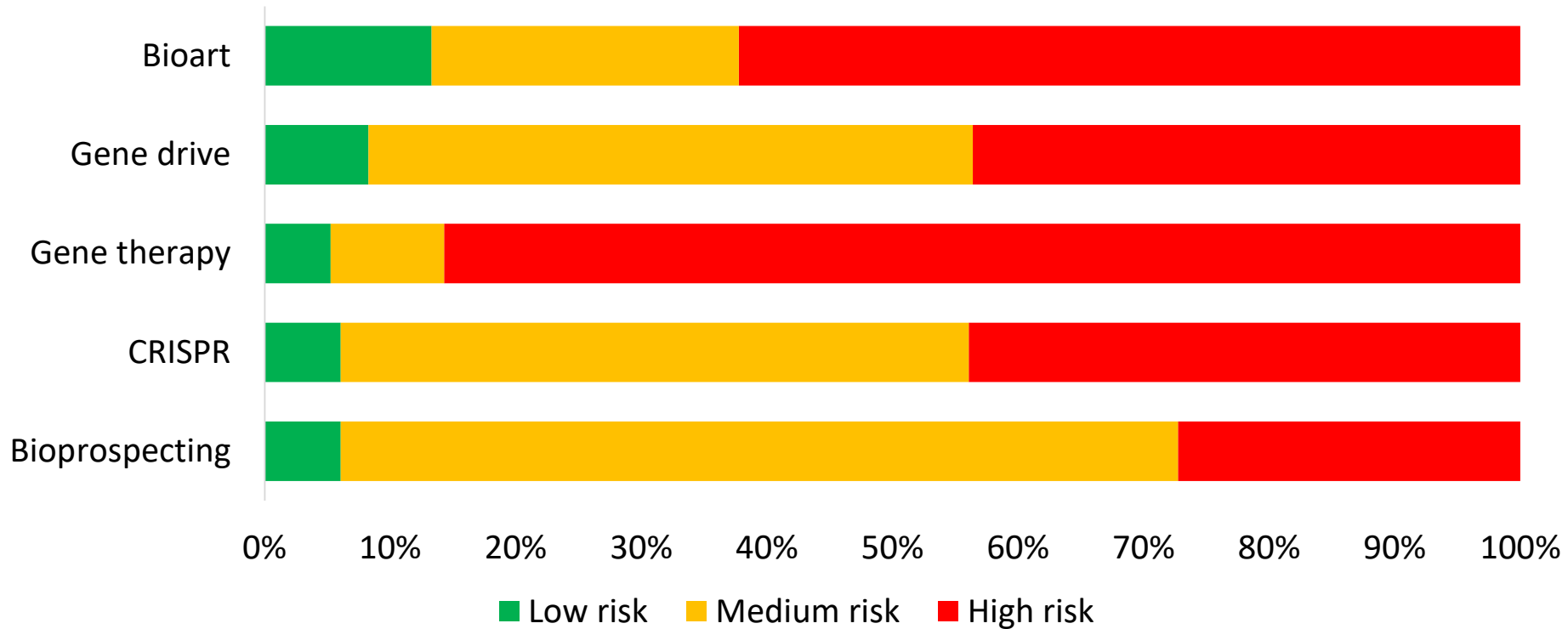
<https://www.surveymonkey.com/r/biorisk>

The aim of this research is to study the **global landscape** of DIYBio and identify its associated **motivations, challenges, and opportunities** in different regions.

The overarching aim is to then develop **unified and orchestrated local, regional, and global strategies** for establishing and adapting policies to ensure that the **benefits and potential of the DIYBio movement is maximized whilst minimizing the risks.**

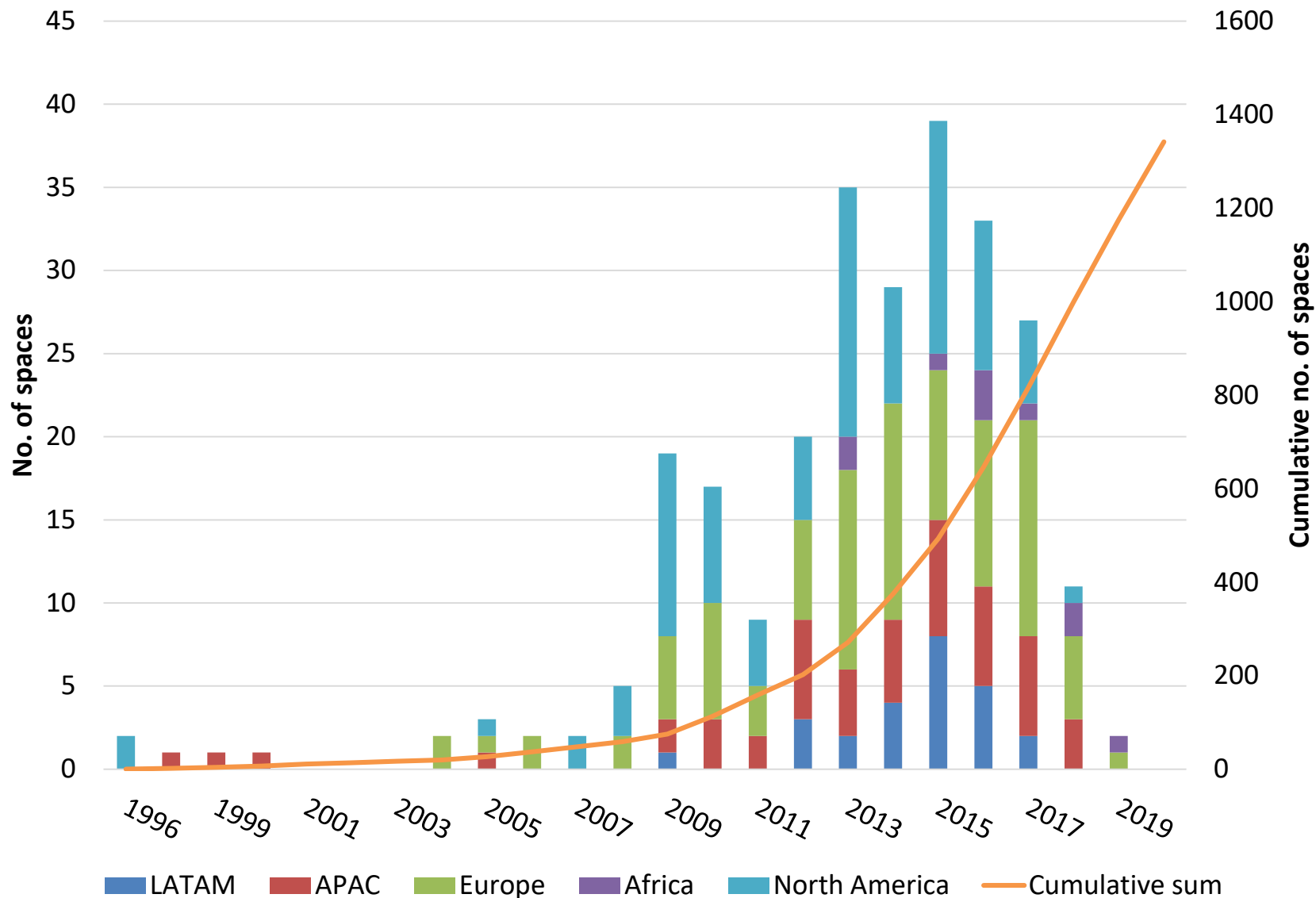


# The aggregate risk perception across the five case scenarios



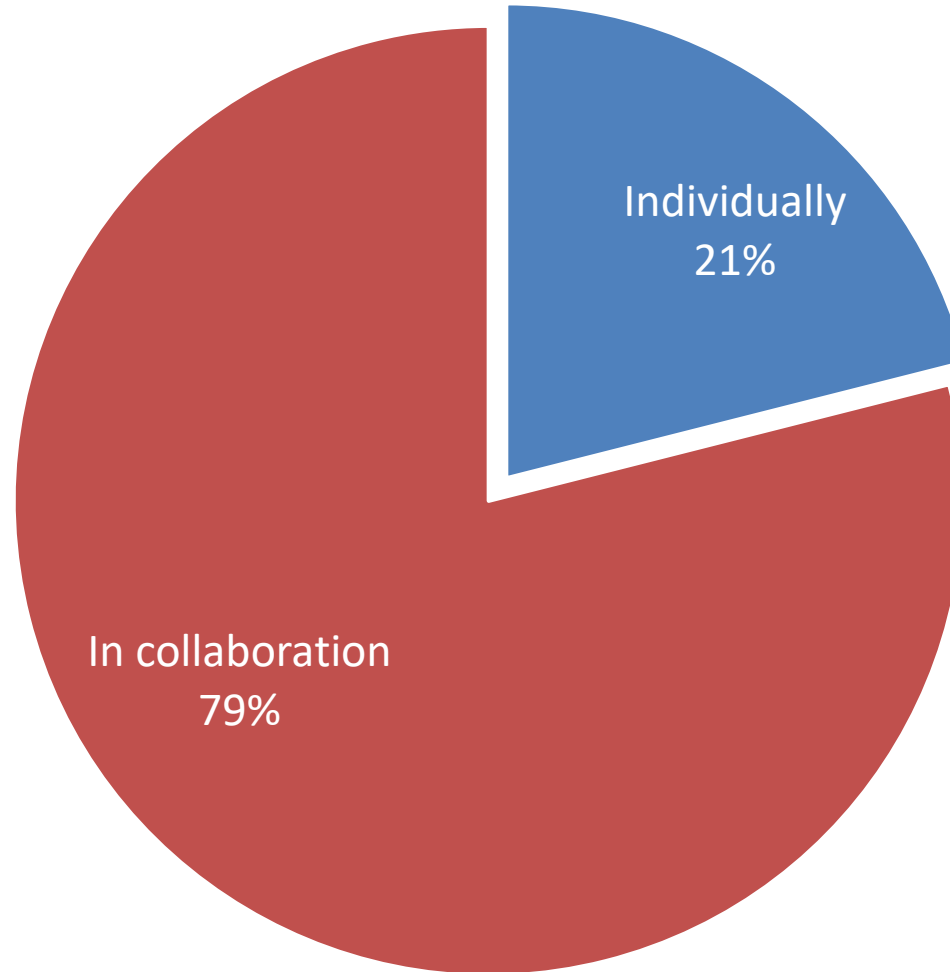
- In general, the majority of respondents identified 3 out of 5 scenarios as high risk.
- Highest perceived biorisk was recorded for the case scenario revolving around self-experimentation in gene therapy.
- In contrast, the majority of respondents ranked the scenario involving bioprospecting as low or moderate biorisk.
- The case scenario involving bioart recorded the highest percentage of low risk rating amongst the 5 case scenarios

## Global DIYBio and DIYBio-associated Spaces



<https://www.surveymonkey.com/r/diybio>

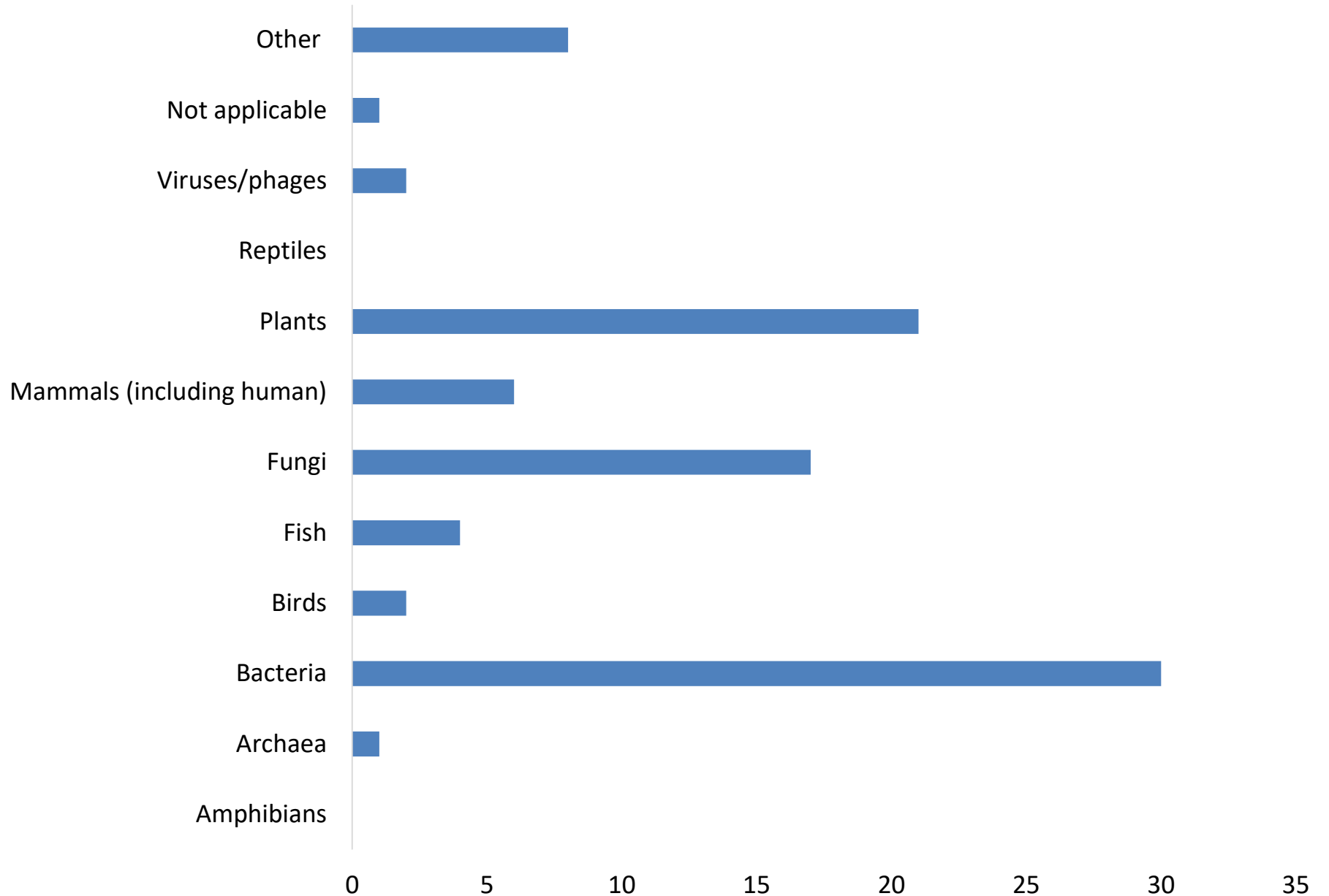
## DIYBio Working Nature



<https://www.surveymonkey.com/r/diybio>



## Type of Organisms used in DIYBio experiments



# We need your help!

We need to more respondents especially from  
Europe and North & South America

<https://www.surveymonkey.com/r/diybio>

Thanks to:

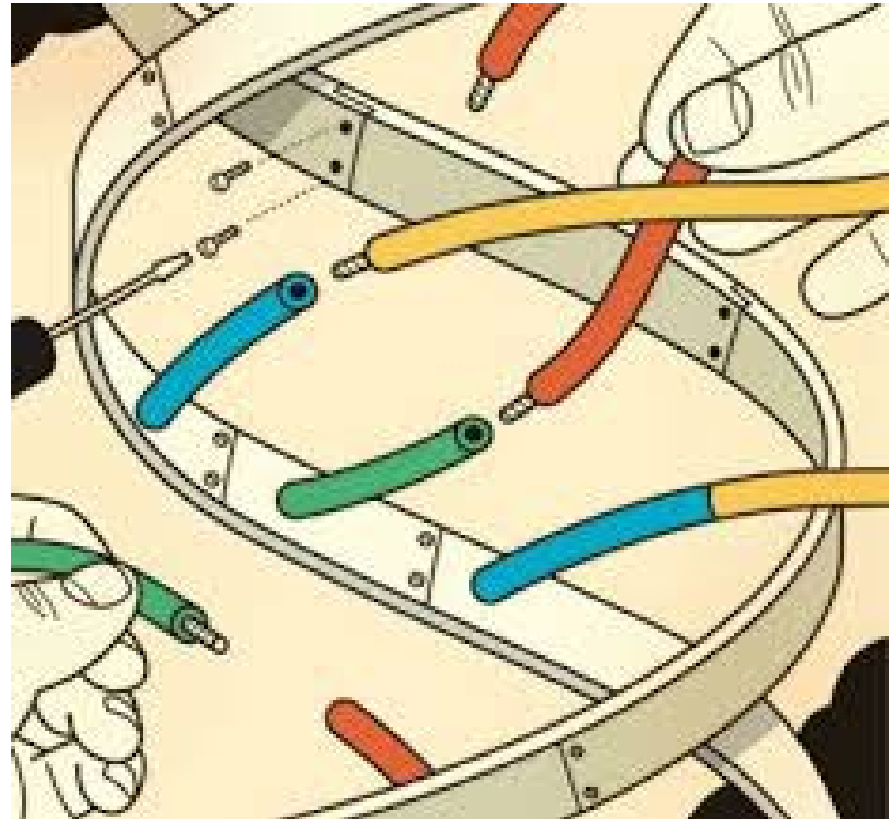
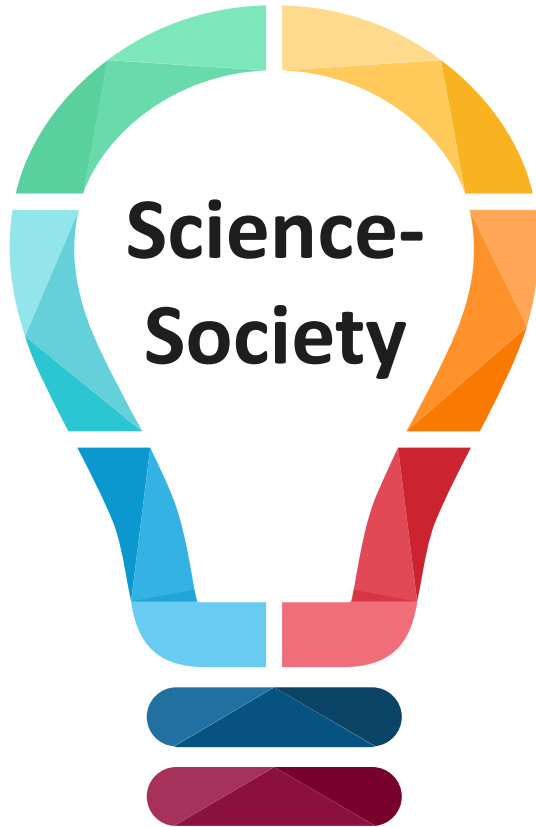
Prof. Dr. Abhi Veerakumarasivam, GYA DIY-Bio WG co-chair

Dr. Bart Kolodziejczyk, GYA DIY-Bio WG co-chair

Dr. John Malone



# GYA DIY Biology



The group aims to report on the prospects, risks, and opportunities around DIY Synthetic Biology. Additionally, the group provides training and policy recommendations to G20 and United Nations

