

**MEMORANDUM OF UNDERSTANDING
BETWEEN THE CALIFORNIA DIGITAL LIBRARY AND
THE EUROPEAN MOLECULAR BIOLOGY LABORATORY :
COMPACT IDENTIFIER SUPPORT**

California Digital Library, University of California, Office of the President, 415 20th Street, 4th Floor, Oakland, California, USA, represented by Günter Waibel, Executive Director, hereinafter called CDL,

and

European Molecular Biology Laboratory (EMBL), an intergovernmental institution, acting through its outstation, the **European Bioinformatics Institute (EMBL-EBI)**, operating at Wellcome Genome Campus, Hinxton, Cambridge, UK, represented by Rolf Apweiler, Director and Christian Scherf, Administrative Director, hereinafter called EMBL-EBI;

CONSIDERING that

- Academic and scientific collaboration between CDL and EMBL-EBI would be highly desirable to their mutual interest and benefit;
- CDL promotes the broadest possible dissemination of knowledge, information, and tools to benefit the University of California and the public interest;
- EMBL's mission includes basic research in molecular biology;
- EMBL-EBI's mission includes to provide freely available data and bioinformatics services to all facets of the scientific community;

RECOGNIZING that

- EMBL-EBI, as an ELIXIR node, supports the coordination of biological data provision throughout Europe;

WITH THE FOLLOWING OBJECTIVE

- Each institution's meta-resolver -- n2t.net and identifiers.org -- for the duration of this MoU, will forward incoming Compact Identifier requests appearing in the Registry (as defined below); in particular, both meta-resolvers will forward every Prefix (Namespace and Provider Code combination) listed in the Registry;

EMBL-EBI and CDL hereby conclude this Memorandum of Understanding (hereinafter referred to as the "MoU"):

1. Compact Identifiers

1.1 A Compact Identifier is a unique string consisting of a Prefix, a colon (':'), and a local identifier string (e.g., an accession number). The Prefix part is either a Namespace string by itself, or a Provider Code string followed by a slash ('/') and Namespace. Examples of compact identifiers are `pdb:2gc4` and `rscb/pdb:2gc4`. Each Prefix implicitly refers to a resolver that specializes in returning detailed information for identifiers associated with that Prefix. In biomedicine alone, there are over 700 such Prefixes.

1.2 A meta-resolver knows how to forward an identifier to the correct resolver based on its Prefix. Two meta-resolvers, one running at EMBL-EBI (`identifiers.org`) and another at CDL (`n2t.net`), forward Compact Identifiers written as hyperlinks such as

`http://n2t.net/orcid:0000-0002-6309-7327`
`http://identifiers.org/orcid:0000-0002-6309-7327`

2. The Registry

The Prefix registry, hereafter called the Registry, documents Prefixes that researchers and publishers will be encouraged to use in referencing data. The Registry contains a set of Prefixes that EMBL-EBI and CDL agree to forward via their respective meta-resolvers (`identifiers.org` and `n2t.net`). The Namespaces and Provider Codes in the Registry are jointly determined by CDL and EMBL-EBI, and each institution agrees, for a limited period of time, to support every Prefix listed in it.

3. Technical aspects

The Registry is represented by a small text file, updated regularly, that is available on the web without access restriction. The file is to be made available at

`http://n2t.net/e/cdl_ebi_prefixes.yaml`

Registry changes are made automatically when Prefixes are added or changed by CDL or EMBL-EBI.

4. Changes to the Registry

Changes to Registry are arrived at by mutual consent of EMBL-EBI and CDL.

5. Communication

CDL and EMBL-EBI will jointly announce this arrangement to their users and to the digital library and life sciences communities.

6. Duration

This MoU will come into effect on the date indicated below and remain valid for a period of 2 years thereafter, unless either Party chooses to terminate it sooner having first given six (6) months written notice of this intention to the other Party. After the initial term, this MoU will renew for further terms of 2 years, subject to termination as outlined before.

This MoU may be amended or renewed by the mutual written agreement of both Parties.

7. Questions and Consultations

In the event that questions should arise concerning the interpretation of the provisions of the MoU, or problems should be caused by matters not prescribed herein, both Parties will consult with each other and conclude a mutually acceptable solution.

Agreed in Oakland, Cambridge and Heidelberg on 31 March 2017.

For the European Molecular Biology
Laboratory - European Bioinformatics
Institute, Director



Rolf Apweiler

For the California Digital Library,
Executive Director



Günter Waibel

For the European Molecular Biology
Laboratory, Administrative Director



Christian Scherf