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## Library Services and research data support at King's College London – profiling the research data management librarian

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### Abstract:

*In this paper I explore the roles and responsibilities of the research data librarian at King's College London and outline the skills, competences and knowledge needed to carry out this role. I draw upon my own experience as a research data librarian at King's college London as well as referring to the literature on the topic. I focus in particular on research data management training for researchers and the "unofficial" research data management curriculum. I also look at aspects of data management that we don't include in our training – including domain specific guidance - and emphasise the importance of intra-organisational cooperation and researcher engagement for meeting the challenge of providing disciplinary specific support for research data management.*

**Keywords:** Research, Data, Management, RDM, Libraries,

### Introduction

Is there such a thing as a research data management librarian? When academic libraries first become interested in supporting research data management (RDM) there was some uncertainty as to whether this would require a new specialised role or an extension of existing roles (e.g. data librarians, subject librarians). In this paper I will sketch a profile of the roles and responsibilities of the RDM librarian based on own experience at King's College London while also referencing the relevant literature.

### Roles and responsibilities

Although King's has been providing RDM support for researchers since 2013, the RDM team has only been in place since February 2013. It is comprised of a Research Data Manager, Research Data Coordinator, Research Data Officer and a Research Support Assistant whose

time is divided between RDM and Scholarly Publications. I am currently the (acting) Research Data Coordinator but was previously RDM officer. The model RDM librarian profiled for this paper is a composite of the roles and responsibilities of both the Officer and Coordinator roles at King's.

What, then, are the roles and responsibilities of the RDM librarian at King's? Potential roles and responsibilities for librarians have been much discussed in the literature on RDM (see for example Lougee et al., 2007; Pryor and Donnelly, 2009; Corrall, 2012; Cox, Verbaan, and Sen, 2012; Cox and Pinfield, 2014).

Lewis (2010) proposed nine possible areas for library involvement with RDM

- Influence national data policy
- Lead on local (institutional) data policy
- Develop local data curation capacity
- Identify required data skills with LIS schools
- Bring data into UG research based training
- Teach data literacy to postgraduate students
- Develop LIS workforce data confidence
- Provide researcher data advice
- Develop researcher data awareness

Responsibility for some of these areas, such as leading on institutional data policy or developing data confidence among library staff, will most likely rest with management or senior management, but I have picked out four areas that cover the main roles and responsibilities of the RDM Librarian at King's:



*Figure 1 Roles and responsibilities of the Research Data Officer and/or Coordinator at King's College London*

For each area I have also listed the main activities undertaken by the RDM Librarian at King's:



Figure 2 *Main duties and activities carried out by the Research Data Officer and/or Coordinator at King's College London*

## Skills and competences

There are numerous descriptions of RDM services available on university websites and I think it's fair to say the activities listed here are fairly typical of those undertaken by library staff supporting RDM. But what skills and competences are required to perform this role? One justification for academic librarians becoming involved with RDM is that librarians already possess skills and competences which can be extended and adapted to provide support for data management, e.g. experience of teaching information literacy, collection development and management, reference interviews and, as noted above, publications repository management and Open Access (Lougee et al., 2007, p13; Corral, 2012, pp118-110). Prior to becoming the Research Data Officer at King's I worked in an earlier incarnation of what eventually became the Research Support team and so had experience of working with the publications repository and E-theses, and I have been able to draw upon these experience in my RDM work. I also have a background in teaching and research and that too has proved useful. However, prior to joining the RDM team my knowledge of key topics in RDM was minimal at best. As a result I had to rely on self-study and learning on the job to acquire the necessary knowledge, and I doubt I am alone in this. But what knowledge does the research data librarian have to acquire in order to carry out her role?

## The RDM curriculum

The quantity of RDM resources now available (online tutorials, training courses, websites) makes it possible to speak of an RDM curriculum, albeit an "unofficial" one, and the training workshops we run at King's are closely aligned with that curriculum, so a brief look at what we cover should provide a good indication of the range of topics with which RDM librarians are expected to be familiar.

As with most other RDM training courses, the concept of the research data lifecycle plays a central role in organising and structuring the training we provide. A recent survey of approaches to RDM training in Europe found that almost half of the respondents provide training that covers all phases of the data lifecycle with only a small proportion offering training that does not focus primarily on the data lifecycle (Goldstein, 2016, p8). There are numerous variations on the research data lifecycle available but for our training sessions and website guidance I created a very simple, generic version:



Figure 3 A simplified representation of the research data lifecycle

The value of the data lifecycle model - both for training researchers *and* self-studying for librarians - is that it brings coherence to an otherwise diverse and wide-ranging collection of topics. It allows us to tell the “story” of data across the research project and focus on those aspects of data management that are relevant for each phase of the lifecycle such as:



Figure 4 Key topics in research data management training

## The research data librarian’s sphere of influence

The topics listed above will probably be familiar enough to anyone involved in supporting RDM. In the final section of the paper however, I want to focus on what we *don’t* teach, partly to acknowledge institutional differences but also to consider the possibility that there might be limits to the kinds of support that librarians can be expected to provide.

Unlike some other lifecycle models we haven’t included data processing or data analysis among the phases of the research lifecycle. Also, unlike MANTRA, the University of Edinburgh and Edina’s online RDM training course, we don’t include data handling in our

RDM training. The inclusion of data handling tutorials as part of MANTRA is perhaps not surprising considering it was partly created by data librarians, and is arguably a legacy of an earlier phase of library support for data management in the UK when it was assumed that this role would mainly be the responsibility of data librarians (for more on data librarianship and RDM see Swan and Brown 2008; Rice, 2008; Rice 2016; on the MANTRA project see Rice, 2014). At King's, training in data skills is provided by other staff so while it is important for us to be aware of the tools used by researchers to analyse their data, responsibility for training those skills is not part of the RDM team's remit. And, as discussed below, intra-organisation collaboration across the university with other teams and services is essential (Pinfield, Cox, and Smith, 2014, p7)

Earlier I used the phrase “data literacy” to describe the training we provide but I’m not entirely sure that what we do *can* be described as a training in data literacy, except in the broadest sense of the term (see by way of comparison the Data Information Literacy (DIL) curriculum as described by Carlson et al., 2011). Because the training we provide is generic rather than domain focused, the primary goal of our training is to *raise researcher awareness* of RDM concepts and issues and to *change researcher perceptions of research data* as research outputs in their own right

Anyone familiar with RDM will be aware that the need to make training more disciplinary specific is a recurring trope and has been identified as a significant gap in existing training provision (Gold, 2007; Swan and Brown, p26; Goldstein, 2016, p22). One frequently proposed solution is to “upskill” subject/liaison librarians to provide disciplinary focused training (Gabridge, 2009; Lewis, 2010; Cox, Verbaan, and Sen, 2012) but King’s no longer has subject librarians in the traditional sense, rather we have faculty liaison librarians whose duties are unlikely to be expanded to include teaching RDM.

While it is certainly important that we learn as much about different research cultures as we can, it will most likely not be library staff providing disciplinary specific training in RDM. Instead our task will be to act as facilitators and coordinators seeking to increase researcher engagement and work with researchers to design and implement more domain focused training (see for example the University of Cambridge’s “Data Champions” program, <http://www.data.cam.ac.uk/datachampions> and Rosie Higman’s paper at this conference).

## Conclusion

While it is true that at many universities responsibility for supporting RDM is often added to the portfolios of existing library roles, especially those working with Open Access and other aspects of Scholarly Publications, the increasing number of advertisements for jobs in UK universities with titles such as “Research Data Advisor”, “Research Data Officer” and “Research Data Coordinator” suggests that King’s is not alone in creating dedicated roles for RDM support.

And so I think I am justified in drawing a profile for this peculiar creature I’m calling the RDM librarian. On the other hand it is also clear that, as has been pointed out on numerous occasions, librarians cannot do this on their own, and the challenge of providing disciplinary specific training is a salutary reminder of this. To meet this challenge, intra-organisational cooperation and research engagement will be crucial and presents the next big challenge for the RDM librarian.

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