



# THE COBRA (Citation Of BioResources in journal Articles) GUIDELINE

Plenary BoF meeting  
BoF session 5 apr 2017 14.00-15.30

*How to give credit to scientists for their involvement  
in making data & samples available for sharing.*



## WHY COBRA?

- Not cited or not acknowledged adequately
    - lack of standards for BR citation in the scientific literature
  - Difficult to trace; difficult to assess their usage reliably
    - lack of BR identification system to trace them precisely and of indicators describing efficient usage and management of BR
  - Bioresources not visible enough; no credit for the work
- Need for standards for citation / acknowledgement of bioresources in scientific articles



# HOW?

## **‘BRIF and Journal Editors’ working subgroup**

co-chaired by **A. Cambon-Thomsen**, Inserm-Université Toulouse III, Tlse, FR and **E. Bravo**, Istituto Superiore di Sanità, Rome, IT

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# HOW?

## Actions

- > to raise awareness among all stakeholders
- > to build collaborative relationships with journal editors and associations

- Dissemination of BRIF in international Science Edition Conferences and biobanking communities
- Sensitizing editors and their associations about BR issues (targeted surveys)
- Organizing restricted workshops addressed to Journal editors and experts (Rome, June 21, 2013; Toulouse, Oct 9, 2015)

>>> guideline for citation of bioresources

Bravo et al. *BMC Medicine* (2015) 13:33  
DOI 10.1186/s12916-015-0266-y



GUIDELINE

Open Access

# Developing a guideline to standardize the citation of bioresources in journal articles (CoBRA)

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## Abstract

**Background:** Many biomedical publications refer to data obtained from collections of biosamples. Sharing such bioresources (biological samples, data, and databases) is paramount for the present governance of research. Recognition of the effort involved in generating, maintaining, and sharing high quality bioresources is poorly organized, which does not encourage sharing. At publication level, the recognition of such resources is often neglected and/or highly heterogeneous. This is a true handicap for the traceability of bioresource use. The aim of this article is to propose, for the first time, a guideline for reporting bioresource use in research articles, named CoBRA: Citation of BioResources in journal Articles.

**Methods:** As standards for citing bioresources are still lacking, the members of the journal editors subgroup of the Bioresource Research Impact Factor (BRIF) initiative developed a standardized and appropriate citation scheme for such resources by informing stakeholders about the subject and raising awareness among scientists and in science editors' networks, mapping this topic among other relevant initiatives, promoting actions addressed to stakeholders, launching surveys, and organizing focused workshops.

**Results:** The European Association of Science Editors has adopted BRIF's suggestion to incorporate statements on biobanks in the Methods section of their guidelines. The BRIF subgroup agreed upon a proposed citation system: each individual bioresource that is used to perform a study and that is mentioned in the Methods section should be cited as an individual "reference [BIORESOURCE]" according to a delineated format. The EQUATOR (Enhancing the QUALity and Transparency Of health Research) network mentioned the proposed reporting guideline in their



# COBRA CHECKLIST

RDA Plenary 9, 5 apr 2017,  
Barcelona

| CoBRA short checklist for the citation of bioresources in scientific journal articles. |   |
|--|---|
| Article text section   | Guidance  |
| Abstract   | Indicate whether the work has used one or more bioresources, and specify the number of bioresources if relevant.  |
| Introduction   | Indicate that the work has used one or more bioresources. Specify the type.   |
| Methods  | Report each individual bioresource used to perform the study: <ul style="list-style-type: none"> <li>• by their name and other ID, if extant, and</li> <li>• by a single bibliographic reference.</li> </ul>  |
| References   | <p>Cite each bioresource used as follows:</p> <p><b>ID/Bioresource Name (acronym if available)/organisation or network partnership/Number of access(es), Date of last access; [BIORESOURCE]</b></p> <p><u>Specifications for ID:</u> Unique ID can be DOI (Digital Object Identifier), catalogue number, or the name only.<br/>If the only ID is the name then add Town and Country.</p> <p>In the case of bioresources not used as a source of material for the study, but only referred to, follow the citation format:<br/><b>ID/Bioresource Name (acronym if available)/organisation or network partnership</b></p> |



## BOX 1. **Examples** of how to cite a bioresource in the references of articles

- All examples assume that the bioresource was actively used to complete the research .
- Examples assume that two different accesses to the bioresource occurred, one on March 3, 2013 and one on April 15, 2014.
- Examples 1, 2 and 3 assume that cited bioresources are committed to report their partnership with BBMRI-ERIC.
- Acronyms will be added only in cases of consolidated use by the biobank.

### **Example 1: The bioresource has an ID and a consolidated acronym**

Bioresource: Microisolates in South Tyrol Study (MICROS), Bolzano, Italy; ID: BRIF2155

Citation: BRIF2155; Microisolates in South Tyrol Study (MICROS); BBMRI-ERIC; No. Access: 2, Last: April 15, 2014. [BIORESOURCE]

### **Example 2: The bioresource has been described by a marker paper with a DOI, and has a consolidated acronym**

Bioresource: The Australian Breast Cancer Tissue Bank (ABCTB), Australia

Citation: Carpenter JE, Marsh D, Mariasegaram M and Clarke CL. The Australian Breast Cancer Tissue Bank (ABCTB). Open Journal of Bioresources 1:e1; 2014. DOI: <http://dx.doi.org/10.5334/ojb.aa>; No. Access: 2, Last: April 15, 2014. [BIORESOURCE]

### **Example 3: The bioresource does not have a DOI, nor an ID**

Bioresource: BioBanca Istituzionale of Naples, Italy

Citation: BioBanca Istituzionale (BBI), Naples, Italy; BBMRI-ERIC; No. Access: 2, Last: April 15, 2014. [BIORESOURCE]

# TUTORIAL FOR COBRA

- Tutorial on how to use CoBRA (prepared by the Institute of public health in Roma, under coordination by Elena Bravo)
- <https://zenodo.org/record/55785>
  - The video has a DOI to make it easily and uniquely citeable. The DOI is: [10.5281/zenodo.55785](https://doi.org/10.5281/zenodo.55785)





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#### Developing a guideline to standardize the citation of bioresources in journal articles (CoBRA)

**Reporting guideline provided for?**  
(i.e. exactly what the authors state in the paper)

Citation of bioresources in journal articles

[CoBRA checklist \(PDF\)](#)



**Full bibliographic reference**

Bravo E, Calzolari A, De Castro P, Mabile L, Napolitani F, Rossi AM, Cambon-Thomsen A. Developing a guideline to standardize the citation of bioresources in

- Equator network works to improve the reliability and value of biomedical research literature

- Contains the major reporting guidelines internationally recognised

<http://www.equator-network.org/reporting-guidelines/cobra/>

# COBRA AT BBMRI-ERIC

## BRIF SERVICES: THE CoBRA GUIDELINE

### What is the guideline about?

The BRIF (*Bioresource Research Impact Factor*) initiative is building a framework that enables set up indicators for the use of bioresources\* and rewarding mechanisms. Generated as part of the BRIF initiative, the CoBRA (*Citing Of Bioresources in Research Articles*) guideline provides guidance for citing bioresources in academic literature: it specifies where and how to cite bioresources at each section of a research article.

BBMRI-ERIC encourages the systematic use of the CoBRA guideline by the biobank community and supports the inclusion in MTA/DTAs.

\* Bioresources are defined as collections of biological samples with associated data (medical/epidemiological, social), databases independent of physical samples or other collection of biomolecular and bioinformatics research tools.

### KEY ELEMENTS:

To report in scientific journal articles:

**II Abstract section:** Indicate whether the work has used one or more bioresources, and specify the number of bioresources if relevant.

**II Introduction section:** Indicate that the work has used one or more bioresources. Specify the type.

**II Methods section:** Report each individual bioresource used to perform the study: By their name and other ID, if extant, and by a single bibliographic reference

**II References section:**

*Cite each bioresource used as a reference as follows:*

ID / Bioresource Name (acronym if available) / organization or network partnership, membership (optional) / Number of access(es), Date of last access; [BIORESOURCE]

*Cite each bioresources referred to (but not used) as a reference as follows:*

ID / Bioresource Name (acronym if available) / organization or network partnership, membership (optional)

### Who is this guideline for?

The guideline is intended for any researcher or professional reporting on a research work using bioresources or referring to bioresources in a scientific journal article.

### How can I engage?

Use the CoBRA checklist when writing a scientific article!

Download the CoBRA guideline at

<http://www.equator-network.org/reporting-guidelines/cobra/>

### Who to contact?

BRIF: [Laurence.Mabile@univ-tlse3.fr](mailto:Laurence.Mabile@univ-tlse3.fr)

CoBRA: Elena Bravo, [elena.bravo@iss.it](mailto:elena.bravo@iss.it)

### What is BBMRI-ERIC?

BBMRI-ERIC is a distributed research infrastructure of *biobanks* and *biomolecular resources*. For its Member States, it provides expertise and services on a non-economic basis and facilitates access to collections of partner biobanks and biomolecular resources. BBMRI-ERIC is established for an unlimited period of time.

# NEXT: IMPLEMENTATION OF COBRA

## WHAT ACTIONS?

- What mechanisms: promotion and endorsement at various levels
  - Institutional (Universities, national institutes, infrastructures...)
  - Administrative : Inclusion of the reference to use
  - Educational : good practices taught to PhD students using bioresources
  - Editorial (instruction to authors, to reviewers; incentives to use EQUATOR's references guidelines...)
  - **Scientific (Scientific consortia, scientific and professional societies...)**



## DISCUSSION

- Applicability and usefulness of CoBRA beyond the biomedical community?
- Other
- How to go further...

### Contacts:

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Thank you