#### What have we all been up to?



### Future of Research Communications and E-Scholarship

Maryann E. Martone, Ph. D.
President
Professor of Neuroscience, University of California, San Diego







### What is FORCE11?

### Future of Research Communications and E-Scholarship:

A grass roots effort to accelerate the pace and nature of scholarly communications and e-scholarship through technology, education and community

Why 11? We were born in 2011 in Dagstuhl, Germany

Principles laid out in the <u>FORCE11</u> <u>Manifesto</u>

FORCE11 launched in July 2012

FORCE11 is a 5013C non-profit



#### Force11 White Paper: Improving The Future of Research Communications and e-Scholarship

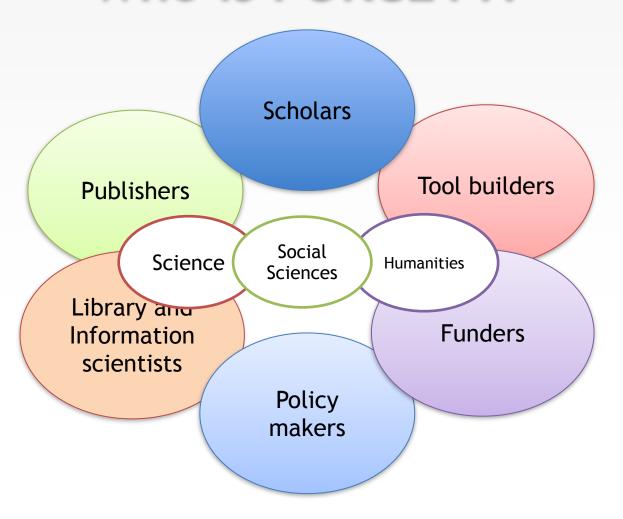
February 19, 2012

Editory: Philip E. Boume\*, Tim Clark\*, Robert Dale\*, Anixa de Waard\*, Ivan Herman\*, Eduard H. Hovy\*, and David Shorano\*

Concributory: Bradiey P. Allen', Aliaksandr Birukou', Judith A. Biake', Philip E. Bourne', Simon Buckingham Shum', Gully A.P.C. Burne', Leslie Chan', Olga Chiarcoo', Paolo Cictarese', Tim Glark', Leuss Carratewicz'', Robert Dule', Anna De Liddov, David De Roure', Asita De Waard', Stefan Decker', Alex Garcia Caster', Carole Goble', Eve Gray'', Paul Goodn', Udo Halan', Ivan Herman', Eduard H. Hory', Bichael J. Kurse', Flona Murphy', Cameron Neylon', Steve Pezifics', Mile W. Rogen', David S. H. Rosenthal'', David Shottne', Jarkin Sizen', Herbert van de Sompel', Poter van den Besselaar' and Todd Maloe'



### Who is FORCE11?



Anyone who has a stake in moving scholarly communication into the 21st century



### FORCE11.org



- Community platform
  - Discussions
  - Tools and resources
  - Blogs
  - Event calendar
- FORCE meeting
- Working groups
  - Support mission of FORCF11
- Education
  - What can you do to improve scholarly communication?

## Beyon ← PDF → FORCE

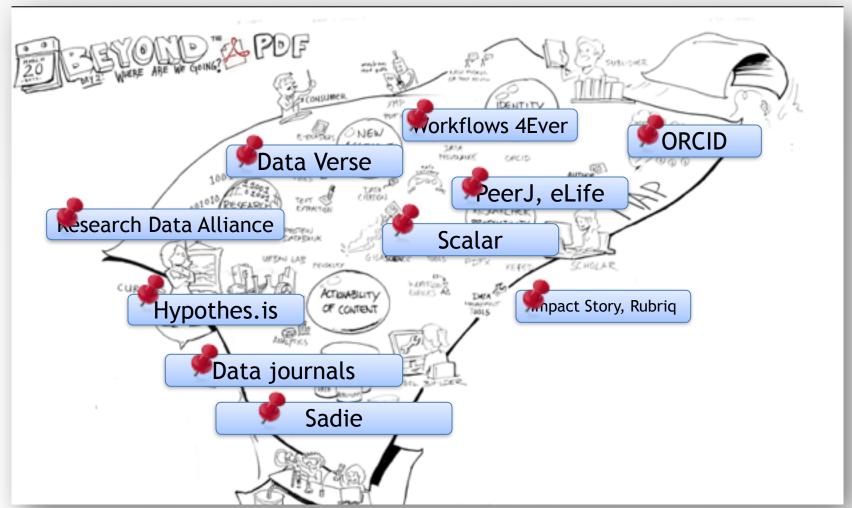
- Conference/ unconference where all stakeholders come together as equals to discuss issues
  - Publishers
  - Technologists
  - Scholars
  - Library scientists
- Incubator for change
- What would you do to change scholarly communication?



San Diego, 2011 ... Amsterdam, 2013... Oxford, January 2015... Portland 2016



# Resource for scholarly communications: People, organizations, publications, tools



Beyond the PDF Visual Notes by <u>De Jongens van de Tekeningen</u> is licensed under a <u>Creative Commons Attribution 3.0 Unported License</u>.



Get on the map! Future commons working group and tool catalog

### FORCE11 Working Groups

- FORCE11 provides a convening place for individuals to come together around issues in scholarly communication
  - FORCE11 provides web working space and facilitation where possible
  - Short term working groups with clear focus
    - Deliverable specified
    - Time line determined



# Resource Identification Initiative: What studies used...

- Have authors supply appropriate identifiers for key resources used within a study such that they are:
  - Machine processible (i.e., unique identifier that resolves to a single resource)
  - Outside of the paywall
  - Uniform across journals and publishers
- Pilot project
  - Antibodies
  - Software/databases
  - Genetically modified animals























Launched February 2014: > 40 journals participating; 400 articles have appeared

# Joint Declaration of Data Citation Principles

- Synthesis of data citation principles
  - >25 groups participating
- Designed to be high level and easy to understand
- Supplemented with a glossary, references and examples



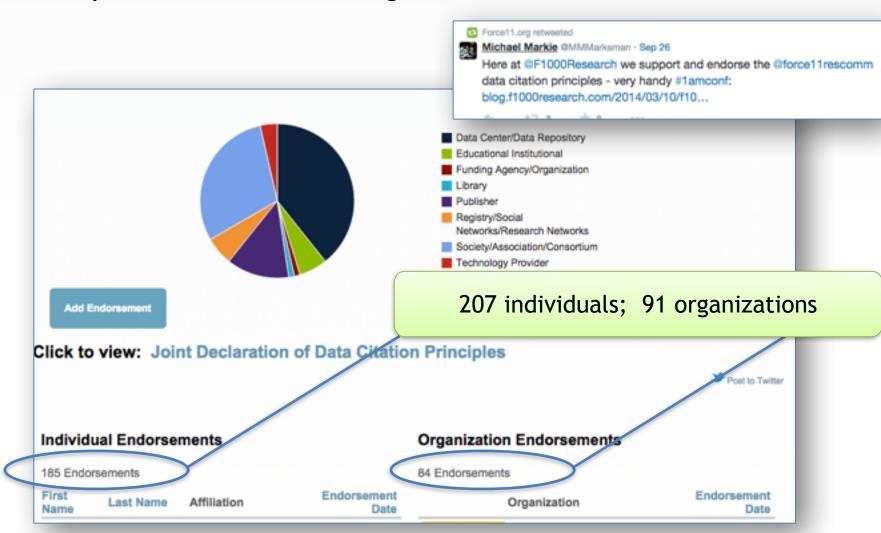
- 2. Credit and attribution
- 3. Evidence
- 4. Unique Identification
- 5. Access
- 6. Persistence
- 7. Specificity and verifiability
- 8. Interoperability and flexibility





### **Endorse the Principles!**

http://www.force11.org/datacitation/endorsements



### Data Citation Implementation Group

- Tim Clark, Harvard
- Joan Starr,
   CDL

PREPRINT - PeerJ PrePrints is not a peer-reviewed venue.

### Achieving human and machine accessibility of cited data in scholarly publications

```
Joan Starr <sup>1</sup>, Eleni Castro <sup>2</sup>, Mercè Crosas <sup>2</sup>, Michel Dumontier <sup>3</sup>, Robert R. Downs <sup>4</sup>, Ruth Duerr <sup>5</sup>, Laurel Haak <sup>6</sup>, Melissa Haendel <sup>7</sup>, Ivan Herman <sup>8</sup>, Simon Hodson <sup>9</sup>, Joe Hourclé <sup>10</sup>, John Ernest Kratz <sup>1</sup>, Jennifer Lin <sup>11</sup>, Lars Holm Nielsen <sup>12</sup>, Amy Nurnberger <sup>13</sup>, Stefan Pröll <sup>14</sup>, Andreas Rauber <sup>15</sup>, Simone Sacchi <sup>13</sup>, Arthur P. Smith <sup>16</sup>, Michael Taylor <sup>17</sup>, Tim Clark <sup>38</sup>
```

Author and article information

- California Digital Library, University of California, Office of the President, Oakland, CA, USA
- <sup>2</sup> Institute of Quantitative Social Science, Harvard University, Cambridge, MA, USA
- <sup>3</sup> Stanford Center for Biomedical Informatics Research, School of Medicine, Stanford University, Palo Alto, CA, USA
- Center for International Earth Science Information Network (CIESIN), Columbia University, Palisades, NY, USA
- 5 University of Colorado at Boulder, National Snow and Ice Data Center, Boulder, CO, USA
- ORCID, Inc., Bethesda, MD, USA
- Oregon Health and Science University, Portland, OR, USA
- 8 W3C/CWI, Amsterdam, The Netherlands
- 9 CODATA (ICSU Committee on Data for Science and Technology), Parie ED
- 10 Solar Data Analysis Center, NASA Goddard Space Flight Center, C



## New working groups forming: Join now!

- Commons working group: Robin Champieux
  - Organizing a series of sessions across stakeholder groups defining the "future commons"
- Software citation principles: Arfon Smith
- Force11-RDA BioSharing Working Group: Susanna Sansone
  - principles for linking information about databases, content standards and journal and funder policies in the life sciences
- Attribution: Melissa Haendel and Karen Gutzman
  - attribution implementation for any research products

