## Evidence for: (K2.1 & B1.1), (K2.2 & B1.2) and (K2.3 & B1.3)

(K2.1 & B1.1) Describes where their role has contributed to the successful achievement of an organisational objective, and provides examples of when they have communicated effectively with a wide range of senior leaders across different departments.

The contract between my team at Bristol and the NHS meant that my 'research' had to focus on service improvement; not 'exploratory' research. However, the University was keen that novel academic outputs came out of my work, one's that can seek external funding. For, one organisational objective is to maintain and increase income across the University, and one channel for this is external research funding, which requires exploratory work to be able to then apply for grants.

To meet this organisational goal, I decided to create, and head-up, a project that involved others in the University. An opportunity arose when I attended a seminar to link the many Uni departments with an interest in 'data', where I got chatting to two people from the Medical School about my own work (Emma and Eleanor). We found that we have similar types of data, and my ML approach could help them. This was followed up by a more formal (see email below, Fig 1, where this invite from me to them is being arranged). Emma is a senior figure in the Medical School, managing a project to discover how many men die 'with' prostate cancer as opposed to dying 'from' cancer. Eleanor is a data engineer involved in their data collection and analysis.

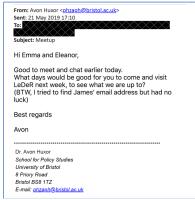


Fig. 1. Email invite from me to Medical School

I worked with them on their data for a while. We also met at a Uni-wide Networking Event (see invite, Fig 2), where I introduced them to an old Computer Science Colleague, Raul, who is a senior person in that Dept., being the principal investigator (PI) of a Turing AI Fellowship, as well as PI of a project applying machine learning to ICU decision support.



Fig. 2. Ticket for Bristol Uni networking event for Data Science people and health researchers.

At this event we all agreed to apply for seed-corn funding (by the Uni's Jean Golding Institute) to pay for a programmer to take the work further (on a short contract), with me as project lead. My leadership in process consisted of ensuring that all would attend the event, and then managing the discussion as each party highlighted what they could contribute to a project, and what they would like the outcomes to be.> Based on these discussions I then headed up the proposal writing process. This application was successful (see evidence in Fig. 3, of scanned letter).

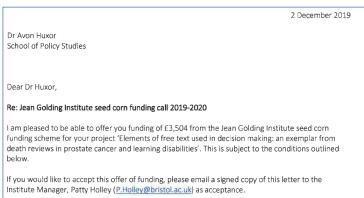


Fig. 3. Offer letter for my project proposal

I then led the project, coordinating the programmer (recruited by Raul) in his work with Emma and Eleanor (who provided the data), and using my original Python code as a starting point. The project was completed within budget and on schedule (see the required Blog entry<sup>1</sup>).

 $<sup>^1\,</sup>Blog\ page\ at\ https://jeangoldinginstitute.blogs.bristol.ac.uk/2020/08/14/predicting-cause-of-death-and-the-presence-of-bad-healthcare-practice-from-free-text-summaries/$ 



Fig. 4. Part of JGI blog page publishing the results of the project.

(K2.2 & B1.2) Demonstrates examples of advanced mixed media communication, such as presentations, report writing (technical and non-technical) negotiation and influencing.

There are two examples worth noting here, that relate to this project:

#### 1. Seminar poster

To act as a focal point at the EBI Networking Event I presented a poster of my own work (see file called huxor\_EBI\_poster.pdf). This employs standard forms of visual style for a scientific poster to enable the audience to get the key points quickly in a busy room. I also ended with the most important result of the high probability predictions which were remarkably good. This attracted much interest, as this audience was more concerned with practical results than theoretical concerns.

## 2. Application for funding

I led the writing of the funding application for seed-corn funding. This was written to hit the key objectives of the funding process, and involved me negotiating with my colleagues to get a coherent project proposal to satisfy the aims of us all. So, for example, as a seed-corn project the JGI intend that the project leads to possible and larger future projects. I addressed this explicitly in the proposal, by listing specific, and known, grant sources. I also highlighted another aim of the JGI (in their home page), namely, to encourage collaborations (in data science) across the University. This was also added to the proposal (see Fig. 5), to influence the panel's view of the proposal.

We will seek future funding from (at least):

- 1. The National Institute of Health Research (<a href="https://www.nihr.ac.uk/">https://www.nihr.ac.uk/</a>) Cross-programme grant, Nov. 2020
- 2. The Health Foundation (<a href="https://www.health.org.uk/">https://www.health.org.uk/</a>) Programme grant, Dec. 2020

It will also build cross-faculty relationships between: Social Sciences and Law; Health Sciences; and Engineering and will facilitate future collaborations involving external funding.

Fig. 5. Excerpt from seed-corn application, showing intended future funding targets

(K2.3 & B1.3) Describes examples of when they have provided leadership within a team of multi discipline specialists at different levels across the organisation, ensuring a shared vision and commitment to success.

#### Example 1:

The first example comes from the project described above. From the project proposal one can see that I am the project lead, and the proposal team comprised people from across the University: my own School, Policy Studies (within the Faculty of Social Sciences), the Medical School, and the Computer Science Dept (see Fig. 6). We recruited a postdoc student (Chris) as the programmer, and this meant that the team covered a range of levels from a Team Leader in the Medical School (Emma) to a recent postdoc.

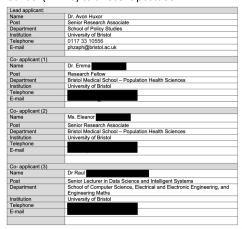


Fig. 6. Applicant list from project proposal document

# Example 2:

The second example arose from an occasion just after I started my role in the job. I found that the tools (Excel) used up to that point were inadequate. Excel was being used to label paragraphs/sentences from the documents we received from the NHS according to a list of known social and health themes. It was unable to perform this task given the expected volume of documents we expected as the LeDeR programme was rolled out to all NHS England. From research I recommended that NVIVO be used. But this required that the coding team get training on it. I arranged a contract for a PhD student (Lydia) with NVIVO experience to come and train up the coding team up (Nick and Kamila) (Fig. 7)

Commented [HA1]: (K2.3 & B1.3) Describes examples of when they have provided leadership ... ensuring a shared vision and commitment to success.

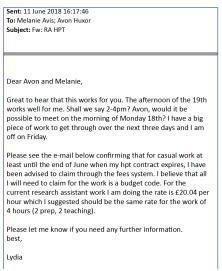


Fig. 7. Email from Lydia arranging slot for NVivo training, and the contract for it.

I also had to create a sample *mock* document, for me to continue the training with the team, Nick and Kamila, to a level to deploy in the programme (Fig. 8)



Fig. 8. Email regarding my mock data for NVivo training.

This NVivo example involved me dealing with the Programme Lead (at Professorial level), our coding team and a PhD student from outside the LeDeR programme. The programme lead was initially against changing the tool from Excel to NVivo, but was persuaded when I, firstly, wrote up a literature search showing this was the industry standard for such work; and secondly, gathered and communicated complaints from the coding team about the inadequacies of Excel. I then found, and arranged the contract for, Lydia to train the coding team, as well as leading from the front by creating mock that I initially coded in NVivo as an example.

Commented [HA2]: (K2.3 & B1.3) Describes examples of when they have provided leadership within a team of multi discipline specialists at different levels across the organisation