

## Moments of Transition

### The Global Open Access Debate & Institutional Repositories for Researchers

Research Open Day, University of Nottingham  
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## Key Questions

1. Who are the SHERPA team?
2. Why is Open Access such a key issue?
3. What is the global Open Access movement?
4. What Repositories does Nottingham support?
5. What tools are available to help authors?

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## Who are SHERPA?



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## SHERPA

- Originally SHERPA was a project
  - Securing a Hybrid Environment for Research Preservation and Access
  - Original project 2003 - Jan 2006
- Ongoing Project consortium Jan 2006 onwards
  - Projects funded by JISC, CURL, OSI, SPARK Europe, Wellcome
- Work Goals
  - Develops tools & provides assistance for institutional repositories
  - Investigates related scholarly publishing issues and challenges
  - Disseminates experience & advice to broad audience
- Core team based at University of Nottingham, UK
  - Partner Officers based at UK research universities

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## SHERPA Project Portfolio

- Copyright & IPR
  - JULIET, SHERPA/RoMEO
- Discovery & search services
  - OpenDOAR, Intute RS
- Preservation & long term access
  - SHERPA DP, PROSPERO & The Depot
- Repository development
  - DRIVER, EthOS, SHERPA Plus & Repositories Support Project

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## Open Access Repositories

- Online sites
  - Authors deposit scholarly publications
  - Sometimes called digital repositories
- Open Access repositories mean
  - Contents are freely available online to all
- Open Access repositories are not
  - A substitute for peer-reviewed publication
- Potential for value added services
  - Personalised publications lists, hit rates & citation analysis
- Sustainability built in
  - Repositories work towards continued format accessibility

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## Why Institutional Repositories?

- Greater longevity than individual projects
  - SRs can use IRs as ingest mechanisms
- Subject repositories more at risk in the long term
  - Projects end or enthusiasts lose ability to support
  - Some subject repositories adopted by institutions
- IRs allow easier intellectual asset management
- Allows co-ordinated approach to capture, storage and retrieval
  - Encourages efficient use of research & encourages collaboration
- A source of readily reusable material
  - Courses, presentations or auditing purposes
  - Potentially supporting QA reviews & audits

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## Why is Open Access Such a Key Issue?



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## Research Publishing Barriers

- Readership limited by economics
  - Journal prices rise as budgets fall
  - Potential global partnerships aborted
  - Inaccessible research
- Emerging Publisher monopolies
  - Eliminating competition & squeezing out smaller publishers
  - Resultant cancellation of smaller publisher titles to maintain major bundles
- Knock-on effects
  - Restriction on advancement of human knowledge

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## OA Opens the Barriers

- *A research need*
  - As an author I want my research papers to be read and cited. In short, for the sake of my academic career I need my research to have professional visibility & the maximum possible impact.
  - R. Jones 2006
- *A possible solution*
  - Open access encourages a wider use of information assets and increases citations.
  - An Open Access article can be freely accessed by anyone in the world using an internet connection.
  - Potential readership is far, far greater than that for articles where the full-text is restricted to subscribers.
  - B. Hubbard 2005

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## What is Open Access

- Budapest Open Access Initiative (2002)
  - *By open access to this literature we mean its free availability on the public internet, permitting any users to read, download, copy, distribute, print search or link to the full text of these articles, crawl them for indexing, pass as data to software, or use them for any other lawful purpose, without financial, legal, or technical barriers other than those inseparable from gaining access to the internet itself.*
  - <http://www.soros.org/openaccess/>

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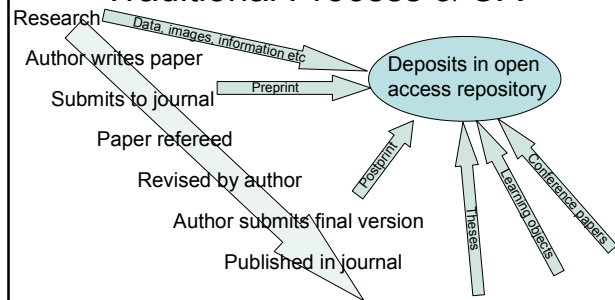
## What is Open Access

- Deposition of research into repositories
  - Electronic versions of any kind of publication
  - *Institutional* or *Subject* based varieties
- Freely available online - no subscription to read
  - A particular constituency can donate
- Timely & rapid communication of ideas
- Sustainability built in
  - Repositories ensure continued format accessibility
- Funders
  - Compliance with OA now mandated as grant condition by some research funders

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## Traditional Process & OA



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## The Global Open Access Movement



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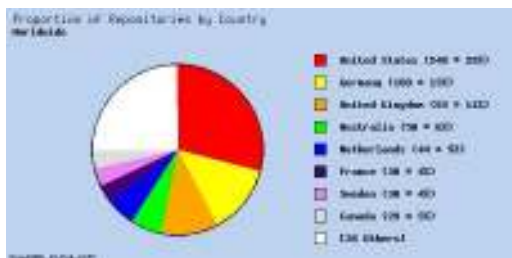
## The World of Open Access

- Global movement
  - Not an activity occurring in isolation
  - Projects & initiatives since the late 1990s
  - 93 UK OA Repositories listed on OpenDOAR
- EU Petition for guaranteed public access to publicly funded research
  - Over 20,000 personal and institutional signatories
- Global OpenDOAR repository directory
  - 843 fully OA repositories listed globally
  - Includes a content search engine powered by Google

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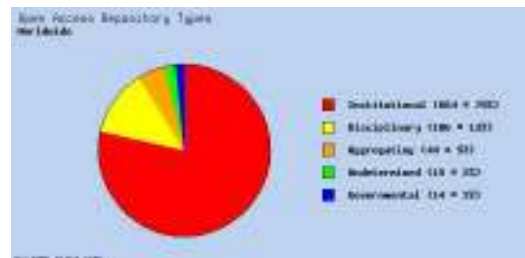
## Repository Locations



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## Repository Types



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## The World of Open Access

- Research Funding Council statements & policy
  - Supporting or mandating OA deposition
  - Listed on JULIET Website
  - Compliance by publishers listed on SHERPA/RoMEO
- Open Access journals exist with very different funding models
  - Peer reviewed but author retains rights
  - See DOAJ for over 2,500 examples
  - Tend to use the Pay up-front business model
  - Quality maintained –no guarantee of publication

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## Publisher Reactions

- A very mixed bag, often surprising
  - Ours is the best of businesses: we get our raw material for free and our customers pay us a year in advance," joked the publisher of an academic journal to a university researcher
    - *The Guardian*, 13/02/2007
- Some supportive, some not
  - Many uncertain or unwilling to comment
- Brussels Declaration on STM Publishing
  - A counter to the Berlin Declaration?
- Open Access publishers offer a new way forward
  - Peer reviewed publishing whilst retaining Open Access rights

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## OA Research Benefits

- OARs enable a wider global readership
- Which means:
  - ↑ Improved citation rankings
  - ↑ Communication
  - ↑ Improved long term preservation
  - ↓ Decreased potential plagiarism
- Leading to:
  - ↑ Professional standings
  - ↑ Departmental & Institutional respect/promotion
  - ↑ Long term accessibility
  - ↑ Ease of access for colleagues and students

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## Broader Benefits

- For the institution
  - Facilitates use & re-use of information assets
  - Raises profile and prestige of institution
  - Potential long-term cost savings
- For the research community
  - Frees up the communication process
  - Avoids unnecessary duplication
  - Assists in truly global collaboration
- For society at large
  - Publicly-funded research publicly available
  - Aids in public understanding of research

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## What Institutional Repositories does Nottingham support?



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## Nottingham Repositories

- Three main repositories at Nottingham
  - **Nottingham ePrints** (Institutional repository)
  - **Nottingham eTheses** (PhD) & **Nottingham eDissertations** (Masters pilot)
  - Already high up on search engine rankings
- Deposition of material
  - Submission takes 10 minutes
  - Full text only - not metadata only
  - Registration 1<sup>st</sup> time only for QA purposes
  - Departmental administrators can help with deposition
- Interface due for upgrade over March/April

<http://eprints.nottingham.ac.uk/>



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Efficient delivery of Cre-recombinase to neurons in vivo and stable transduction of neurons using adeno-associated and lentiviral vectors

Abstract

Background: Cre-loxP system is one of the important techniques for manipulating gene function within adult nervous system. Unfortunately, conventional lentiviral vector may suffer from several limitations including relatively low genetic efficiency and the long-term regulation of other genes. One approach to produce a conditional function in excitation of genes involves the use of Cre-recombinase transgene. Self-targeted expression of Cre, which enables the effects of Cre-loxP to be the hippocampus and nucleus of adult mice by using adeno-associated virus (AAV) and lentiviral (LV) vectors. In this study, we have developed a novel Cre-loxP system using adeno-associated virus (AAV) and lentiviral (LV) vectors. We used Cre-loxP system to generate Cre-expressing neurons in vivo and stable transduction of neurons using adeno-associated and lentiviral vectors. We used Cre-loxP system to generate Cre-expressing neurons in vivo and stable transduction of neurons using adeno-associated and lentiviral vectors. We used Cre-loxP system to generate Cre-expressing neurons in vivo and stable transduction of neurons using adeno-associated and lentiviral vectors.

Keywords: [Cre-loxP system](#), [adeno-associated virus](#), [lentiviral vectors](#), [neurons](#), [in vivo](#), [stable transduction](#)

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BMC Neuroscience

Research article

Efficient delivery of Cre-recombinase to neurons in vivo and stable transduction of neurons using adeno-associated and lentiviral vectors

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## Cautions & Alternatives

- OA self-archiving not always possible
  - Potential rejection risks?
  - Ethical or commercial sensitive?
- Don't take risks with your publishing!
  - Can always revisit post-publication
  - See SHERPA Guidance for Authors
- Deposition in IRs & SRs is allowed
  - Although publishers agreement may affect some depositions

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### What Tools are Available to Help Authors?





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## But is it Legal?

- ~90% of journals or ~75% of publishers allow
- **Conditions or restrictions**
  - Conditions allow deposition provided rules followed
    - E.g. Not publishers version, pre/post print only
  - Restrictions stop immediate deposition
    - E.g. Embargos (6 months-2 years commonly)
- Tools to help
  - SHERPA/RoMEO - [www.sherpa.ac.uk/romeo.php](http://www.sherpa.ac.uk/romeo.php)
  - SHERPA/JULIET - [www.sherpa.ac.uk/juliet/index.html](http://www.sherpa.ac.uk/juliet/index.html)
  - Quality assured through industry links

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## S/RoMEO Colour Scheme

- Highlights publisher's archiving policies (237)

<b>Green</b> (38%) Can archive both pre & post-prints	<b>Blue</b> (26%) Can archive post-print only
<b>Yellow</b> (10%) Can archive pre-print only	<b>White</b> (26%) Archiving not formally supported

- Prohibitive restrictions reduce colour level
- Pending a response from ~200 publishers

Figures accurate as of Feb 2007

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## S/RoMEO Record

237 publishers listed to-date

Equates to over 15,000 journals

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## Conclusion

- Open Access repositories work alongside traditional publishing
- SHERPA's work is helping to support the global OA movement
- OA in essence is unrestricted access
- Deposition in an institutional repository will improve your professional standing
- On site help & advice on OA is available from SHERPA

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## Final Thoughts

- The "open access" academic journal movement is one of those things. It is a no-brainer.
- Academic literature should be freely available: developing countries need access; part-time tinkering thinkers like you deserve full access; journalists and the public can benefit; and most importantly of all, you have already paid for much of this stuff with your taxes.
- They are important new ideas from humanity, and morally, you are entitled to them.
  - Ben Goldacre, The Guardian Sat 10<sup>th</sup> Feb 2007

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  - Presentation & other resources
- Author Guidance & Help
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