Writing Research Grant Applications

Andrew Derrington Parker Derrington Ltd

Programme

Things you Need to Know

- Where to get a handout
- Are you ready to start?
- Funding Strategy
- Why You Need a Magic Formula
- Fellowships
- Aims and Objectives
- Writing Guidelines
- Recipe to Create the Magic Formula

Exercises

- Review Exercise
- Implementation Sentences
- **Problem** Sentences
- Pairing Exercise
- Project & Next Sentences
- Global Sales Pitch
- Promise Sentence Exercise
- Examples

Introduction

This workshop is designed to start you working on a 'recipe' for an application for a research project grant, such as a research council standard grant. In the morning session we discuss the things you need to know and do before you start writing. In afternoon session you start writing and get feedback. Follow-on consultations may be available for you to seek further feedback or advice on any topic.

The first part of the workshop covers the following issues:-

- Writing a grant application is very difficult unless you have designed a fundable project before you start. We will discuss how you can assess whether you have a fundable project.
- We will discuss the elements of an individual research funding strategy.
- I will explain what information to include in the case for support so that it convinces the reader:-
 - that your project is important,
 - that your project is likely to be successful,
 - that you are competent to lead the project, and

- that the project is good value for money.
- We will discuss who reads your application and how they contribute to the funding decision.
- We will discuss the specification for a case for support that gives all the readers what they need.
- We will discuss how the requirements of a grant application dictate writing style.
- We will discuss how fellowship applications differ from grant applications.

If you have a fundable project in mind at the start of the day, you should have a rough draft of the skeleton of the case for support by the end of the day. If you don't have a suitable project in mind at the start of the day you can practise the skills of writing the 10 key sentences with a dummy project, or maybe you will be able to formulate something to work with in the morning.

The remainder of the workshop concentrates on exercises to help you develop the writing skills needed to follow the recipe. For several of these exercises you will need to work with a summary of a research project: if you have not yet designed a fundable project you can use a summary from a successful grant application. The workshop handout, which can be downloaded from the resources web page, contains links to summaries from successful ERC, UKRI and NIHR grant applications. You can also find summaries in the ERC and the UKRI databases of funded projects and the NIHR Journals Library.

The handout is designed to be read on a screen, not printed. It is important that you bring a WiFi enabled laptop, a smartphone or a tablet to the workshop. There is no need to look at the handout before the workshop.

Andrew Derrington

Detailed List

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Are you Ready to Start ***

. . .

■ Do you have a project?

- Big picture goal
- Detailed approach
 - * aims/problems/research questions
 - * how you will achieve/solve/answer them

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- Break your project into implementation sub-projects.
 - May be easier to assemble sub-projects from smaller parts
 - Define the important problem that is solved by each sub-project.

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- What is the evidence that your project is of interest to your chosen funder?
 - Can you express it in one sentence?

. . .

- What have you done that would convince a sceptic that you can do the project?
 - Can you express it in a single statement?

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- If impact is part of the funding criteria:-
 - Who will benefit most from your research?
 - * How will they benefit?
 - * What is their involvement in the development & delivery of the project?

. . .

Your application will need to answer all these questions.

Strategy ***

Your strategy must accommodate rejection

- Most well-written grant applications get rejected.
- Rejection can be a devastating experience

. . .

Minimise the pain: write 5 or 6 applications

- Never get down to your last rejection.
- If you get 6 rejections, it's time to develop a new set of ideas.

. . .

How to turn a small number of ideas into a large number of grant applications

- Different Outcomes? (Derrington method)
- Different Contexts? (Dr Pig method)
 - Different collaborators/consortia/industrial partners
 - * Check collaborators before you commit
- Different Approaches to Answer the same Question?
- Different Combinations of Sub-Projects

Should I use a successful application as a model? ***

Most successful applications are very badly written

- Especially those from senior academics.

. .

Before you follow an example, test it:- find one-line answers to the following questions:-

- 1. What is the overall aim of the project?
- 2. What makes the project important?
- 3. What are the overall research methods?
- 4. State the 3 or 4 main problems the project needs to solve
 - 1. Why is each one important?
 - 2. How will the project solve the problem?
- 5. What will happen after the project is done?

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• If finding and writing down those answers takes more than 10 minutes, the answer is "No".

Writing Guidelines ***

- Vocabulary simple & clear
 - same-meaning = same word or phrase ALWAYS
 - No Initialisations

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- Sentences easy to process
 - As short as possible
 - * no lists
 - * no multiple verbs, adverbs or adjectives
 - * no inessential adjectives or adverbs
 - Same job = same structure
 - Use Evidence

. . .

- Sections and paragraphs
 - Hierarchical detail
 - * heading
 - * Key Sentences
 - * Summary paragraph
 - * Topic Sentences

. . .

- Useful Software (if you don't like the tools in MS Word)
 - The Writers' Diet
 - HemingwayApp also available as a text editor.

Nominalisations *** **

• A nominalisation is a noun phrase constructed from a verb,

. . .

which can be used with a general purpose verb to create a flabby, pompous, long-winded way of saying something simple.

- We will investigate X
 - We will carry out an investigation into X
- We will analyse
 - We will undertake an analysis of

. . .

- You can make it more pompous and long winded by using a few adjectives to describe the nominalisation:-
 - We will undertake a detailed, rigorous and searching analysis of ...
- But sometimes a nominalisation is what you need:-
 - "Our aim is to" is better than "We aim to...." if you want to discuss aims.

Implementation ***

Sub-projects

Break your project into components (sub-projects) to make it easier to explain.

- Sub-projects can be sequential
- Or parallel

. . .

Each sub-project solves a problem

Easier if you design the problems after the sub-projects

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Background explains the problems

- Background comes before project description
 - It defines the criteria for success solving the problems
 - It convinces the reader that the project will be successful

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• 3 is the perfect number of sub-projects, but 4 is OK.

. . .

- Don't create a hostage situation.
 - A sub-project that cannot be done unless a previous sub-project produces a result that it is not certain to produce.

AIMS & OBJECTIVES ***

. . .

- Nobody is sure what Aims & Objectives mean, so you can write anything that helps your case as your aims and objectives.
 - What would you write?

. .

Why wouldn't you just use the key sentences?

- Overall Aim
 - Promise + Importance sentences
- Specific Aims

- 3 **Problem** sentences . . .
- Overall objective or intro to objectives
 - Project Sentence
- Specific Objectives
 - Implementation sub-project sentences
 - Maybe add the **Next** sentence as a final objective

Example

Alternatives

- No Overall Aim
- One Aim

. . .

No Synonyms

- **Problems** = Aims = Research Questions = Hypothesis Tests
- Sub-projects = Work Packages = Objectives
- If the funder makes you use more than one term, tell the reader they mean the same thing.

Why you need a magic formula ***

The Case for Support must persuade the funder to fund your project.

- 1. What do funders want?
 - This tells you what information the Case for Support must include.
- 2. Who Reads Your Application?
 - And how do they influence the outcome?
 - This tells you the requirements for the Case for Support.
 - You need a magic formula to meet them.

Grant Funders have Four Questions about the Project ***

Does it fit with published priorities?
 Does it fit the scheme (training, career development, mobility...)
 Will it work?
 Will it achieve its declared goal?

 Will the results be put to use?

3. Can you do it?

. . .

- Can you carry out the project?
 - Does your institution have the necessary facilities?

. .

4. Is it worth it?

. . .

- Are resources Necessary & Sufficient
 - Are they in-line with what we usually fund?

Importance *** **

What content?

. . .

- A convincing promise about the overall aim that the project will deliver
- Explanation of what makes it fit the funders priorities.
 - Support it with a review of the literature

. . .

Where?

. . .

- First two key sentences
- First two sections

Example

Success *** **

What Content?

. . .

- Problems you have to solve to deliver the 'promise'.
- Research that will solve those problems.
 - Impact and dissemination plans?

. .

■ Where?

. . .

- Problems in the Background
 - can be expressed as RESEARCH QUESTIONS, AIMS, OBJECTIVES or HYPOTHESES
- Research in the Methods/Research Plan section (Implementation)
 - Describe the research in each of 3 sub-projects
 - Make it clear that the sub-projects will solve the problems.
 - * Sub-projects can be referred to as "OBJECTIVES" or "WORK PACKAGES".
- Always match the background to the research plan, even when they are entries on a form.

Competence *** **

What Content?

- Publications should give evidence that the team has the necessary skills
 - quality and authorship matter

- Track record gives evidence that PI can deliver
- Environment gives evidence Institution can support

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Where?

. . .

- Case for support
 - Background
 - Methods
 - Track record and Environment
- CV

Value for Money *** **

What Content?

. . .

- 1. Mention the resources to be used in the project
 - Resources funded by the grant are necessary
 - Other resources show that the institution is contributing
 - Do this in the case for support
- 2. Explain that the resources requested are appropriate and good value
 - Do this in Justification of Resources.

NEVER try to compete on price

The Decision *** **

. . .

- Who reads the application?
 - How do they read it?
 - And how do they influence the outcome?

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At least 2 'Expert' Referees

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- They have time to read your grant carefully it's the only one they have to read.
 - They write a report and recommend a score
 - * You may have the opportunity to respond
 - * The committee consider the report, the score and the response

. . .

 2 Presenting members, probably expert on something else, may know something about your research area.

. .

- They may have ten or so grants to read, they might have an hour for yours
 - They have to explain your application, & the referees' reports to the rest of the committee and recommend a score.

- About 18 committee members, probably know nothing about your area & have no time, they
 probably read the summary, they'll try and read one or two of the 90 grants they don't present.
 - They decide whether to follow the recommended score
 - * The score is the median of the committees' scores
 - They can adjust the ranking after scoring

Implications of the decision process *** **

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Referees will analyse your case for support in detail but:-

- They will do it better if you make it easy
- Most of the committee don't read it.
- The ones who do read it probably don't understand it.
- There will be about 100 other applications.

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This imposes certain requirements on the case for support.

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- The first sentence must create a clear impression
 - that the project is important,
 - and will be successful

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- The next few sentences:-
 - Sketch a picture that reinforces the impression of importance & success (Committee Member).

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- The rest of the docment
 - Supports the picture with detailed evidence (Referee).
 - Makes it easy to remember the picture (Designated Member).

. . .

Perhaps you need a Magic Formula

The Magic Formula *** **

Components

- 1. The Key Sentence Technique
- 2. Layout
- 3. Tag Phrases
- 4. Repetition

The Key Sentence Technique *** **

- Reading Order: PIPPIN "An excellent person or thing" Oxford English Dictionary
 - Promise? (the case in one sentence)
 - What makes that promise Important,

- What **P**roblems do you have to solve (there will be 3)
- One sentence version of your Project
- Implementation (3 sub-projects that solve the 3 problems)
- What happens Next
- Examples of Project Key Sentences
- Use the key sentences as a framework for writing the Case for Support
- Use the key sentences as the Introduction
- and as the Summary
- Every Reader gets the same picture, no matter what they read
- And referees know where to look for detail
- Writing Order:-
 - Implementation
 - Problem
 - Project & Importance
 - Next
 - Promise

Layout *** **

Text layout allows skimmers and speed-readers to pick up extra detail.

. . .

- 1. Message on first line of paragraph (ASSERT then JUSTIFY)
- First sentence of para ASSERTS (topic sentence)
- Remainder of para JUSTIFIES
 - This is where you cite literature
 - This is how you avoid citing too much literature.
- 2. White space above each paragraph

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- Readers' eye movements land on blank lines.
 - Speed-readers will read first line of every paragraph.
 - Browsers will only read first lines.
 - Detail readers will know what to expect in each para

Tag Phrases *** **

- Tag phrases establishes the success proposition the sub-project solves the problem
 - Teach your terminology
 - Create slogans
- Use exactly the same words at the end of the implementation key sentence and the beginning of the problem key sentence

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Problem Key Sentence

We need to know the relationship between the performance of neurons and the performance of the whole visual system in order to establish the contribution of neurons to perception.

Implementation Key Sentence

We will record neurons during perceptual tasks and calculate sensitivity functions for neural responses and for task performance in order to characterise the relationship between the performance of neurons and the performance of the whole visual system.

. . .

- Key sentences and tag phrases start off messy and long-winded, like these.
 - You have to edit them to make them effective.

Examples.

Tag Phrases in Use *** **

• Start of a **Problem** sub-section in the background.

The perceptual capabilities of neurons in cortical area V1

We need to know the perceptual capabilities of neurons in cortical area V1 in order to establish the contribution of V1 to perception. The contribution can be assessed using a range of perceptual tasks, such as visual pattern discrimination, object discrimination, and motion-detection. For any such task, we can infer the contribution of cortical area V1 to that task from the relationship between the perceptual capabilities of neurons and the perceptual capabilities of the individual.

• Description of corresponding **Implementation** Sub-project

Measuring the perceptual capabilities of neurons in cortical area V1

We will measure neural responses as functions of stimulus strength during perceptual tasks in order to calculate the perceptual capabilities of neurons in cortical area V1. Stimuli from a set that covers a range of strengths will be presented repeatedly in random sequences under computer control. The computer will record responses during the presentations, and during equivalent periods when no stimulus is presented, for off-line spike sorting and analysis......

Repetition ***

Re-cycle Text From Case for Support

| Case for Support | Technical Summary | Lay Summary |
|--|----------------------|-------------------|
| (Track Record) | | |
| Introduction (<20%) | | |
| Background (<30%) Description of Project (>50%) | Aims & Objectives | Impact Summary |
| 2030p.1.0 0 | | |

- Repeat key sentences and tag phrases
 - to provide common structure, and
 - to link
- Maintain structure and order

Resources ***

What's been funded?

- Research Council Project Summaries
- ERC Summaries
- NIHR
- Leverhulme Awards 2016

Advice on writing:- www.parkerderrington.com/blog

- How to construct a project
- The key sentences
- Catalogue

The Recipe ***

Process

- Make sure you have a fundable project
- Prepare your Ingredients
 - Implementation sentences
 - Problem Sentences
 - Project & 'Next' Sentences
 - Elevator Pitch
- Build the Case for Support
- Write a Grant in 10 Steps

Implementation sentences *** **

Summarise the research activities in a sub-project and say what outcome it will produce.

We will measure neural responses as functions of stimulus strength during perceptual tasks in order to calculate the perceptual capabilities of neurons in cortical area V1.

We will carry out an ethnographic study, in order to characterise the writing practices of professional social workers.

- Common mistakes
 - Describing and outcome instead of summarising the activities
 - Failing to say what outcome the sub-project will produce
 - Too long or too complex
- Examples

Problem Sentences *** **

Say that we need the outcome of a sub-project (& say why)

We need to know the perceptual capabilities of neurons in cortical area V1 in order to establish the potential contribution of V1 to perception.

We need to know the writing practices of professional social workers so that we can identify weaknesses and areas of good practice.

- Common mistakes
 - Describing the research activities instead of the outcome
 - Too long or too complex
- Examples

Project & 'Next' Sentences *** **

Project

- **Project** sentence introduces the project.
- If they only read 1 sentence about your project, it will be this one.
- Summarise the method and state the scope.
- Material common to all implementation sentences may move to here.

Next Sentence

- Say what will happen after the sub-projects are finished
- What will we be able to do then that we can't do now?
 - New kinds of research?
 - Solve a societal problem?

Examples

Elevator Pitch *** **

Also known as "Global sales pitch"; makes the Importance Proposition

. . .

- Importance sentence: what makes the outcome important. For example....
 - 1. Quantify the real-world problem it will help to solve.
 - 2. Say what it will allow us to do that we can't do now.
 - 3. Prepare to say which named priorities of your funder it contributes to, and how?

Social care costs 27 billion pounds annually in the UK and problems arising from errors in writing increase the risk of harm to service users.

- Promise Sentence should have 3 parts:-
 - 1. What the project aims to achieve, in 'big picture' terms (too vague for insiders).
 - 2. What you actually expect to achieve (too detailed for outsiders).
 - 3. A reference to your achievements using similar methods, to show you are competent.

The aim of the project is to enable improvements in training social workers by analysing the role of writing in social work practice using an integrated ethnographic and linguistic methodology we have developed.

. . . Another EG

Build the Structure *** **

- Standard Structure: Key sentences as Introduction and Skeleton
- Variations
- ESRC Aims and Research Questions
- EPSRC Guidance
- Suggested Structure for EPSRC

Standard Structure *** **

- 1. Introduction All the Key Sentences Write it Last.
 - **Problem** key sentences can be research questions, aims or hypotheses.
 - Implementation/sub-project (and Project and Concluding key sentences) can be objectives.
- 2. Background four sections sells the project Write it after the Methods.
 - Importance section explains what makes the project important.
 - **Problem** section x 3, each explains one of the problems/aims/research questions.
- 3. Methods five sections describes the Project Write it First
 - Project Describe the project as a whole.
 - Implementation / Sub-project section x 3 Each describes a sub-project and shows that it solves the corresponding problem.
 - 'Next' Say what will happen after the project (impact?). Then add detail.
- 4. Track record (required by MRC, BBSRC, EPSRC, NERC); create your own key sentences Write it anytime after the Methods

Alternative Structures *** **

Some funders specify requirements that appear to be incompatible with the standard structure, but these can usually be addressed by one or other of two approaches.

. .

- 1. Moving sub-components around
 - e.g. BBSRC require you to introduce the 'Research Plan and Methodology' with the Overall Aim & Specific Objectives. Can do this by having separate introductions for the Background & Methods sections. Or by double-naming the introduction, see below
 - NIHR ask for 'Aims and Objectives' in the middle of the case for support . . .
- 2. Using composite titles to avoid repetition
 - e.g. ESRC ask both for aims and for research questions: call each aim a research question.
 - EPSRC appears to ask for 4 sections covering same topic 'Background', 'National Importance',
 'Academic Impact' and 'Research Hypotheses & Objectives' solution here

 BBSRC problem (above) can be solved by writing the Aims and objectives as subsections of the introduction.

EPSRC Guidance *** **

Previous Track Record (up to 2 sides)

Description of proposed research and its context (6 sides)

- Background
 - Introduce topic and explain academic and industrial context
 - Demonstrate understanding of related work
- National importance
 - Contribution to other disciplines, economy & society.
 - Long term effects; relation to national strategic needs.
 - Fit with UK research & EPSRC's portfolio, research areas & strategy.
- Academic Impact
 - Describe academic impact
 - Explain collaborations; justify Visiting Researchers
- Research Hypothesis and Objectives
 - Set out your research idea or hypothesis
 - Explain why the proposed project is novel and timely
 - Identify the overall aims of the project, and the measurable objectives
- Programme and Methodology
 - Detail and justify research methodology
 - Describe the work programme & milestones for each member of the team,
 - Explain how the project will be managed.

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Composite Titles to Comply with EPSRC Guidance *** **

- 1. Track Record
 - If you don't need 2 pages for your track record, put pilot data in the track record section.
- 2. Background (2 sections + 3 subsections)
- i. Aim, Research Hypothesis and Objectives. This is a standard introduction that uses all the key sentences in order.
- ii. National Importance and Academic Impact section. **Importance** Sentence followed by details that cover the topics specified by EPSRC.
 - a. -c. Problem sections as sub-sections of importance
- 2. Programme and Methodology. (5 sections)
- i. **Project** sentence & subsection;
- ii. -iv. Implementation sub-projects 1-3
- v. 'Next' section
 - Must include milestones and explain how the project will be managed.

Pairing Exercise ***

Pair an Implementation Sentence with the Problem Sentence that justifies it

- Implementation
 - We will do Z and the outcome will be X
- Problem
 - We need X because Y

Example

- Implementation
 - We will analyse and quantify texts and explore how writing is being managed alongside other commitments in order to characterise the institutional writing demands of contemporary social work.
- Problem
 - We need to know the institutional writing demands of contemporary social work so that we
 can identify the writing skills that social workers need.

Create your own example or three.

Promise Sentence Exercise * ****

Why is the first sentence important?

. . .

- It has to be good enough to want to read your application
- They will have 99 other applications.
 - They know most of them are headed for the shredder.
- They also have a TV.
- What will make them want to read your application?

. . .

A plausible and attractive promise

- What are the elements?

. . .

- 1. A project that is likely to advance an important area of knowledge.
- 2. A project that is likely to be successful.
- 3. Evidence that you are competent to carry out the project.

The Perfect Promise Sentence *** **

Three Elements

. . .

- 1. What the project will achieve, in 'big picture' terms.
 - A project that is likely to advance an important area of knowledge.

. . .

- 2. How it will achieve it (a more specific and detailed statement of the goal).
 - A project that is likely to be successful.

. . .

- 3. A reference your achievements using similar methods.
 - Evidence that you are competent to carry out the project.

The Exercise *** **

- 1. Interview your neighbour (3 mins)
- 2. Swap roles and interview again (3 mins)
- 3. Write a promise sentence for your neighbour's project (2 mins)
- 4. Write a Sentence for your own Project (2 mins)
- 5. Optimise and discuss.

. .

The information you need to gather in your interview is:-

- 1. What the project will achieve, in 'big picture' terms.
- 2. How it will achieve it (a more specific and detailed statement of the goal).
- 3. An example of your achievements using that approach.

eg The aim of the project is to enable improvements in training social workers by analysing the role of writing in social work practice using an integrated ethnographic and linguistic methodology we have developed.

How the Structure Works *** **

(Key Sentence Names are Bold Font)

- 1. Introduction (summarises whole case for support using all key sentences)
- Promise, Importance, Problem₁₋₃, Project, Implementation₁₋₃ & 'Next'

. . .

- 2. Background (Literature review=> **Promise** is Important; Solving **problems** is criterion for success)
- Importance: Sells promise => IMPORTANCE PROPOSITION
- Problem₁: Explains Problem₁
 Problem₂: Explains Problem₂
- Problem₃: Explains Problem₃

. .

- 3. Methods / Research Programme (Project is value for money & will be successful)
- **Project:** Introduces the project.
- Implementation₁: How sub-project 1 will solve Problem₁
- Implementation₂: How sub-project 2 will solve **Problem**₂
- Implementation₃: How sub-project 3 will solve **Problem**₃
 - Mention resources used in research => VALUE for MONEY PROPOSITION
 - Explains how Project solves Problems => SUCCESS PROPOSITION
- Next: Says what happens after the project.
 - Expectations depend on funder & on importance proposition.

. . .

- 4. Some funders require section on track record & environment
- Track record demonstrates all necessary skills
- Environment describes all necessary infrastructure & support
 - => COMPETENCE PROPOSITION

Fellowships ***

- Fellowships 101
- Key Sentences
- Generic Criteria
- MSCA Criteria
- UKRI Criteria
 - Project
 - Candidate
- EPSRC Criteria
 - Project
 - Candidate
- Talks and Interviews

What is a Fellowship? *** **

. . .

- Personal support for an individual (The Fellow)
 - How much?
 - For how long?
 - To do what?

. .

- Research expenses
 - Travel?
 - Slush?

- Project Funding
 - * Equipment?
 - * Staff?
 - * Research Costs

Who offers Fellowships and Why? *** **

Who? . . .

- Universities
- Research Institutions
- Funding agencies
- Charities

. . .

Why?

. . .

- To develop talent
 - MSCA, Research Councils, Wellcome Trust
- To attract talent
 - Institutions
- To steer talent
 - MSCA
 - Discipline-hopping
 - Industry -> Academia
- To reward & showcase talent
 - Superstar Fellowships

What kind of person are they looking for? *** **

Exceptional research talent

- Achievements
- Skills
 - Discipline-hopping?
 - MSCA 2-way transfer?
- Check requirements before you apply
 - Criteria
 - Previous winners
 - * UKRI
 - * ERC
 - * Google

Fellowship Key Sentences *** **

Fellowship Key Sentences Cover Topics Beyond the Project

- Career Outcome
- Institution's Strengths
- Fellow's Strengths
- Individual Skills

- Dissemination / Impact
- Developmental Programme (How many parts?)
- Developmental value of Project

. . .

- Start every section with a key sentence that summarises it
 - Follow it with supporting evidence/detail
 - Re-use Key Sentences in summaries

. .

- Use Key Sentence approach in answering questions
 - On Application Forms
 - In Interviews

Fellowship Funders are looking for Four Things *** **

- 1. A good PERSON
- Fellows are future research stars.
 - Potential
 - Achievements
 - Creativity

. . .

- Which of your achievements make you look like a future star?
 - What could you change to make yourself appear more stellar?

. . .

- 2. A suitable PROJECT
 - As a vehicle for your development
 - As a flagship for the funder.

. . .

- 3. A suitable PLACE
 - Facilities
 - Mentors
 - Support

. . .

- 4. A good PROGRAMME
 - New Techniques & Skills for the Fellow (and the Host)
 - Experience
 - Connections

Principles of short talks and interviews *** **

General Principles

- Decide on your take-home message.
 - Learn it
- Use it as a cue for the whole talk
 - Tell explain remind.

- Keep to time
- Be yourself.

Talks ***

Message as a cue for the talk

- Message is 1 short sentence
 - Expands into 3 or 4 short bullets
 - * Each bullet expands into a section that makes the point

. . .

And thank the audience

Communication Basics *** **

- Look at the audience
 - Look at the screen when you want them to . . .
- Tell-Explain-Remind
 - Tell them your message
 - Explain it to them
 - Then remind them what you told them

. .

- Try to like your audience
 - It helps with the body language

Slides, Handouts and Scripts *** **

• Slides illustrate or emphasise, not expand

. . .

- Must explain
 - What point the slide makes
 - What is on the slide use a pointer
 - How it demonstrates the point

. .

- Handouts
 - Only if teaching.
 - Never to expand the message write a book!

- Scripts
 - Bad to script the whole talk
 - Script the first sentence
 - * for each slide if necessary.

Interviews *** **

• It's like several short talks with the topics chosen by the panel

. . .

- Prepare answers for the obvious questions
- Time is always a problem so give a short answer and offer to expand it.
 - Tell, explain, remind
- Practise speaking your answers.
- Learn your short answers.
- Look mostly at the questioner but also at the chair and the other members of the panel

Take Home Message *** **

- Always know what your message is.
- And how much time you have to communicate it.
- Remember your audience is only human.

Thank you

Marie Curie Criteria *** **

- Excellence 50%
 - Quality and credibility of the research/innovation action (level of novelty, appropriate consideration of inter/multidisciplinary and gender aspects)
 - Quality and appropriateness of the training and of the two way transfer of knowledge between the researcher and the host
 - Quality of the supervision and of the integration in the team/institution
 - Capacity of the researcher to reach or re-enforce a position of professional maturity/independence

. .

- Impact 30%
 - Enhancing the potential and future career prospects of the researcher
 - Quality of the proposed measures to exploit and disseminate the action results
 - Quality of the proposed measures to communicate the action activities to different target audiences

. . .

- Implementation: 20%
 - Coherence and effectiveness of the Work Plan
 - Appropriateness of the allocation of tasks and resources
 - Appropriateness of the management & risk management structures and procedures
 - Appropriateness of the institutional environment (infrastructure)

. .

• Pick a sub-category & write a paragraph that states how you meet the criterion.

UKRI Project *** **

Excellence of the research and innovation

- Importance, novelty and feasibility of the proposed programme of work (and whether long-term Fellowship support is needed to enable this)
- Robust methodology and appropriate consideration of research and innovation reproducibility, openness, governance and ethical / social responsibility issues
- Overall potential of the fellowship to establish or maintain a distinctive and outstanding research/innovation activity

. . .

• Pick a criterion & write a paragraph that states how you meet it.

UKRI Candidate *** **

- Be recognised to be of the highest standard relative to their career stage and on a trajectory to become world-class
- Clear evidence of independence and thought leadership, which may go beyond the level normally expected of their current position
- Demonstrate an ability to be, or become, a clear communicator and disseminator of knowledge and innovation, able to inspire and lead others; and ability to develop new relationships and influence across multiple disciplines and sectors
- A broad understanding of the research / innovation landscape at both the national and international level and clarity on how their research / innovation will contribute to it
- A clear plan to support the training and development of the fellow (and, if applicable, their team) and for gaining advice or mentorship; supporting not only the programme but also their broader professional development

. .

• Pick a criterion & write a paragraph that states how you meet it.

EPSRC Research Criteria (Panel) *** **

- Your research should demonstrate a high degree of novelty in the proposed research in comparison to the broader research context of the area internationally.
- You should be able to articulate a strong vision for the research proposed in the proposal and possess the ability to deliver it.

EPSRC Web Page . . . - Pick a criterion & write a paragraph that states how you meet it.

EPSRC Applicant Criteria (Interview) *** **

- You should be able to demonstrate a vision of the contribution that will be made to the research area and an independence of research ideas.
- You must show an awareness of research in other fields or across technology readiness levels, and an aspiration to work across boundaries and/or to conduct high risk research.
- You can show evidence of an aptitude and potential to lead, inspire and influence for example, through mentoring or self organisation of peers. You should show how you have developed of a network of relevant independent contacts.

• You must demonstrate excellent communications and interpersonal skills and show that you aspire to develop these across a broad audience.

. . .

Pick a criterion & write a paragraph that states how you meet it.

Write a Grant in 10 Steps *** **

- 1. You can start as soon as you have thought of a viable project.
- 2. Check that the project is suitable for your chosen funder and funding scheme.
- 3. Divide the project into sub-projects and assemble the information you need to describe each and to explain its importance.
- 4. Initiate the costing process & institutional approvals in parallel with the writing.
- 5. Draft your Key sentences in this order:
 - i. Implementation sentences.
 - ii. Problem sentences.
 - iii. Project and 'Next' Sentences
 - iv. Importance sentence.
 - v. **Promise** sentence

If you need a lay summary, begin working to prepare and test it.

- 6. Draft the case for support.
- 7. Add any funder-specific information or sections to the case for support.
- 8. Draft any required information on the project timetable and project management.
- 9. Assemble the budget and write the Justification of Resources
- 10. Finalise any attachments and summaries you need to submit.

Review Exercise ***

- Take a summary from a list or from from the ERC database or the UKRI database.
 - We have taken this one

. . .

Identify the following different kinds of statement

- Background Next?
- Goals/Research Outcomes Implementation, Problem, Promise, Next
- Importance Problem, Importance
- Research Activities Implementation

- Can you identify or write a set of implementation and problem sentences for the project?
- Can you identify or write a **project** sentence
- Can you identify or write a 'next' sentence
- Can you identify or write **importance** sentence or its elements.
- Can you identify or write a **promise** sentence?

Rewriting an abstract as a set of key sentences *** **

Cognitive Neuroscience Original

Human long-term memory has an astonishing capacity to store information about our own past experiences (episodic memory) as well as general knowledge (semantic memory). One of the big challenges in psychology is to understand what makes a memory last, i.e. why some experiences are easily remembered after days, weeks or even years, while other experiences fade and are ultimately forgotten.

The aim of this project is to investigate the role that active remembering plays in stabilizing newly acquired memories. Previous research has shown that remembering can protect memories against forgetting, such that experiences that are repeatedly retrieved after initial acquisition become more robust and more accessible in the long term. For example, in a recent study participants learned English-Swahili vocabulary pairs (e.g. tomato - nyanya) and were then given the opportunity to practice the pairs, either by extra study (tomato - nyanya) or by extra testing (tomato - ?). After one week, the vocabulary practiced by extra testing was retained 50% better than the vocabulary practiced by extra study. This striking memory improvement through retrieval (testing effect) stands in sharp contrast to common classroom practice, where tests are typically used to measure learning success, rather than to enhance learning success. Interestingly, the study on vocabulary learning found that even university students are largely unaware of the memory-boosting effects of retrieval.

Surprisingly little is known about why retrieval has such a strong beneficial effect on memory. This project is aimed at investigating the neurocognitive mechanisms underlying the testing effect. All experiments are based on the central idea that memory traces change each time they are actively retrieved. Previous research has shown that the brain repeatedly replays newly acquired information during sleep or periods of awake rest after learning. Such offline reactivation seems crucial for the long-term stabilization (consolidation) of new memories. The current project will test the novel hypothesis that active retrieval mimics the changes that occur via offline consolidation, including making memory representations more semantic, less context-dependent, and more robust to interference. The experiments use an innovative combination of established and novel behavioural methods, as well as state-of-the-art pattern analysis of neuroimaging data, the latter being particularly well suited to track online the reactivation of individual memories in the brain.

The basic design used in all experiments is similar to the above vocabulary study. Participants will be given lists of materials to study once. They then receive no further practice, practice by extra study, or practice by extra testing.

Retention of the materials will be assessed either immediately or after one week.

- The first set of experiments will explore whether visual and verbal materials equally benefit from testing.
- The second set of experiments will behaviourally test the central hypothesis that retrieval produces consolidation-like effects on memories. If retrieval mimics consolidation, it should have beneficial effects on some aspects of the learned information (e.g. semantic content), but detrimental effects on other aspects (e.g. contextual information).
- The final set of experiments uses functional magnetic resonance imaging (fMRI) to directly observe how the neural patterns that represent an individual memory change with repeated recall, and how these neural changes predict enhanced memory on a delayed test.

Together, the results from these studies will advance our understanding of how active retrieval shapes and strengthens long-term memories. From an applied perspective, the results will help to identify the conditions under which repeated testing is useful in practice (e.g. in educational settings, or to boost memory in ageing populations).

Separate the Different kinds of Statement *** **

- research outcomes, (goals or aims). Promise, Problem, Implementation, Next
- descriptions of research activities. Implementation
- statements about the importance of goals. Problem, Importance
- background. Next?

Human long-term memory has an astonishing capacity to store information about our own past experiences (episodic memory) as well as general knowledge (semantic memory). One of the big challenges in psychology is to understand what makes a memory last, i.e. why some experiences are easily remembered after days, weeks or even years, while other experiences fade and are ultimately forgotten.

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Parker Derrington Ltd Workshop Handout

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**

Original Text Used to write key sentences *** **

The key sentences are given here in the order in which you would write them.

Implementation¹ Analysing the patterns of performance with visual and verbal materials will tell us whether active remembering and off-line consolidation produce the same pattern of effects across visual and verbal test materials.

Implementation₂ Comparing the patterns of performance acoss the different testing conditions will tell us whether active remembering and off-line consolidation produce the same pattern of effects on semantic content and context.

Implementation₃ Comparing functional magnetic resonance images (fMRI) of the neural patterns that represent individual memories under different test conditions will tell us whether active remembering and off-line consolidation produce similar effects on the neural signatures of memories.

Problems Intro As Research Questions The hypothesis that active retrieval mimics the changes by which offline consolidation stabilizes new memories raises three research questions.

Problem₁ Do active remembering and off-line consolidation produce the same pattern of effects across visual and verbal test materials?

Problem₂ Do active remembering and off-line consolidation produce the same pattern of effects on semantic content and context?

Problem₃ Do active remembering and off-line consolidation produce similar effects on the neural signatures of memories?

Project The experiments use an innovative combination of established and novel behavioural methods, and state-of-the-art pattern analysis of the neural signals of memory retrieval to track online the reactivation of individual memories in the brain. The basic design used in all experiments is similar. Participants will be given lists of materials to study once. They then receive either no further practice, practice by extra study, or practice by extra testing. Retention of the materials will be assessed either immediately or after one week.

Next Together, the results from these studies will advance our understanding of how active retrieval shapes and strengthens long-term memories. From an applied perspective, the results will help to identify the conditions under which repeated testing is useful in practice (e.g. in educational settings, or to boost memory in ageing populations).

Promise The aim of this project is to investigate the neurocognitive mechanisms by which active remembering stabilizes newly acquired memories, by testing the hypothesis that active retrieval mimics the process by which offline consolidation stabilizes new memories.

Importance One of the big challenges in psychology is to understand what makes a memory last, i.e. why some experiences are easily remembered after days, weeks or even years, while other experiences fade and are ultimately forgotten. If we can support our hypothesis by showing that active remembering affects memories in exactly the same way as does off-line consolidation it will open the door to future experiments that directly and systematically manipulate the memory consolidation process, enabling direct study of its neural mechanisms.

Key Sentences as a Free Text Summary

The aim of this project is to investigate the neurocognitive mechanisms by which active remembering stabilizes newly acquired memories, by testing the hypothesis that active retrieval mimics the process by which offline consolidation stabilizes new memories.

One of the big challenges in psychology is to understand what makes a memory last, i.e. why some experiences are easily remembered after days, weeks or even years, while other experiences fade and are ultimately forgotten. If we can support our hypothesis by showing that active remembering affects memories in exactly the same way as does off-line consolidation it will open the door to future experiments that directly and systematically manipulate the memory consolidation process, enabling direct study of its neural mechanisms.

The hypothesis that active retrieval mimics the changes by which offline consolidation stabilizes new memories raises three research questions.

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The experiments use an innovative combination of established and novel behavioural methods, and state-of-the-art pattern analysis of the neural signals of memory retrieval to track online the reactivation of individual memories in the brain.

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Together, the results from these studies will advance our understanding of how active retrieval shapes and strengthens long-term memories. From an applied perspective, the results will help to identify the conditions under which repeated testing is useful in practice (e.g. in educational settings, or to boost memory in ageing populations).

Pulmonary Arterial Hypertension Abstract and Key Sentences *** **

Dissecting the role of Osteoprotegerin and related signalling pathways in the pathogenesis of pulmonary arterial hypertension

Technical Summary

Pulmonary arterial hypertension (PAH) is a devastating and life threatening condition often affecting young women, limiting their physical capacity, and decreasing life expectancy (median 2.8 years without treatment). Current drug treatments fail to reverse disease, leaving lung transplant as the only curative treatment. Pathologically PAH is characterised by the obliteration of the distal pulmonary arteries. Early endothelial cell (EC) dysfunction and apoptosis, and the subsequent abnormal proliferation and migration of pulmonary artery smooth muscle cells (PA-SMC) are thought to be the major contributing factors but the molecular mechanisms responsible are unknown. I have recently described heightened expression of osteoprotegerin (OPG) in Pulmonary Arterial Hypertension (PAH) patients, and that OPG induces proliferation and migration of pulmonary artery smooth muscle cells in vitro. These data are the first to demonstrate that OPG is increased in PAH and that it regulates PA-SMC proliferation and migration. It is unclear, and I aim to determine whether OPG is causal and/or a potential new biomarker in PAH. To this end, the objectives for this fellowship are to 1) determine the temporal relationship between the pattern of OPG expression and onset/progression of PAH in animal models 2) Determine whether over-expression of OPG expression causes PAH in a transgenic mouse model. 3) Determine whether blocking OPG with a neutralising OPG antibody prevents and/or reverses PAH in animal models, and 4) Identify associated binding partners and signalling processes involved in OPG-induced PA-SMC proliferation and migration. To achieve these objectives I will use a combination of established rodent models for PAH and generate a transgenic mouse that over-expresses OPG in vascular smooth muscle cells. Finally using a systems biology approach, I will identify OPG binding partners and subsequent signalling mechanisms by a combination of Biacore technology, MALDI-TOF mass spectrometry and protein array to determine the key molecules that mediate OPG-induced PA-SMC proliferation and migration. The data generated will provide valuable insights into the role of OPG in that pathogenesis of PAH and potentially identify novel therapeutic targets for the treatment of PAH.

- Research Activities
- Goals/Research Outcomes
- Importance
- Background

Pulmonary arterial hypertension (PAH) is a devastating and life threatening condition often affecting young women, limiting their physical capacity, and decreasing life expectancy (median 2.8 years without treatment). Current drug treatments fail to reverse disease, leaving lung transplant as the only curative treatment. Pathologically PAH is characterised by the obliteration of the distal pulmonary arteries. Early endothelial cell (EC) dysfunction and apoptosis, and the subsequent abnormal proliferation and migration of pulmonary artery smooth muscle cells (PA-SMC) are thought to be the major contributing factors but the molecular mechanisms responsible are unknown. I have recently described heightened expression of osteoprotegerin (OPG) in Pulmonary Arterial Hypertension (PAH) patients, and that OPG induces proliferation and migration of pulmonary artery smooth muscle cells in vitro. These data are the first to demonstrate that OPG is increased in PAH and that it regulates PA-SMC proliferation and migration. It is unclear, and I aim to determine whether OPG is causal and/or a potential new biomarker in PAH. To this end, the objectives for this fellowship are to 1) determine the temporal relationship between the pattern of OPG expression and onset/progression of PAH in animal models 2) Determine whether over-expression of OPG expression causes PAH in a transgenic mouse model. 3) Determine whether blocking OPG with a neutralising OPG antibody prevents and/or reverses PAH in animal models, and 4) Identify associated binding partners and signalling processes involved in OPG-induced PA-SMC proliferation and migration. To achieve these objectives I will use a combination of established rodent models for PAH and generate a transgenic mouse that over-expresses OPG in vascular smooth muscle cells. Finally using a systems biology approach, I will identify OPG binding partners and subsequent signalling mechanisms by a combination of Biacore technology, MALDI-TOF mass spectrometry and protein array to determine the key molecules that mediate OPG-induced PA-SMC proliferation and migration. The data generated will provide valuable insights into the role of OPG in that pathogenesis of PAH and potentially identify novel therapeutic targets for the treatment of PAH.

Key Sentence rewrite: Dissecting the role of Osteoprotegerin and related signalling pathways in the pathogenesis of pulmonary arterial hypertension

Promise This project will test a potential therapeutic target for pulmonary arterial hypertension by extending our recent discovery that osteoprotegerin is increased in pulmonary arterial hypertension and that it regulates pulmonary arterial smooth muscle cell proliferation and migration.

Importance Pulmonary arterial hypertension is a devastating disease that often affects young women, limiting physical capacity and life expectancy (median 2.8 years without treatment). Abnormal proliferation and migration of pulmonary artery smooth muscle cells are thought to be the major contributing factors in the disease. Current drug treatments fail to reverse the disease, leaving lung transplant as the only curative treatment.

 $Problem_1$ We need to know the temporal relationship between osteoprotegerin expression and disease onset/progression in animal models in order to establish whether osteoprotegerin is a potential biomarker for pulmonary arterial hypertension.

 $\label{problem2} \textbf{Problem2} \ \ \text{We need to know the causal relationship between over-expression of osteoprotegerin and onset/progression of pulmonary arterial hypertension in animal models.}$

Problem₃ We need to know the associated binding partners and signalling processes involved in osteoprotegerin-induced proliferation and migration of pulmonary artery smooth muscle cells in order to identify potential therapeutic targets.

Project The project will use a systems biology approach, based on established rodent models for pulmonary arterial hypertension and a transgenic mouse that over-expresses osteoprotegerin in vascular smooth muscle cells and that will be created in the project.

Implementation₁ The project will characterise disease progression in established animal models to establish the temporal relationship between the pattern of osteoprotegerin expression and onset/progression of pulmonary arterial hypertension in animal models.

Implementation₂ The project will create a transgenic mouse model that overexpresses osteoprotegerin and test whether blocking OPG with a neutralising osteoprotegerin antibody prevents and/or reverses pulmonary arterial hypertension in the transgenic mouse and in established animal models to establish the causal relationship between over-expression of osteoprotegerin and disease onset/progression.

Implementation₃ The projectwill use a combination of Biacore technology, MALDI-TOF mass spectrometry and protein array to determine the associated binding partners and signalling processes involved in osteoprotegerin-induced proliferation and migration of pulmonary artery smooth muscle cells.

Next The data generated will clarify the role of osteoprotegerin in the pathogenesis of pulmonary arterial hypertension and potentially identify a number of novel therapeutic targets for treatment.

*** **

Examples ***

- Key Sentences 1-5 (Background)
- Key Sentences 6-10 (Project)
- Writing Key Sentences from an Abstract
- Aims and Objectives
- All The Key Sentences as Aims & Objectives
- Elevator Pitch
- Implementation/Problem Pairs
- Tag Phrases
- Pairing
- Writing Pairs
- Summaries
- Workshop Key Sentences

Example Key Sentences *** **

Key Sentences 1-5 Give the background and context

- 1 Promise The project aims to enable improvements in training social workers by analysing the role of writing in social work practice using an integrated ethnographic and linguistic methodology we have developed.
- 2 Importance Social care costs 27 billion pounds annually and problems arising from errors in writing increase the risk of harm to service users.
- 3 Problem₁ We need to know the writing practices of professional social workers so that we can identify weaknesses and areas of good practice.
- 4 Problem₂ We need to know the institutional writing demands of contemporary social work so that we can identify the writing skills that social workers need.
- 5 **Problem**₃ We need to understand how writing practices shape professional social work so that we can identify how writing skills could lead to future improvement in practice.

The Key Sentence Technique Problem Sentences

Original

Example Key Sentences continued *** **

Key Sentences 6-10 describe the project

- **Project** The project will use a methodology that integrates ethnographic description, discourse analysis and tracking the production of texts to analyse the writing practices and the work of 50 professional social workers in three local authorities in the UK.
- Implementation₁ We will carry out an ethnographic study, in order to characterise the writing practices of professional social workers
- Implementation₂ We will analyse texts and explore how writing is managed alongside other commitments to characterise the institutional writing demands of contemporary social work.
- Implementation₃ We will use discourse analysis and track texts relating to specific cases to understand how writing practices shape professional social work.
- 'Next' We will develop effective writing practices that will improve training and practice of social work.

The Key Sentence Technique

Implementation sentence Explanation

Project & 'Next' Sentence Explanation

Example Aims and Objectives *** **

- Our project has three aims, which are expressed as the research questions we need to answer:-
- 1. We need to know the writing practices of professional social workers so that we can identify weaknesses and areas of good practice.
- 2. We need to know the institutional writing demands of contemporary social work so that we can identify the writing skills that social workers need.
- 3. We need to know how writing practices shape the nature of professional social work so that we can identify how writing skills could lead to future improvement in practice.
- Our project will answer the three research questions by pursuing the following three objectives:-
- 1. We will carry out an ethnographic study, in order to characterise the writing practices of professional social workers
- 2. We will analyse and quantify texts and explore how writing is being managed alongside other commitments in order to characterise the institutional writing demands of contemporary social work.
- 3. We will use discourse analysis and track the trajectories of texts relating to specific cases in order to understand how writing practices shape professional social work.

Aims and Objectives

Key Sentences as Aims & Objectives *** **

Aims

The overall aim of the project is to enable improvements in training social workers by analysing the role of writing in social work practice using an integrated ethnographic and linguistic methodology we have developed. The project is important because social care costs 27 billion pounds annually in the UK and problems arising from errors in writing increase the risk of harm to service users. The project has three aims, which are to answer the following research questions:-

- 1. We need to know the writing practices of professional social workers so that we can identify weaknesses and areas of good practice.
- 2. We need to know the institutional writing demands of contemporary social work so that we can identify the writing skills that social workers need.
- 3. We need to know how writing practices shape the nature of professional social work so that we can identify how writing skills could lead to future improvement in practice.

Aims and Objectives

Key Sentences as Aims & Objectives (continued) *** **

Objectives

- The project will use a methodology that integrates ethnographic description, discourse analysis and tracking the production of texts to analyse the writing practices and the work of 50 professional social workers in three local authorities in the UK. It has three objectives:-
- 1. We will carry out an ethnographic study, in order to characterise the writing practices of professional social workers
- 2. We will analyse and quantify texts and explore how writing is being managed alongside other commitments in order to characterise the institutional writing demands of contemporary social work.
- 3. We will use discourse analysis and track the trajectories of texts relating to specific cases in order to understand how writing practices shape professional social work.

We will develop effective writing practices that will improve training and practice of social work.

*** ** Aims and Objectives

Aim, Objectives, WPs *** **

The aim of the project is to enable improvements in training social workers by analysing the role of writing in social work practice using an integrated ethnographic and linguistic methodology we have developed. It has three objectives, which are to answer the following research questions:-

- 1. What are the writing practices of professional social workers? Answering this question will allow us to identify weaknesses and areas of good practice.
- 2. What are the institutional writing demands of contemporary social work? Answering this question will allow us to identify the writing skills that social workers need.
- 3. How do writing practices shape the nature of professional social work? Answering this question will allow us to identify how writing skills could lead to future improvement in practice.
- The project has three work packages that will answer the three research questions:-
- 1. We will carry out an ethnographic study, in order to characterise the writing practices of professional social workers
- 2. We will analyse and quantify texts and explore how writing is being managed alongside other commitments in order to characterise the institutional writing demands of contemporary social work.
- 3. We will use discourse analysis and track the trajectories of texts relating to specific cases in order to understand how writing practices shape professional social work.

Better not to refer to a work-package by its number - everybody has a WP-1. Writing Guidelines

Aims and Objectives

Example Elevator pitch *** **

Promise

The central aim of the project is to enable improvements in training and practice of social work by analysing the role of writing
in social work practice using an integrated ethnographic and linguistic methodolody we have developed.

Importance

 Social care costs 27 billion pounds annually in the UK and problems arising from errors in writing increase the risk of harm to service users. • Check for Tag Phrases.

Elevator Pitch

The Importance Proposition

Example Tag Phrases *** **

Make sure your implementation & problem sentences are linked bytag phrases, no matter how they are expressed.

- Our three aims are to answer the following three research questions:-
 - 1. What are the writing practices of professional social workers? Answering this question will allow us to identify weaknesses and areas of good practice.
 - 2. What are the institutional writing demands of contemporary social work? Answering this question will allow us to identify the writing skills that social workers need.
 - 3. How do writing demands and practices shape professional social work? Answering this question will allow us to identify how writing skills could lead to future improvement in practice.
- Our project will answer the three research questions by pursuing the following three objectives:-
 - 1. We will carry out an ethnographic study, in order to characterise the writing practices of professional social workers.
 - 2. We will analyse and quantify texts and explore how writing is being managed alongside other commitments in order to characterise the institutional writing demands of contemporary social work.
 - 3. We will use discourse analysis and track the trajectories of texts relating to specific cases in order to understand how writing demands and practices shape professional social work.

Pairs *** **

- Implementation Sentences
 - 1. We will carry out an ethnographic study, in order to characterise the writing practices of professional social workers.
 - 2. We will analyse and quantify texts and explore how writing is being managed alongside other commitments in order to characterise the institutional writing demands of contemporary social work.
 - 3. We will use discourse analysis and track the trajectories of texts relating to specific cases in order to understand how writing demands and practices shape professional social work.
- Problem Sentences
 - 1. What are the writing practices of professional social workers? Answering this question will allow us to identify weaknesses and areas of good practice.
 - 2. What are the institutional writing demands of contemporary social work? Answering this question will allow us to identify the writing skills that social workers need.
 - 3. How do writing demands and practices shape professional social work? Answering this question will allow us to identify how writing skills could lead to future improvement in practice.

Writing Pairs *** **

- Implementation Sentences
 - 1. We will carry out an ethnographic study, in order to characterise the writing practices of professional social workers.
 - 2. We will analyse and quantify texts and explore how writing is being managed alongside other commitments in order to characterise the institutional writing demands of contemporary social work.
 - 3. We will use discourse analysis and track the trajectories of texts relating to specific cases in order to understand how writing demands and practices shape professional social work.
- Problem Sentences
 - 1. We need to know the writing practices of professional social workers so that we can identify weaknesses and areas of good practice.
 - We need to know the institutional writing demands of contemporary social work so that we can define the writing skills that social workers need.
 - 3. We need to know how writing demands and practices shape professional social work so we can identify how writing skills could lead to future improvement in practice.

Pairing Exercise

Summaries *** **

- Psychology
- Education, Sociology, Politics
- Infection
- NIHR
- LSHTM
- Computing

You can also find summaries of successful projects in the ERC and the UKRI databases of funded projects.

Psychology Summaries *** **

- Risk And Resilience Following Childhood Maltreatment: A Longitudinal Investigation
- Memory consolidation in typical and atypical development
- Facilitate memory persistence through consolidation and reconsolidation in early, middle, and late adulthood in rats
- Neural mechanisms of memory updating
- · Charting the impact of bilingualism on development in children with and without autism spectrum disorders
- Gender Differences in Autism Spectrum Disorders in a Population-Based Twin Sample: testing three hypotheses for male preponderance
- Imagining Autism: Drama, Performance and Intermediality as Interventions for Autistic Spectrum Conditions
- · Brain-to-brain coupling during dialogue: What sentence fragments can reveal about 'joint' mental representations
- Musical impact: A study of the effects of music making on musicians' health and wellbeing
- Adult aging and social attention: the role of cognitive decline and social motivation.
- Representation and processing of spatial information in lateral occipital cortex

Education, Sociology, Politics Summaries *** **

- Teaching accessibility in the digital skill set
- Teaching, learning and schooling in contemporary India
- Clean Break: Women, Theatre, Organisation and the Criminal Justice System
- Structure and Organisation of Government Project
- Understanding the Role of Faith Based Organisations in Anti-Trafficking

Infection Summaries *** **

- Bim-mediated attrition of virus-specific CD8 T cells in chronic HBV infection
- The impact of systemic viral infections on the innate immune response in the brain in chronic neurodegeneration
- Pathfinder: Determining the efficacy of plasmapheresis as a treatment for patients with chronic Pseudomonas infections and inhibitory antibodies
- TGF-beta activation by gut dendritic cells: identifying a critical pathway in regulation of chronic parasitic infection
- Non-adherence to treatment: a methodological approach to compensating for its impact in chronic infections, using tuberculosis
- Elucidating functions of a specialised staphylococcal secretion system during infection
- The effect of macrolide therapy on sub-clinical infection and inflammation in human lung transplantation
- Understanding prevalence and impact of frailty in chronic illness and implications for clinical management
- Respiratory infections
- The roles of Pellino-1 in the control of airway viral infection

NIHR Summaries *** **

- Can Hygiene-Therapists maintain the oral health of routine low-risk dental recall patients in "high-street" dental practices: a pilot study
- Evaluation of the impact of a levy on added-sugar soft drinks on sales and purchasing behaviour within Jamie's Italian restaurants
- Development and evaluation of a psychosocial intervention for children and teenagers experiencing diabetes (the DEPICTED Study)
- Effective home support in Dementia care: components, impact and costs of tertiary prevention
- Peri-operative Enhanced Recovery hip FracturE Care of paTiEnts with Dementia-"PERFECTED" project
- Developing patient-centred, feasible alternative care for emergency department users with epilepsy. A model for service design
- Treatment of Anorexia nervosa: Translating experimental neuroscience into clinical practice
- SAVER Sodium Valproate for Epigenetic Reprogramming in the Management of High Risk Oral Epithelial Dysplasia
- Information for choice: what people need, prefer and use
- Detection and diagnosis of common oral diseases: Diagnostic test accuracy of tests of oral cancer and caries

LSHTM Summaries *** **

• Maximising the impact of chemoprevention on the malaria burden in children in areas of seasonal transmission

- Can community-wide active case finding for tuberculosis and universal testing and treatment for HIV control the African tuberculosis epidemic?
- The Role of Complement Component C1Q in Tuberculosis and Diabetes Co-morbidity
- Epidemiological features, national burden of several HPV-related diseases and estimation of cost-effectiveness of HPV vaccines in Vietnam
- Malaria parasite population structure and adaptation on the edge of endemic distribution in Africa
- Using host-responses and pathogen genomics to improve diagnostics for tuberculosis in Bandung, Indonesia
- Modelling disease emergence in heterogeneous populations
- A lung-oriented controlled human infection model using live BCG to evaluate tuberculosis immunopathogenicity and vaccine efficacy (TB-CHIM)
- Can norethisterone enantate (NET-EN) reduce the risk of recurrent bacterial vaginosis in women at high risk for HIV infection?

Computing Summaries *** **

- ACCEPT: Addressing Cybersecurity and Cybercrime via a co-Evolutionary aPproach to reducing human-relaTed risks
- INTUIT: 'Interaction Design for Trusted Sharing of Personal Health Data to Live Well with HIV'
- Machine Learning, Robust Optimisation, and Verification: Creating Synergistic Capabilities in Cybersecurity Research
- Control and Trust as Moderating Mechanisms in addressing Vulnerability for the Design of Business and Economic Models (ConTriVE)
- DC networks, power quality and plant reliability
- An Intelligent Digitial Household Network to Transform Low Carbon Lifestyles
- The INtelligent Airport (TINA)
- Realising Accountable Intelligent Systems (RAInS)
- Circular4.0: Data Driven Intelligence for a Circular Economy
- DAWNMANTLE Decontamination and waste minimisation strategies for and using advanced molten salt nuclear technologies
- Digital-twin-based Bilateral Tele-autonomous System for Nuclear Remote Operation
- Digital Originals
- RAnDMS (Real time Analysis of Digital Media Streams)
- Digital Citizenship and Surveillance Society: UK State-Media-Citizen Relations after the Snowden Leaks
- Digital Personhood: Charting the digital lifespan

Workshop Key Sentences *** **

The workshop teaches an approach to grant-writing that won the presenter continuous funding during his research career and that has been refined by his analysis of committee decisions on thousands of grant applications.

A successful approach to grant writing makes research grant applications easier to write and more likely to be successful. It must have three elements. It must include an effective strategy to maximise success and reduce wasted effort, so that it is clear when to write grant applications and how to prepare. It must include a specification for an effective grant application, so that it is clear what to write. It must include a step by step recipe for producing effective grant applications, so that it becomes easy to write.

The workshop will teach participants all the elements of a successful approach to grant writing. The presenter will explain how the uncertainty of funding decisions can ameliorated by an effective strategy to maximise success and reduce wasted effort. The presenter will analyse how funding decisions are made in order to derive a specification for an effective grant application. The workshop will include writing exercises to help participants follow the presenter's step by step recipe for producing effective grant applications.

The workshop explains how all the elements of his approach are based on the presenter's successes and failures in applying for and in awarding research grants, so that participants can use the workshop to develop their own approach.

Parker Derrington Ltd Workshop Handout

Presenter



Andrew Derrington has in-depth

experience of the research funding process. He obtained his first research grant, a Beit Memorial Fellowship for Medical Research, while he was writing his PhD. His research was continuously funded by fellowships, project and programme grants for the next 30 years. He served on research grant committees for The Science and Engineering Research Council, the Medical Research Council and the Wellcome Trust. His book, *The Research Funding Toolkit*, which he co-wrote with Jacqueline Aldridge, research and enterprise associate in the School of Psychology at the University of Kent, is the definitive guide to grant writing for early career academics and research professionals. It is based on Andrew's analysis of how grants committees make funding decisions.

Andrew has worked in eight Universities including two in the world top ten.

He has also worked as a journalist. Over several years he wrote two successful columns in the Financial Times. *The Nature of Things* covered science - from astrophysics to zoology. *Psych Yourself Up* was a guide to the different psychotherapies available in the UK.

Andrew set up Parker Derrington Ltd in 2013. He now works as a consultant, writing research grant applications and providing strategic advice and training to individuals and organizations.

Testimonials

I had a fantastically useful time attending your recent workshop at Leicester University. Writing the 10 key sentences was a very useful exercise and I have, since, worked on them to discover they are a fab tool for any kind of writing really.

Dr Ranjana Das, University of Leicester

Andrew blends easy authority and extensive experience with humour and approachability. The result is a workshop full of practical, memorable advice on how to compete more successfully for research funding.

Professor Peter Clegg, Institute Institute of Ageing and Chronic Disease, University of Liverpool}

I attended one of Andrew's workshops when I was a senior lecturer. The hands on advice about how to structure my applications in a really appealing fashion enabled me to win a grant of nearly $\neg £600K$ the next year. I still implement the advice that I received in that workshop, and pass it down to junior colleagues. I find that Andrew's advice has a high success rate!

Prof Theresa Gannon, University of Kent

I still use the tips you gave me for my successful Wellcome SRF application. Your advice on "12 key sentences" is spot-on and helps people focus on the aspects of the proposal that are critical to success instead of getting bogged down in reams of text.

Prof Mark Baxter, Mount Sinai School of Medicine

Andrew's grant-writing workshops teach you how to convince the world that it needs your research. They are the most useful training events I have ever attended. His advice about how to sell the big idea without compromising on the science was critical to the success of our $\neg £9.3$ million ESRC application.

Prof Julian Pine, University of Liverpool