

# Transformative Research Support Services at CUHK Library

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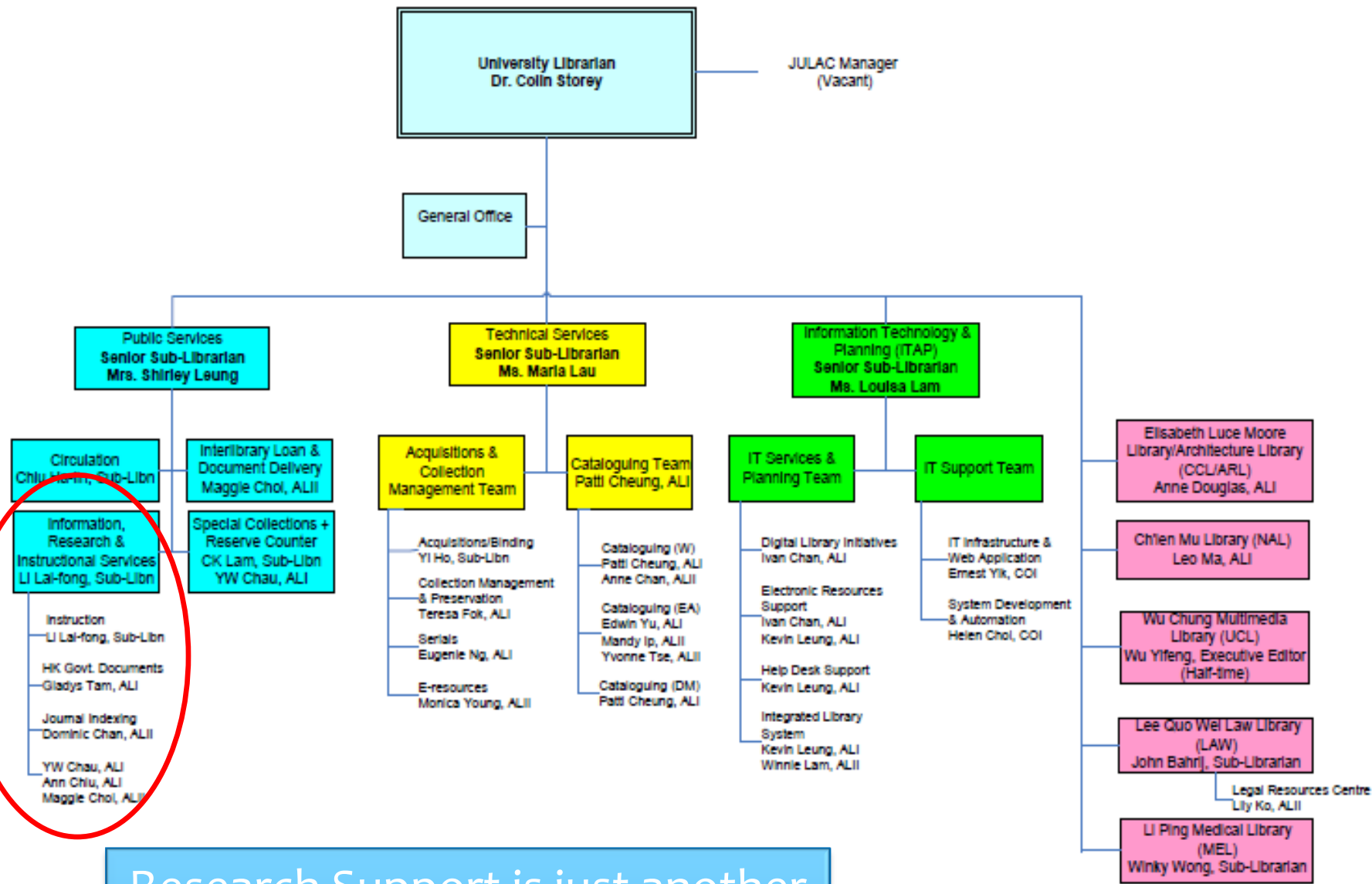
February 2, 2017

# Drivers for Change

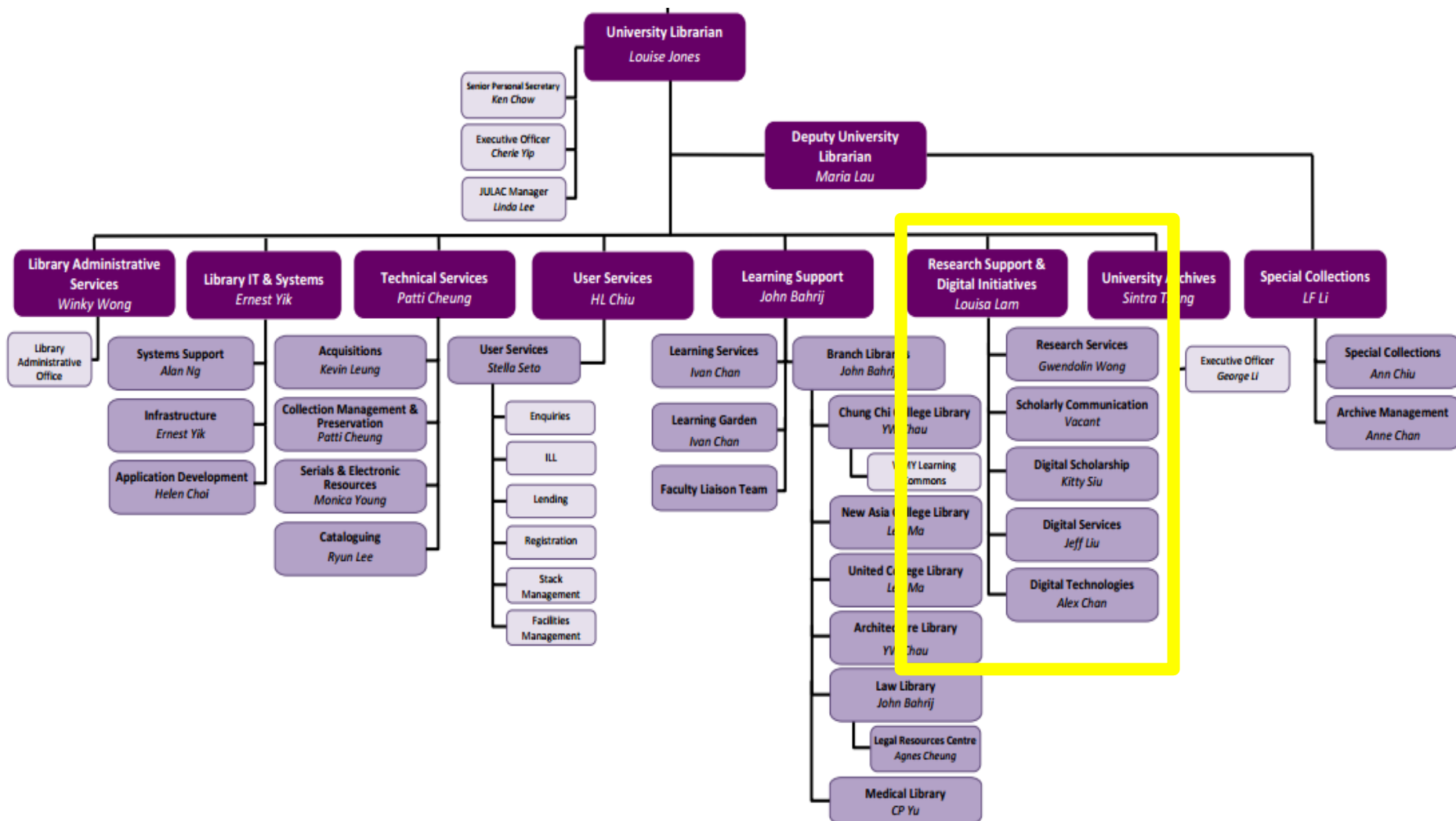


# Responses of CUHK Library

- \* Re-organization to focus its resources on research support
- \* Embed into the workflow / life-cycle of researchers
- \* Build connections with postgraduates and young researchers
- \* Foster partnership and collaboration
- \* Provide more access points discovered by Google
- \* Content is king – create more digital objects of value to researchers
- \* Leverage digital technologies in services



Research Support is just another reference service under the umbrella of user services



A new team, Research Support & Digital Initiatives, was formed in July 2015

# Supporting Research Life-Cycle



- \* New Digital Tools and Platforms are explored and embedded into a suite of services
- \* Cover postgraduates, researchers and Faculty
- \* The emphasis is on professional support and practices, not tools and platforms

# New Scholarly Communications Services

- \* Provide new research tools and citation management tools
- \* Support Open Access Initiatives
- \* Manage CRIS (Current Research Information Systems) for institutional research outputs
- \* Promote ORCiD
- \* Copyright support
- \* Citation Management Service
- \* Support RAE (Research Assessment Exercise) requested by the research funding body of Hong Kong SAR

# Research & Citation Management Tools

Available online or use in the Library:

Workshops & Seminars:



Learning objects:





# Open Access Day at CUHK Library



- \* Raise the awareness of University community on open access
- \* Lead the discussion on open access on campus
- \* Promote new CRIS (Converis Research Portal)



Mobilize campus support for self-archiving at Research Portal

# Research Portal

- \* From IR to CRIS
- \* Before CRIS: Non-validated metadata without full-text
- \* Now: fully open access CRIS for CUHK Library
- \* All the research outputs from a closed internal system were migrated: Currently contains +68,000 records
- \* New features developed to enhance its visibility:
  - \* Full-texts with DOI and/or publisher's website
  - \* Citation Counts for records indexed in Web of Science
  - \* All auto-harvesting of records from external databases and ORCID
  - \* A better interface to enhance<sup>10</sup> browsing and navigation

# Research Portal

## (<http://aims.cuhk.edu.hk>)

### Professor SUNG Jao Yiu



#### Personal Information

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ISNI	0000-0000-7900-5103
URL	<a href="http://www.cuhk.edu.hk/governance/officers/joseph-sung/english/biography.html">http://www.cuhk.edu.hk/governance/officers/joseph-sung/english/biography.html</a>

#### Research Outputs

1 of 47

- Association of distal hyperplastic polyps and proximal neoplastic lesions: a prospective study of 5613 subjects (2016)
- Colorectal Cancer Screening Based on Age and Gender A Cost-Effectiveness Analysis (2016)
- Colorectal cancer screening of the general population in East Asia (2016)
- Copy number variations of HLA-I and activation of NKp30 pathway determine the sensitivity of gastric cancer cells to the cytotoxicity of natural killer cells (2016)
- CREPT Plays an Oncogenic Role in Colorectal Cancer Through Promoting Wnt/ $\beta$ -Catenin Pathway via Enhancing Acetylation of  $\beta$ -catenin (2016)
- Critical Role of Antimicrobial Peptide Cathelicidin for Controlling Helicobacter pylori Survival and Infection (2016)
- CXC chemokine receptor 3 promotes steatohepatitis in mice through mediating inflammatory cytokines, macrophages and autophagy (2016)
- Determinants of Bowel Preparation Quality and Its Association With Adenoma Detection A Prospective Colonoscopy Study (2016)
- Disruption of NCOA2 by recurrent fusion with LACTB2 in colorectal cancer (2016)
- Distinct Subtypes of Gastric Cancer Defined by Molecular Characterization Include Novel Mutational Signatures with Prognostic Capability (2016)
- Dysregulated Lysine Acetyltransferase 2B Promotes Inflammatory Bowel Disease Pathogenesis Through Transcriptional Repression of Interleukin-10 (2016)
- Epigenetic silencing of GDF1 disrupts SMAD signaling to reinforce gastric cancer development (2016)
- Expression and functional characterization of intrafollicular GH-IGF system in the zebrafish ovary (2016)
- Forkhead Box F2 Suppresses Gastric Carcinogenesis Through Inhibiting Wnt Signaling By Promoting  $\beta$ -Catenin Degradation and Is Associated With Survival of Gastric Cancer Patients (2016)
- Global Incidence and Mortality for Prostate Cancer: Analysis of Temporal Patterns and Trends in 36 Countries (2016)

### Removal and recovery of nickel ion (Ni<sup>2+</sup>) from aqueous solution by magnetite-immobilized cells of Enterobacter sp 4-2

Publication in refereed journal

#### CUHK Authors (Current)

Professor WONG Po Keung (School of Life Sciences)

#### Full Text

View Full-text in CUHK



Digital Object Identifier (DOI)

[http://dx.doi.org/10.1016/S0141-0229\(96\)00082-8](http://dx.doi.org/10.1016/S0141-0229(96)00082-8)

#### Times Cited

Web of Science 21

#### Other information

##### Abstract

Cells of Enterobacter sp. 4-2 which could remove large amounts of nickel ion (Ni<sup>2+</sup>) from aqueous solution were immobilized on magnetites. The optimal conditions for the adsorption of bacterial cells onto magnetites were a cell:magnetite ratio greater than 1:10 (dry weight basis), Tris buffer with pH less than or equal to 6.5, and temperature at 25 degrees C. Under selected conditions (cell:magnetite ratio of 1:10, pH 6.0, and temperature at 25 degrees C), more than 90% of the bacterial cells were immobilized onto magnetites. The optimal conditions for immobilized cells to remove Ni<sup>2+</sup> from aqueous solution were Tris buffer at an alkaline pH, the temperature higher than 37 degrees C, and the retention time longer than 30 min. Under selected conditions (temperature at 25 degrees C and retention time of 10 min), 50-90% of Ni<sup>2+</sup> was removed by immobilized cells from the buffer at pHs 7-9. Complete recovery of adsorbed Ni<sup>2+</sup> from immobilized cells was achieved by washing the Ni<sup>2+</sup>-cell-magnetite complexes with diluted citric acid. (C) 1997 by Elsevier Science Inc.

##### Author(s)

Wong PK, Fung KY

##### Journal name

Enzyme and Microbial Technology

##### Year

1997

##### Month

2

##### Day

1

##### Volume number

20

##### Issue number

2

##### Publisher

Elsevier

##### Pages

116 - 121

##### ISSN

0141-0229

##### Languages

English-United Kingdom

##### Keywords

Enterobacter sp; immobilized cell; magnetite; nickel ion


##### Web of Science

Biotechnology & Applied Microbiology; BIOTECHNOLOGY & APPLIED MICROBIOLOGY




##### Subject Categories

# CUHK Digital Repository

(<http://repository.lib.cuhk.edu.hk>)



香港中文大學圖書館  
The Chinese University of Hong Kong Library

繁 · 簡 | A A A | 

Special Collections | Archival Collections


All collections ▼ Enter Search Terms Search Advanced Search

Welcome to CUHK Digital Repository


The Chinese University of Hong Kong (CUHK) Digital Repository is a one-stop repository for accessing all the publicly available digital content created and maintained by the CUHK Library. [More](#)




簡朝亮 行草登覽臺防詩卷




Archive of Christian Study  
Centre on Chinese  
Religion and Culture



書畫  
Calligraphy &  
Paintings  
Collection



中醫  
Chinese  
MEDICINE  
Texts Collection



中國古籍庫  
Chinese Rare Book  
Digital Collection



Chinese Women And  
Hong Kong Christianity:  
An Oral History Archive

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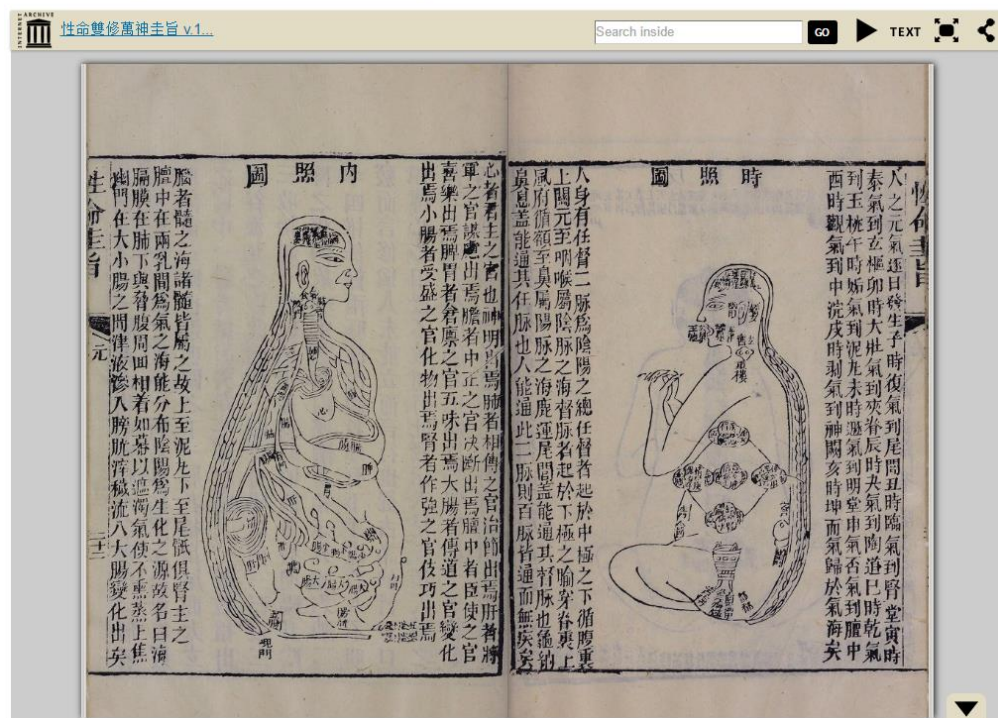
# CUHK Digital Repository

- \* The single home for all digital collections created by the Library
- \* Built on Islandora as the one-stop platform for all digital images
- \* OAI-PMH enabled to provide open access
- \* Full metadata to provide multiple access points
- \* Search Engine Optimization (SEO) to facilitate discoverability by Google
- \* Collaborated with Faculty to develop the collections to ensure they are valuable for research



## 性命雙修萬神圭旨 v.1

Full Text	Description	Pages
Other volumes <input type="text" value="Please select"/>		



## Details

Title	性命雙修萬神圭旨：[四集] Xing ming shuang xiu wan shen gui zhi : [si ji]
Other Title	性命圭旨 Xing ming gui zhi
Author(s)/Creator(s)	尹真人.
Statement of Responsibility	[尹真人秘授]. [Yinzhenren mi shou].
Publisher	[China] : 一山房, China) Yi shan fang
Date	清康熙庚戌 [9年, 1670] Qing Kangxi geng xu [9 nian, 1670] 1669
Issued Date	1669-01-01T00:00:00Z
Edition	[刻本]. [Ke ben].
Resource Type	print
Subject	Taoism. Alchemy.

# Digital Scholarship Lab

- \* A cutting-edge space for supporting digital scholarship (DS) research and collaborative research work
- \* To encourage informal interactions in the space
- \* Increase opportunities for library-faculty collaboration
- \* On-site consultation service on DS projects is provided by Digital Scholarship Librarian
- \* Workshops provided to promote DS research on campus

# Visualisation Room

Wired & wireless  
connections

Digital display wall

80" Interactive  
whiteboard

Multiple video  
inputs

Writable  
partitions

Moveable chairs  
& tables





# Seminar Room



Printing, photocopying & scanning

5 high-speed PCs

5 iMacs

with digital scholarship tools/software

# DS Specialist Software

- \* 10 PCs and iMacs are installed with specialist digital scholarship software to support GIS, text-mining

<u>Software in PCs</u>	<u>Software in iMacs</u>
<ul style="list-style-type: none"><li>■ <b>ArcGIS Teaching &amp; Research Lab Kit</b> - Geographic information system (GIS) software for mapping &amp; geospatial data analysis</li><li>■ <b>Adobe Creative Cloud</b> - Includes Photoshop, Dreamweaver, Illustrator, Premiere Pro and all the available apps in the package</li><li>■ <b>AutoCAD</b> - For 2D and 3D computer-aided design and drafting</li><li>■ <b>Cytoscape</b> - For visualising molecular interaction networks and biological pathways</li><li>■ <b>Gephi</b> - For visualisation and exploration of graphs and networks</li><li>■ <b>Google Earth Pro</b></li><li>■ <b>GRASS GIS</b> - GIS software</li><li>■ <b>IBM SPSS</b> - For statistical analysis</li><li>■ <b>MALLET</b> - For statistical natural language processing and different machine learning application to text</li><li>■ <b>MS Office</b></li><li>■ <b>R</b> - For statistical computing and graphics</li></ul>	<ul style="list-style-type: none"><li>■ <b>Adobe Creative Cloud</b> - Includes Photoshop, Dreamweaver, Illustrator, Premiere Pro and all the available apps in the package</li><li>■ <b>AutoCAD</b> - For 2D and 3D computer-aided design and drafting</li><li>■ <b>Gephi</b> - For visualisation and exploration of graphs and networks</li><li>■ <b>Google Earth Pro</b></li><li>■ <b>Nvivo</b> - For qualitative research analysis</li><li>■ <b>R</b> - For statistical computing and graphics</li><li>■ <b>MS Office</b></li></ul>

# Reflections

- \* We are taking on new research tools and platforms to transform our research support services in addition to the traditional roles as a teacher of information literacy skills, custodian of information, provider of e-resources
- \* We have assumed following new roles:
  - \* Technology Specialist
  - \* Manager of institutional research outputs
  - \* Manager of digital repository
  - \* Creator of digital collections
  - \* Hosting of institutional e-journals
  - \* Advisor on Copyright issues
  - \* Supporter of open access<sup>19</sup>

# Reflections

- \* We are not there yet:
  - \* We have not fully embedded into researcher's workflows
  - \* More collaboration is needed
  - \* More innovative research tools can be taken
  - \* More services can be delivered online
- \* The way forward:
  - \* Towards e-Research: supporting digital curation and research data
  - \* More integration in Research Portal
  - \* Develop data visualisation service

# Reflections

- \* What hindered?
  - \* Right mix of staff skills
  - \* Traditional service culture of the Library
  - \* Research culture of the University
  - \* Sustainable Resources

# Q & A

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