

#### 10<sup>TH</sup> ANNIVERSARY OF THE BERLIN DECLARATION



Berlin Open Access Conference · 19-20 November 2013 in Berlin, Germany

# Development of Open Access in China: Strategies, Practices, Challenges

#### Xiaolin Zhang

National Science Library, Chinese Academy of Sciences

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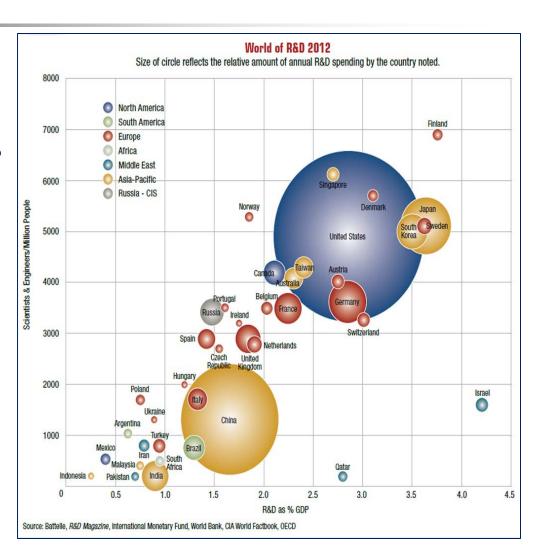


#### Development of Open Access in China

- 1. STM R&D growth in China
- 2. OA Strategies & Promotion in China
- 3. OA Journals & Repositories in China
- 4. Further Challenges

#### (1) Growth of Chinese STM R&D Investment

- NBoStat/MoST/MoF:
- 2012 R&D Investment
  - 2012: 1029 Billion RMB
  - 18.5% over 2011
  - 1.98% of GDP
- Public R&D:
  - 560 Billion RMB
  - 16.7% over 2011
  - 4.45% of budgets
- Industry R&D:
  - **784.2 Billion RMB**
  - 19.2% over 2011

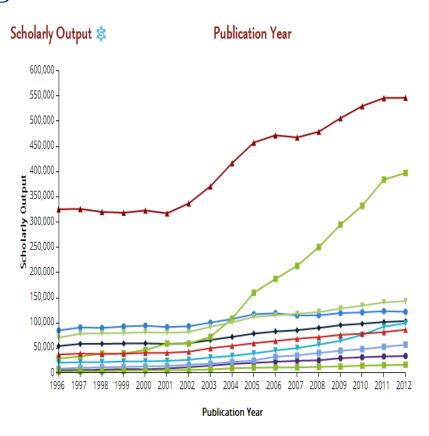




#### (2) Growth of Chinese Research Papers

2003-2012: Chinese SCI papers from 47927 to 186577 World percentage from 5.6% to 13.9%





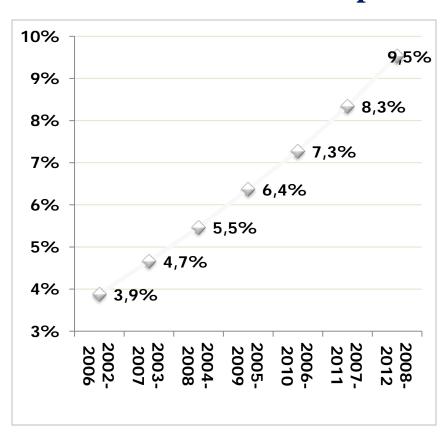
By InCite, including HK and Macau

By SciVal, via Y.S. Chi

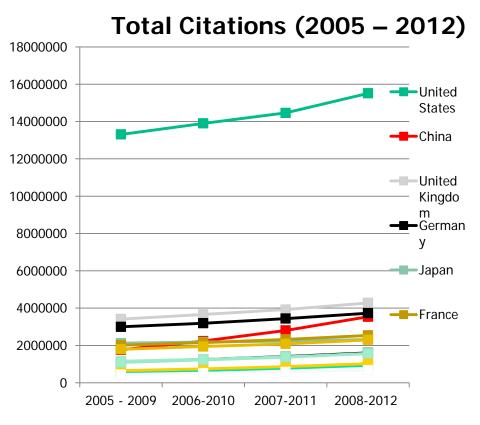
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#### (3) Growth of Chinese Research Impact

2002-2012: Chinese SCI citations from 3.9% to 9.5% World position as the 3<sup>rd</sup> most cited country



By InCite, including HK and Macau



By SciVal, via Y.S. Chi

### (4) Growth of International R&D Cooperation

Chinese SCI papers with internationally co-authors 2000-2010: from 7552 to 31478
World percentage from 5.1% to 12.5%

|  | 2000 | 2005  | 2010  |
|--|------|-------|-------|
| Chinese SCI papers with international co-authors       | 7552 | 16199 | 31478 |
| Percentage of world internationally co-authored papers | 5.1% | 8.0%  | 12.5% |
| Countries co-authored with China                       | 32   | 41    | 47    |

By NSL/CAS, including HK and Macau



# (5) Responsibility for its people and for the world

- While recognizing challenges to the quality and impact of its research, a keen realization of the responsibility
- To enable access to research results by Chinese people, especially those outside the elite few
- To contribute to the open sharing of research results world-wide, not taking a free ride

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#### 2. OA Strategies & Promotion

- **2003 CAS President Lu signed Berlin Declaration**
- **2004 CAS and NSFC signed Berlin Declaration**
- 2005 Intl Conf. Strategies and Policies of Open Access to Scientific Information, by CAS, Beijing
- 2007 Intl Sem. Copyright Issues in DL/OA, Beijing
- 2009 Intl Sem. on Common Licenses for OA, Beijing
- 2010 8<sup>th</sup> Berlin Conf. on OA, CAS & MPG, Beijing
- 2012 1<sup>st</sup> China Open Access Week, Beijing
  - International trends, policies, and experiences
- 2013 CAS & NSFC endorsed GRC OA Action Plan
- 2013 2<sup>nd</sup> China Open Access Week, Beijing
  - Domestic experiences & best practices in OA journals/repositories
- 2014 GRC Summit with reviewing of open access
  - CAS working as the central team in organizing the review

# 2. OA Strategies & Promotion

#### **2006** at the CODATA Beijing

- Minister of Science and Technology
  - Commitment to open access to scientific information
- 2010 at the 8<sup>th</sup> Berlin Open Access Conference, Beijing
  - Chinese Academy of Sciences
    - CAS Open Access Strategy
- 2012 at the National Innovation Congress
  - Primer Wen Jiabao
    - All scientific information created with public funding should be openly accessible to the whole society to support innovation and development
- New actions in 2013
  - From the State Council, MoST, CAS & NSFC
    - Strong public commitment and current working on policies

# 2. OA Strategies & Promotion

#### **CAS Open Access Strategy**

- By vice secretary general of CAS Pan Jiaofeng
- At the 8<sup>th</sup> Berlin OA Conference, 2010, Beijing
- Promoting deposit of public research results
  - Developing OA IRs in CAS institutes
- Supporting OA publishing by CAS authors
- Supporting OA journals by CAS institutes
- Promoting OA policies & initiatives by funders
- Participating in international cooperation in OA

# 2. OA Strategies and Promotion



- OA Promotion Portal
- China OA Weeks
- Public media reports

#### Promotion

- IR Implementation Group
- arXig.org China Group
- China IR Conf. 2013

#### Support

- OSS CSpace software
- Best practices for policies
- Info Policy Research Center









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#### (1) Journal publishing and OA journals

#### Journals

- Total: 9849; STM: 4920 (by 2011)
- Higher quality: 1124 (by CSCD)/1868 (by ISTIC)
- Survey 1: Cheng, W. & Ren, S. 2012.11.23
- OA journals: 642
  - 34.4% among 1868 academic 'core' journals
  - **300+% increase since 2006**

#### Distribution

- Med 130, 20%; Eng 107, 16.7%; Univ. Journals 201, 31.3%; Basic Sciences 204, 31.7%
- Speed to open:
  - Before print 4.8%; Con-Current 39.3%;
  - Delayed 1-12m 36% and 13m+, 19.9%

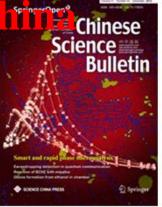


- Survey 2 by Chu, J. et al, 2012.10
  - OA Journals 308
    - 29.3% among 1050 STM society journals
    - 137% since 2006
  - Speed to open:
    - Con-Current, 55.7%; Delayed 1-6m, 25.6%
    - Delayed 7-12m, 5%; Delayed 13m+, 2.5%; Others, 10.1%
  - Use rights:
    - Only 7% adopts CC licenses, 47% have NO formal policies
  - Fees
    - Only 7 titles with OA fees; 39% with print subscriptions;
    - 46.8% fees from aggregators; Majority funded by institutes
  - Self deposit:
    - Formally allowed, 19%; Not against, 44.2%
    - Not allowed, 6.3%; No policy, 30.4%

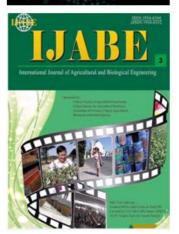
(1) Journal publishing and OA journals CAS OA Journal Portal <a href="http://www.oaj.cas.cn/">http://www.oaj.cas.cn/</a>



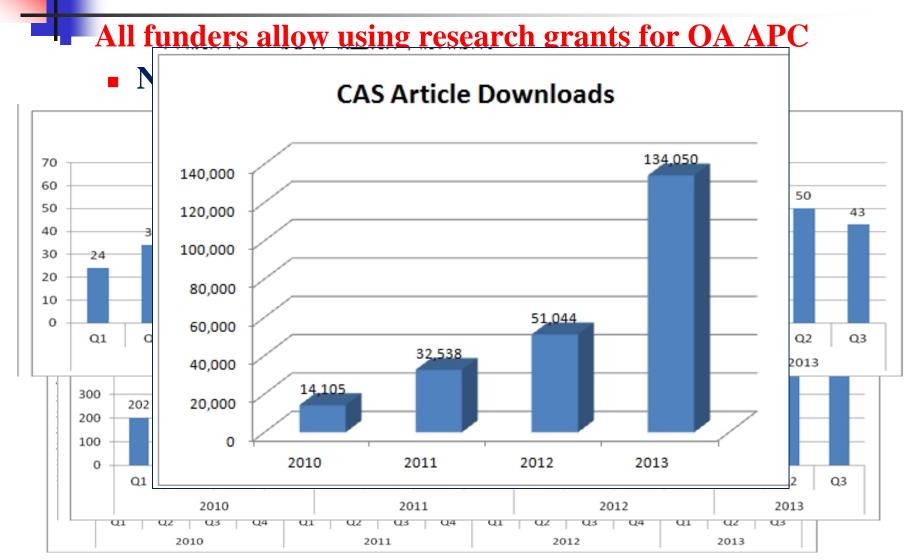
- (1) Journal publishing and OA journals
- Science China--Life Science
- Chinese Science Bulletin
  - Both transformed to OA since 2011, as part of SpringerOpen, http://www.scichina.com
- International Journal of Agricultural and Biological Engineering, born OA in 2008
  - With the OJS platform, www.ijabe.org
    - Wang, Y.K, 2012.11
  - By CSAE & AOCABFE & CAU
  - Intl editorial board, 65% foreign
  - Intl publications, 85% in 2011
  - APC: \$50 or ¥ 400/page, with additional support from sponsoring organizations







#### (2) Support OA publishing





- All funders allow using research grants for OA APC
  - NSFC, MoST, MoE, CAS, CAMS, CAAS, ......
- Increasing numbers of OA papers by Chinese authors
- PLoS
  - Jan. 2010 through Oct. 2013
  - Submissions China 23,947
  - Publications China 9,975
  - Publications from CAS 1,597
- BMC:

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#### (2) Support OA publishing

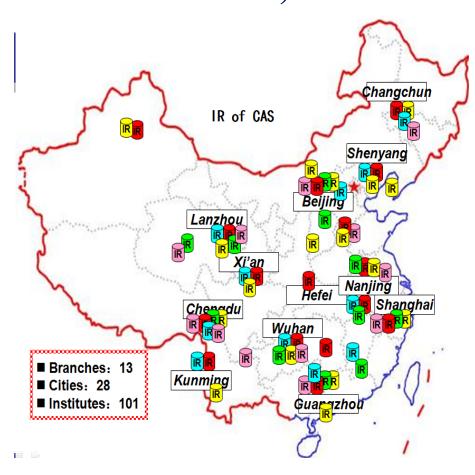
#### CAS/NSL supports OA publishing by its authors

- NSL + BMC, 50% APC
- NSL + NJP, 50% APC
- SCOAP3 China Group
  - Transforming HEP peer-reviewed publishing into OA
  - CAS, Peking U., Tsinghua U., Fudan U., etc.



#### (3) CAS IR Services

#### IRs in CAS, 2009-



- **2013-10**
- 87 in service
- 23 more in development
- CAS IR Grid in service

Total: 490,000+

Fulltext: 390,000+, 75+%

OA: 290,000, 75+%

Total Visits: 40,000,000+

Total downloads: 6.3 million+



#### (3) CACID Carvings





#### Certificate for Most Downloaded Paper from CAS IR Grid



(4) Academic Libraries in the mainland China

**CALIS IR Project** 

#### http://dspace.xmu.edu.cn/dspace/



# 28 universities http://ir.calis.edu.cn/about.jsp



#### (5) IRs in Taiwan and Hong Kong

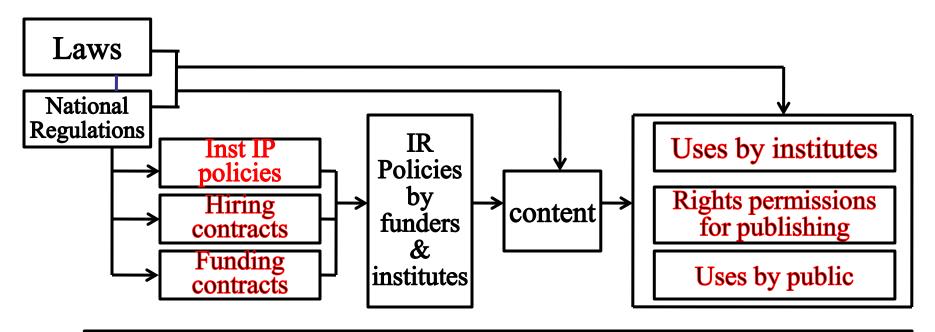
Taiwan Academic IRs http://tair.org.tw



Hong Kong Academic IRs. http://openaccess.hk/hkir.html



- (6) Rights Management for IR content
- CAS/NSL Policy guidelines for content deposit and dissemination in institutional repositories (in Chinese)
  - http://ir.las.ac.cn/handle/12502/5043



Multi-stakeholders, Prior rights and permissions,
Protection of use, dissemination, and preservation rights of all stakeholders

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# 4. Further Challenges

# Strategic Directions

#### **Stronger general commitment to OA**

 While still a few people with misunderstanding, governmental, public, and research communities support open access with stronger commitment and real actions

#### Green OA as the policy focus

- While supporting OA APC through R&D funds, emphasis is on Green OA first to have the content in and accessible
- Clearer understanding of public rights to open access

#### Support for infrastructure

- Institutional repository development
- OA resource discovery and aggregation

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# 4. Further Challenges

# Challenges

- Need stronger involvement of research communities
  - Promotion, Policy development, Evaluation of OA
  - Protection of the rights of public and researchers
- Lack of formal policies, yet
  - Policy research and policy drafting going on
  - Detailed guidelines and good practices needed
- Mandatory OA policies?
  - Mandate or Not?
  - Embargo periods and differences for different fields?
  - How to enforce conformance?

# 4. Further Challenges

# Challenges

- Whether or how to support Gold OA
  - Need specific institutional funds while already allowing research funds to pay APC?
  - Stronger support for domestic OA journals?
  - How to make publishing cost transparent, reasonable, and affordable (or, how to control APC)?
  - Support hybrid OA?
  - How to guard against predatory journals?
  - How to promote and organize transition of library acquisition budgets to open access funds?
  - **.....**
- Concerns with domestic journal development



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### **Development of Open Access in China**

- Thanks!
- zhangxl@mail.las.ac.cn
- National Science Library, Chinese Academy of Sciences

