University of Luxembourg

Multilingual. Personalised. Connected.

Persistent Identifiers

What? Why? How?

Beth PARK

Open Science Forum – November 2018

UNIVERSITÉ DU LUXEMBOURG

What problem are we trying to solve?

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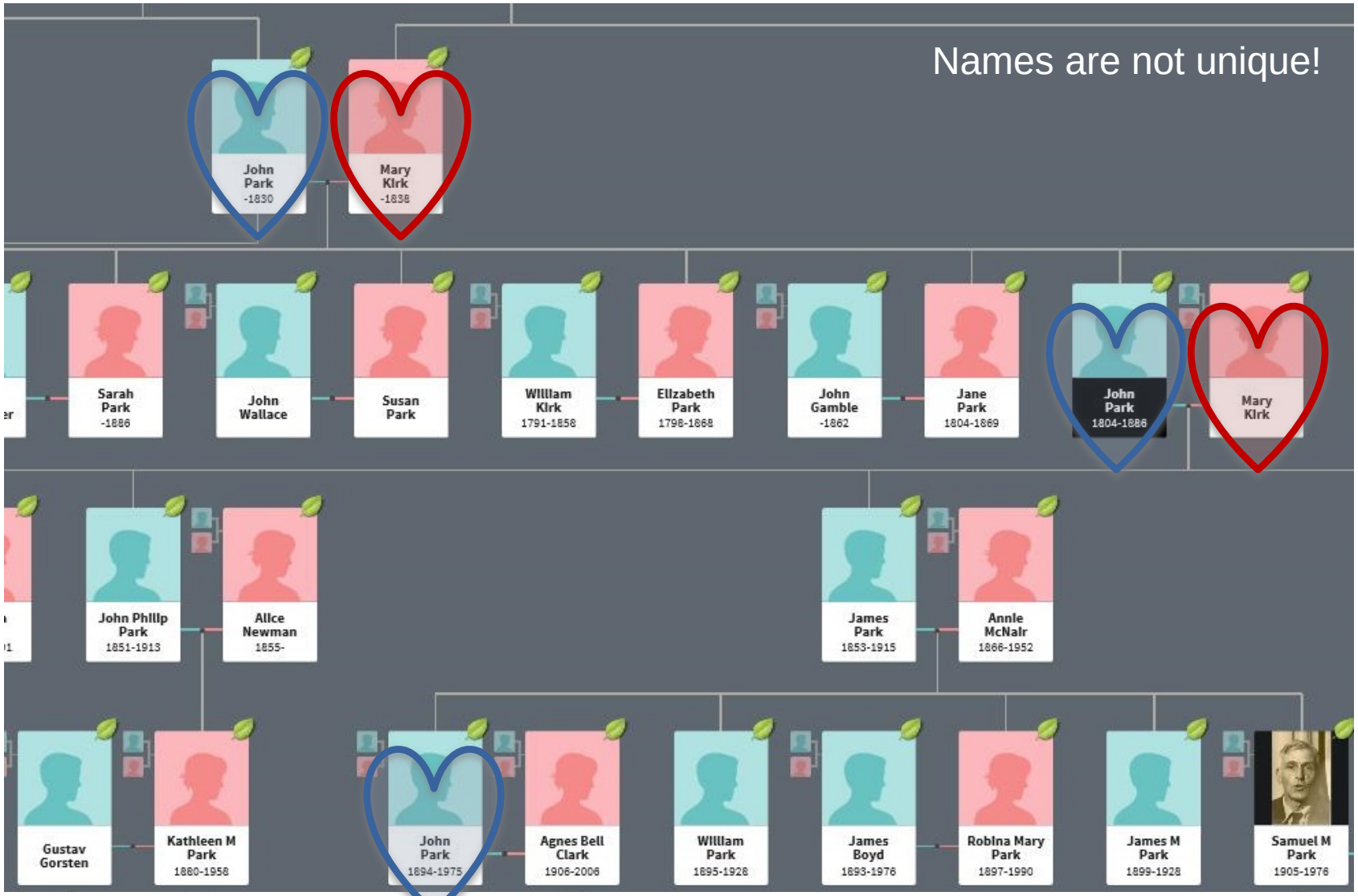

Credit: John Park

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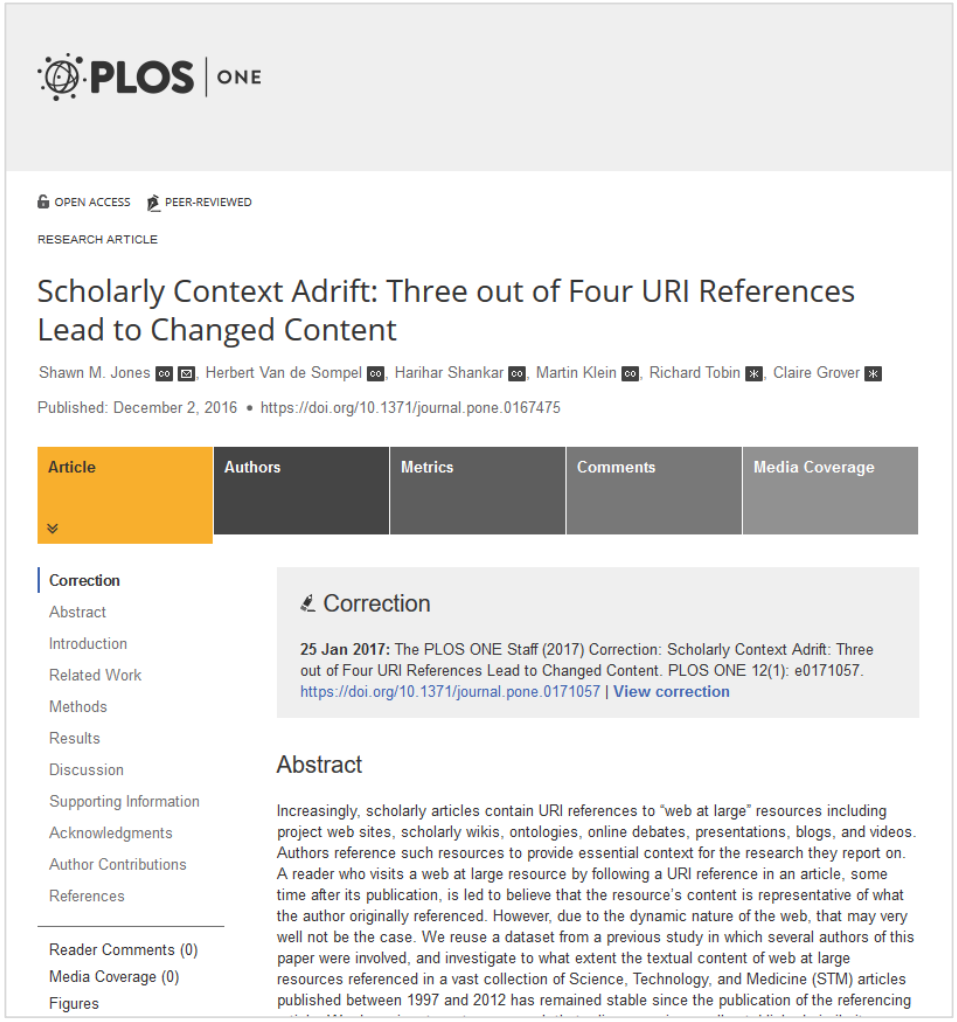
Information changes over time



PLOS ONE

OPEN ACCESS PEER-REVIEWED

RESEARCH ARTICLE

Scholarly Context Adrift: Three out of Four URI References Lead to Changed Content

Shawn M. Jones, Herbert Van de Sompel, Harihar Shankar, Martin Klein, Richard Tobin, Claire Grover

Published: December 2, 2016 • https://doi.org/10.1371/journal.pone.0167475

Article | Authors | Metrics | Comments | Media Coverage

Correction
Abstract
Introduction
Related Work
Methods
Results
Discussion
Supporting Information
Acknowledgments
Author Contributions
References

Reader Comments (0)
Media Coverage (0)
Figures

Correction

25 Jan 2017: The PLOS ONE Staff (2017) Correction: Scholarly Context Adrift: Three out of Four URI References Lead to Changed Content. PLOS ONE 12(1): e0171057. https://doi.org/10.1371/journal.pone.0171057 | **View correction**

Abstract

Increasingly, scholarly articles contain URI references to "web at large" resources including project web sites, scholarly wikis, ontologies, online debates, presentations, blogs, and videos. Authors reference such resources to provide essential context for the research they report on. A reader who visits a web at large resource by following a URI reference in an article, some time after its publication, is led to believe that the resource's content is representative of what the author originally referenced. However, due to the dynamic nature of the web, that may very well not be the case. We reuse a dataset from a previous study in which several authors of this paper were involved, and investigate to what extent the textual content of web at large resources referenced in a vast collection of Science, Technology, and Medicine (STM) articles published between 1997 and 2012 has remained stable since the publication of the referencing

https://doi.org/10.1371/journal.pone.0167475

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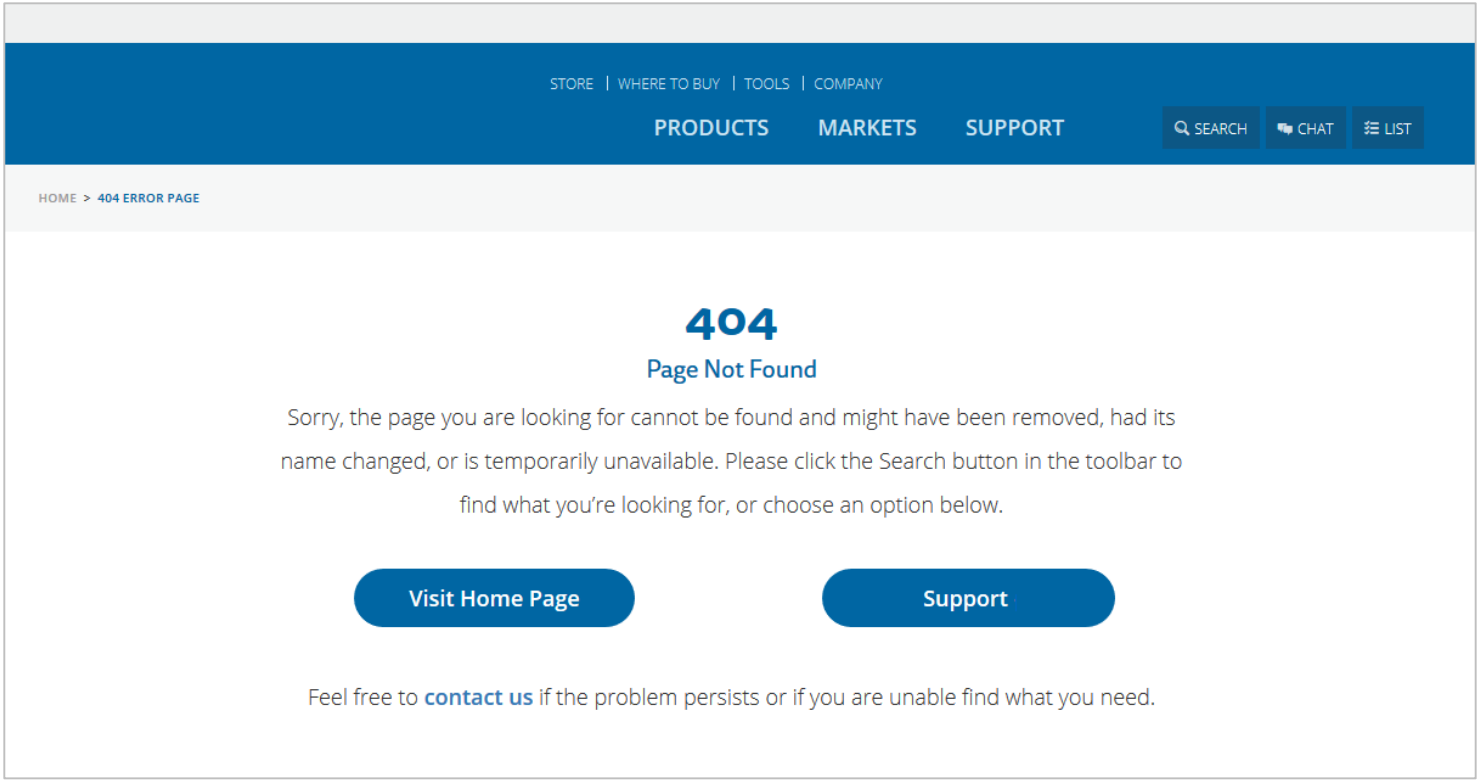
or disappears all together



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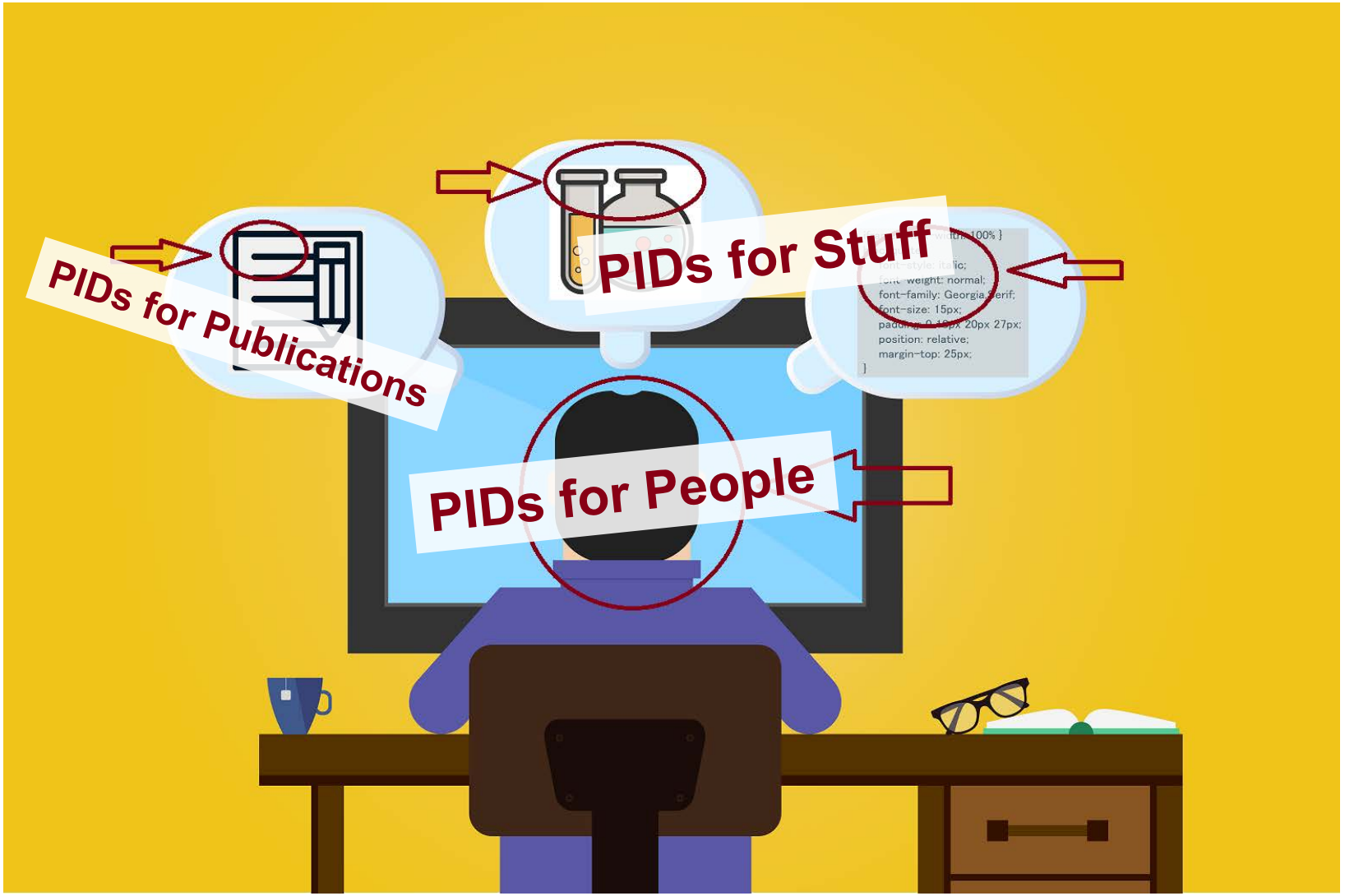
- You and your work must be properly identified:
  - **Persistent**: now and in the future;
  - **Unique**: no mismatches;
  - **Actionable**: links work best;
  - **Machine-readable**: “DJL789354DKS”.

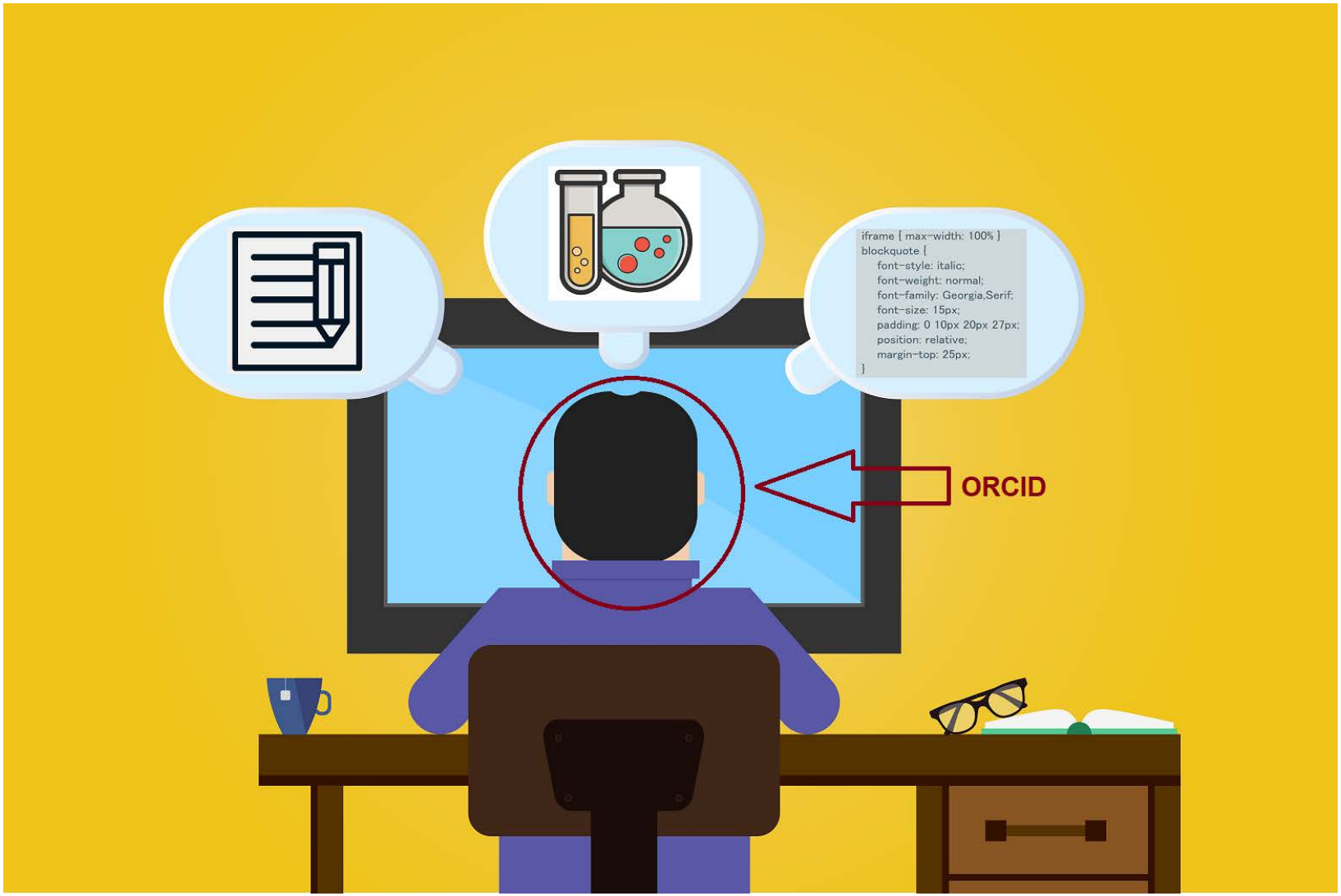
And the answer is ….

PERSISTENT IDENTIFIERS or PIDs

You and the PIDs



PIDs for People



PIDs for People

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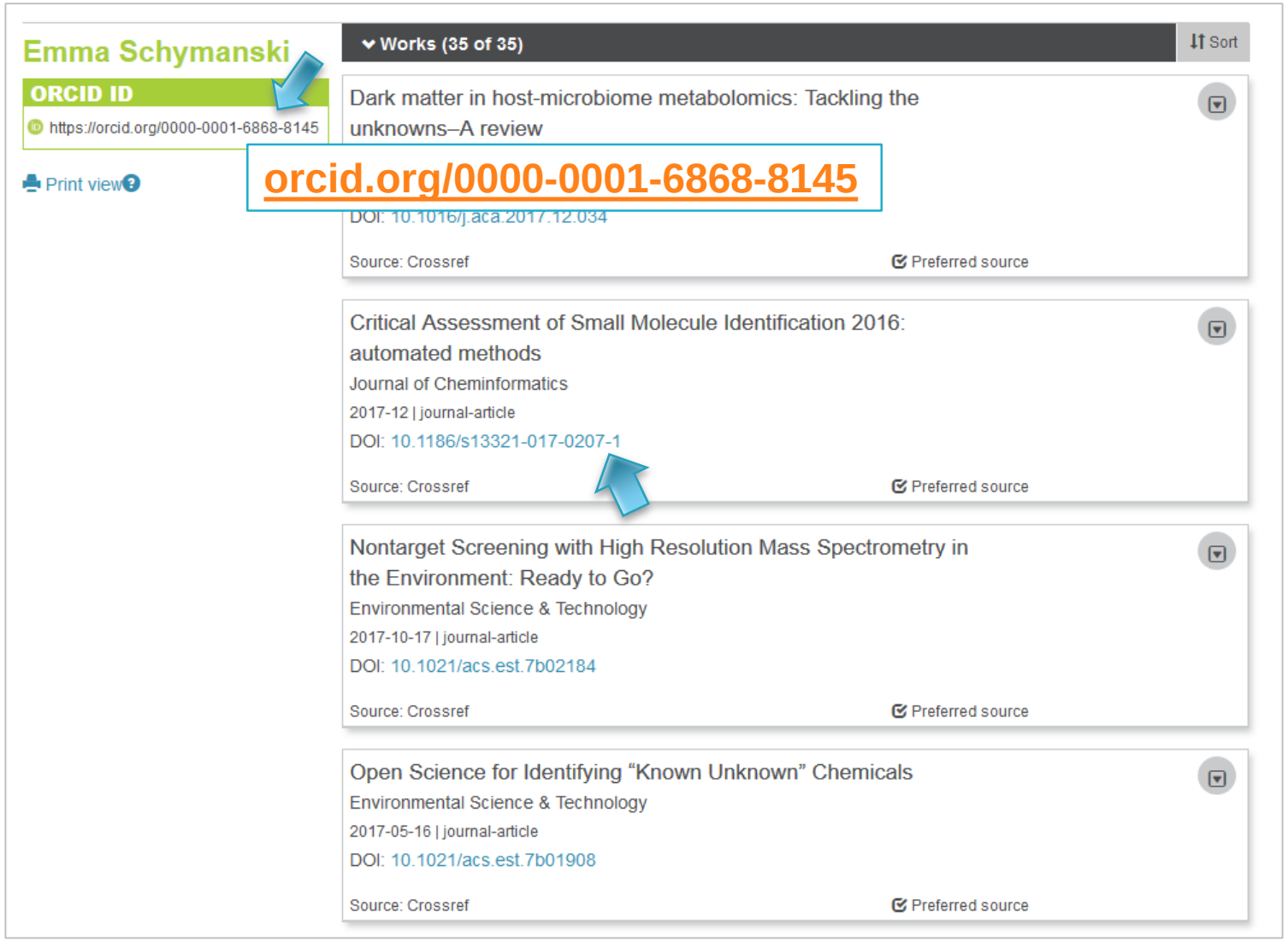
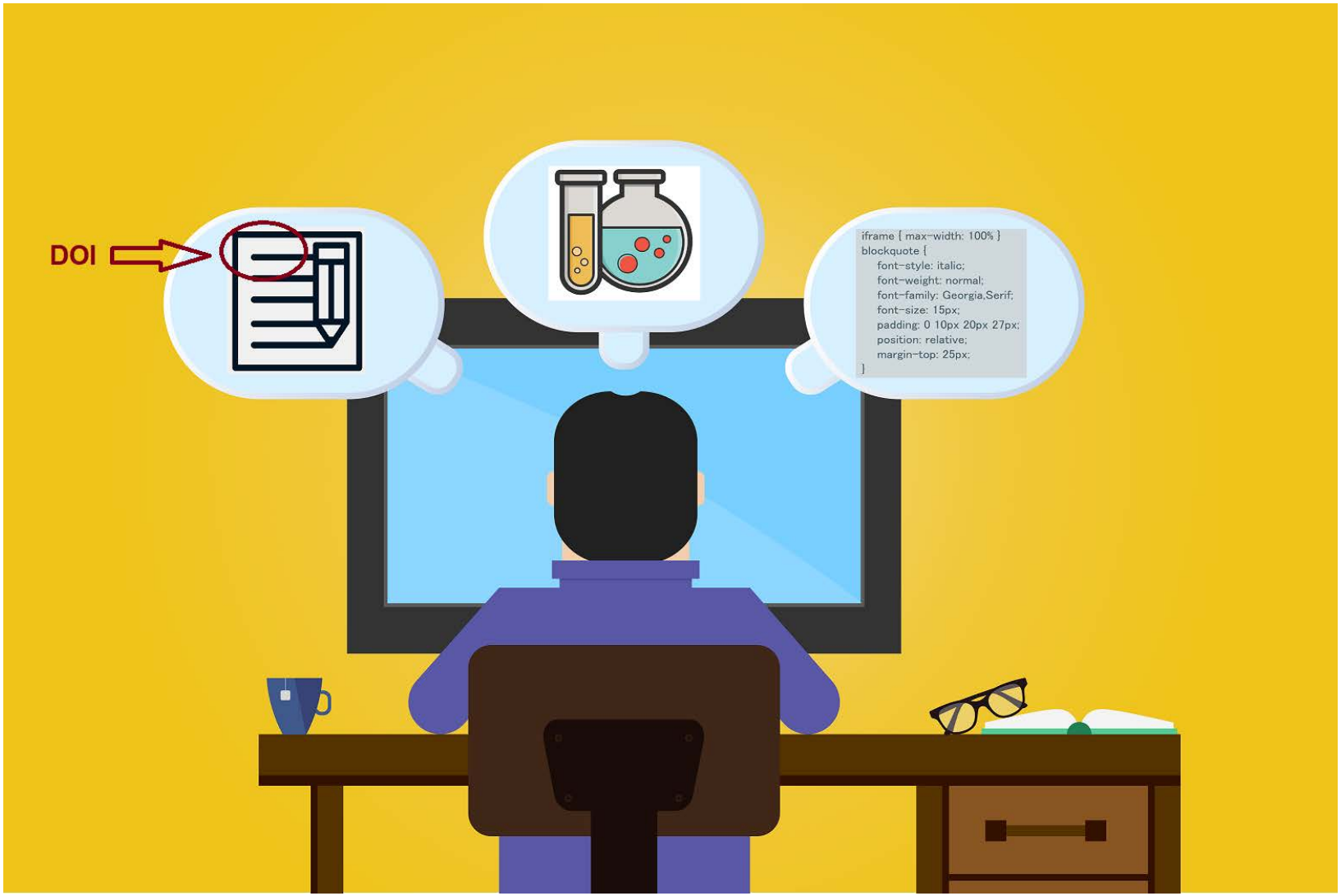
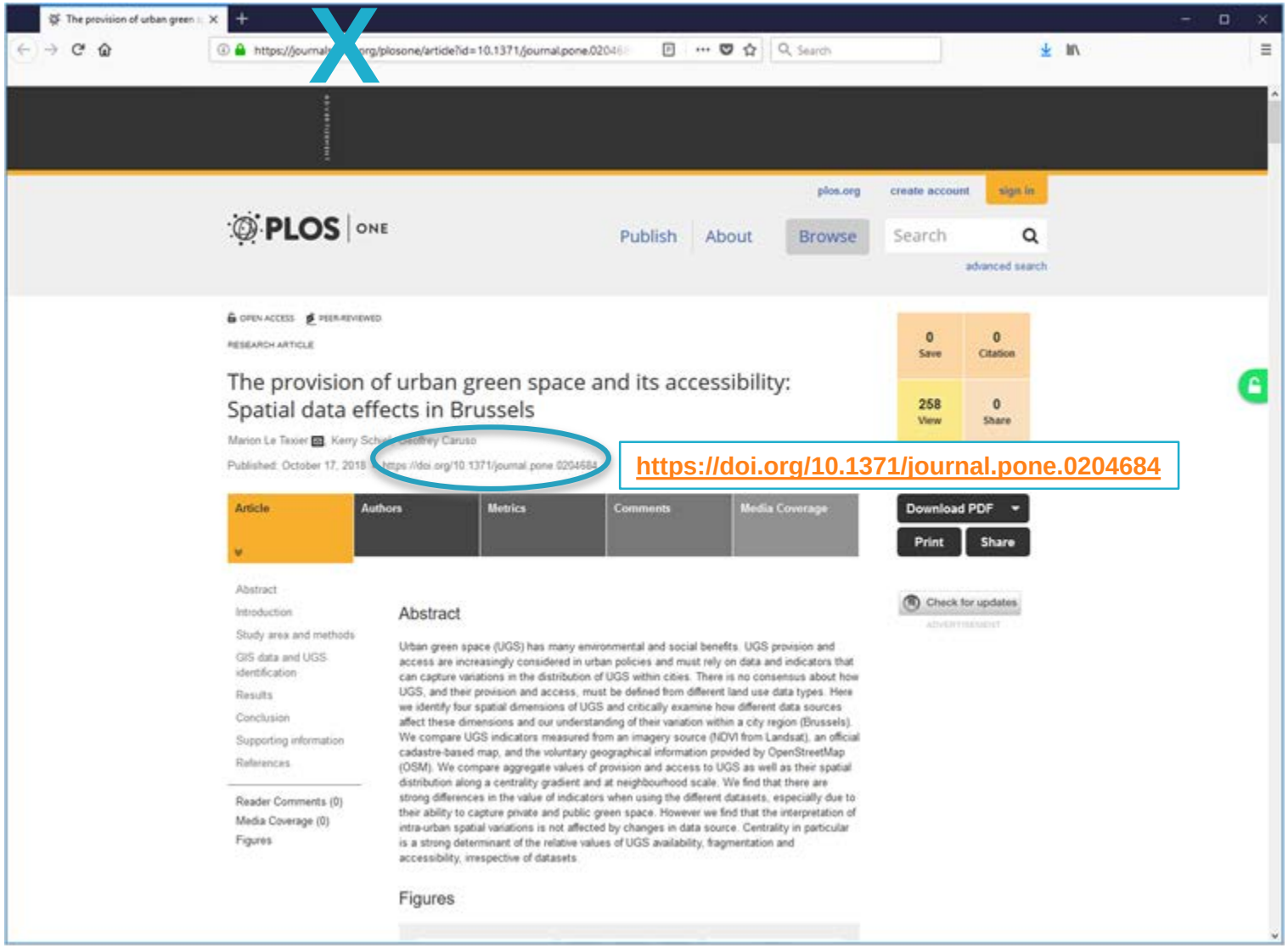


PIDs for Publications

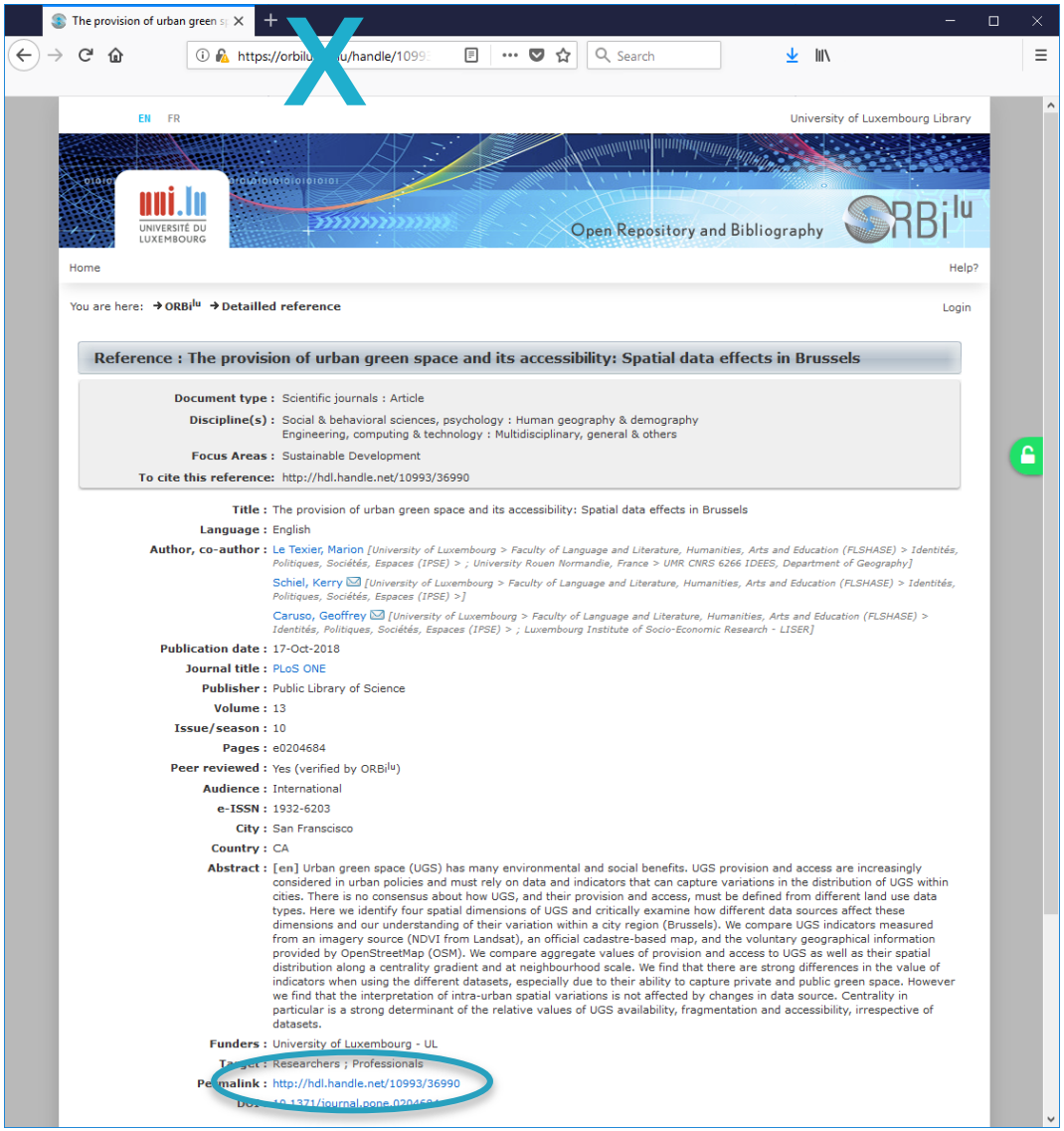


PIDs for Publications

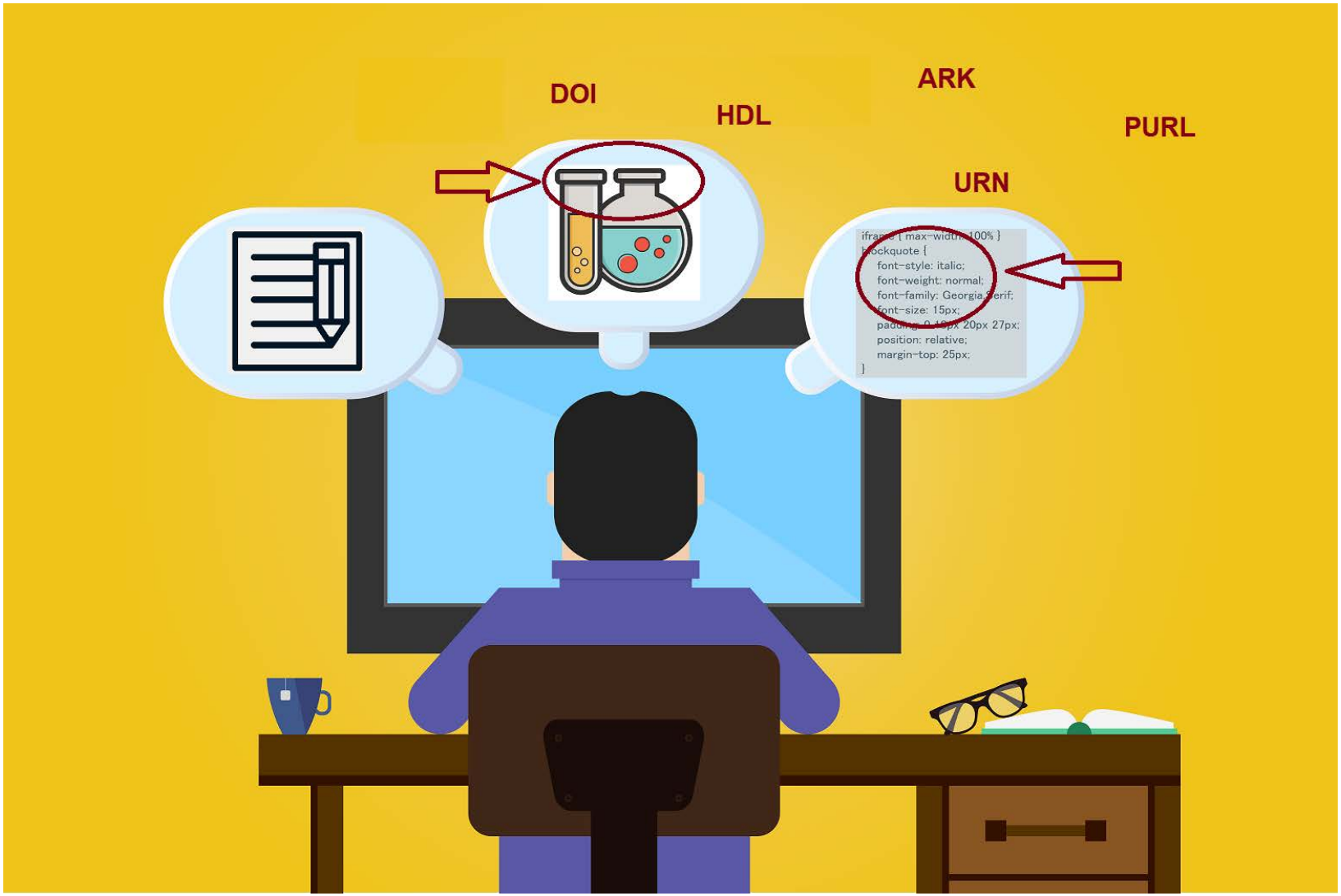


PIDs for Publications

Where's the PID?

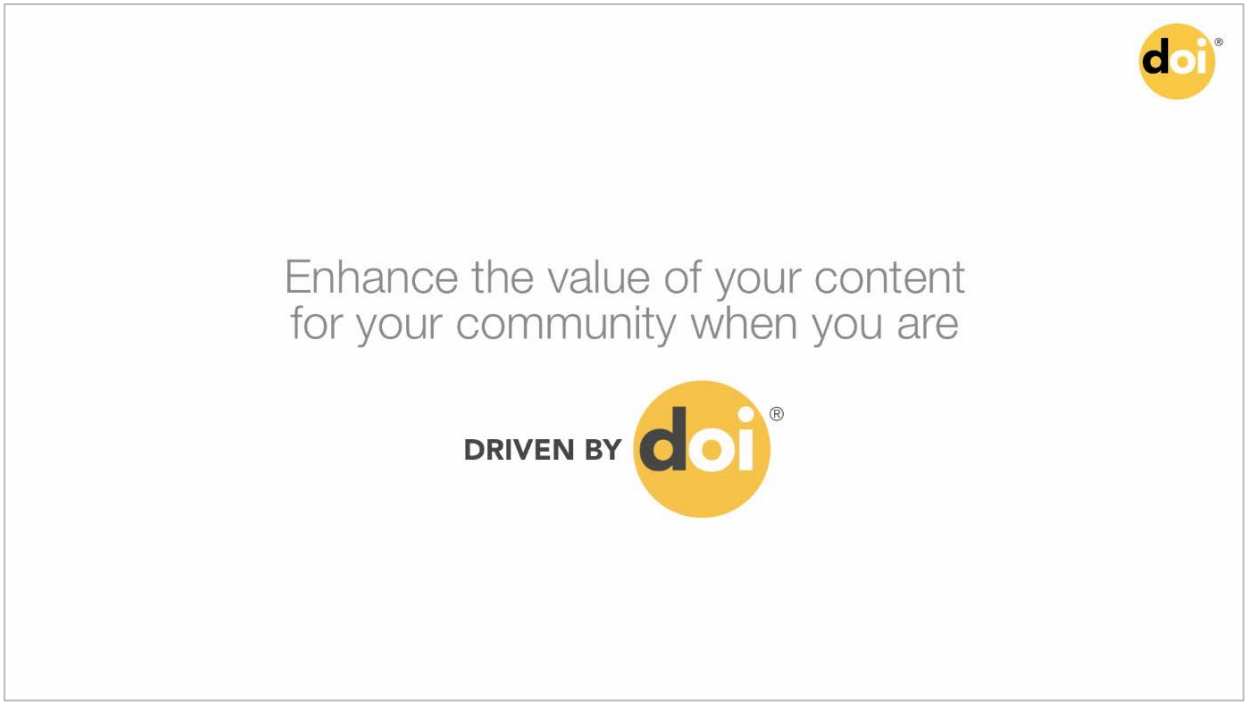


PIDs for Stuff – Data, Source Code, …



PIDs for Stuff

- **PIDS for Scientific Articles, Papers, etc.**
  - DOI = Digital Object Identifier;
  - Can be used for datasets too;
- TIP: Use a DOI shortener: http://shortdoi.org/



Learn more at https://www.doi.org/driven_by_DOI.html

PIDs for Stuff

- **If you build a management system:**
  - Handle (HDL);
  - DOIs are a subset of Handles;
  - ORBi[lu] uses Handles: http://hdl.handle.net/10993/36990

PIDs for Stuff

- **Other Options:**
  - **Archival Resource Key (ARK)**
    - ARK is an identifier scheme conceived by the California Digital Library (CDL), aiming to identify objects in a persistent way.
  - **Persistent Uniform Resource Locator (PURL)**
    - PURLs are URLs is a permanent web address which contains the command to redirect to another page, one which can change over time.
  - **Universal Resource Name (URN)**
    - URNs are persistent, location-independent identifiers, allowing the simple mapping of namespaces into a single URN namespace.

Learn more at
https://www.dpconline.org/handbook/technical-solutions-and-tools/persistent-identifiers
and
https://www.ands.org.au/guides/persistent-identifiers-awareness

In Summary

- Give yourself a PID;
- Give your stuff PIDs;
- Use PIDs whenever possible;
- Web addresses don’t last;
- Machines understand PIDs.

This presentation has been largely based upon http://urn.fi/URN:NBN:fi-fe201706087064.
Thanks goes to Esa-Pekka Keskitalo for making his presentation available and reusable.