

# The perspective of a researcher on Open Science

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## What do we need to promote sharing of Open Data?

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# 'Open Data' is nothing new

## Bases

*Open data is data that can be freely used, re-used and redistributed by anyone - subject only, at most, to the requirement to attribute and share alike.*

Explore more than 1 petabyte of open data from particle physics!

Start typing...

The Open Data Handbook (<http://opendatahandbook.org/guide/en/what-is-open-data/>)

search examples: [collision datasets](#), [keywords.education](#), [energy.7TeV](#)

### Explore

[datasets](#)  
[software](#)  
[environments](#)  
[documentation](#)

### Focus on

[ATLAS](#)  
[ALICE](#)  
[CMS](#)  
[LHCb](#)  
[OPERA](#)

1985 1990 1995 2000 2005 2010 2015

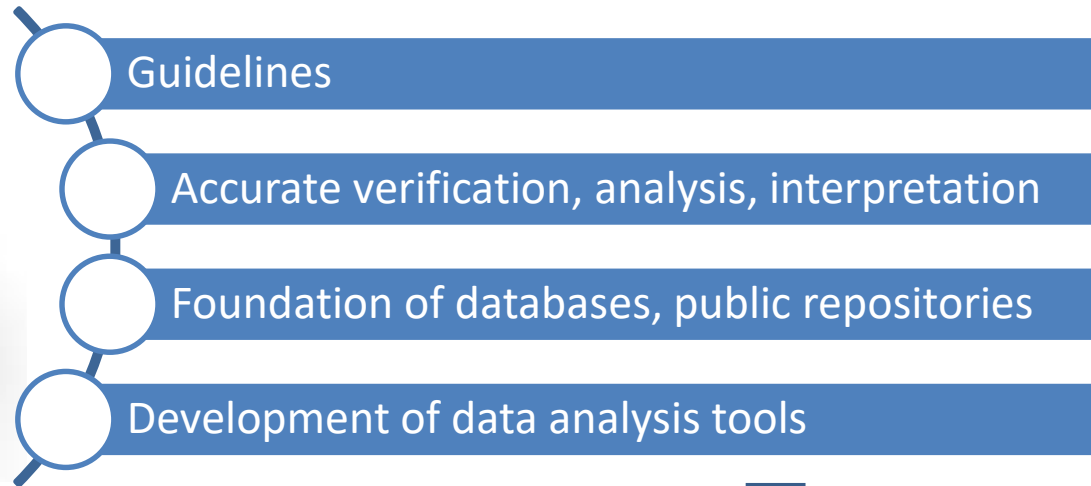
# 'Open Data' is nothing new, but ...

- Still limited to specific types of data
- GIGO
- What needs to be reported to make data FAIR?
  - Data
  - Metadata
  - ... ?
- What is the workload?
- What is in it for me?

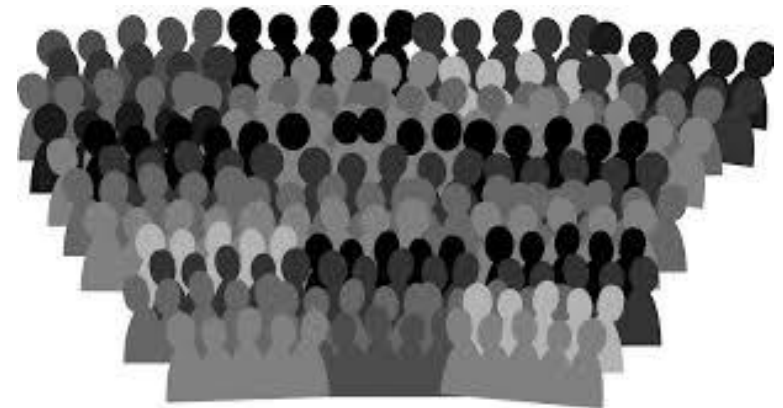


# Data & metadata

## Minimum Information Standard ('MIS')



MIS are developed by community of specialists and provide specifications what information about the experiments (metadata) needs to be reported together with data



# Data & metadata

## Minimum Information Standard ('MIS')

Promoting coherent minimum reporting guidelines for biological and biomedical investigations: the MIBBI project



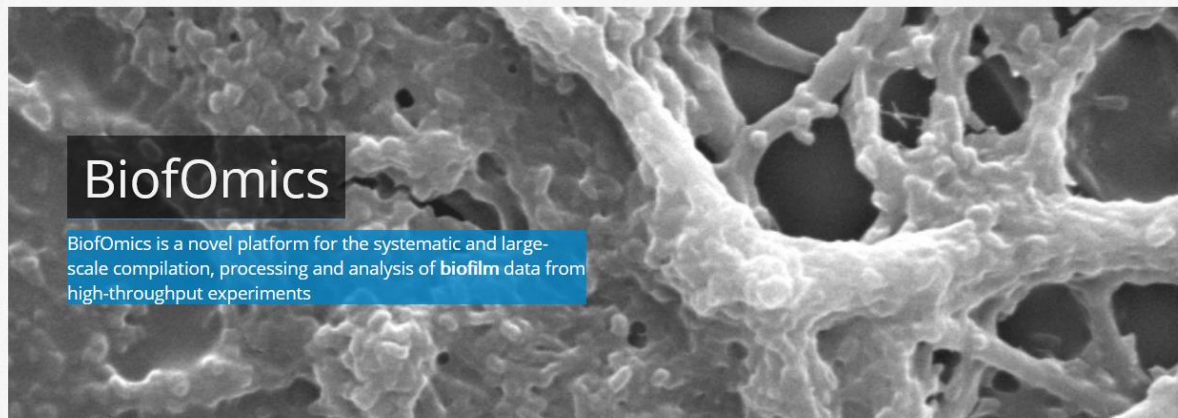
## MINIREVIEW

# Minimum information about a biofilm experiment (MIABiE): standards for reporting experiments and data on sessile microbial communities living at interfaces



Anália Lourenço<sup>1,2</sup>, Tom Coenye<sup>3</sup>, Darla M. Goeres<sup>4</sup>, Gianfranco Donelli<sup>5</sup>, Andreia S. Azevedo<sup>6</sup>, Howard Ceri<sup>7</sup>, Filipa L. Coelho<sup>2</sup>, Hans-Curt Flemming<sup>8</sup>, Talis Juhna<sup>9,10</sup>, Susana P. Lopes<sup>2</sup>, Rosário Oliveira<sup>2</sup>, Antonio Oliver<sup>11</sup>, Mark E. Shirliff<sup>12,13</sup>, Ana M. Sousa<sup>2</sup>, Paul Stoodley<sup>14</sup>, Maria Olivia Pereira<sup>2</sup> & Nuno F. Azevedo<sup>6</sup>



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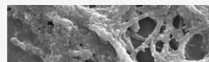


## Welcome

Here you can find biofilm data that results from experiments involving several types of microorganisms such as salmonella, Escherichia, Candida, etc. BiofOmics is part of the efforts undertaken by the **MIABIE** (Minimum Information About a Biofilm Experiment) initiative  

## What we provide

The platform provides a number of tools that allows users to easily take advantage of all functionalities of the website. It is comprised of four main areas:



Bio  
Sta  
Dat

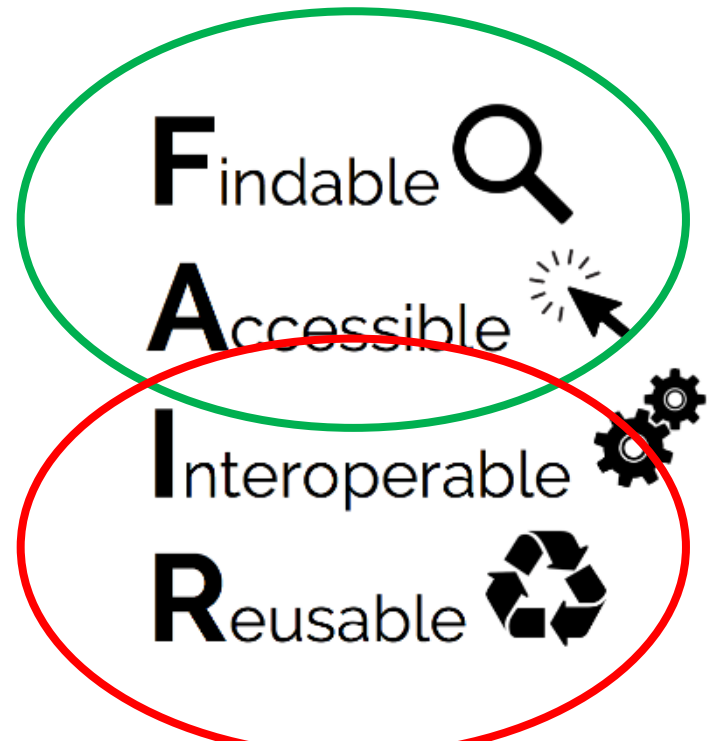
Anália  
Nuno

1 IBB - In  
Environme

Process,

# 'Open Data' is nothing new, but ...

- Still limited to specific types of data
- For 'non-standard' data: considerable workload
- Who will cover the costs?
- What about the long term?
- FA is easy, what about IR?



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