UCL Big Data Institute Launch - 18th December 2013

Question and Answer Document

Q: What is being announced today?
A: UCL and Elsevier will collaborate to develop innovations that further extend the quality and value of research information and tools, through the creation of the UCL Big Data Institute (BDI). The researchers working as part of the BDI will be based at UCL's campus and at Elsevier's Centre of Excellence in London. The BDI is designed to help scientists do better research and do it faster.

Q: What are the goals and purpose of the UCL Big Data Institute?
A: The aim of the BDI is to explore innovative ways to better serve needs of researchers through the exploration of new technologies and analytics as applied to scholarly content and data. The researchers will help to address pressing issues around the storage of big data, the curation of scientific information, and the production, disclosure and consumption of research information. The BDI will fund initiatives and research projects focused on the following areas:

- Development and application of technologies and methodologies to deliver new insights into the use of scholarly content and distribution solutions, e.g. data-mining, text-mining, web analytics and A/B testing.
- Recommendations for improved search and discovery, content evaluation and recommendation algorithms, practices and development.
- Innovations in online and off line content enrichment initiatives, including but not limited to linking research databases/datasets, topic pages and co-development of domain specific vertical experiences.
- Research new ways to produce, disclose and consume research findings, including alternative content types such as non-textual research data, using best of breed technologies, tools and platforms.
- Research and development of new/alternative performance metrics and new mechanisms to demonstrate and increase the impact of research, with scholarly audiences and beyond.
- Engagement with a broad range of stakeholders on potential future changes to research practices in the context of such innovations in information tools and metrics.
- Exploring the theoretical foundations and wider applications of Big Data technologies in order to develop cross-disciplinary connections within the UCL research community and inform work within more specific themes.

Q: Why are you establishing the UCL Big Data Institute now?
A: Big Data has been a key focus area for both UCL and Elsevier. Both organisations have complementary initiatives in the space that can be combined to help researchers do better research faster.

Q: How and why is UCL involved in this collaboration?
A: UCL is a world-leading research university, which has strong domain expertise in the area of big data. Furthermore, the collaboration will have immediate synergies to other UCL big data research strengths, such as those involving eHealth, computational finance and geographical information through the planned formation of UCL's eResearch domain. UCL will have access to Elsevier's world-class research

data and large scale technology, opening up new research possibilities with a broad range of applications.

Q: How and why is Elsevier involved in this collaboration?
A: Elsevier is a world-leading provider of scientific, technical and medical information products and services. The company believes linking analytics and scientific content is one of the key enablers to better serve scientists. Elsevier has made several sizeable London-focused investments related to analytics including the acquisition of London-based startup Mendeley, which operates a global research management and collaboration platform, and the creation of a London-based web analytics unit that houses world-leading analytics expertise. Elsevier believes that there are natural synergies between UCL's research initiatives and Elsevier's London-based analytics initiatives. Furthermore, Elsevier plans to make available a proven big data technology, HPCC, which is being used by Elsevier in the ScienceDirect platform, and across Reed Elsevier, Elsevier's parent company.

Q: Will academic freedom be impacted in any way by this collaboration?
A: The academic freedom of UCL researchers will not be affected in any way by the collaboration. UCL researchers will choose whether they wish to collaborate in BDI research projects with clearly stated terms of engagement at the time of participation.

Q: Will UCL academics only be able to publish with Elsevier as a result of this collaboration?
A: UCL academics working on BDI research projects will be free to publish the results of the projects in any journal. Academics working on research projects will not be confined to publishing with Elsevier, although many currently do choose to publish with the company.

Q: Does this collaboration mean that UCL will not support open access research?
A: UCL's position on, and activities relating to, open access research will not be affected by the collaboration. The 2011 UCL Research Strategy highlights that "UCL fully endorses open access to research publications as a vital way of allowing the widest possible dissemination of knowledge, which generates vast social benefit." UCL Library Services has provided leadership in the UK and Europe in this area and open access is already embedded in the UCL workflow. Its potential has been further enhanced by the creation of UCL Discovery. Further details of UCL's Open Access work are available here and here.

Q: Does this collaboration mean that UCL academics are not able to voice differences of opinion or criticism of Elsevier and its publications?
A: The ability or capacity of UCL academics to voice differences of opinion or criticisms of Elsevier, or other parties, will not be affected by the collaboration.

Q: How does this collaboration benefit UK science?
A: The collaboration represents a significant investment by Elsevier into UK science in terms of funding, the use of research data and large scale systems for the research projects. UCL researchers will work closely with Elsevier's growing pool of best-in-class technology and analytics experts. The possible improvement in technologies to use research information and in understanding the relationship between who uses specific research also has great potential benefits to the UK scientific community. In the longer run, such information may well form the foundation of the case for investment in science through showing the wide benefit and impact of UK science. For instance, Elsevier's recent report to BIS on International Comparative Performance of the UK Research Base – 2013 is a key document in the current case. It is possible that future reports might draw upon the new analytic techniques developed through this collaboration.

Q: How many people will work at the UCL Big Data Institute (and will they work there full-time)?
A: The collaboration will initially begin with research projects involving up to six full-time staff working on research projects, supported by senior academic staff and senior data and analytics experts from Elsevier. This number is expected to increase over the life of the collaboration. Staff from UCL and Elsevier, in both steering and administrative capacities, will also support the collaboration.

Q: Who is leading the UCL Big Data Institute from UCL and Elsevier?
A: Prof. David Price (Vice Provost, UCL) and Olivier Dumon (Managing Director, Elsevier) will initially be co-Chairs of the Institute.

Q: How can UCL academics get involved with the UCL Big Data Institute and contribute to the projects?
A: Prof. David Price from UCL will head the BDI with whom UCL academics can explore the idea of initiating projects as part of the collaboration.

Q: Can academics and experts external to UCL and Elsevier get involved with the UCL Big Data Institute and contribute to the projects?
A: Yes, either on a per project basis or more broadly in the activities of the BDI, by mutual agreement between UCL and Elsevier. UCL hopes to announce additional partners in the BDI in due course.

Q: What is the Centre of Excellence and how does it relate to the UCL Big Data Institute?
A: Elsevier will establish a Centre of Excellence within the company's London-based web analytics group in connection with the BDI, co-staffed with UCL researchers. This will offer employment as well as commercialisation activities in collaboration with UCL Business and UCL Consultants. The BDI will undertake both broadly focused initiatives, for example those aimed at the engagement of the scientific community, as well as more specific projects. When appropriate, projects will be undertaken in Elsevier's Centre of Excellence (CoE), where Elsevier will make available its research data and large scale technology.