



GET READY TO APPLY PUT TOGETHER YOUR CV WRITE YOUR APPLICATION SAMPLE CVs & FURTHER HELP

**CVs & COVER LETTERS** FOR PhDs & POSTDOCS

www.careers.cam.ac.uk

This book has been written by Careers Advisers at Cambridge University Careers Service to help you prepare your CVs and cover letters, whether you are applying for an academic position or a non-academic position – or both.

It is designed primarily for Cambridge PhD students and postdoctoral staff. Undergraduates and Masters students should ask for the edition of CVs and Cover Letters written especially for them, available free from the Careers Service. Each example CV is genuine, only personal details and other identifying information having been changed. Each was successful in getting the applicant through to the interview stage of the selection process and, in many cases, to a job offer.

#### Many thanks to:

The PhD students and postdocs who gave us feedback and allowed us to use their CVs.

The academics and other employers who provided us with advice (quoted throughout).

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Written by Careers Advisers of Cambridge University Careers Service Designed by www.magneticstudio.co.uk

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In an ideal world, we would always have lots of time to prepare every job application, reflect on our past experiences, draft our CV with plenty of evidence of success, get feedback from various sources, reflect again, re-draft, and so on. In reality, there's seldom lots of time, and it's amazing how difficult it can be to remember good supporting evidence when the pressure is on, the night before an application is due.

#### Building a CV is an on-going job

That's why you may find it useful to keep a master document covering all of your experiences (academic, professional, and personal) in one place. This serves as a bank from which you can draw relevant content depending on the kind of job you come to apply for.

#### Record achievements when they are fresh

If you already have a recent version of your CV, start from there and add new content to this document. Do it when an experience or achievement is fresh in your mind, and be sure to note down key information, particularly quantitative data, that will later help you to demonstrate success, e.g. "improved reliability by 15%" or "doubled attendance compared to previous year".

Don't worry about the format and style of your master CV; this is not something you would ever send to an employer.

#### In your master document, you should record:

- Education
- Research positions and experiences note down key projects, responsibilities and achievements for each position
- Other professional employment and experience
- Collaborations ideally those that you have initiated
- Awards and prizes
- Funding and grants you have obtained, or contributed towards
- Patents
- Teaching experience, including research supervision
- Technical skills, including research tools and programming languages
- Professional memberships
- Positions of responsibility, both academic and extra-curricular
- Academic service activities, e.g. committees or reviewing
- Conferences you have attended, and those at which you were an invited speaker
- Training courses you have attended
- Languages
- Interests outside of work

"Update your master CV regularly. Log new experience and evidence of achievements. This will save you time and stress when you come to make applications."

Liz Simmonds, Postdoc Careers Adviser

# Your online presence

Increasingly, employers are using online social or professional networking tools to look for good potential hires, and job-seekers are using the same tools to look for potential employers and job vacancies. In a few cases, opportunities may only be advertised via social media – this is particularly likely to be true for media jobs.

Employers may check your online presence before offering you a job, so it is important to make sure that your online presence (across all platforms) won't put them off, even if you are not actively using these tools for job searching.

#### **General points:**

- Update and manage your privacy settings
- Keep your social media accounts up to date and remove old/unused ones
- Manage the image you present on social media

   think about what photos you are tagged in and be cautious about work-related comments that you make online
- Find out how employers of interest to you are using social media in their recruitment. Do you need to keep an eye on their Twitter feed? Are they on Facebook? Do they use LinkedIn?
- Find ways to connect to people working in areas of interest to you through social media. This could mean following up meetings with people at events by connecting to them, or joining in online discussion groups in areas of interest.

#### LinkedIn

LinkedIn is a professional networking tool - you can think of it as being like Facebook but for work. Thousands of jobs at every level are advertised on LinkedIn and many recruiters use it, so for many PhDs and postdocs it will be worthwhile to have a good LinkedIn profile. It is free to set up a LinkedIn account and you can use LinkedIn in many useful ways without having a paid subscription.

#### Top tips:

- Include a professional looking photo
- A complete profile looks better than a half-finished one
- LinkedIn works on keywords, so think about the sort of keywords that are related to the type of work you are most interested in and include these throughout your profile. You can get good ideas of keywords by looking at job advertisements
- Connect to people you know through work
   or study
- Use LinkedIn as a research tool, e.g. to see what alumni of your university in your subject have gone on to do

## "Make sure your application matches your online presence. We will look you up on LinkedIn."

Negin Lankarani, Graduate Recruitment Manager, L'Oréal

# Layout, evidence and impact

When a potential employer is reading your CV, they don't want to have to work hard to find what they are looking for, so a clear layout and concise evidence to back up your claims are crucial.

Michole Cutugno, PhD

"Make sure you carefully follow instructions on how to present your application, addressing the job description and person specification. If you don't – however brilliant you are – you are unlikely to be shortlisted."

Dr John Wolffe, Professor of Religious History, Faculty of Arts, Open University

#### The overall look

Aim for clarity, simplicity and consistency. A CV has to stand up to a "skim" read, perhaps as quick as 60 seconds. You have to organise and present your information in such a way that, at first glance, a selector will readily see that you're a suitable candidate – without having to read all of the detail.

#### Bold, italics or underlining?

Highlight headings by use of capitals or bold type. Avoid underlining and italics as they can make the CV look too fussy.

#### **Bullet points**

One style of bullet point is enough. Using different bullets or extra indentation for subcategories is likely to add confusion rather than clarity.

Avoid or limit the use of complete sentences on the CV. Note form is usual (omitting pronouns and conjunctions) – this saves space and avoids repetitiveness.

#### **Choice of font**

Choose one attractive readable font – preferably similar to the one the organisation uses.

You can vary the font sizes (larger for headings, smaller for text and contact information) but keep the main text size consistent. Don't go below 10pt.

#### **Columns and tables**

Avoid columns except for small items, e.g. degree modules. Avoid tables because they can look rigid and tend to draw the eye to the lines rather than to the information within them.

### "Candidates need to be aware that the CV is a piece of personal marketing that has to engage the reader immediately."

Sharon Goymer, Resourcing Manager, National Grid

#### **Headings and sections**

Keep a consistent style (i.e. use the same font, font size and capitalisation) for headings and subheadings of the same level.

Titles and headings don't need full stops; they hold the reader up.

Don't use "Other" as a heading: it either suggests something unimportant, signalling to the reader that they can skip past this section, or it indicates that you don't know how the experience collected in that section is relevant to the job description. Create headings and sections on the CV that are meaningful to your prospective employer. For example, someone applying for the job on p58 might have sections entitled "Politics-related experience" and "Media experience." This enables you to manage your material well by putting the most relevant things first, rather than your most recent experience, which may be less relevant.

Keep a consistent order of the information within a section, e.g. give the name of employer and then job title, or vice versa, but not a mix. Within each section, organise your material with the most recent experience first.

#### Length of the CV

A CV for use outside academia must not be more than two pages. This is non-negotiable. A three-page CV doesn't make you look like a stronger candidate ("I simply had so much experience that I needed to run on to a third page"), it just gives the selector the impression that you can't prioritise and didn't bother to find out the conventions in their field.

Some employers, such as banks, may specify that they only want one page, but if they do not say this, give them two. This gives you more space to give your evidence.

#### Use the space well

Create a balanced-looking page: do not have lots of white space on one side or in one area. Make sure the bulk of the CV is used for giving evidence of how you meet the criteria, rather than taking lots of space for your address or referees.

#### A poorly laid out CV - see the next page for how to transform it into a much clearer version.

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Dec 2002- April 2003	Digital Green, India
February 2000- Nov 2002	Salaam Baalaak, India (grassroots organisation)
November 1998- Jan 2000	Habitat for Humanity, India
December 1996 - August 1997.	Connect- India,

#### **Teaching experience:**

- Designed & taught 'Introductory course in anthropology' for undergraduates at Centre for Liberal Arts, Mumbai in November 2011- January 2012 & December 2012- February 2013, December 2014- February 2015
- Designed, coordinated & partially taught 2 weeks summer school in geography for international A level students for Institute of Continuing Education, Cambridge in August 2012 & August 2013
- Supervisions (small group teaching) for undergraduate students Contemporary India: The Politics of Society, Environment and Development at Geography department, University of Cambridge in May- June 2013

#### **Other Responsibilities:**

- Co-convener of NGOs' network for water management for the state of Andhra Pradesh. (2001-2005).
- Executive founder member of the 'Andhra Pradesh Water Conservation Movement'.
- ٠ Green Officer, St John's College College, 2010-11
- Elected International Officer, Graduate Union, University of Cambridge 2013-14
- Member, Events Team, Cambridge University International Development Society 2013
- ٠ Co-convenor, City Seminar, Centre for Research in Arts Social Sciences & Humanities (CRASSH), University of Cambridge 2013-14

#### **Publications:**

•

- Shekhar, S. (2007) Details of publication •
- Shekhar S. (2006) Details of publication
  - Shekhar S. (2006) Details of publication
- Shekhar S. (2004) Details of publication
- Shekhar S. (2003) Details of publication
- Shekhar S. (2003) Details of publication
- Shekhar S. (2002) Details of publication

#### Fellowships/ Scholarships:

- Detail of scholarship
- Detail of scholarship
- Detail of scholarship

#### Selected presentations:

- Details of conference paper
- Details of conference paper
- Details of conference paper

Web researcher & writer	
Director	
Programme officer	
Programme Officer	

A big list of publications per se is unlikely to be of interest outside academia - better to explain the relevant skills you have gained e.g. research, writing for different audiences, or attention to detail

Don't give all your experiences the same weight – give more prominence to the most relevant ones

It is likely that much of this information will be irrelevant for a career outside academia

Avoid "other" in a heading as it makes the selector think they do not need to read it - pick a more meaningful heading e.g. 'Evidence of working in a team' or 'Organisational experience'

The bullet points don't help here better to list these responsibilities in the format of a job with bullet points of key achievements

Lots of text in italics is hard

to read

A much better CV layout - see page 10 for the original

#### **SNEHA SHEKHAR**

St John's College, Cambridge, CB2 1TP ss12@cam.ac.uk +44 (0) 7584 123456

#### EDUCATION/ENVIRONMENTAL QUALIFICATIONS

2010-2015: University of Cambridge: Geography PhD - nearing completion

- Space here to unpack the skills the PhD has given her
- Space here to unpack how the subject of the PhD is relevant to what she is applying for

2009-2010: University of Cambridge: M.Phil. Environment, Society & Development

Space here to unpack any relevant skills or topics e.g. writing or research skills

2001: University of Warwick: Certificate course in Environmental Management

Space here to unpack any relevant skills or topics e.g. writing or research skills

1995-1996: Centre for Environment Education, Ahmedabad, India: Certificate Course in **Environment Education.** 

Space here to unpack any relevant skills or topics e.g. writing or research skills

1994-1995: University of Mumbai, India: M.Sc. Anthropology

Space here to unpack any relevant skills or topics e.g. writing or research skills

1990-1993: University of Mumbai, India: M.Sc. Botany

Space here to unpack any relevant skills or topics e.g. writing or research skills

#### ENVIRONMENTAL WORK EXPERIENCE

Feb - Jun 2008: NASSCOM Foundation, India in collaboration with NALSAR, Hyderabad, India: Consultant

- Undertook consultancy project "Strengthening environmental law capacity in SAARC region"
- Space here to give more evidence of relevant achievements

#### Jan 2007 – Jan 2008: Self employed, Consultant

Space here to give evidence of relevant achievements

Sep 2006 - Dec 2006: Institute for Social Studies Trust, India, Professional Fellow

Space here to give evidence of relevant achievements

Jan 2006 - Aug 2006: CDVTLA International India: Consultant

 Conducted analysis for project 'Developing incentive based mechanisms for watershed protection services and improved livelihoods in India'

May 2003 - Dec 2005: University of Bath, Consultant

 Co-ordinated project (EU R8280) 'Incorporating stakeholder perceptions of participatory water management in India'

Dec 2002 - April 2003: Digital Green, India: Web researcher & writer

Feb 2000 - Nov 2002: Salaam Baalaak Trust, India (grassroots organisation): Director

Nov 1998 - Jan 2000 Habitat for Humanity, India: Programme officer

Dec 1996 - Aug 1997 Connect, India: Programme Officer

#### ENVIRONMENTAL LEADERSHIP/MANAGEMENT/TEACHING EXPERIENCE

2011-2015 (intermittent): Centre for Liberal Arts, Mumbai: Lecturer Designed & taught 'Introductory course in anthropology' for undergraduates

#### 2012-2013: Institute of Continuing Education Cambridge: Lecturer

 Designed, coordinated & partially taught 2-week summer school in geography for international A-level students

#### 2013: University of Cambridge Geography Department: Supervisor

Politics of Society, Environment and Development"

2010-2011: St John's College, Green Officer

2001-2005: Participatory Water Management for the state of Andhra Pradesh: Convenor

2001: Executive founder member of the 'Andhra Pradesh Water Conservation Movement'

#### WRITING/COMMUNICATIONS EXPERIENCE

- Published and co-published six academic papers on environmental issues including joint water management and gender in India
- Presented papers/made presentations at ten conferences including the Royal Geographical Institute and the Cambridge International Development Conference

#### RELEVANT EXTRA-CURRICULAR EXPERIENCE

Space here to list other relevant activities e.g. volunteering

Supervised (small group teaching) for undergraduate students on "Contemporary India: The

#### Use impactful language in your CV

Your CV should include powerful language to emphasise your achievements and make you stand out. Here is a selection of words you can use to add impact to your material.



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"Don't just list the workshops you've attended. Think about how you've benefitted, the skills you've developed as a result, and how you've applied them to your work."

Dr Sue Jackson, Research Development Co-ordinator Department of Engineering

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reviewed revised scheduled systematized verified	integrated investigated mediated negotiated proposed sorted out
examined expanded generated improvised indexed redesigned	rpe
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Used by permission, Imperial College London Careers Advisory Service



#### **Build evidence into your CV**

For everything you state on the CV, ask yourself: How can I prove that? What difference did it make? Sometimes people worry about coming across as arrogant or boastful, but if you can provide evidence for what you are claiming, then it's not boasting.

#### Evidence can come from a variety of sources:

- Data/numbers
- Published articles
- Feedback e.g. through a guestionnaire or from a supervisor
- Changes that have taken place

"Make sure we can understand your application - the short-listers are unlikely to be experts in your field. Help us understand how what you have done is relevant to what we are looking for."

Aleron, a social impact consulting firm

Avoid "...ing" words. Instead put verbs in the past tense, which will focus on your quantifiable achievements. For example "Presenting scientific findings" does not make a strong impact; "Presented scientific findings to an audience of ~60 at an international conference" is much better. Even if the task you are talking about is not yet completed, focus on what you have done so far.

#### Here is an example of how you can build evidence into a CV:

Compare the first and second extracts:

Oct 2010 - Dec 2014 PhD, Dept of Chemistry, University of Bristol Supervisor: Professor Jacks Thesis: A TCSPC study of polymerised indoles.

#### Oct 2010 - Dec 2014

PhD, Dept of Chemistry, University of Bristol

Key achievements: set up a challenging experiment from scratch, ran the experiment producing data now published in two peerreviewed journal articles

presented scientific findings to an audience of ~60 at an international conference

one-to-one supervision of a final year undergraduate project student; student awarded a prize for best project of the year

The second extract gives you a much better sense of what the person has achieved, by demonstrating outcomes such as journal articles, presentations and prizes.

#### Here are some examples of evidence of broader skills:

#### Mentoring

As vice-captain of the University softball team, I recruited 2 new team members and mentored them. During this time, our league position rose and our team coach praised the effectiveness of my mentoring skills.

#### **Communication skills**

Have written 4 papers published in peer-reviewed journals in addition to writing annual reports for my funding body. I give oral presentations at local and international meetings and I have been commended for the clarity of my presentations.

I volunteered for the Cambridge Science Festival and spent a day explaining my research to members of the public from age 4 to over 80. This experience has developed my ability to communicate to diverse and non-specialist audiences.

#### Teamwork

Working in a team of 3 researchers, my role was to source reagents and optimise the X technique. This allowed our team to produce data quicker and resulted in our lab being the first to publish on this topic.



### "I've never seen a CV that doesn't mention teamwork, but it's easy to be flippant about it. I need to see concrete evidence to be convinced."

Sylvia Court, Graduate Programme Manager for R & D, GSK

# Comparing academic and non-academic CVs

and For can see book you can see ames Mason's CV reworked for an reworked for and a academic and a commercial role

There are some essential differences in the content and presentation of CVs for jobs in academia, and those in other sectors. This table summarises some of the main points you should consider for each type of CV.

	Academic CV	Industry R&D CV	Non-research CV
Length	No limit	2 pages with possible appendix of publications	2 pages maximum
General focus	Demonstrating a personal track record in your specialist research area, and selling that research area to your target institution.	Demonstrating a track record of delivering research projects, of tailoring your research experience to match the company's requirements.	Demonstrating the broad range of skills acquired during your research experience, and through other activities, tailored to the employer's essential criteria/competencies.
Research experience/ PhD should focus on:	The contributions you have made to the field. Number, quality and consistency of publications. International reputation as evidenced by invited talks and invitations to review articles. Early career funding that you have obtained.	Experimental experience or subject area you researched that is relevant for the job and company. An ability to deliver projects on time and within budget. Stopping projects that were not yielding results. Flexibility to work on projects not directly related to your specialist area.	The broader experiences you have gained as a result of doing research in academia. The main outcomes of your research, to demonstrate that you have been successful in your career.
Technical skills	Important at the postdoc level, to demonstrate what you can bring to a research group. Less important for lectureship positions.	Very important – in many cases, this will be the main reason a company will be interested in you.	Not relevant for non-research roles, with the exception of some programming skills used in a non- research context.
Research supervision	Provides early evidence that you have the potential to run a research group. Evidence that you can develop project ideas for students, and manage them to achieve successful outcomes such as publications and prizes.	Provides early evidence that you have the potential to become a research manager. Evidence that you can supervise less experienced staff members so that they are effective in their work, and complete their projects on time and to a high standard.	Provides early evidence that you have the potential to become a team leader or manager. Evidence that you can supervise less experienced staff members so that they are effective in their work, and complete their projects on time and to a high standard.

	Academic CV	Industry R&D CV	Non-research CV
Teaching	Evidence that you are capable of providing lectures, tutorials and practical classes. Give details of which subjects you have taught, in what format, and to what level and size of audience.	'Communication skills' – shows that you can communicate concepts to people who are not specialists, and can mentor and inspire. Summarise your experience – no need for details.	'Communication skills' – shows tha you can communicate concepts to people who are not specialists, and can mentor and inspire. Summarise your experience – no need for details.
Collaborations	Demonstrates that you are starting to develop your own independent research projects.	Useful evidence of teamwork – co-ordinating multiple partners towards a common research goal.	Useful evidence of teamwork – co-ordinating multiple partners towards a common goal.
Publications	Extremely important evidence of your scientific track record – give full details.	Can be useful evidence of your research output – some fields will accept an appendix of publications, some prefer you to summarise, e.g. "11 papers in 5 years."	Useful only as evidence of success in your career – summarise, e.g. "11 papers in 5 years."
Academic service/ administrative experience/ responsibilities	Demonstrates that you are willing to contribute to the running of the academic community and/or department.	Demonstrates a range of broader skills such as organisation, communication, team working, which employers will be very interested in.	Demonstrates a range of broader skills such as organisation, communication, team working, which employers will be very interested in.
Awards/ prizes/ funding/ patents	Important evidence of your reputation and track record.	Important evidence that you have been successful in your research career.	Prices and awards show you have achieved excellence in your career Funding and patents can be usefu in demonstrating commercial awareness.
Conferences	Invited talks give evidence of your reputation in your field.	Attending conferences is evidence that you are willing to engage with the broader field, communicate your work, and network. Give a summary, e.g. "Attended 3 international conferences in the last year, and presented at one."	Could be relevant for roles in e.g. publishing, or sectors where academic networking is an important skill. Give a summary, e.g. "Attended 3 international conferences in the la year, where I was able to establish two new collaborations."
Training courses	Not very important, with the exception of some accredited teaching courses.	May be important if you have been trained in specific technical skills relevant to the company, but you will also be expected to show how you have used them in your work.	May be important if you have bee trained in specific skills relevant to the sector/job (especially if you are changing career direction), but yo will also be expected to show how you have used them in practice.
Referees	Very important – choose your referees carefully. You may be asked to give 3 or more.	Less important – will probably only be contacted after you are offered a job. May be useful where your research group has strong industry links.	Less important – will probably onl be contacted after you are offered a job.

# Preparing applications for academic positions

Academic positions are extremely competitive, so you need to make sure that your application materials focus on what the selectors are looking for, and make it easy for them to understand what your specialism is, and how good you are.

#### What academic selectors look for

If you're planning a career in academia, you need to be able to demonstrate excellence in your chosen field. You will be expected to make an increasing impact on your field as your career progresses, demonstrating academic prowess in your undergraduate days, delivering successful research projects through your PhD and postdoc(s), and eventually becoming a significant authority in your chosen specialism.

#### **Get honest feedback**

Other experiences, such as teaching and academic service, and experiences which shape you as a person, may come in to play, but your application materials must always place academic impact at the fore.

When it comes to your publication record and how yours will compare to that of others on the job market, you need to find out what the norm is in your field, for someone at your career stage. Ask peers and senior academics to give you an honest assessment of how you stack up. It's no good not knowing, or merely hoping that your years of dedicated committee work will disguise a big gap in your publications.

To find out more about the type of experience you need to be competitive for academic jobs, and what you can do now to begin building up that experience, read our Quick guide to planning an academic career.

#### Basic content of an academic CV

For any academic position, your CV should include the following main headings, not necessarily in this order. (It is conventional to use reverse chronology.)

**Education** – from undergraduate level. Include grades/marks, and class positions if particularly impressive, e.g. "top 5 %" If your degree is from outside the UK, give sufficient detail for the selector to understand the

sufficient detail for the selector to understand the achievement, e.g. "Grade 2 of 5, where 1 is best", or "4.75/5 (top 5% of class)".

**Research experience** – not the title of your project, but its focus and key outcomes (see our worked example on p16)

**Teaching experience** – state where and when you taught, at what level and in which format. Translate Cambridge - specific terms (eg"Part II") in to more general terms (eg " final year"). Don't forget research supervision experience, although it's not necessary to list all the individuals you have supervised – summarise, and include key outcomes.

**Publications** – highlight where you are the lead author. If you work in a field where the convention is to list authors alphabetically, make sure your contribution to the publication doesn't get lost.

Referees

You could also have sections which cover:

#### Awards/prizes

**Funding obtained** – for awards, prizes and funding it's useful to give some detail about how competitive the award was (e.g. "3% success rate"), and the level of funding/support, so that selectors can assess the prestige of your attainment.

**Academic service** – e.g. journal refereeing, committee work

**Invited talks** 

**Professional memberships** 

#### Applying for a postdoc position

#### Be clear about your research skills

If you are applying for an advertised postdoc position, the Pl in charge will have a project already in mind and will probably be looking for someone with a specific set of technical and/or research skills who can deliver it. They will also want to know about your interest in their group or project – what motivates you to join them, what do you hope to learn there, and what can you bring to the group?

#### Apply speculatively

It's not unusual to apply speculatively to join a research group – sometimes using contacts from your own or your Pl's academic network, and sometimes approaching groups you have found through online research. In this case, you may have to do a bit more groundwork to discover what kinds of research skills the Pl might be seeking, and so you will need to be clear about the work the group is doing and how you can fit in. You may also have to look for your own funding.

"Think ahead to your future academic career – what do you want to be working on? What questions and problems interest you? Do you want to change direction or combine different approaches/topic areas? If so, think about what technical expertise you might need to develop, and look for postdoc positions that will help you to achieve this."

Professor Matthew Juniper, Department of Engineering, Cambridge University



#### Laboratory Techniques

#### Specialised Laboratory Techniques:

- · Design, optimisation & implementation of high content/high throughput siRNA library screen using liquid handling robots - logistics, quality control, trouble-shooting and training of team members (PhD student & Post Doc).
- High content/high throughput screening analysis strategy development and implementation using The R Project for Statistical Computing packages CellHTS & RNAither.
- Microarray analysis using GeneSpring 7.0.
- Systems biology analysis Ingenuity Pathway Analysis; MetaCore.

#### General Laboratory techniques:

- Gene expression analysis quantitative real-time PCR & DNA microarray.
- Reverse-transcription PCR and gel electrophoresis analysis.
- · Mammalian cell culture aseptic technique, cell culturing/freezing, cell line maintenance, adapting growth conditions without altering characteristics of cell line to facilitate co-culturing.
- DNA, RNA & protein extraction from cell lines, tissue (frozen & formalin fixed paraffin embedded (RNA)) and blood.
- · Cellular transfection (siRNA & DNA plasmids).
- Western blotting.
- · Cell proliferation assays.
- · Anchorage independent growth assay I was the first person in the research group to develop this assay for use with our cell lines.
- Immunofluorescent staining.
- · Wound healing assay.
- · Transmembrane migration assay.
- Interpretation of DNA sequencing chromatographs.

#### Transferable Skills

- Communication Regular oral presentations at lab meetings, departmental seminars and conferences.
- Teamwork Completed high throughput project taking lead in protocol development and analysis strategy.
- Organisation Organised conference for over 100 delegates including trade exhibition.
- Working to Deadlines & Time Management Year 1 of integrated PhD required completion of numerous projects and assignments, while concurrently attending lectures and completing lab rotations.
- Information Technology Microsoft Office, Adobe Photoshop, GeneSpring, Ingenuity Pathway Analysis, Endnote.

#### Conference Proceedings

- Digestive Disease Week Chicago (2014). Two oral presentations given by the PhD students who were members of the siRNA screening team.
- The 7th International Conference on Advances in Canine and Feline Genomics and Inherited Disease Boston (2013). Poster Presentation.
- · Irish Society of Gastroenterology Spring Meeting Kilkenny (2012). Oral Presentation.
- The 6<sup>th</sup> Barrett's Symposium University College London (April 2012). Poster Presentation First Prize.
- Digestive Disease Week San Diego (May 2012), New Orleans (May 2010) & Chicago (May 2009). Poster Presentations
- Oeso 10<sup>th</sup> World Conference: Barrett's Esophagus Boston (Aug 2010). Poster Presentation.
- XXI International Bile Acid Meeting: Falk Symposium 175 Freiburg (Oct 2010) & XX International Bile Acid Meeting: Falk Symposium 165 - Amsterdam (May 2008). Poster Presentation. Third Prize (2008).

#### Publications

- Batchelor, D., Aguirre-Hernández, J., Constantino-Cases, F., Scase, T., Hoather, T.M., Dobson, J.M. & Bugden, R. Improved Classification of Canine Soft Tissue Sarcomas using miRNA Expression Profiling. Manuscript in Preparation. Manuscript prepared and under review by co-authors, expected submission September 2014.
- Batchelor, D.\*, Duggan, S.P.\*, Garry, C.\*, Phipps, S., Davies, A. & Dawson, E. Novel Oesophageal Cancer Therapeutic Targets Identified Through siRNA Library Screening of Oesophageal Dysplastic Cells. Manuscript in preparation, expected submission October 2014. (\* these authors contributed equally to the completion of this work)
- Batchelor, D.\*, Duggan, S.P.\*, Phipps, S.,\* Garry, C., Davies, A. & Dawson, E. Screening the invasive potential of oesophageal cancer using siRNA library knockdown and high content analysis. Manuscript in preparation, expected submission October 2014. (\* these authors contributed equally to the completion of this work)
- Batchelor, D., Duggan, S.P., Freund, J.N., Dawson, E. The Identification of a novel role for CDX2 as a Tumour Suppressor in an Oesophageal Adenocarcinoma in vitro system. Manuscript prepared and under review by coauthors, expected submission September 2014.
- Duggan, S.P., Batchelor, D., Kirca, M., Smith, S., Reynolds, J.V., Long, A., Dawson, E. (2010). An integrative genomic approach in oesophageal cells identifies TRB3 as a bile acid responsive gene, downregulated in Barrett's oesophagus, which regulates NF-kB activation and cytokine levels. Carcinogenesis, 31 (5): 936-945.

Clear demonstration of key technical skills

Her contributions to each paper are clarified

	in biochemistry ying for postdoc in bioenergy Alison W	ilson	SELECTED TALKS		
	80 Elsworth Street Cambridge CB1 1AB Nationality: British	Telephone (Home): 01632 960000 Telephone (Mobile): 07700 900000 E-mail: aw@example.com	July 2015 March 2015 Oct 2014 May 2012	Friday Seminar Series. Department of Plant Scient 'Hormonal regulation of potato tuberisation' Department of Plant Sciences Cell Physiology Sup 'StCLA1: A Lost Enzyme of Cytokinin Interconvers Department of Plant Sciences Poster Week 'StCLA1: A lost enzyme of cytokinin interconversi First Year Graduate Students' Symposium. Depar 'Cytokinins and Potato Tuber Dormancy.'	
	EDUCATION	•	_TEACHING EX	EXPERIENCE & PUBLIC OUTREACH	
	April 2012       St John's College, University of Cambridge         -Present       Ph.D. Plant Sciences – BBSRC-CASE funded in particular descent	Control of Sprouting g protein, StCLA1, and its role in potato tuber dormancy. on using HPLC and LCMS/MS to determine its function as en (Imperial), and further determined the $K_m$ for a variety dynamic spectrophotometric assay. Explored expression	-	Practical Leader for Part IB Plant and Microbial Sc Laboratory Project Supervisor for Part II (Final Yea Undergraduate Supervisor for Part IA Physiology of Teaching Laboratory Demonstrator Cambridge University Science Fair Volunteer	
	pattern <i>in planta</i> by transcript and protein analysis, and transge StCLA1 in tuber and plant phenotype is currently being resolved th Oct 2008 <b>St John's College, University of Cambridge</b> –June 2011 <b>BA (Hons) Cantab. Natural Sciences (1<sup>st</sup> Class)</b> Final year laboratory project, based in the Department of Plant S	hrough use of the CaMV 35S promoter driven expression. ciences – Investigation into plant growth regulator (PGR)	Spe     ELI     Ext     Ovv     tec	MS and HPLC analysis ectrophotmetric enzymatic assays SA craction and purification of plant hormones erexpression and purification of proteins using affin chniques, SDS-PAGE and immuno-blotting plecular biology: isolation and analysis of plant and l	
	exudation from the root membranes of Oil Seed Rape ( <i>B.napus</i> ss Final Year Courses taken: Plant-Microbe Interactions; Dynamics, History and Future of Ve Physiology and Ecology		TAI Baa His Sol Bio	IL-PCR and Real Time PCR cterial and plant transformation tochemical and fluorometric assays of promoter:GL <i>anum tuberosum</i> L. (Potato) husbandry and tissue of informatics: BLAST, ClustalW, use of SOL Genomics	
mic	2001-2008 Richard Crosse High School, Whittington A-Levels: Biology (A), Chemistry (A), Geography ( GCSE: 10 subjects (7 at Grade A*, 3 at Grade A)	A), Art (A), General Studies (A)		mputing: VectorNTI, GenStat, Serial Cloner, Chroma	
t is clear	_ SCHOLARSHIPS AND AWARDS		<ul> <li>Languages</li> </ul>	Conversational German and understanding of syntax	
	2014Company of Biologists Travel Award – Applica	14/11, proposal submitted for purchase of hybridisation tion made for travel to Plant Hormones and Signalling	IT INTERESTS A	Regular use of MS Word, Excel, Powerpoint & Outloo Completed a course in Windows and MS Office appli ND ACTIVITIES	
	Hormones and Signalling conference, Keystone, (		2014 2012-2013	Cambridge University Women's Boat Club Squad N St John's College Boat Club Captain	
	excellence.	e governing body of St John's College for academic e award made by Drapers' Company to a student of a	2009-2010	St John's College Boat Club Ladies' 1 <sup>st</sup> VIII St John's College May Ball Committee Member Larmor Society Committee Member (Scientific Soc St John's College JCR Access Officer	
nonstrates	PUBLICATIONS	e	2002-Present 2011-2012	PADI Open Water Diver, Advanced qualification at Roles including event organiser at Chatsworth Esta	
PhD will It in a <b></b> lication	Wilson A; Warnes BJ; Thomson JCP; James CM; Warren S interconversion is a key component in potato tuber initiation. In P		REFEREES		
ncauvil	Conference Proceedings		<b>Dr. James Smith</b> (PhD Supervisor		
	Feb 2015 Plant Hormones and Signalling, Keystone Sympos	sia, Colorado USA; poster presentation	Dr Robin Jones,	Department of Plant Sciences, Ca	



ences, Cambridge, CB2 3EA, UK, 01223 339876

ences, Cambridge, CB2 3EA, UK, 01223 339827



After leaving this post I initiated links between the Ministry of Justice and the Institute of Criminology. Developing this network included chairing seminars, acting as a representative and providing feedback

British Research Council Fellow – Library of Congress Washington DC, USA (January-March 2013). Visiting fellowship at the Kluge Centre pursuing independent study, presenting research, participating in research community, building networks

Assistant to the Director and Lecturer - Teachers Programme, Oxbridge Academic, Cambridge (Summer 2012 & 2011). Writing and presenting lectures on gender and crime. Assisting in administration and organisation. Preparation of course material. Responsibility for student welfare

	Key research skills
Qualitative	Sensitive and emotive research topics In-depth interviews Focus groups Recruiting participants and negotiating Analysing interview transcripts and leg Qualitative computer software packag
Quantitative	Analysis of large data sets SPSS (now PASW) Presenting quantitative data to non-sp
Education and teaching	Lectures on gender and crime as part Programme Preparation of class material for Oxbri Cambridge University professional de Researchers In Residence –Teaching
Publications and conferences	Presentation of findings at two interna Chapter in an international ISBN Eboo Two journal papers in progress (See b
	Additional skills
Editing	Co-Editor <i>Examining Aspects of Sexu</i> Interdisciplinary.net Press (January 20 Institute of Criminology Writing Group providing weekly peer review and critic
Collaboration and network building	Developed research network between Facilitated links between Ministry of Ju Maintained links with the Kluge Cente
Administration	Managed own PhD budget and resour Successful application for additional P Administrative responsibilities at the M
Teamwork	Rowing for Women's II boat, Girton Bo
	Publications and presenta

'Uncomfortable Territory? The Relationship Between Gender, Intoxication and Rape' in Examining Aspects of Sexualities and the Self, EBook ISBN 978-1-84888-020-7 (2014), pp. 69-85

'Uncomfortable territory? The Relationship between Gender, Intoxication and Rape' Global Sexualities Conference, Salzburg, Austria, October 2013

'Victim-Intoxicated rape: Initial findings on age and gender' British Society of Criminology Conference, Cardiff, June 2013

(In progress) 'Is alcohol the new miniskirt? The challenge of power and gender in the law on sexual consent and capacity' [submitted to The British Journal of Sociology June 2015]

(In progress) 'Male victims and unreported rape' [In preparation for The British Journal of Criminology]

#### Referees

Dr. Gill Adams, Reader in Criminology and Criminal Justice, Institute of Criminology, University of Cambridge. Email: gra15@cam.ac.uk Tel: 01223 335398

Dr. Heather Field, Lecturer, Centre for Criminological Research, School of Law, University of Sheffield. Email: H.Field@sheffield.ac.uk Tel: 0114 333 8778

Dr Sam Holt, Research Fellow, ICPR, King's College London. Email: sam.holt@kcl.ac.uk Tel: 0207 848 3672

experience academia

Cecily Wilde CV page 2

g access gal documents ges (Nvivo, Atlas, Nudist)

pecialist audiences of Oxbridge Academic Teacher's

ridge Academic seminars evelopment course: Supervising students g training course ational conferences below)

alities and the Self, ISBN EBook, 2014)

- developing critical skills through tique to members on writing

n police, health care & support groups Justice and Institute of Criminology er, Library of Congress, Washington DC

irces

PhD funding

Ministry of Justice and Oxbridge Academic Boat Club

#### ations

Easy to see the research skills gained in the PhD

#### Applying for a lectureship or tenure-track position

#### It's all about research excellence

At this level, it's not enough simply to deliver the aims of someone else's project. You need to convince a University or Institution that you have the potential to deliver a long-term, high-impact research programme that fits with their needs and aspirations.

The phrase you will hear over and over again is "research excellence". What this amounts to is a track record of outstanding independent research combined with concrete, fundable research plans. Research excellence trumps everything else teaching experience and academic service may be looked upon positively, but unless your research profile is up to scratch, your application is very unlikely to be considered.

"People are conflicted about impact for early career researchers -- of course it looks good to be doing research that is significant in the real world, but impact tends to be a product of a longer period of research than most early career applicants have yet had. So, a willingness to consider the wider impact of your research and a couple of early-stage ideas about it are sufficient.

Don't bend your research out of shape to give it artificial "impact" but do think about how it could have impact in five years' time."

Dr Teresa Grant, Deputy Head of Department, English and Comparative Literary Studies, University of Warwick

# Make it easy for selectors to see your impact

In practice, when your application is being reviewed by a search panel, they will be focusing on your publications, their impact, and other evidence of research output, such as invited talks, prizes and funding you have obtained. It's typical for a lectureship position in the UK to attract around 100 applications for one post, so you need to make sure that the busy member of the search committee reading many applications in their limited spare time can quickly find the right information.

#### Pick your referees carefully

Referees are crucial. Academia is a small and wellconnected world. Academics will be reassured by a recommendation from one of their colleagues. Think carefully about who you ask to be your referees, and make sure they know what you need them to say.

Selection panels may be suspicious if your current supervisor is not listed as a referee, so if you don't get on with them to the extent that you feel you can't use them as a referee, it can be awkward. It's a good idea to try and resolve any conflicts before you need to apply for jobs, so that you can rely on a reference from your boss. But if you are still concerned that he or she will not represent you fairly, it may be better not to list them. If you don't, be prepared to justify this decision at interview.

#### Don't despair

Don't despair if you don't get shortlisted when you start applying. As fast as you add more publications to your list, the people above you in the pecking order get jobs and make the next application easier for you.

#### Top tips:

Demonstrate the impact of your research through publications, citations, invited talks, and detailed outcomes. You can see how this is done in the example CVs which follow.

If you haven't received your own funding, but have contributed towards writing grants held by your PI or other academics, make sure you include this.



"When you come to apply for lectureship positions, one of the criteria on which you will be judged is your ability to bring in grant money. If you have already secured some of your own funding, this provides convincing evidence that you have the skills to do this again in the future."

Dr Howard Baylis, Reader in Zoology, University of Cambridge

for	rch fellow in bring applying lectureship			
		ESTHER EMILY JENNINGS		
	Home Address: Selwyn C Email: <u>eej99@cam.ac.uk</u>	College, Cambridge, CB3 9DQ	Tel: 07123 234567 Nationality: British	
	Education and Em	Education and Employment		
	October 2012 – present January 2014 – present	Maudslay-Butler Research Fellow, Selwyn Co Visiting Scholar, Zucrow Laboratory, Purdue L		
	7	Prestigious, stipendiary Research Fellowship for outstanding track record and research plans.	or three years, awarded on the basis of	
Immediate impact by stating		Running independent research projects in two Tidal power generation and aero-engine comp	•	
independence up front		<ul> <li>Independent funds from Rolls-Royce to start p</li> <li>Established a new collaboration with Purdu</li> <li>Undertaking computational work to unders compressor tip-clearance is enlarged.</li> </ul>	e University and ran experiments there.	
Quantifies impact of her research drive	>	<ul> <li>Developing and co-ordinating Whittle Laborat</li> <li>Expanded the tidal power work from one P</li> <li>Built a novel test rig for unsteady loading tedesign, patent discussions underway with A</li> <li>Employed a post-doc to develop prototype</li> <li>Set up a collaboration with Dalian Technica</li> <li>Running a project to develop a probe for m has generated an offer of collaboration from</li> <li>Raising the profile of Cambridge Tidal Grou and managing the collaboration with Cranfil</li> </ul>	hD student to four active researchers. Ists and developed a load-shedding device Istom. for flume tests. I University to study tidal farm design. easuring turbulence in tidal channels, which n the European Centre for Marine Energy.	
Demonstrates emerging	July – September 2012	Research Associate, Whittle Laboratory, Cam Title: Increasing the Life of Marine Turbines b EPSRC/SUPERGEN Marine Challenge – Superv Funds from SUPERGEN Grand Challenge (£600 University:	y Design and Innovation. visor: Prof. Rich Carter.	
nature of research area		<ul> <li>Establishing Cambridge as a major centre for</li> <li>Working to reduce unsteady loads using flo</li> </ul>		
	2008 – 2012	PhD Student, Whittle Laboratory, Cambridge Title: Tip-Clearance Effects in Axial Compress	-	
Reference to funding at each stage		Research funds secured as a result of successf Thesis submitted April 2012. Degree approved Experimental study of stall inception and the e performance.	July 2012.	
Clear		<ul> <li>Major achievements include:</li> <li>Proving the existence of pre-stall disturbance</li> <li>Unifying contradictory reports in the literat</li> <li>Dismissing a US patent of a new engine contradictory</li> </ul>	ure, and	
outcomes		<ul> <li>Two award-winning Journal papers published.</li> </ul>		
	2004 – 2008	Undergraduate Student, Engineering MA, ME First Class Honours obtained in Years 1, 2 and Distinction in Year 4 (1 <sup>st</sup> class in project and m	3.	
		4 <sup>th</sup> year MEng Project: Compressor Blade Tip Experimental research into stall in aero-engine Awarded 80%. Key results impressed Rolls-Roy	e compressors.	
	1996 – 2003	Dame Alice Owen's School, Potters Bar, Hert 4 A-Levels including 3As in Maths, Further Ma		

Esther Emily Jennings

Funding	
2014	Principal Investigator: RCUK-China Newton Trus Awarded £125k to set up a collaborative relation basis of my pitch at a two-day EPSRC 'sandpit'-str Funds for a post-doc and computing time to run
2013 – 2016	Rolls-Royce TSB Grant. Negotiated £35k from a TSB grant to start indepe Money for computer resources (HPC time) and tr Follow-on money was applied for (from NASA).
2013	<b>EPSRC Undergaduate Research Opportunities Pr</b> 10 weeks' worth of funding for an undergraduate System Design of Tidal Turbines (£2300). Work le
2012 – 2015	Maudslay-Butler Research Fellowship. Awarded a competitive, stipendiary Research Fel track record and high-impact research plans.
2012 – 2015	SUPERGEN Marine Challenge. Instrumental in the writing and submission of a s experimental work into tidal stream power.
2008 – 2012	Rolls-Royce Industrial CASE Award. £100k funding from EPSRC/Rolls-Royce for PhD. Funds secured as a result of excellent 4 <sup>th</sup> year pro-
Teaching	
Graduate Teaching	
October 2014	MRes GTA3 Advanced Experimental Methods – Developed a laboratory experiment to teach mas systems and delivered a lecture on LabVIEW. Oversaw use of wind tunnel facility by master's s including co-ordinating demonstrators and refur
February 2014	RCC1 Research and Communications Club, Whit Interactive seminar for first-year PhD students or
February 2013	<b>5R9 Experimental Methods Course, Whittle Lab</b> Lecture to graduate students on LabVIEW and ex
Supervision of Researc	h Students and Marking of Projects
2013 – present	Part IIB MEng Project Supervision. Supervision of research projects which account fr 2014/15: Supervising two students, one working on actuator disk modelling of tidal farms. 2013/14: Following on from UROP project on wh 2012/13: Co-supervised a student with Prof. Rich Also involved in assessment of other students' pr
2012 – present	Energy Technologies MPhil, Cambridge. Supervising students (one per year) on novel rest 2014: Development of a novel probe for tidal cha 2013: Critical review of tidal channel measureme 2012: Design and construction of a wind-tunnel t Also involved in marking projects from other sup

#### CVS AND COVER LETTERS FOR PHDS AND POSTDOCS



#### **Esther Emily Jennings CV continued**

	Esther Emily Jenning	32	Esther Emily Jennings	
	Undergraduate Teac	hing	2013	Rolls-Royce Howse and Ruffles Award for Bes
	2013 – present	Part IB Mathematical Methods Supervisions, Selwyn College. Supervising all second year Engineers at Selwyn College (14 – 15 students each year)		For the best paper by a Rolls-Royce student, p alongside awards for outstanding work by Roll
	2011 – 2013	Part IIA Supervisions, Cambridge. 3A3 Fluid Mechanics II (2012/13) 3A5 Fluid Mechanics and Dower Concretion (2011/2012 and 2012/2012)	2012	ASME Turbomachinery Committee Best Pape For the best compressor paper presented at A
	2008 – 2012	3A5 Thermodynamics and Power Generation (2011/2012 and 2012/2013) Part IB Thermofluid Mechanics Supervisions, Downing College. Supervising all second year Engineers at Downing College (11 – 14 students each year)	2008	<b>Downing College Keller Prize</b> . For outstanding academic performance 2004 -
	May – June 2010	Supervising all second year Engineers at Downing College (11 – 14 students each year). Part IIA Turboexpander Project Demonstration, Cambridge. Teaching and assisting with theory and practical work for design, build and test project.	2007	<b>Engineering Department Project Prizes.</b> For top marks in both 3 <sup>rd</sup> year projects – Heat
	October 2008	Cambridge University Engineering Department Supervisors' Training Course.	2005 – 2008	Downing College Scholarship (2006,7,8) Downing College Engineering Prize (2006,8) Downing College Exhibition (2005)
	<b>Invited Talks and</b>	Presentations	Acadamia Decence	Downing College Exhibition (2005)
	November 2014	SUPERGEN Annual Assembly, University of Edinburgh.	Academic Respons	ibilities and Outreach
Clear impact of this talk		Presented the Cambridge-Cranfield work on tidal power generation to an audience of 150 including experts from industry and government. Talk generated contacts and offers of collaboration with European Marine Energy Centre, Orkney (major centre for marine energy development and testing).	July 2013, April 2014	Seminar Leader, "The Future of Energy", Selw Created and ran a seminar for sixth-form stud Cambridge. Covered selected topics related to with the aim of giving them the ability to under
	October 2013	Rolls-Royce Corporation, Indianapolis, USA. Presented my work and plans for collaboration with Purdue University to the compressor design team at Rolls-Royce, Indianapolis.	February 2013	Author, "Power for the Future". Wrote an article for <i>Selwyn</i> (Selwyn College Al stream power and my research in the area.
	January 2013	Rolls-Royce Global Fans and Compressors Seminar. Presented to experts at Rolls-Royce in Derby, Bristol, USA, Canada and Germany. Raised my profile within the company and initiated further collaboration.	January 2013	Global Young Scientists' Symposium, National Selected as one of four Rolls-Royce nominees from across the world. Networked with PhD st well as Nobel Laureates. Experienced academi
	September 2011	<b>Rolls-Royce UGTP Review Day, Cambridge.</b> Selected to give a flagship presentation to senior engineers and managers at the annual review of Rolls-Royce University projects. Spoke on "Stall Inception, Something New".	October 2012 – present	Selwyn College Governing Body. Attendance at thrice-termly College Meetings, 2013/14, member of International Programme placements at Selwyn College. 2014/15, mem
	July 2011	FETE (Fluids Energy Turbomachinery Expo), Cambridge. Presented on "Stall Warning in Aero-Engine Compressors" at the Engineering Department Divisional Seminar Day. Received a best student presentation prize.	2013 - present	ASME Turbo Expo Session Organiser. Assigning and collating peer reviews for a sess the basis of the reviews and recommending for
	June 2011	ASME Turbo Expo 2011, Vancouver, Canada. Presented my paper "Stall Warning by Blade Pressure Signature Analysis" at the premier conference in the field. The paper later won a Best Paper Award.	2012 – present	ASME Turbo Expo Reviewer. Peer-reviewing papers for ASME Turbo Expo a
	October 2009	Women in Aerospace Symposium, MIT, Cambridge, MA, USA. Invited to a conference for outstanding women PhD students in Aerospace Engineering and	2011 – present	Undergraduate Admissions Interviews. For De Undergraduate Admissions Pool. For Selwyn
		Earth Sciences. Spoke on "Detecting the Limit of Stability in Aero-Engines". Interacted with prominent members of MIT, and students from top US Universities.	Internships	
	Prizes and Award	ls	July – September 2007	Summer Intern, Bowman Power Group Ltd, S 9-week placement in a company developing a Design calculations, company texting and co
	2014	ASME Gas Turbine Award. For the best paper presented at ASME Turbo Expo 2012 (out of 1000 papers across all aspects of Turbomachinery) – GT2012-68707.	2003 – 2004	Design calculations, component testing and co Class 375 Project Assistant, South Eastern Tra One-year placement as part of the New Trains Checking new trains on delivery and investigat
	2013	<b>ASME Turbomachinery Committee Best Paper Award.</b> For the best compressor paper presented at ASME Turbo Expo 2012, the top conference in the field – GT2012-68707.	Interests Community – Local church Sport – Running, cycling, fo	member, and summer youth camp leader.

#### Best Doctorate Paper.

t, presented at Sir Henry Royce Awards Ceremony Rolls-Royce employees.

#### aper Award.

at ASME Turbo Expo 2011 – GT2011-45840.

04 - 2008.

eat Exchanger Design and French.

#### elwyn College Masterclass.

udents considering Science/Engineering at to 'green' power generation and energy use nderstand the numbers involved.

e Alumni Magazine) on the UK's potential for tidal

#### onal Research Foundation, Singapore.

es to attend a conference for young scientists D students and post-docs from top universities as emic life in Singapore through facility tours.

ngs, participation in decision making processes. nmes Committee, overseeing summer student ember of Buildings Committee.

ession at ASME Turbo Expo. Assessing papers on g for conference and Journal of Turbomachinery.

o and Journal of Turbomachinery.

r Downing (2011) and Selwyn (2012 – 2014). yn College (Jan 2013 – 2015).

#### d, Southampton.

g a diesel engine exhaust energy recovery device. d contact with suppliers.

#### Trains, London. ains Team.

igating persistent problems.

a sha	DC YE	escarch fellow ages applying lectureship				
Post in	angu	ages approved				
	KOK		Dr Sarah Constable			
			Dr Sarah Constable 367 Kathleen St, Bowing, QLD 5026 AUSTRALIA s.z.constable@uq.edu.au +61 (0) 987654321 / +61 (0) 123456789			
		+61 (0) 9876543217 +61 (0) 123456789 EMPLOYMENT				
Clear factual		2011-Present	<b>Postdoctoral Research Fellow</b> , Centre for Critical and Cultural Studies, University of Queensland (January–August 2014, maternity leave)			
maternity leave		2010-2011	Postdoctoral Research Fellow, School of Languages and Comparative Cultural Studies, University of Queensland			
		2007-2010	Lecturer in Hispanic Studies, Department of Modern Languages (January–June 2010, maternity leave), University of Hull			
		EDUCATION				
		2004-2007	PhD, Department of Spanish, University of Cambridge Dissertation title: "Representations of Peripheral Identities in the Films of Julio Medem, Bigas Luna and José Luís Guerín" awarded October 2008			
		2003-2004	MPhil, European Literature and Culture, University of Cambridge MPhil in European Literature and Culture, Dissertation (15000 words). "An Examination of Lacanian Theory and the Cinema of Julio Medem: Repetition, Drive, Desire." Distinction, awarded June 2004			
		1998-2002	BA (Hons), Modern and Medieval Languages, Pembroke College, Cambridge Specialism in French and Spanish, First Class awarded June 2002			
		AWARDS, GRANTS AND FELLOWSHIPS				
	Γ	2011-2014	Postdoctoral Research Fellow Research Funds (\$23000)			
		2010	Conference Travel Fund, School of Languages and Comparative Cultures, University of Queensland (\$1000)			
		2008-2009	Sherman Severin Early Career Fellowship (awarded by The Association of Hispanists of Great Britain and Ireland and Women in Spanish and Portuguese Studies) (£1500)			
This section demonstrates impact of		2008	£5000 for co-organised interdisciplinary conference <i>Transmission: Cinema/Psychoanalysis,</i> funding from AHRC, CRASSH, French Embassy			
work, and is given priority		2006-2007	Pembroke College Graduate Scholarship (£1250)			
		2004-2007	Arts and Humanities Research Council, UK, full-time doctoral award fees and maintenance (£10000, £11500, £12000)			
		2003-2004	Arts and Humanities Research Council MPhil funding, full fees and maintenance (£9000)			
		2004-2005	Pembroke College Scholarship (£150)			
		2003-2004	Pembroke College 1872 Scholarship (awarded for first class degree result) (£150)			

#### **RESEARCH ACTIVITIES**

- Film theory: documentary; psychoanalysis; phenomenology and the intersections between film and material culture.
- Catalan cinema, alternative national identities in Spain, global cinemas.
- Remediation and dynamics of cultural memory in the digital age.

#### PUBLICATIONS READY OR IN PREPARATION FOR FUTURE REF SUBMISSION

"Cinema at the Edges: New Encounters with Julio Medem, Bigas Luna and José Luis Guerín" Oxford and New York: Berghahn Books, 2014.

"An Encounter with Ethics and Documentary Images in the Exhibition Totes les cartes/Todas las cartas/All the Letters." Studies in Documentary Films, 7.3 (2013).

"Cuéntame cómo pasó/Tell me how it was: Narratives of Memory and Television Drama in Contemporary Spain." European Journal of Cultural Studies, in press anticipated early 2015.

"'Sí valgo, yo valgo seguro.' New Female Subjects in Bigas Luna's Yo soy la Juaní." Invited contribution to Studies in Spanish and Latin American Cinemas, 13.1 in preparation for publication late 2015.

#### PUBLICATIONS

#### Book

"Cinema at the Edges: New Encounters with Julio Medem, Bigas Luna and José Luis Guerín" Oxford and New York: Berghahn Books, 2014.

#### **Refereed Journal articles**

" 'Sí valgo, yo valgo seguro.' New Female Subjects in Bigas Luna's Yo soy la Juaní." Invited contribution to Studies in Spanish and Latin American Cinemas, 13.1 in preparation for publication late 2015.

"Cuéntame cómo pasó/Tell me how it was: Narratives of Memory and Television Drama in Contemporary Spain." European Journal of Cultural Studies, in press.

"An Encounter with Ethics and Documentary Images in the Exhibition Totes les cartes/Todas las cartas/All the Letters." Studies in Documentary Films, 7.3 (2013).

"Objects of Memory in Contemporary Catalan Documentaries: Materiality and Mortality", Senses of Cinema 60 (2011), http://sensesofcinema.com/2011/feature-articles/objects-of-memory-in-contemporary-catalandocumentaries-materiality-and-mortality/.

"Veo, Veo; Leo, Leo: A (re-)viewing of Haptic and Visual Discourse in Bigas Luna's Bilbao (1978)." Studies in European Cinema 4.3 (2007): 211-21.

'Barcelona under Construction: The Democratic Potential of Touch and Vision in City Cinema as Depicted in En construcción (2001) dir. José Luis Guerín.' Studies in Hispanic Cinemas 3.1 (2006): 35-48.

#### **Book Chapters**

"Digesting the Image: Carnal Appetites and Ethical Consumption in the work of Bigas Luna" in Food on Screen. Ed. Bradley, Peri, Palgrave Macmillan, 2015 (in press).

"Consuming the Past as a Televisual Product. Gender and Consumption in Cuéntame cómo pasó/Tell Me How it Was" in Gender and Consumer Cultures in Late- and Post-Authoritarian Greece, Spain and Portugal, 1960s-1980s. Eds. Kornetis, Kostis, Eirini Kotsovili and Nikolaos Papadogiannis, Bloomsbury, 2015 (in press).

#### Dr Sarah Constable

Cultural memory and screen media including installation, televisual media and Internet video.

Specific reference to publications relevant to REF submission

#### Dr Sarah Constable CV continued

#### Dr Sarah Constable

"Subjective Pasts and the Imaginative Power of the Image in Bucarest, la memoria perduda and Nedar" in The Noughties in the Hispanic and Lusophone World. Eds. Bacon, Kathy and Niamh Thornton, Newcastle upon Tyne: Cambridge Scholars Publishing, 2012. 130-41.

#### Book Reviews

"Bigas Luna, El ojo voraz", Carolina Sanabria (2010), in Studies in Hispanic Cinemas, 8.2 (2012): 207-208.

"Projecting Migration: Transcultural Documentary Practice." Eds. Grossman, Alan and Aine O'Brien (2007), in New Cinemas Journal of Contemporary Film 6.2 (2008): 153-155.

#### Peer Review

Peer reviewer for Culture, Theory and Critique and Studies in European Cinemas

#### CONFERENCE PRESENTATIONS AND LECTURES

#### (\* invited speaker)

Easy to see which ones

were invited

"Spain's other memories: El tren de la memoria (Ana Pérez and Marta Arribas, 2005)." European Cinema Research Forum, Edinburgh, July 2013.

"Remediation and Recuperation of Memory in the Spanish TV series Cuéntame cómo pasó/Tell me how it was." Society for Cinema and Media Studies conference 2013, Chicago, USA.

"Remediation and Recuperation of Memory on Spanish and Catalan Television", CSAA annual conference, University of Sydney, 'Materialities: Economies, Empiricism, & Things', December 2012.

"The body and the Documentary Moving Image in the Gallery Exhibition Totes les cartes/Todas las cartas. All the letters." Visible Evidence, ANU, Canberra, December 2012.

\*"Memory in Contemporary Spanish Screen Media", World Literatures and Cultures Seminar Series, School of Languages and Comparative Cultural Studies, University of Queensland, October 2012.

"Investigating Memory and Amnesia in Contemporary Screen Media from Spain", Rethinking Humanities and Social Sciences Conference, The Politics of Memory, University of Zadar, Croatia, September 2012.

"Digesting the Image: Carnal Appetites in the Films of Bigas Luna", Society for Cinema and Media Studies, Boston, March 2012.

\*"Forging New Connections: the Body and Documentary Images in Totes les cartes/Todas las cartas/All the letters" Journal of Material Cultures International Symposium, University of Queensland, March 2012.

\*"Images of Spain in the 20<sup>th</sup> and 21<sup>st</sup> Centuries", Queensland Art Gallery and Gallery of Modern Art, Up Late Series associated with the Portrait of Spain, Masterpieces from the Prado Exhibition, October 2012.

\*"Images of Spain in the 20<sup>th</sup> and 21<sup>st</sup> Centuries", floor talk, Sala del Prado, Queensland Art Gallery, October 2012.

\*"Contemporary Spanish Culture and Society", Queensland Gallery of Modern Art, staff training course for Portrait of Spain. Masterpieces from the Prado Exhibition. July 2012.

"Local Cinema, Global Practice: A New Barcelona School?" World Cinema Now, Monash University, Melbourne, October 2011.

Dr Sarah Constable "Active Spectatorship in En la ciudad de Sylvia/In Sylvia's City, (Dir. José Luis Guerín)", Screen Cultures Conference, University of Otago, New Zealand, June 2011. \*"Objects of Memory in Contemporary Catalan Documentaries", Material Cultures Seminar Series, Centre for Critical and Cultural Studies, University of Queensland, May 2011. "Of Time and Two Cities: Cinematic Memories of Barcelona and Liverpool", School of Literatures and Comparative Cultures Research Day, November 2010. "New Catalan Documentaries", School of Languages and Comparative Cultural Studies, Hispanic Research Seminar Series, October 2010. "Digesting the Image: The Body and Catalan Identity on Film", Modern Languages Research Seminar, University of Hull, November 2009. "Jose Luis Guerín's Innovative Documentary Gaze", Modern Languages Research Seminar, University of Hull, April 2009. \*"Between Stasis and Motion: New Ways of Viewing Documentaries from Spain", University College London, Hispanic Research Seminar Series, October 2008. \*"Medem in (Cyber)Space", MacColl Symposium: 'Spanish Screen Media: Cinema, Television, Internet', University of Cambridge, December 2006. "Introduction to Pyschoanalysis and Cinema", Modern and Medieval Languages Student Forum, Newnham College, Cambridge, November 2006. \*"Haptic Visuality in Bigas Luna's Bilbao?" Distinguished Scholar Workshop, University of Cambridge, invited scholar Laura Marks, March 2006. "Time, Space and Touch in *En construcción* (2001) dir. José Luis Guerín", International Conference on Hispanic Cinemas, State University of New York, November 2006. "Leo, Leo: A reading of haptic and visual discourse in Bigas Luna's Bilbao", European Cinema Research Forum,

University of Wales, Swansea, July 2006.

#### POSTGRADUATE TEACHING

2009	Co-supervision of MA thesis for the MA in translat "Manipulation of Gendered Discourse in Film Subt
	1980)".
2006	MPhil seminar on Representations of Barcelona on European Literature and Culture, University of Car

#### UNDERGRADUATE TEACHING

#### 2010-present University of Queensland

• Spanish Language for Beginners • 'European Film Today', three lectures on Catalan Documentaries as part of a team taught comparative module

ation studies University of Hull. Title: titling. The case of Pepi, Luci, Bom (Almodóvar,

on Film for MPhil in ambridge.

> Very clea layout of teaching experience

#### Dr Sarah Constable CV continued

#### Dr Sarah Constable

· 'Creativity and Cinema' guest lecture for bachelor of Creative Arts core course on aesthetics

#### 2007-2010 University of Hull

- Spanish Language (post A level), 1<sup>st</sup> year students.
- Spanish Language (Beginners and Improvers). 1<sup>st</sup> year students.
- 'The Modern Hispanic World' (team-taught culture module, 1<sup>st</sup> year students). Lectures and seminars on 20<sup>th</sup> century Spanish culture and society. Topics including: civil war images and films, gender and the family under Franco, representations of the transition to democracy)
- 'The Making of the Hispanic World' (team-taught culture module, 1<sup>st</sup> year students). Lectures and seminars on Spanish history and the development of Spanish and Latin American Identities: topics including Iberia, Hispania, Al andalus and Mexican cinema.
- Final year dissertation supervision (topics including Chilean Cinema, Contemporary Spanish Womens Writing and film, Catalan cinema)
- Lectures and seminars for the 4<sup>th</sup> year comparative papers: 'European Auteur Cinema' (two lectures and seminars on Julio Medem); 'Representations of the Past' (introductory theoretical lectures and seminars on representations of the past on film); 'Modern Women Writers' (three lectures and seminars on the novels of Carmen Martín Gaite)

#### 2004-2007 University of Cambridge

- Supervisions (small group tutorials): modern Spanish culture and history (1<sup>st</sup> and 2<sup>nd</sup> year students); introduction to Catalan language and culture; Spanish literature thought and history after 1820. 4<sup>th</sup> year comparative courses: 'The Body', 'Modern European Film', lecture on documentary theory.
- Final year dissertation supervision.

#### SERVICE AND ENGAGEMENT

Consultant and Public speaker for the exhibition Portrait of Spain, Masterpieces from the Prado, Queensland Art Gallery and 100 Years of Spanish Cinema, Australian Cinémathèque, Queensland Gallery of Modern Art, 2012

Steering committee for new MA in European Popular Cultures, Department of Modern Languages, University of Hull, 2009.

Staff representative, Staff-Student liaison committee, Department of Modern Languages, University of Hull, 2008-2009.

Personal tutor for Arts undergraduates, University of Hull, 2007-2010.

Course coordinator, first year Modern and Medieval Languages, Pembroke College, University of Cambridge, 2006-2007.

Examinations Committee, Internal Assessor, University of Cambridge 1<sup>st</sup> year literature paper and 2<sup>nd</sup> year translation paper (Spanish to English), 2006.

Graduate representative for Aim Higher Programme, scheme run by Local Education Authorities designed for non-traditional Cambridge applicants from State schools to visit Cambridge, 2005-2007.

President of Pembroke College MCR (graduate committee). Responsibilities included attendance of the college's governing body meetings with other academics, 2005-2006.

Film reviewer for Festival Daily, official publication of the Cambridge Film Festival, 2005-2006.

#### PROFESSIONAL DEVELOPMENT

Blackboard training: basic and advanced, University of Queensland, August 2011.

Induction for Academics New to UQ, University of Queensland, July 2010.

Transferable skills and professional development for PhD candidates, University of Cambridge, October 2004-June 2007:

- Using Information Technology for teaching
- Delivering undergraduate lectures
- Publishing
- Language teaching
- Computerised bibliography software (EndNote)
- Organising and presenting research proposals and projects

#### LANGUAGES

Spanish (near native), French and Catalan (good)

#### **PROFESSIONAL ASSOCIATIONS**

- Society for Cinema and Media Studies
- Cultural Studies Association of Australasia
- Association of Hispanists of Great Britain and Northern Ireland

#### Dr Sarah Constable

#### **Research statements**

For many academic positions, you will be asked to include a research statement. What do you research, and why? What do you plan to research in the future, and why? This is your platform to expand on your most impressive achievements so far in your research career, as well as to convince the selectors that you have a cogent research vision for the future.

## When covering your track record, you should make sure that you:

- Set your topic in context why is it important and timely?
- Make clear which other researchers or organisations will be interested in the outcomes of your work. How will you help to move the field forward? Are there wider benefits – economic, societal – to your research?
- Include your main research achievements to date and their impact in the field.
- Mention any notable breakthroughs, strong publications, prizes and invited talks, and funding that you have personally secured.
- Refer to collaborations you have initiated.

## When expanding on your future plans, you need to:

- Include short, medium and longer-term goals.
- Be clear about how your plans will advance key issues in the field.
- Emphasise what is unique about your approach, and how you stand out from competitors in the field.
- Suggest avenues for funding the proposal (if the application is not for a fellowship).
- Demonstrate how your proposed research complements/builds on research at your target institution (for a lectureship or tenure-track position).
- Point to potential collaborations for the work.
- Spell out why your intended research programme is both necessary and timely.

#### Top tips:

Stick to the brief – focus on what they have asked, and stick to the page/word limit.

Research statement or research plan? – are they looking for a big picture statement of your long-term vision, or a 3-year plan with specific milestones?

Consider your audience – get research colleagues to comment on the technical content, but it may also be worth checking that people outside your specialism can still understand your plans. A great research proposal should excite someone from any discipline! Most research proposals will be assessed by non-experts as well as specialists in your field, and you can't afford to write for only half your audience.

# "If you don't grab my attention in the first paragraph, you've lost me."

Dr Melinda Duer, Reader in Chemistry, University of Cambridge



#### **Research experiences and proposals**

My research interests lie in the improvement of storage requirements of cold-chain biologicals and how it affects the ways we make use of these products. This was piqued during my PhD research and continues to grow within my current research, where I am attempting to address the challenges associated with emerging regenerative medicines and blood products. Supply chains cannot be developed if there is no standardised and appropriate way to store biologicals in adverse conditions. Health care should not be limited only to countries with temperate climates and good infrastructure. Even something as ubiquitous as blood is limited in terms of its use owing to the need of cold storage and relatively short shelf life.

My research skills have evolved over the past decade, through my investigations into temperature stabilisation for biologicals, as discussed in my PhD thesis, "Vehicles for the Oral Delivery of Live Bacteria." My laboratory skills were advanced through fundamental investigations and my experiences on the project also helped my ability to communicate and develop commercial aspects of the research in the form of industrial and TSB funded collaborations. A key output, a gastric acid resin which improves the efficacy of medication delivery, was developed as part of my thesis and is currently being used by a biotechnology company, Biotikum, to develop their Sandonella<sup>™</sup> oral protein vaccine platform.

In April, an idea to solve challenges faced in the tissue engineering of hollow structures through the magnetic patterning of cells put me on the winning team of EPSRCs Dragon's Den style research funding competition, granting the group to be led by Dr Joseph Hamilton. And only few weeks ago, a collaborative partnership with a surgeon at the clinical school in Addenbrookes' Hospital led to the awarding of a Confidence in Concepts grant for improving cryopreservation of human haematopoeietic stem cells and pancreatic islets, for which research work will commence in January 2015.

The opportunity to continue my research at Cambridge will allow me to pursue these projects and my interests further in terms of both technology exploitation and fundamental science exploration in conjunction with my current collaborators at Qishlak Khwaja Metropolitan Technical Institute. I expect that my comparatively broad industrial experience across engineering and biotechnology, including work with BNFL and Schlumberger, and collaboration with BioPharma, Microbial Developments, Cobra Biologics and Royal Holloway (University of London), will enable me to find additional avenues to achieve this goal. My experiences with multiple collaborations has made me adept at time and project management in adverse conditions. I am confident that I can manage the significant time demands of this post.

I have actively proposed several MPhil research projects, and prepared multiple stand-alone projects well-suited to develop the research skills for Part IIB students. Both of these activities have taken place within the BioScience Engineering group; this career opportunity would give me the ability to further participate in research supervision at all levels. These experiences will enhance my breadth of knowledge in order to obtain Fellow status from the Higher Education Academy.

My approach to research supervision and teaching is simple – keep each student engaged and adapt the teaching style to suit both the subject at hand and the student learning it. Whilst this is often easier to apply to small group supervisions and one-on-one research advising situations, it is still possible to ensure that each student is engaged whether in a small group tutorial or within a larger lecture hall. My ambition is to progress to being a lecturer in chemical engineering and this post would represent a step towards this goal.

#### CVS AND COVER LETTERS FOR PHDS AND POSTDOCS

Research statement for a lectureship in biotechnology



Esther Emily Jennings

Track Record in Research and Future Plans

Research statement for a lectureship in biotechnology

#### **Research Excellence**

My most significant achievements so far have been:

- 1. Confirming the existence of pre-stall vortical disturbances in compressors and explaining why they are seen in some machines but not others. The work received Best Paper awards from Rolls-Royce and ASME.
- 2. Putting together a successful bid for £600k funding for tidal power research in Cambridge, which enabled me to start three new projects and establish the Whittle Laboratory as a centre for tidal research.
- 3. Setting up a collaborative project with Purdue University, and working there as a Visiting Scholar studying the detrimental effects of large tip-clearances in future high-efficiency engines. Also building a framework for moving from low-speed tests to real engine behaviour.

My PhD work focussed on the flow conditions leading up to stall in an aero-engine compressor. The dangers associated with stall necessitate a compromise between safety margin and efficiency, and this often increases fuel burn. A clearer understanding of the stalling process will help to reduce this wasteful safety margin. I made a major contribution to this aim by taking high-resolution measurements of the flowfield and developing a novel data analysis technique. My work led to the positive identification of a vortical disturbance in the tip-clearance gap when the compressor is operated near stall. This led to a collaborative project between Cambridge and MIT, in which we combined experimental and computational data to build up a physical model of the stall inception process. This model was presented at ASME Turbo Expo 2012, and was seen as a big step forwards in terms of understanding stall. This new insight is now being used by others to develop methods of avoiding stall.

Since my PhD, I have used the freedom granted to me by my Research Fellowship to branch out into tidal power generation – a comparatively new area of research for the Whittle Laboratory. In this field, I have focussed on the unsteady flow encountered by a turbine at sea. Unsteady loads due to waves and turbulence can reduce a predicted lifespan of 10 years on land to 10 months in salt water, making reliability the main obstacle to large-scale deployment of tidal turbines in the UK. Innovative mechanical techniques are therefore needed to reduce the unsteady forces and eliminate the fatigue problem. With this in mind, I co-ordinated a proposal for £600k for a 3-year project on robust turbine design, which was funded by the EPSRC's SUPERGEN consortium. I have used the money to build a novel gust-generating rig, and have designed a passive load-shedding device which I am in the process of patenting with Alstom. The device enables the lift to be kept constant despite changing incidence. I am also going to test a scale model of the device in the flume at IFREMER, France, next spring.

Since starting work on tidal turbines, I have expanded the tidal power group in the lab from one PhD student to four active researchers and the group is still growing – I have just appointed a Research Associate to assist me. Alongside the main load-shedding work, I am also working on: a novel probe to improve turbulence measurements in tidal channels, a water-to-wire code to examine the effect of unsteadiness on the drivetrain and generator, and a low-inertia transmission system (in collaboration with Cranfield University). By applying the Whittle Laboratory's expertise in unsteady flows to a new set of problems, I am fast establishing Cambridge as a key player in the field of tidal turbine hydrodynamics.

In parallel with the above work, I have retained a strong interest in compressors, and have used results from my PhD to initiate a new project looking at the detrimental effects of large rotor tip-clearances on compressor performance. In recognition of the importance of this work for future high-efficiency engines, Rolls-Royce have given me £35k as a starting point for a new collaborative project with Purdue University. I have been appointed as a Visiting Scholar at Purdue for 2014, working with Prof. Cynthia Lock. The facilities available at Purdue form an ideal complement to those in the Whittle Laboratory. In particular, their three-stage, high-speed compressor is of strategic importance for moving from low-speed, single-stage tests to a more realistic environment. The results so far have shown key differences between single- and multi-stage tests due to the stabilising effect which one blade row has on another. Working at Purdue has also put me in touch with experts at Rolls-Royce's design centre in Indianapolis, and has given me a greater understanding of the global Rolls-Royce University Technology Centre network.

#### Future Plans

Membership of the largest marine power consortium in the UK (SUPERGEN) has opened up possibilities for collaboration on projects relating to tidal array design and the environmental impact of tidal farms – in which field there are many interesting fluid mechanics problems. Accurate turbulence measurements are also vital to the success of the tidal power industry, and both Alstom and the European Centre for Marine Energy (EMEC) have expressed an interest in working with me to develop my novel tidal channel turbulence probe. This means that I

#### Esther Emily Jennings

have the contacts in place to gain funding for sea trials of a working prototype. I plan to continue building the tidal group into a world centre for hydrodynamics research, and hope to supplement funding from Alstom and future SUPERGEN calls with money from an EPSRC First Grant.

On the aero side, the tip-clearance work is directly relevant to Rolls-Royce's future engines, which are likely to have larger tip-clearances due to the move towards smaller cores. A lack of understanding of the effect of tip-clearance on compressor performance causes uncertainties at the preliminary design stage and I plan to use the knowledge gained from my work at Purdue to improve the design system in this regard. During my PhD, I undertook analysis of Rolls-Royce test data from the NEWAC project. Since then, Rolls-Royce have consulted me on measurement strategies for future rig tests, and asked me to analyse more data. This is a link that I would like to strengthen. There is limited capability within the company to analyse and understand engine test data, despite the immense value this information could bring. I would like to set up a PhD project to bring together the test data from the different Trent engines and use this alongside CFD and low-order modelling to build up an understanding of the different tip-clearance sensitivities. This will establish the Whittle Laboratory as a centre for engine data analysis.

My aim for the tip-clearance work is not just to understand the effects of gap size in a realistic compressor, but also to establish a framework for moving through the Technology Readiness Levels (TRLs) from blue-sky research to real engine tests. Motivated in part by my work, funding has been applied for from NASA to re-fit the Purdue compressor with modern blading and to increase its speed. This will bring it up to TRL6, which sits midway between the Whittle Laboratory's low-speed facilities and Rolls-Royce's engine tests. This link is of great strategic importance to future research by at both universities, and other academics (Prof. Rich Carter and Dr Graham Williams) have already expressed an interest in undertaking projects at Purdue.

The first extension to the tip-clearance work will be a study of eccentricity – my work has shown that the long-held 'rule of thumb' for eccentricity in the tip-clearance of a compressor is pessimistic, and there is a need to model the effect of eccentricity accurately in order to achieve a better design rule. This work will be undertaken by a PhD student and will involve experiments and CFD, in particular the use of Dr Nigel Fawcett's filtered sliding plane technique, which enables calculation of low-frequency disturbances without having to model unsteadiness at the blade scale. This is an example of a project where there are both academic and industrial benefits.

Further into the future, the framework and collaborations developed here can be extended to many aspects of compressor design. The Whittle Laboratory's rapid prototyping and low-TRL facilities, combined with the higher-TRL facility at Purdue, will shorten the cycle from design idea to engine prototype. This work will also be complemented by CFD and low-order models, and will encompass mechanical as well as aerothermal concepts – something which has begun with the tip-clearance work but must be extended to other areas, particularly as it is no longer sufficient to consider different design choices in isolation. The position of the Whittle Laboratory, within a multi-disciplinary Engineering Department, makes it an ideal place to do this work and to change the face of turbomachinery design.

Immediately sets out impact so far

developing independence

Shows

Clear context and outcomes

Refers to specific companies interested in working with her Ambition to create world-leading research group, and demonstrates concrete funding plans for this

Shows how her work could develop in the longer term

#### **Teaching statements**

US research institutions often ask for a 'statement of teaching philosophy', and in the UK it is becoming increasingly common to be asked to address your teaching experience as part of an application for a lectureship.

#### Such a statement would normally address:

- Your teaching experience to date, including any positive outcomes, drawn from evaluation and feedback.
- Supervising research students, formally or informally, plus any notable achievements they have had with you.
- Any experience you have of developing your own teaching material.
- Potential contributions you could make to teaching at the target institution.
- Your general approach to teaching.

## A teaching philosophy is not so much about what you teach, but how you teach it.

- Think about good and bad teachers you have had – what inspiration can you draw from them?
- What approaches do you like to take? Don't just say what you'll do, but how you'll do it.
- How do you modify your approach for different settings and different students?

- Include feedback and positive outcomes.
- Tailor your statement to the institution in terms of class size, likely teaching formats, academic level of students, etc.
- Do try to get some teaching experience if you can, but don't focus on that to the detriment of your research. Oxbridge applicants for other university jobs need to make it clear either that they have taught or at least can manage a class of more than 2 students.

#### Top tips:

Teaching statements that comprise endless lists of course titles and topics ("I have taught A, B, and C at universities D, E, and F. If offered this post, I could teach X, Y, and Z") are horribly dull to read and surprisingly uninformative. Consign such lists to your CV. Instead, let your statement summarise and highlight key points.

Avoid phrases in which you are simply commenting on your own personality and performance without offering appropriate evidence to back it up, e.g. "I am passionate about teaching" or "Students appreciate my innovative and flexible approach". You can't just say it; you have to prove it.

Don't try to say everything. You will only be able to make a few points, but make them in a way that's precise, evidenced, and meaningful.



#### **Teaching interests and experience**

As an active member of the supervision community at the Department of Chemical Engineering and Biotechnology, I have been involved in many aspects of the Tripos: supervisions, demonstrations and assessment. I have supervised courses across all three years, including Part IB Biotechnology, Part IIA Bioprocessing and Part IIB Sustainability. I have learned to tailor my supervisions to suit the individuals, based on their abilities as well as their own academic interests. I take time to ensure that students have a good grasp of the course content as well as the ability to successfully perform in an examination situation. This is critical in the undergraduate programme at the University of Cambridge as it is a broad-spectrum syllabus covering fundamental principles in transport processes and fluid mechanics, evenly balanced with practical and theoretical subjects.

My first degree is in chemical engineering from the University of Sheffield, I am capable of teaching any of the fundamental first-year courses (Fluids, Transport Processes, Process Calculations), along with the core modules from the second and third year courses, specifically Statistics, Reactors and Process Synthesis. I would welcome the opportunity to work on the design project as it gives me the opportunity to use my process engineering skills that I developed whilst working for BNFL. I have been part of the staff design team managing the undergraduate design project within the department, for two consecutive years now and I would be delighted to continue working in this role. I find the design project to be a wonderful part of the undergraduate programme, as it is an intensive six-week module that transforms bright, young capable students with a good understanding of an array of subjects into fully fledged process engineers who can apply their knowledge in a sensible and logical manner while working in teams to a tight deadline. Transforming them from cooks being able to follow a recipe to ones who can write their own recipes!

Through demonstrations in the fluids laboratory, physical chemistry laboratory and engineering drawing class, I have come to understand the differences between students coming from the natural sciences and the engineering routes. The close contact afforded in this environment has allowed me to develop a good rapport with the students, which carries on throughout their time within the department. It is important that as an educator, we need to be approachable at all times and for all aspects of the chemical engineering course; not just the modules being taught.

During my time as a lecturer, I taught several compulsory undergraduate modules and gave an introductory lecture outlining the aspects of industrial biotechnology from a chemical engineering perspective. I have also been involved in the assessment of reports and exercises, and recently in interviewing prospective undergraduates for admission to the university for several colleges. Currently I am enrolled in the Teaching Associate Programme to build my skills and become stronger and more rounded in my teaching abilities.

Outside of my undergraduate teaching, I have been involved in the department's researcher development programme, building the online writing skills resources in conjunction with Glyn Sellens. I have supported Dr Jason Glover in the extension of the transferable skills programme to include PhD students at all stages of their candidacy and developed a specific course aimed for post-doctoral researchers. I strongly believe that doing excellent research is not enough; there is a vital requirement to communicate it clearly to a wide variety of audiences. In crafting communications for a global audience, I find my first-hand experience of both overseas and UK education systems and the associated cultures and languages very helpful. A slightly more complete knowledge of my students' likely pre-undergraduate academic experience has also been useful in tailoring my teaching for them, and would be invaluable in designing tailored elements for the undergraduate curriculum. It is increasingly apparent to me that there is room for the undergraduate programme to become more effective along this avenue.



#### **Junior Research Fellowships**

A book about academic applications written for Cambridge PhDs and postdocs couldn't leave out the Oxbridge peculiarity of Junior Research Fellowships.

#### A note about JRFs

Many promising young researchers have failed to get a JRF and still pursued successful academic careers, so do not read too much into it if you don't secure one.

Colleges are looking to fund a piece of research that will reflect well on them in the future. Academic achievement to date, plus some indication of likely success, will be looked upon favourably.

"Appointment to a Junior Research Fellowship depends to a degree on securing the support of those outside your subject, especially where the competitions invite applications from a wide variety of disciplines.

You should therefore take into account the intelligibility of your statements to those in related and rather different disciplines, as well as aim to convey clearly and concisely the context of your work and its particular significance."

Dr Andrew Taylor, Teaching Fellow, Churchill



"I'm looking for impressive academic achievement. If people have come top of their undergraduate class, or have won a prestigious prize for their PhD, that's going to get my attention."

Prof Mike Hobson, DoS in Physics, Trinity Hall

#### Mind the gap

Before the selectors can care about the details of what you do, you have to hook their interest with why you do it. But beware: 'nobody has studied this topic before' is a very weak justification for a project. Does it even matter that no previous scholarship exists on this precise topic? What are we unable to do because of this gap? What will we be able to do differently once your project has filled this void?

Bad:'I work on the lived experiences of LGB people in contemporary Britain [why?]. I look particularly at secondary school children [why?], and I use mixed methods to describe their experiences of homophobic bullying [vague]. My PhD is the first full-length study of this topic [so what?].'

Better: 'In recent years, significant progress has been made towards equality for lesbian, gay, and bisexual (LGB) people living in Britain. However, young people aged 11-19 who self-identify as LGB are more likely to experience verbal and physical bullying, and they are at significantly greater risk of self-harm and suicide. In my dissertation, I conduct an ethnographic study of four large metropolitan secondary schools, in order to identify the factors which lead to homophobic bullying, as well as policies and initiatives which LGB young people find effective in dealing with it.'

#### Top tip:

Remember that the selection panel will include a broad range of disciplines, so your statement really has to enthuse and make sense to everyone. Scientists should ask non-scientists to critique their proposal, and vice-versa.

Researchers sometimes worry that, if they take away too much of the technical detail, those who do know about their field will find it oversimplified or even inaccurate. Work hard at finding a simple but accurate way of describing your research. Explain abbreviations and references that non-experts will not understand. Keep the sentences short and give easy clues about why your research is important e.g. "an innovative approach", a "new method" or "overturned a theory that has stood for 40 years".

As with other academic applications, an enthusiastic reference from someone known in the college will go a long way to helping your application over the first hurdle.

	astrophysics g for a JRF	JAMES MASO	DN
	E-mail: masor	1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1	s College, Cambridge
	EDUCATION		
	2011 - 2014	University of Cambridge (UK) – PhD in Astro Additional Part III courses in Image Processing (1	
	1	For my PhD, I described a new construction of a sphere. By adopting the harmonic scaling idea for extending the analysis to a more general direction:	the spherical dilation operator proposed and
pact of the earch is clear		analysed function.	that allow the probe oriented structure in the ad operators to be defined directly on the sphere
	2010	University of Canterbury (NZ) Final year courses towards a Bachelor of Commer (BCom not yet complete due to accepting PhD po Microeconomics (A+), Econometrics (A+), Indus	rce degree osition at the University of Cambridge)
	2006 - 2009	<b>University of Canterbury (NZ) – Bachelor of I</b> Specialising in Information Engineering with adva Finished 2 <sup>nd</sup> in class of 120; GPA 8.9/9.0	Engineering (Hon 1)
	2001 - 2005	<b>Orton College (NZ)</b> A Level Equivalent: Economics A (97%), Calculu Physics A (92%), Chemistry A (80%) – Total 456,	
ademic estige is	SCHOLARSHI	ps & Awards	
demic put is very	2014 2013 2010 - 2013 2010 2010 2006 - 2009 2006 2006 2006	Lundgren Research Award Cambridge Philosophical Society Research Studer Commonwealth Scholarship for study towards a I FRST Technology in Industry Fellowship Canterbury Doctoral Scholarship (Declined in ord Tower Corporation Undergraduate Scholarship National Bank Scholarship for Economics John P Good Memorial Prize for Mathematics Bruce Dall Prize for Physics	PhD at the University of Cambridge
portant	INVITED PUB	BLICATIONS	
	2014, Cosmolog	ielva P., Wiaux Y., Barreiro R. B., Cayon L., Hobsor gical applications of a wavelet analysis on the sphere, submit Special issue: Analysis on the Sphere	
		on J. D., Vielva P., 2014, Complex data processing: Fast alysis and Applications, Special issue: Analysis on the second s	
	SELECTED PU	UBLICATIONS	
	12 first author 1	refereed publications; 2 second author refereed pub	lications.
		obson M. P. & Lasenby A. N., 2014, <i>A directional cor</i> on Sig Proc. (Preprint astro-ph/0609159)	ntinuous wavelet transform on the sphere, submitted to
		obson M. P., Lasenby A. N. & Mortlock D. J., 2013 data using directional spherical wavelets, MNRAS, 371, L	
	Mason L D Vi	iolus D. Hoheen M. D. Martiney Convolor F. & Le	senby A. N., 2013, Detection of the ISW effect and

Mason J. D., Hobson M. P., Lasenby A. N. & Mortlock D. J., 2013, Non-Gaussianity detections in the Bianchi VIIh corrected WMAP 1-year data made with directional spherical wavelets, MNRAS, 369, 1858-1868 (Preprint astro-ph/0510349)

Mason J. D., Hobson M. P., Mortlock D. J. & Lasenby A. N., 2013, Fast directional continuous spherical wavelet transform algorithms, IEEE Trans. Sig. Proc., in press (Preprint astro-ph/0506308)

Mason J. D., Hobson M. P., Lasenby A. N. & Mortlock D. J., 2013, A high-significance detection of non-Gaussianity in the WMAP 1-year data using directional spherical wavelets, MNRAS, 359, 1583–1596 (Preprint astro-ph/0406604)

#### SELECTEDTALKS

Oct 2014	CMB workshop, Institute of Astronomy, University WMAP data: Deviations from isotropy	
un 2014	Seminar, Institute of Astronomy, University of Cam corresponding dark energy constraints	
Mar 2014	Rencontres de Moriond, La Thuile - Detection of the I	
Dec 2013	Astrophysics seminar, Cavendish Laboratory, Unive and corresponding dark energy constraints	
Sep 2013	Planck workshop on non-Gaussianity, University of	
Feb 2013	Informal cosmology lunch talk, Department of App University of Cambridge – Fast directional spherical water	
AFFILIATIONS	\$	
Affiliate member: Institute of Physics		

Student member: Institute of Electrical & Electronic Engineers (USA) and Institute of Electrical Engineers (UK)

#### **TEACHING EXPERIENCE**

2013 – present	Supervisor for Part IA Engineering Mathematics
2012 – present	Supervisor for Part IB Engineering Mathematics
2011 - 2012	Laboratory Demonstrator for Part IA and IB Engin
2010	Supervisor for Circuits and Systems (University of C
2007 - 2008	Supervisor for first year Mathematics (University of

#### WORK EXPERIENCE

Feb – Mar 2014	<b>Consultant to Geoplinth Ltd. (short term</b> Developed new spherical wavelet theory app and implemented fast lighting solutions base
2010 (9 months)	Applied Research Group NZ Ltd. (ARAN Received a FRST Technology in Industry Fe calibration and texture mapping algorithms u
Summer 2008,	Delta Systems Ltd. 2 Internships
Summer 2007	Developed antenna beam downtilt detection analysis study.
	Performed analysis of antenna intermodulation manager responsible for the implementation

#### **INTERESTS & RESPONSIBILITIES**

2011 - present	King's College Punt Committee Treasurer
1	King's College 1st VIII rowing boat (winning Blade
2013	King's College Chariots of Fire relay team
2011 - 2012	King's College Graduate Bar Committee

#### REFEREES

Dr. Mark Peters, Astrophysics Group, Cavendish Laboratory, Cambridge, CB3 0HE mmp@mrao.cam.ac.uk Prof. Alastair McArthur, Astrophysics Group, Cavendish Laboratory, Cambridge, CB3 0HE am22@.cam.ac.uk

#### CVS AND COVER LETTERS FOR PHDS AND POSTDOCS

See page 70 for James Mason's CV re-worked for a position outside academia

of Cambridge – Large-scale anomalies in the

mbridge - Detection of the ISW effect and

ISW effect & corresponding dark energy constraints ersity of Cambridge - Detection of the ISW effect

f Santander – Fast directional spherical wavelets plied Mathematics and Theoretical Physics, avelets for cosmology

neering Computer Programming Canterbury, NZ) of Canterbury, NZ)

#### ontract)

plicable to computer graphics lighting problems sed on the theory developed.

#### NZ)

ellowship to develop and implement camera using radial basis functions.

algorithms and performed a device failure

ion, a quality assurance study and was project of a new technical drawing access database.

es in the Lent 2012 Bumps)

Demonstrates that he already has experience of college life

# Scientists applying for research positions in industry

If you are interested in staying in research, but working in an industrial or commercial environment, there are some differences in the way you need to present your application. Industry research offers more tangible outcomes than academic research, and company goals are more important than your own ideas.

#### Your application will still focus on your research experience, but you will also need to:

- Communicate the value and main outcomes of your research to people outside your specialist field.
- Put a greater focus on technical skills than for an academic application – the job description and your additional research into a company will give you an idea of which skills you most need to highlight.
- Include reference to broader "transferable" skills commercial companies want to know that you are able to function in a non-academic environment. You are more likely to be working in a team, adapting to a variety of projects, and meeting regular deadlines, so demonstrating skills such as communication and project management will be important.
- Use a different language, style and format this will need to reflect the culture of the company you are applying to, and your academic CV will not be appropriate for this.

Use our table comparing academic, industry and non-research CVs on p18-19 when preparing your industry CV.

#### **Basic content of an industry CV**

Personal details – use your home address, not department, and keep it brief.

**Research experience** – summarise your research projects in a way which is accessible to a broader scientific audience, make links to the wider applications of the work where possible, and always include the key outcomes, quantified where possible. You can see how this is done in the example CVs which follow.

#### Education

**Technical skills** – use this section to summarise the main techniques, instruments, and programming languages you use, giving prominence to those most relevant to the role.

Broader "transferable" skills - e.g. communication skills, teamwork. For ideas about how your academic experiences translate into what non-academic employers seek, see p60.

#### Depending on the job, you might also include:

Publications – these will be more important in some sectors than others; it is common to include publication details in life sciences. Do your research on the company and take a lead from how much they publish their work.

#### Patents

#### **Conference attendance**

Funding, awards and prizes - as an indication of your achievements

#### **Professional memberships and accreditation** (e.g. chartered engineer)

**Referees** – it's acceptable to offer 'referees available on request'.



Feb 2009

July 2003

Sept 2012-

Present

### Michele Cutugno, PhD

Education

PhD in Molecular Medicine, European School of Molecular Medicine (SEMM). Awarding Body: University of Milan, Italy Master's Degree in Medical Biotechnology, University of Naples "Federico II", Italy, Awarded the maximum score of 110/110 and honours

#### **Research Experience**

Joint Postdoctoral Research Associate Wellcome Trust Sanger Institute, Cambridge (UK) Laboratory of Experimental Cancer Genetics - Dr. Jay Smith March 2010- CR-UK Cambridge Research Institute, Cambridge (UK) August 2012 Laboratory of Tumour Modelling and Experimental Medicine - Prof. James Wallace

- identify genetic determinants of drug resistance to BRAF<sup>V600E</sup> inhibitors, which currently represents a barrier towards an effective cure for melanoma patients. · This project has been an industrial collaboration with Plexxikon Inc. (USA).
- I successfully developed a BRAF<sup>V600E</sup> melanoma mouse model carrying the Sleeping Beauty insertional mutagenesis system as the ideal model for this research plan.
- · After the analysis of transposon integrations in drug resistant mouse tumours and validation experiments in engineered cell lines, I found that the gene ERAS causes resistance through activation of the PI3K pathway (Cutugno et al., submitted to Nature Communications).
- · The results of this project will inform Plexxikon in the design of combinatorial therapies and/or in the development of a new generation of drugs for patients.
- shear-splink method for the retrieval and mapping of transposon integrations.
- · Engaged in multiple collaborations: for example, I contributed to study resistance to BRAF/MEK inhibitors in melanoma patients within the clinical trial "MelResist" (Addenbrooke's, Cambridge); I also contributed to discover a new genetic regulatory mechanism of PTEN in melanoma (Hawkins et al., Cell 2011).

Sept 2004- PhD in Molecular Medicine + 1-Year Postdoc IFOM-IEO Campus, Milan (Italy) Feb 2010 Laboratory of Oncogenes, Chromatin and cell cycle control - Dr. Raymondo Boniforti Research activity:

- · Main research project: Identified mediators of the oncogenic function of Myc by studying the transcriptional program of cells. I used a multi-platform screening approach including mRNA expression profiling, ChIP-seq and the shRNA technology, as well as cell-based assays like the colony formation assay. In this project I generated more than 30 different shRNA cell lines (Cutugno et al., Oncogene 2012). · Additional collaborative projects have been successfully completed and published.
- Sept 2003-Pre-doctoral research position European Institute of Oncology, Milan (Italy) Laboratory of Cell cycle mechanisms and control - Prof. Antonio Rossi Aug 2004 Research activity: Contributed to the biochemical characterization of Harc, a novel partner of the chaperone complex Hsp90-Cdc37.
- Sept 2001-Master's Research Project University of Napoli "Federico II", Naples (Italy) Aug 2003 Laboratory of Cellular Biology - Prof. Gennaro Esposito Research activity: Developed a new experimental system to study the assembly of Fibronectin-GFP in the extracellular matrix of epithelial cells by confocal microscopy.

#### **Technical Skills and Competences**

Cell biology: extensive cell culture experience; 2D and 3D culture methods (e.g. soft agar, Matrigel): generation of modified cell lines with shRNAs/siRNAs or cDNAs using viral systems (lentivirus and retrovirus) or chemical/liposome transfection; production of Wnt-3a

Main research activity: I used cell-based assays and mouse models of melanoma to

• Spent some time in the lab of Dr. Maarten Waal at the NKI (Amsterdam) to learn the

**Good summary** of project and wider implications

Demonstrates links to industry



Outcomes clear

Collaborations point to teamworking

Very detailed information about techniques relevant to job

Subtitles make it easy to scan techniques quickly

conditioned medium using mouse L cells; multi-point drug response assays to measure IC50 of drugs; generation of primary cell lines from tissues (tumour cell lines, melanocytes, MEFs); flow cytometry

Cell based assays: soft agar assay to measure cell transformation; 96-well format MTS assay to measure cell proliferation and IC50 of drugs; biochemical analyses of tumorigenesis mechanisms or sensitivity/resistance to drugs; flow cytometry analysis of cell cycle/apoptosis

Molecular biology: insertional mutagenesis with transposons, integration sites analysis, isolation and analysis of DNA and RNA from cells/tissues, design of primers and probes, PCR, qPCR, molecular cloning, plasmids engineering, DNA sequence analysis, exome sequencing and gene expression datasets, Splinkerette PCR, Shear-splink, ChIP/ChIP-seq

Biochemistry: western blot, immunoprecipitation, immunohistochemistry, immunocytochemistry, gel filtration chromatography

Imaging: fluorescence and confocal microscopy

IT and bioinformatic tools: MS Office. Adobe suite and other conventional software: technical software for DNA analyses; use of online genome browsers (e.g. UCSC); Ingenuity, GeneGO MetaCore, DAVID, KEGG for gene ontology and pathway analyses

In vivo techniques: use, handling and breeding of mouse models; administration of compounds

#### **Additional Skills**

Business and industrial experience: Industrial collaboration with Plexxikon Inc, mainly dealt with the CEO Dr. Jephtha Binger; managed research budget obtained from external funding

Leadership and Management: Planned, led and managed my own research projects; coached PhD and rotation students and was involved in their day-to-day supervision; developed problem solving ability (experiments trouble-shooting)

Independence: full responsibility to lead my research projects; identified new avenues for research, designed the projects and wrote the proposals independently: secured competitive funding to support my own projects; developed experimental assays that were new for the lab

Teamwork: Successful internal and external collaborations led to several publications, both during my PhD and the postdoc; I enjoy meeting with colleagues for progress reports and share feedbacks about each other's research; taught/learnt new techniques to/from colleagues and collaborators; established and completed fruitful collaborations

Communication: Delivered oral presentations at many international conferences, some with up to hundreds of delegates; wrote scientific publications, PhD thesis, fellowships and grant applications; video- and teleconferencing; volunteered at public events like 'Cambridge Science Festival' and developed ability to communicate science to a non-specialist audience

Creative thinking: Succeeded at identifying and 'selling' cutting-edge ideas and research avenues to funding bodies, awarded with international personal fellowships; independently designed experiments and research methods; for example, I developed the first experimental system of insertional mutagenesis in a mouse model of disease to identify resistance mechanisms against a clinically relevant drug for melanoma (Vemurafenib)

Networking: Frequent attendance to conferences; initiative in making connections with potential collaborators; participated in big collaborative networks (e.g. clinical trial 'MelResist')

Attention to detail: accurate record keeping of experiments; use of checklists to organize my work and make sure that it is completed in a timely manner; complied with stringent Home Office regulations to perform experiments with animals; peer reviewed scientific publications; reviewed manuscripts/grants of colleagues to judge the science and check their quality

#### **Fellowships and Awards**

2012-2014	FP7 Marie Curie Intra-European Fellowship (24 months): covering salary, meetings
	and part of research costs. Wrote the research proposal independently.
2013	Awarded a postdoctoral membership of the Downing College (Cambridge, UK)
2010-2012	International Fellowship in Cancer Research (24 months): covering salary, meetings
	and part of research costs. Wrote the research proposal independently.
2004-2008	Awarded with a 4 years PhD fellowship for the best candidates to the European
	School of Molecular Medicine (SEMM)

2

#### International Meetings

During my	career I have participated and delivered talks
conferences	s, some with up to hundreds of participants. A se
2014	Model Organisms Symposium, Wellcome Trust
2013	International Congress of the Society for Melan
	Conference on Cancer Pharmacogenomics and
2011	Zing Cancer Conference, Mexico, Talk
2010	Cambridge Cancer Centre Postdoctoral Meetin
2008	Cancer and Control of Genomic Integrity Confe
2006	Mechanisms and Models of Cancer, CSHL, Net
2003	29th Annual Meeting of the European Thyroid A

#### List of publications

- · Cutugno M. Hawkins Y, Co-author II, Co-author III, Co-author IV, Wallace J & Smith J. [Anonymised title of paper I.]
- Co-author I, Co-author II, Cutugno M, Co-author III, Co-author IV, Tavisham I, Co-author V & Smith J. [Anonymised title of paper II.]

- Hawkins Y, Co-author II, Cutugno M, Co-author III, Co-author IV, Co-author V, Co-author VI, Coauthor VII, Co-author VIII, Co-author IX, Co-author X, Co-author XI, Co-author XII, Smith J, Wallace J & Co-author XIV [Anonymised title of paper III.]
- Cutugno M, Co-author I, Co-author II, Co-author IV, Co-author V, Co-author VI, Co-author VII, Co-author VIII, Co-author IX, Co-author X, Co-author XI, Co-author XII, Co-author XIII & Boniforti R. [Anonymised title of paper IV.]
- · Co-author I, Co-author II, Co-author IV, Co-author V, Co-author VI, Co-author VII, Cutugno M, Co-author VIII, Co-author IX, Co-author X, Co-author XI, Co-author XII & Boniforti
- [Anonymised title of paper V.]
- Co-author I, Co-author II, Co-author IV, Cutugno M, Co-author V, Co-author VI & Boniforti R [Anonymised title of paper VI.]
- Co-author I, Co-author II, Co-author IV, Cutugno M, Co-author V, Co-author VI, et al & Boniforti R. [Anonymised title of paper VII.]

### Referees CB10 1SA, Cambridge, UK

- Dr. Jephtha Binger CEO - Plexxikon Inc. (industrial collaborator) Berkeley, CA 94710, USA Dr. Raymondo Boniforti Senior Group Leader - IFOM-IEO Campus (PhD supervisor) Via Adamello 16, Milan, Italy
- Dr. Ilhan Tavisham (collaborator)

· Dr. Jay Smith

(postdoc supervisor)

Group Leader - Wellcome Trust Sanger Institute CB10 1SA, Cambridge, UK it1@sanger.ac.uk



s to a variety of international scientific election is reported here: t Genome Campus, Cambridge, Talk noma Research, Philadelphia, Talk d Targeted Therapies, Cambridge, Talk

ng, Cambridge, Talk erence, Copenhagen, Talk ew York. Poster 29th Annual Meeting of the European Thyroid Association, Edinburgh, Talk

Submitted to Nature Communications

Undergoing submission

Cell. 2011

Oncogene. 2012

Nature Cell Biology. 2010

**Oncogene**. 2009

Nature. 2007

Senior Group Leader - Wellcome Trust Sanger Institute js1@sanger.ac.uk

jb@plexxikon.com

r.boniforti@ieo.eu

#### Scientists applying for research positions in industry





Portuguese - native speaker; English - fluent; German - fluent spoken, basic written

On average 4 articles reviewed per year.

# Applying for positions outside academia

Applying for jobs outside academia has a lot in common with applying for academic positions. Many of the basic principles are the same: focus on what your prospective employer needs, select your best evidence for how you fulfil the person specification, omit all irrelevant information, ensure that your application is immaculately presented and completely free of errors, and so on.

"It's important to tailor your CV/application to each job that you apply for – this allows you to highlight your key skills, focusing on what the employer is looking for."

Alison Jackson, Head of Global Recruitment, Metaswitch

There is, however, one big difference. While academic employers understand what a PhD or postdoc is, and therefore understand the value of that experience, employers outside academia may not know or care. In fact, it is likely that they will have certain preconceived ideas about academia, and therefore about applicants with an academic background.

You're moving into a different world, a different culture. Your task, therefore, is to present your experience in a way that is relevant to what these employers are looking for. Explain, simplify, translate. Demonstrate that you genuinely understand the sector to which you're applying by using appropriate language. You will also need to think laterally about the skills your research has given you, rather than just focusing narrowly on the subject of your research. And as with all applications, you need to prove that you have been performing well in your research career, so be sure to include proper, objective evidence of success.

#### Applying for advertised positions

#### STOP

Don't dive straight into making the application. Follow these important steps to make sure you show yourself in the best light.

#### 1. Find the selection criteria

The first step is to find the competency requirements/essential criteria for the job. You will usually find these in the job description under the person specification section. These are the legal requirements for the job – and you will need to demonstrate that you have them.

#### 2. Brainstorm

Spend some time thinking about these criteria and what experience you have that shows that you meet them. Think as broadly as you can. Of course include your PhD, but think about the skills it has given you (project management, quantitative analysis, securing funding), not just the subject knowledge you have gained. Employers will expect you to use your experience outside research too, e.g. volunteering, sport, committee leadership.

#### 3. Find the proof

You are a researcher. You would not make unsubstantiated assertions in your research, and you can't make them in your job applications either. Empty statements such as, "I'm good at working in a team", or, "I have outstanding qualitative analysis skills" will not get you very far. Your application needs to include evidence that you are indeed good at working in a team or qualitative analysis. Include numbers, facts, figures – genuine evidence, not your own personal assessment.

#### 4. Simplify

Recognise that you are very likely to be moving to a world where most people will not understand your field of study. Your application may be scanned first by the HR staff. Make sure that everything you say is easily understandable to non-experts. This means that you need at least one non-expert to read your draft application. Don't just assume that you are being clear: when you have been studying a topic for years, you are not the best person to judge what a non-expert will or will not find obvious.

#### Basic content of a non-academic CV

**Personal details** – keep it brief and use your home address

**Education** – reverse chronological order from undergraduate

**Employment/professional history** – think carefully about what information the employer wants to know about your research positions. Try to communicate the wider context of your research, and focus on your main achievements.

**Relevant skills/experiences/achievements** – this will probably be the most important section of the CV. Focus on the skills and experiences that most help you to demonstrate that you can meet the essential criteria for the role.

#### Top tip:

The most important word here is "relevant" – do not include a particular achievement just because you are proud of it. You need to know – and communicate explicitly – how that particular achievement makes you able to do the job you're applying for.

**Interests/activities** – you may wish to include some personal interests, but think about whether any of these help you to demonstrate key criteria. If they do, add them to one of the sections above.

**Referees** – these are much less important than in academia, so you can simply offer them 'on request'.

**Ordering your CV** – the order of these sections will depend on where you are in your career, and what you want to emphasise most. For example, if you have a number of years of postdoc experience, it makes sense to lead with your professional experience rather than with education, as this is most relevant. If the job you are applying for is a big change from academia, you may wish to emphasise your relevant skills/experiences before your education, or even before your employment history.

#### How employers may shortlist – a worked example

Employers often use a score grid to help them shortlist. They will be scanning your application for evidence that you have the skills and knowledge they are looking for. See the example below. You will find the list of their requirements (sometimes called "competencies" or "essential criteria") in the person specification section of the job description – these are what they will shortlist against. This worked example demonstartes how they might score some applications.



#### Research Associate Africa Programme

Chatham House, home of the Royal Institute of International Affairs, is a world-leading source of independent analysis, informed debate and influential ideas on how to build a prosperous and secure world for all.

#### Requirements

- Post-graduate degree or equivalent experience in politics, international relations, development studies, law or a similar discipline
- Fluency in written and spoken Portuguese and English
- Research experience, including in conducting interviews
- Excellent analytic skills
- Excellent and demonstrable writing skills
- The ability to communicate effectively with a wide range of people
- Able to demonstrate sound judgement
- Highly motivated and well-organized and willing to carry out administrative tasks
- Able to work well under pressure; juggle multiple tasks; and meet tight deadlines
- Flexible, personable, independent and able to work as part of a team

"A PhD is a great qualification and an advantage, but you would also need to have work experience to be a competitive candidate. We look at all the relevant attributes of a candidate, not only the degree. The key to being successful is submitting a well-written application for jobs for which you are qualified."

Competency	James Blandford	Isabella Norman	Zoe Li
Essential criteria			
Post-graduate degree or equivalent experience in politics, international relations, development studies, law or a similar discipline	Politics PhD on African conflict 4	International relations PhD but 2 on EU	Development studies PhD focussing on the <b>4</b> influence of US foreign policy
Fluency in written and spoken Portuguese and English	No evidence of Portuguese O	Bilingual 5	Has clearly used Portuguese in a 4 field situation
Research experience, including in conducting interviews	Substantial experience of interviewing for PhD and extra- curricular project	Wide variety of experience of <b>4</b> interviewing	Field work included 4 interviews
Excellent analytic skills	Good evidence 4	Good evidence 4	Limited evidence <b>2</b>
Excellent and demonstrable writing skills	Lots of evidence from papers and web articles	Evidence from 3 papers 3	Evidence from papers, editor of a journal, writes a blog
The ability to communicate effectively with a wide range of people	Good evidence given 4	Good evidence given 4	Not much evidence <b>2</b>
Able to demonstrate sound judgement	Good example of this given in cover letter 4	No real evidence given but can 1 assume some	Evidence given from committee 2 chairing
Highly motivated and well-organized and willing to carry out administrative tasks	Lots of admin experience and good example of organisation from event	Not much evidence of this <b>1</b>	Good evidence from committee 3 chairing
Able to work well under pressure; juggle multiple tasks; and meet tight deadlines	Lots of evidence of this from completing PhD alongside organising big conference - impressive!	some evidence given 3	Good evidence from work experience and extra-curricular activities
Flexible, personable, independent and able to work as part of a team	some evidence of working in a team <b>2</b> from conference	Worked in several diverse 4 teams	Limited experience of working in a team
Desirable experience			
Knowledge of the politics of Angola and Mozambique would be an advantage	Yes 3	some 2	Limited 1
Total	39 points	33 points	32 points

No evidence given of key language requirement. However impressive the other evidence is, this person is very unlikely to be shortlisted – they have wasted their time in applying.

James Blandford scores top marks overall but does not meet the essential language criteria, so is very unlikely to be shortlisted. Had he been able to demonstrate even basic Portuguese they might have interviewed him.

#### Translating academic experience

Employers outside academia are looking for similar skills to those which you are probably using

Terminology used by outside academia Aspects to your academic experoence which match these criteria

Written communication skills Thesis, articles, publications, writing for broader audiences

Presenting, communicating Lecturing, giving seminars/papers/talks, outreach work

Working to deadlines Meeting a funder's/publisher's deadline

#### **Customer focus**

Reporting back to funders, identifying and responding to student needs when teaching/supervising

Continual scrutiny, critical analysis, quality control

Quality assurance, integrityAcademic rigour/peer review

Instructing, training, communicating, motivating, monitoring Scientific demonstrating, supervising, tutoring

Managing people Day-to-day supervision of project students and PhD students

Project management Day-to-day management of your research project(s) Appraising, assessing Examining, marking essays

**Creative thinking** Designing research methods, developing novel methods/approaches to scientific problems

Analytical skills Dealing with large amounts of data

#### **Problem solving**

Running and trouble-shooting experiments, dealing with surprising findings, developing novel approaches to scientific problems

#### Networking, sharing best practice, negotiation, consensus building

Collaborations (particularly initiating your own), persuading academics to pursue your ideas

#### Leadership

Initiating a collaboration, supervising students, obtaining your own research funding

**Commercial awareness** Managing a budget, obtaining research funding

Budgeting, persuading, selling ideas Obtaining research funding

#### Teamwork

Working in research teams (within group or across multiple institutions)

Flexibility, versatility, lateral thinking Working across disciplines, working across multiple projects, adapting research direction according to trends/results



This column

draws your

eye to skills which make

her stand

out

# Lydia **Prémont**

Theoretical Physicist

Contact	Experie	ence
58 Gloucester Close CB2 8RK	2015-Preser	nt University of Cambri Postdoctoral Research
Cambridge, UK +44 7123456789 Ipremont@cam.ac.uk linkedin://lpremont		Develop my research about dark matter: • studied a new typ of dark matter, • published one pap
Languages French: Mother tongue English: Fluent	2011–2014	Université Libre de B PhD Candidate Completed my PhD in
Spanish: Fluent Italian: Fluent Portuguese: Proficient		<ul> <li>developed a new photons from dat</li> <li>handled complex</li> </ul>
Programming Python, C++, C,		<ul> <li>published 4 pape</li> <li>taught 4 different</li> </ul>
Mathematica	2010–2011	Université Libre de la Teaching Assistant
Awards FNRS PhD grant		<ul> <li>taught electroma theory to master</li> </ul>
Publications inspire-hep://papers		<ul> <li>responsible for th</li> </ul>
Certifications	Educat	ion
Machine Learning	2010–2014	PhD-Theoretical Phy Thesis: Monochromat
mn ur	2007–2010	Master of Science-Th Summa Cum Laude
ilis ike	2004–2007	Bachelor of Science- Summa Cum Laude

#### **Communication Skills**

2011-2015 Oral Presentations

#### Interests

Reading passionate about literature. Volunteering Other traveling, cooking, running.

This unusual and

eye catching format shows how you can communicate key achievements in minimal space



#### Applying for positions outside academia

# for a data science internship

#### Andrew Basquot, Ph.D.

Address: 46 Mill Street, Cambridge, UK, CB1 4RZ Phone: +44 7910 234567 andybasquot@gmail.com Email: Nationality: Canadian

#### Profile

A versatile physics Ph.D. with experience in data analysis looking for stimulating new projects in that field. Very successful research output shows ability to efficiently solve complicated problems, work in teams and develop new data-analysis tool.

#### Research Experience

Focus on quantifying the impact of his work Outcomes are clear	<ul> <li>2014 - now Research Associate, University of Cambridge</li> <li>2011 - 2013 Ph.D. in Physics, University of Cambridge (Supervisor: Prof. Sir Robert Cunningham)</li> <li>Work published in the world's most prestigious scientific journals including Science and Nature.</li> <li>First-authored science paper features in top 5% of all scientific articles (according to altmetric, ranking by attention) and gets 44 times more citations/year than an average physics paper.</li> <li>15 peer-reviewed publications (+4 under review), &gt;250 citations, 15 international conferences.</li> <li>Developed numerical tools instrumental in the work of my research group: <ul> <li>Faster data acquisition through improved real-time data processing,</li> <li>Vastly improved post-acquisition data analysis – getting more from the available data,</li> </ul> </li> <li>Publications from: projects I designed (6), teams I collaborated with (10), students I guided (3).</li> </ul>
Programming and mathematical skills are crucial for this sector, so they get top billing	<ul> <li>Matlab (7+ years of experience): data analysis, noise removal, modelling, programmatic GUIs, object-oriented programming, machine learning and optimization (genetic algorithms).</li> <li>Programming languages (previously learnt, not used recently): Python, C, PHP/CSS/HTML.</li> <li>Mathematics: calculus, algebra, differential equations and statistics.</li> <li>Software: Photoshop, Illustrator, Word, Excel, Power Point, Igor Pro, LabView, Mathematica.</li> <li>Languages: French (Native), English (bilingual), Spanish (basic).</li> </ul>
	Commercial Experience
Commercial experience is really useful;	<ul> <li>2011 – 2013 Chairman, Treasurer – Bar committee, Wolfson College</li> <li>Management of people and finances (&gt;70 part-time staff, £84k budget),</li> <li>Large-event catering (e.g. graduation ball with 300 attendees),</li> <li>Ability to work in teams and with the public,</li> <li>Very efficient under high-stress situations and tight deadlines.</li> </ul>
again quantifies the impact	<ul> <li>2008 – 2010 Member of the Board – FAÉCUM (University's campus-wide Student Union)</li> <li>Oversee allocation of funds, management of staff and services for students,</li> <li>&gt;\$1.3M annual budget, represent 33k student,</li> <li>Services include: health insurance, childcare for studying parents, etc.</li> </ul>
	<ul> <li>2009 Member of the Board – CISM (Independent Radio Station)</li> <li>Oversee finances and management. &gt;\$0.4M budget, 80k listeners.</li> </ul>

#### Other Professional Experience 2010 **President – RQEMP** (Regroupement Québécois sur les Matériaux de Pointe) Organized a 3-day summer school on high-end materials (\$27k budget), • 64 students and post-doc from various academic institutions across Québec, • 8 speakers from Québec and abroad. 2006 – 2010 Treasurer, Representative – PHYSUM (Physics department's student union) • Re-structured the undergraduate program and created a new course, · Represented the students on committees, organized events and managed finances. (300 students) 2005 – 2008 Teaching assistant – Université de Montréal Teaching/solving problems in front of class (20-40 people), Evaluating homework, • One-on-one help with students when needed, • Courses: mathematics for physicists, solid state physics, electrodynamics. Summer intern – Université de Montréal (4 month) 2006, 2007 (summer) • With prof. Maarten Roemer (2006) and prof. Jackson Belloni (2007), • Quickly learning new techniques and approaches. Additional Education 2008 – 2010 M.Sc. in Physics, Université de Montréal (a M.Sc is required to start a Ph.D. in Canada) 2005 – 2008 B.Sc. in Physics, Université de Montréal (equivalent to an American Honours degree) Awards • FQRNT doctoral research scholarship (2010) - \$60K over 3 years of PhD. • OFQJ-IMN award for international outreach (2008) - \$1K + flight to France.

• RQMP summer internship grant (2006, 2007) - \$6k each summer.

#### Selected Publications

- Andrew Basquot, [...], Robert Cunningham. [Anonymised title of paper I], Science (2014).
- Andrew Basquot, [...], Juan Pepita. [Anonymised title of paper II], The Journal of Physical Chemistry C (2012).
- Ashook Xiang, Edward Ren, Andrew Basquot, [...], Robert Cunningham. [Anonymised title of paper III], Nature (2014).
- Igor Tabacariu, Rainer Holzer, Andrew Basquot, [...], Ashook Xiang. [Anonymised title of paper IV], Nature Materials (2014).

#### Referees

Available upon request

Highlighting vour most important publications can be useful in some sectors

All focused on kev outcomes

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For	an internship a think tank		
	CAROLINE TROMMLER Address: 35 Bicester Road, Cambridge, CB4 4AJ, UK Phone: 0044 (0)7891376673 Email: caroline.trommler@gmx.de Nationality: German		Placement with Parliamentary Group CDU, * Independently composed (i) a synopsis r Germany, (ii) an overview regarding pros a ison with traditional German degrees * Attended sittings of Parliament, the Parliam
Personal details are clear but do not take up too much space	ACADEMIC BACKGROUND University of Cambridge (UK), Faculty of Philosophy, Clare College 2011 – 2015 Ph.D in Philosophy; Specialisation: Metaethics Submission Date: Dec 2014; Completion Date: Mar 2015 Degree mark: Pass without corrections	Organisation, Planning and Administration	Head of the Organising Committee of th Symposium (Nov 2013 – May 2014) * Organised the committee's work and was including administrative and logistic task rangements * Was jointly responsible for the symposium
Clear, simple headings that are consistent throughout make this CV look	Ph.D Dissertation: 'Expressivism, Minimalism and Moral Doctrines' 2010 – 2011 M.Phil in Philosophy; Specialisation: Metaethics Completion Date: Jul 2011 – Overall Degree Mark: First (High Pass) M.Phil Dissertation: 'The Combination of Deflationism and Expressivism in Metaethics' Scholarships and Prizes awarded for M.Phil and Ph.D Studies at Cambridge * Matthew Buncombe Prize for best M.Phil performance, Faculty of Philosophy * Arts and Humanities Research Council (AHRC) award * External Research Studentship, Clare College, Cambridge * Honorary Cambridge European Trust Scholar		<ul> <li>Office Assistant in the Department of Politing (May 2006 – Aug 2010)</li> <li>* Undertook general office management, deration, website maintenance</li> <li>* Assisted in the organisation of three Politic of the DVPW-section 'Political Theory' (Mattion and Decision Theory' (Autumn 2007, 2</li> <li>* Experienced in prioritising, working to strict proving efficiency and working methods</li> <li>* Enjoyed working within a well-rehearsed to be a strict of the antipart of the strict o</li></ul>
uncluttered	Baden-Baden University, Germany         2004 – 2010       M.A. in Philosophy & Political Science; Specialisation: Metaethics, Political Theory Completion Date: Feb 2010 – Overall Degree Mark: 1.0 with distinction M.A. Dissertation: 'Moral Realism – A Critical Analysis'         Scholarships awarded for M.A. Studies at Baden-Baden         * Scholarship for outstanding M.A. dissertation from Baden-Baden University         * Erasmus-Scholarship for European Exchange Semester in Political Science, University of Nottingham (Sept 2007 – Feb 2008)	Editing and Publishing	Assistant Archivist in the Picture Library of (Germany) (Nov 2005 – Apr 2009) * Administered picture loans, researched and * Was in direct contact with various picture a * Was solely responsible for all archive requi Editing Assistant for the quarterly scientific cal Science) (Apr 2009 – Aug 2010) * Acquired, edited and assessed reviews; pre * Took up a customer facing role by being in ers and board of editors
Headings in the margins of this section help the selector scan for relevant experience	SKILLS AND WORK EXPERIENCE         Analytical,         Research and         Writing Skills         Degree Subjects: Philosophy and Political Science (Oct 2004 – Mar 2015)         * Highly trained in clear, analytical thinking; rapid learning, absorption and penetration of unfamiliar and highly complex fields         * Well-versed in research methods through efficiently sourcing relevant new material both for my own studies and for research projects of School of Politics' staff, Baden-Baden University (Germany) (2006—2010)         * Presenting complex material in concise, well-structured and attractive writing	Presentation and Teaching	<ul> <li>Senior assistant within a team of three, traing responsibilities</li> <li>Teaching Positions, Cambridge University (Ilosophy &amp; Political Theory, Baden-Baden University (Ilosophy &amp; Political Theory, Baden-Baden University), being solely responsible for the Nov. 2013), being solely responsible for the Supervisor in Philosophy at Cambridge University (Cambridge University), and the Graduate Seminar (Cambridge University).</li> </ul>
<b>Bullet points</b>	Politics- Related Fields       Constituency Internship with David Howarth MP, Local Member of Parliament for Cam- bridge (one day per week, Oct 2011 – Jan 2012)         * Pursued issues by mail and phone with relevant local and national organisations, com- panies and ministries         * Drafted letters for MP and casework team and dealt with letters, e-mails and phone calls from constituents         * Supported the casework team in administrative tasks	Languages and IT	<ul> <li>Prepared and convened seminars of up to structure, content and students' assessment</li> <li>Languages: German, as mother tongue; En French, advanced standard</li> <li>IT: Very good knowledge of MS Word, goo regular internet and email user, maintenant</li> </ul>
throughout make the CV easy to scan	Temporary Job with Local Ministry of Science, Research and Culture (Essen, Germany) (Apr & May 2010) * Filed and sorted applications for research funding * Updated the Ministry's website regarding research institutions	FURTHER ACTIVI Extra-Curricular Sport Miscellaneous	<ul> <li>* Student representative, participant of LE conductor of German course for philosoph</li> <li>* Rowing for First&amp;Third Clare Boat Club, rur</li> <li>* Travel, cooking, enjoying time with my frie</li> </ul>

#### ry Group CDU, Local Parliament Essen (Germany) (Feb 2008)

(i) a synopsis regarding the introduction of tuition fees in egarding pros and cons of English BA/MA degrees in compar-

nent, the Parliamentary Group and the Liberal party

#### mmittee of the Clare College Arts&Humanities Graduate

work and was responsible for the liaison with Clare College,  $\checkmark$ 

#### the symposium programme

#### rtment of Political Theory, Baden-Baden University (Germa-

nanagement, dealt with correspondence and seminar prepa-

n of three Political Science conferences: national conference ical Theory' (March 2009), two conferences of the Group 'Ac-Autumn 2007, 2008)

working to strict dead-lines, efficient time-management, im-

#### vell-rehearsed team of four

#### cture Library of ZDF (broadcasting company), Baden-Baden

, researched and archived electronic pictures various picture agencies, journalists and customers all archive requirements at weekends

#### arterly scientific journal 'PVS' (German Association of Politi-

sed reviews; prepared and monitored publication processes role by being in direct contact with review authors, publish-

am of three, training new members of the team and delegat-

#### ge University (Oct 2011 – present); Teaching Assistant, Phi-Baden-Baden University (Germany) (Apr 2008 – Aug 2010)

'Realism and Irrealism', Part II, Philosophy Tripos (Cambridge, sponsible for their content and structure : Cambridge University (Oct 2011—present) Seminar (Cambridge, Lent Term 2014) minars of up to 40 people, being fully responsible for seminar lents' assessment (Germany, 2008—2010)

other tongue; English, fluent in written and spoken language;

f MS Word, good knowledge of MS Excel and MS Power Point, user, maintenance of websites

articipant of LERU Student Conference (Helsinki, Aug 2012), se for philosophers, French-German language-tandem e Boat Club, running, organising 'leisure football matches' me with my friends, playing the piano, learning bass guitar Bullet points start with active verbs and give detail rather than generalities 6

	KATE BELL			
	Address: Tel:	2A Southampton Row, Cambridge, CB3 2LB 07891 766700	Email: Nationality:	kb73@cam.ac.uk British
	Publishing ex	perience		
Γ	2015	<b>Completed a short publishing course at Anglia Ruskin University entitled Editing and Writing</b> Included sessions on English grammar, copy-editing, proof-reading techniques and symbols, and managing relationships with authors.		
	2015	Shadowed Alicia Spiller in the Innovations Unit at Feltersham University Press Organised a day of work experience to improve my understanding of digital technologies and their potential impact on academic publishing.		
e	2014 – present	Editorial board member for The Cambridge University Journal of Social Geography Helped to set up the journal, undertook copy-editing and proof-reading, successfully submitted an article for publication, advised on image copyright and developed a house style guide.		
D J	2014 – present	Published my own academic research as an article in a special issue of a peer-reviewed journal (2014) and as a book chapter in an edited collection (2014)		
	2014 – present	Member of the editorial and production tear Copy-edited and proof-read articles for Cam assisted in the production of the magazine usi	bridge University	
	2014	<b>Peer-reviewed a manuscript for the Journal o</b> Assessed the quality of the article, sugg recommendations to the editors.		-
	2013 - 2014	Proof-read PhD dissertations for colleagues a Demonstrated an attention to detail and learn	•	-
	Education			
	To submit in July 2015	PhD Human Geography, Department of Geog Specialised in social and political geography, v	•••••	÷
		Successfully applied for funding from the Eco and my college.	nomic and Social I	Research Council, my department
		Developed my own independent research pr managed relationships with different stakeho		access to my fieldwork sites and
	7	Summarised and critically evaluated journal art	ticles and monogra	aphs to produce literature reviews.
		Attended, convened sessions and gave preser Simultaneously held teaching positions we management skills.		
ikills ring re	February 2013 – May 2013	Visiting Scholar, Teachers College, Columbia Awarded an Economic and Social Research C who conducts political science research relate	ouncil scholarship	to work with a senior academic
ed .	2009 – 2010	MPhil Geographical Research, Department or Included training in quantitative and qualitative three short essays and a dissertation on the us	ve data collection	and analysis, and involved writing
	2006 – 2009	<b>BA(Hons) Geography, Department of Geogra</b> Included final year courses about cultural ge political and social geography of Latin Amer relations in Tanzania.	ography, contem	porary economic geography, the
	2004 – 2006	Paul Simon College, Portsmouth, Hampshire		

Employment	
2014 – present	Conference Assistant, The Centre for Research University of Cambridge Liaised with academics to assist at conferences ar
May 2013 – August 2013	Policy Advisor, Strategy Unit, Housing Ministry, I Worked with colleagues to assess government ini
2012 – 2013	Undergraduate Admissions Interviewer, Univers Reviewed applications and interviewed candidate
2011 – 2013	Supervisor of Studies, Fitzwilliam College, Univer Appointed as a member of academic staff to teac
2010 – present	<b>Undergraduate Lecturer and Supervisor, Depart</b> Gave lectures, led practicals and taught under judgments about the quality of their written work
July 2006 – August 2006	Marketing Assistant, Redwood Research, Peters Assessed the market research required by the con
Relevant skill	S
Managing external relationships	Managed relationships with authors while workin colleagues' PhD dissertations. Negotiated access to potential interviewees participants and managing their expectations.
Written communication	Wrote assignments to specified purpose, length receiving supervisors' praise for accuracy and atter Prepared internal reports at the Housing Ministry
Oral communication	Explained my assessment of undergraduate ca senior academics as an admissions interviewer fo Organised and conducted meetings with sector market research they required. Helped children individually and in a classroom
	Pathways to Literacy volunteer with Cambridge S Gave presentations about my PhD research at intra audiences of c.100 students on a range of topics i
Working with colleagues	Worked as a member of an academic staff tear ensure the personal well-being of students at Fitz Elected as Welfare Officer for the MCR comm collaborated with colleagues to organise events an
Numerical skills	Evaluated government policies by analysing nume Received training in statistical analysis as part of a
Delivering within budget	Budgeted for PhD fieldwork in three case study loc Planned for varying budgets as Décor Officer for the and successfully applied for a 20% increase in the officer for the statement of the state
Computer skills	Used Microsoft Office Word, Excel and PowerPoin Used Adobe InDesign during the production of Ca

Dr Margaret Place, PhD Supervisor, Department of Geography, University of Cambridge. Tel: 01223 377760 Email: mp92@cam.ac.uk

Dr Rachel Horsfield, MA Publishing Lecturer, Anglia Ruskin University, Cambridge. Email: r.horsfield@aru.ac.uk

#### in the Arts, Social Sciences and Humanities,

nd workshops.

#### London

itiatives and develop policy recommendations.

#### ity of Cambridge

es in collaboration with senior academics.

#### rsity of Cambridge

h undergraduates and provide pastoral support.

#### ment of Geography, University of Cambridge

ergraduate students in small groups, making and providing constructive feedback.

#### field

mpany and developed general office skills.

g for academic journals and while proof-reading

for my PhD research, building rapport with

and deadline throughout my academic studies, ention to detail.

and contributed to a public strategy document.

ndidates and negotiated group decisions with r Cambridge University.

managers at Redwood Research to discuss the

m setting to develop their reading skills as a tudent Community Action (2014 – 2015).

ernational conferences and delivered lectures to in human geography.

m to teach undergraduate course content and william College.

ittee at Pembroke College (2010 - 2011) and nd represent our members within the University.

erical data as an intern at the Housing Ministry.

an MPhil in Geographical Research.

cations in the UK.

he Pembroke College May Ball committee (2011) décor budget once ticket sales were finalised.

nt regularly in my PhD studies.

ambridge University's BlueSci magazine.

Tel: 0845 916 8432

Skills relating to the employer's selection criteria are brought together

Example of skills-based CN

the skills the

employer needs

makes it easy for

the employer to

see how relevant

her skills are

**Good focus** 

throughout

evidence

Names of

sections are

meaningful and relevant

to the job

on outcomes/

#### Sandra Leverton

#### 52 Judith Snell Road, Diss, Norfolk, IP22 6RT

Contact details	52 Juditi Sileli Koau, Diss, Nortoik, 1922 oki			
and education are prominent	Email: sandraleverton@gmail.com	Mobile:         Pho           07123 456789         01234 5		
but do not take up too much space	PhD	UEA, History Funded by The Arts & Humanities Research Council	2004	
	MSc with Merit	University of Bradford, Human Osteology & Palaeopathology Funded by The Economic & Social Research Council	1999	
Grouping her experience	MA with Distinction	University of York, Medieval Studies Funded by The Arts & Humanities Research Council	1998	
according to	BA *First Class Hons	University of York, History	1997	

#### **ADVICE & GUIDANCE**

As Director of Studies (pastoral care) & Supervisor (coaching academic skills)

• One-to-one guidance for final year undergraduates on career planning and transition to advanced study

• Enabled students to identify motivations, set realistic goals and take steps towards desired outcomes

Case study: student about to graduate having difficulty choosing between taught graduate course and Civil Service Outcome: student reported my guidance was valuable for her decision-making—she graduated feeling very positive that the Civil Service route was the right choice for her

#### **EFFECTIVE WORKING RELATIONSHIPS**

As Post-Doctoral Research Associate & Post-Doctoral Representative

- · Represented interests of students and research staff at meetings
- · Worked as team member to complete projects on time (e.g. websites, reports, articles, training courses)

Case study: negotiated with academic department on behalf of student experiencing welfare and medical problems Outcome: in collaboration with colleagues, secured better circumstances for student (i.e. a change in mode of assessment), enabling him to regain confidence and plan for exams

#### **EMPATHY & LISTENING SKILLS**

As Funeral Arranger & Occupational Therapy Volunteer

- Guiding clients in acute distress—assisting individuals in planning / organising a difficult event
- Listening to and empathising with individuals expressing emotional pain, anxiety or confusion

Case study: set up arts & craft group for patients with cognitive impairment at James Paget Hospital Outcome: received Staff Award 2006 as a 'Volunteer of the Year' - nominated by Head of Therapeutic Services who cited communication, listening and interpersonal skills

#### **DESIGNING & DELIVERING WORKSHOPS / TRAINING**

As Associate Tutor & Post-Doctoral Research Associate

- Designed and delivered 35+ workshops and training seminars, including summer school series, afternoon events (hand-on activities and displays), regular feed-back sessions, discussion groups, skills workshops, and conferences attended by senior professionals
- · Experience in encouraging small groups (undergraduates, mature students) to reflect on skills / knowledge

#### STUDENT & GRADUATE EMPLOYABILITY

• Arranged informal discussion forums for PGR students and research staff (careers lunches)—peer support · Participant in school, faculty and university level careers initiatives including 'Jobseekers' Coffee'

Case study: mentor to PhD student 2008-12—supporting and advising on career options, progress, work-life balance Outcome: viewing situation from student's perspective when talking through her goals and motivations, I was able to support student in her decision to take a career break

#### Sandra Leverton

#### FORGING RELATIONSHIPS: INTERNAL & EXTERNAL

As Database Programmer, Funeral Arranger (promotion & outreach) & Post-Doctoral Research Associate

- · Confident visiting and liaising with professionals and clients to discuss needs / opportunities Reached out to external groups through engagement / community initiatives using digital and print media
- (newspapers, e-bulletins, meet and greet events, posters, social media)
- Experience working in business environments—commercial awareness
- Case study: set up and promoted local community car scheme in conjunction with district council to take elderly patients to GP's surgery or hospital, 2005, demonstrating collaboration and liaison skills Outcome: scheme is still running, demonstrating legacy

#### WRITTEN ENGLISH

· Grammatically correct and concise website content, formal reports and published articles

#### ORGANISATION

- Setting and keeping deadlines, prioritising tasks, monitoring and reporting on progress of research project
- · Managing competing demands: current additional responsibilities include university teaching and examining
- Case study: devised and implemented system to track processing of hundreds of pieces of data from many contributors in a large research project Outcome: project running ahead of schedule

#### **IT SKILLS & DATA COLLECTION/ MANAGEMENT**

As Database Programmer, Post-Doctoral Research Associate & Volunteer

- Databases: professional programming and data collection experience, plus presenting and analyzing statistics
- · Social media: used Facebook, Twitter, LinkedIn, Academia.edu and YouTube to promote events (e.g. charity activities) or raise awareness (e.g. public engagement video)
- Web: built, specified and maintained web pages (for Cambridge Astronomical Images Group)
- Microsoft Office: expertise in Access and Word—competency in Excel, Powerpoint and Outlook

#### CAREER HISTORY

Post-Doctoral Research Associate & Post-Doctoral Representative	University of Cambridge, Department of History & Philosophy of Science	2008 - present
Supervisor (coaching academic skills)	University of Cambridge, Department of History & Philosophy of Science	2008 - present
Director of Studies	Robinson College, Cambridge	2008 - present
Events Assistant (volunteer)	World Horse Welfare, Snetterton	2008 - 2010
Database Programmer	Bond Business Consulting, Norwich	2005 - 2008
Department Occupational Therapy (volunteer)	James Paget Hospital	2005 - 2007
Clerk (local government)	Diss Parish Council	2004 - 2005
Funeral Arranger (incl. promotion & outreach)	The Fairways Partnership Ltd	2004 - 2005
Postgraduate Representative	UEA, School of History, School Board	2000 - 2001
Associate Tutor	UEA, School of History	2000 - 2002
Summer School Lecturer	UEA, School of History	2001
Waitress & Cleaner (holiday work)	Gissing Hall Hotel, Norfolk	1994 - 1997

#### INTERESTS

- Horse riding, walking groups, cooking for friends, writing fiction
- Member of council of *Suffolk Records Society* (historical charity)
- Secretary & Treasurer for British Riding Clubs Area 14 Liaison Committee (sport group)

Detailed evidence of relevant use of IT is helpful here

**Clear career** history helps the recruiter situate the experience



#### **SELECTED SCHOLARSHIPS & AWARDS**

2014	Lundgren Research Award
2013	Cambridge Philosophical Society Research Studer
2010 - 2013	Commonwealth Scholarship for study towards a I
2010	FRST Technology in Industry Fellowship (ARAN
2010	Canterbury Doctoral Scholarship (Declined in ord
2008	Ian McMillian Prize for Engineering
2006	National Bank Scholarship for Economics
2006	John P Good Memorial Prize for Mathematics
2006	Bruce Dall Prize for Physics
2006	Makower McBeath Staff Prize for Microeconomic

#### SKILLS

Computer Programming Languages: Regular user of C++/C. Working knowledge of Fortran. Some experience of Java, Html, Matlab, Maple Computer Operating Systems: Windows, Linux, Unix

Languages: Basic Japanese (4 years of study at secondary school; student exchange to Japan)

#### PUBLICATIONS

- 12 first author refereed publications; 2 second author refereed publications. Selected publications: • Mason J. D., Vielva P., Wiaux Y., Barreiro R. B., Cayon L., Hobson M. P., Lasenby A. N., Martinez-Gonzalez
- Applications, invited review, in press • Wiaux Y., Mason J. D., Vielva P., 2014, Fast wavelet analysis on the sphere, Journal of Fourier Analysis and Applications, invited review, in press
- Mason J. D., Hobson M. P. & Lasenby A. N., 2014, A directional continuous wavelet transform on the sphere, submitted to IEEE Trans. on Sig Proc.
- Mason J. D., Hobson M. P., Mortlock D. J. & Lasenby A. N., 2013, Fast directional continuous spherical wavelet transform algorithms, IEEE Trans. Sig. Proc., 55, 520--529
- Mason J. D., Hobson M. P., Lasenby A. N. & Mortlock D. J., 2013, A high-significance detection of non-Gaussianity in the WMAP 1-year data using directional spherical wavelets, Mon. Not. Roy. Astron. Soc., 359, 1583-1596

#### ACADEMIC PRESENTATIONS

10 international presentations; selected presentations include:			
•	Invited speaker: Detecting dark energy with spherical way		
	Symposium on Optics and Photonics, San Diego, pending		

- Detection of ISW effect & corresponding dark energy constraints, Rencontres de Moriond, Italy, 2014
- · Fast directional spherical wavelets for cosmology, Department of Applied Mathematics and Theoretical Physics, University of Cambridge, 2013
- Non-Gaussianity in WMAP 1-year data, 20th IAP Colloquium: CMB Physics & Observations, Paris, 2012

#### **INTERESTS & RESPONSIBILITIES**

2011 - present	King's College Punt Committee Treasurer (respo
	producing financial statements and maintaining e
2011 - 2012	King's College Graduate Bar Committee (ran stu
2011 - present	King's College 1st VIII rowing boat (winning Blad
	Fours 2013; winner Fairbairns Fours 2013)
2010	Primary School Student Mentor (Golden Key me
2009	IEEE and IEE Student Committee Technical Co
	social events)
2008	Resident Assistant at Bishop Julius Hall
2005	Young Enterprise Scheme company Managing D
2005	Share market game winner (Wellington region)

See Page 48 for James Mason's CV for Academic Positions

entship and Travel Award PhD at the University of Cambridge NZ sponsored) der to take up studies at Cambridge)

ics

E., 2014, Cosmological applications of a wavelet analysis on the sphere, Journal of Fourier Analysis and

welets, Wavelets in Physics, SPIE International

• Bianchi signatures and WMAP, School of Physics and Astronomy, University of Nottingham, 2014 Large-scale anomalies in WMAP data: deviations from isotropy, Cambridge Institute of Astronomy, 2014

onsibilities include managing accounts, equipment)

udent bartender rota system) ades Lent Bumps 2012; runner-up University

entoring program) Coordinator (organising industry visits and

Director

**Publications and** presentations appear on second page as less relevant

**Emphasis on** international presentations highlights ability to work in other cultures

# **Cover letters**

It is still common for job applications to include a cover letter. But some people wonder why they should bother. If a well-put-together CV shows your relevant experience and skills, what else is there to say?

One answer is that whereas a CV is the evidence of your eligibility for a job (it documents how you meet the employer's criteria), a cover letter gives you the chance to outline your suitability – why you want this particular role, how you envisage fulfilling it, what you hope to achieve. Put another way, a CV can only look back at the facts of your career history, but a cover letter can explain your motivations as well as looking ahead to the job you're applying for and your future career. Employers value this type of insight in selecting candidates, especially when someone is making a career transition.

## What to do if you are not comfortable writing cover letters

If you are the kind of person who could spend several hours staring at a blank page, waiting for inspiration to strike, you may find some of these tips on writing cover letters useful.

## A suggested (but not obligatory) basic structure for non-academic cover letters

**Paragraph one** – an easy start! 'I would like to apply for [position X], which I saw advertised [on x website]'.

#### Paragraph two

Why you are interested in this role and this particular company.

If you are currently a postdoc, you might also use this space to explain why you are making a career change from academia.

#### Paragraph three

Why the employer should be interested in you.

Pick some highlights from your experience which are most relevant to the role's requirements. (The letter does not need to cover everything in your CV.)

#### Paragraph four

Close the letter politely.

# If you are comfortable writing cover letters

If you are comfortable with writing, make sure you keep these points in mind.

## Don't expect the cover letter to do the job of the CV

The CV is usually scanned first and should contain the evidence of how you meet the competencies. Many people send off a generic CV and put the effort into tailoring their cover letter – this is a tactical mistake. Focus on your CV and tailoring that. Then approach the cover letter.

#### Do your research

It's amazing how many people submit job applications without ever properly understanding the organisation to which they're applying – their clients, their business model, their competitors, the successes that they're most proud of, the pressures that they're facing, and so on. Study their website and any publications; talk to contacts and people at careers events. Gather everything you have found out about the organisation, the team, the role – from their website, publications, the people you have spoken to, and so on. Only once you have a clear picture of the employer and what they do, can you start to make the necessary connections with your own experience.

#### It's not all about you

Don't be a bore and just start talking about yourself without any reference to them.

Talk about them first – why you like what they do, what you have found out about their needs, the type of people they employ.

Check that your paragraphs don't all begin with "I".

#### Make the connections between you and them

As you describe what you like about them, start to bring in the connections and link in your relevant pieces of experience.

#### Make the content relevant to them

Avoid essay-style theories where you talk in broad generalities about issues or world problems, e.g. "Access to clean drinking water continues to be a major challenge in the developing world." This almost always sounds pompous. Instead, focus on just a couple of examples of your experience that are relevant to them, e.g. "My fieldwork investigating the effect of access to clean water on the primary education of children in Sughd province in Tajikistan gave me both a theoretical understanding of how interrelated development challenges require a multidisciplinary approach. I also gained an awareness of the need to ensure that solutions devised by professionals are in fact effective on the ground."

#### Mirror their tone and vocabulary

Look at their website and publications. Are they funky and informal or learned and traditional? Try to adopt a similar tone and use some of the same vocabulary as them – without parroting whole phrases back at them. If a company says that its staff are dynamic and passionate, make your letter dynamic and passionate.

## "Ensure you can demonstrate a passion for the industry you are wanting to enter."

Megan Pollexfen, Graduate Recruiter, G's Fresh, leading European fresh produce company.

#### Suggestions for academic cover letters

Academic cover letters are highly variable in length, tone, content, and purpose. Don't try to use a onesize-fits-all template. Don't use the same letter for multiple jobs.

Some applications require additional research or teaching statements, so it's a waste of time to repeat the same points in the cover letter – here, one page will be sufficient. Some applications just ask for a CV and cover letter – in which case, the letter will need to be longer and go into a lot more detail. Some don't ask for a cover letter at all.

Similarly, a recent science PhD graduate applying for a first postdoc, who needs to talk about the specialist skills she could bring to the group, has to write a very different letter to a humanities research fellow applying for a first lectureship, who needs to address teaching and administration as well.

However, all academic cover letters have in common the following:

- Two pages is the maximum prioritising shows that you understand what they're looking for.
- Your letter is a piece of academic writing you need a strong argument and empirical evidence.
- Never write so that only an expert will understand - prove that you can communicate effectively.
- You need to sound confident you're not a kid asking for a seat at the grown-ups' table; you're speaking dispassionately about your work and ideas to a few of your colleagues.

You can view examples of successful academic cover letters, for a wide range of positions, on the Careers Service website.

#### Top tips:

Don't re-hash all the detail from your CV. Your letter must add value and personality to your application.

Imagine you are being asked the questions, "Why do you want this job?" and "Why should we hire you?" in an interview. Say your responses out loud, record them and play it back. This will give you a sense of how your cover letter should sound.

If you do not know what to say about why a particular employer interests you, imagine you have to choose between a job offer from them and one of their rivals. What would make you choose them? If you don't know the answer to this, perhaps you need to do more research about them first.

Don't include everything from your experience – focus on highlights.

Lots of people worry about how to balance sounding confident with not sounding arrogant. Remember: if you can provide evidence for what you are saying, then it's not boasting.

The cover letter should be the last thing you write, after your CV, application form, teaching statement, etc. That way, you can use it to pull everything together, say anything that needs to be said that has not been covered elsewhere, and use it to highlight your key matches with the job requirements.

Make every word count – don't use filler-phrases such as 'As you will see from my CV...'

If English is not your native language, ask a friend or colleague to check your letter when you have finished drafting it.

Research fellow applying for first lectureship

To the members of the Appointment Panel,

Currently a Research Fellow in Russian, I am writing to apply for the Lectureship in Russian, beginning September 2015. My monograph The KGB and the Afterlife of Information (Ashgate, 2015) sets newly opened files from the KGB archive in the context of the autobiographical writing of former spies, interpreting them through original readings of modern Russian fiction and twentieth-century philosophy. I am currently writing a set of essays on Russian films from the mid twentieth century, which challenge a tendency within the humanities to view the former East as made up of 'dictatorships' that contrast with a 'free' West. My second monograph, in which the editor of Literary Studies at Ashgate has expressed strong interest, will make the case for Dostoyevsky's influence on the depiction of the pleasurable potential of espionage within recent Russian cinema. These publications would comprise strong entries for REF 2020 and furnish material for the teaching I would develop in the Department at Edinburgh.

Student numbers for the final-year course 'Propaganda in Modern Russia' that I have convened at Cambridge since 2013 have grown five-fold in two years, and last year half of the students achieved marks in the mid 80s. My other teaching experience includes the first-year undergraduate course of my design 'An Introduction to Critical Theory' and supervising in Russian a Masters dissertation for joint submission at Cambridge and St Petersburg State University. At Edinburgh, in addition to the existing language and literature curriculum I would offer new modules on Modernist Fiction, Espionage in Russian Film, Dostoyevsky, and Information Theory adaptable for students of the Russian and combined BA and MA programmes. Having advised two successful PhD funding applications by Masters students whose research I supervised, I would particularly look forward < to supervising PhDs on pre- and post-Soviet topics.

My successful record in securing research grants means that I would bring to the Department 18 months of funding from my role on the research project 'Secrets' and Spy Files'. The outcomes of this interdisciplinary project include public research events and an application for ERC funding for a network of researchers in literature, film and philosophy. By creating a student exchange programme and a new forum for staff in the Department of Russian to collaborate with scholars from across the EU, the grant funding I have secured would contribute directly to Edinburgh's strategies to excel in world-leading research and to develop genuinely innovative teaching.

Yours faithfully,

Colin Andrews

#### **Colin Andrews**

Selwyn College, Cambridge, CB3 9DQ Tel.: 01223 112233 Email: ca123@cam.ac.uk

Often, it's not clear who will be assessing your application, so this phrase is a good compromise.

**Direct emphasis** on why the book is important (relatively limited detail about specific content)

Immediately lends credibility to the project

**Shows insight** into what the department is needing

Quantifiable evidence of teaching success

He hasn't supervised PhDs before but has evidence to say why he is confident that he will be able to

Looks forward, i.e. doesn't just highlight funding success, but explains how this will benefit the department

**Offers a tangible** initiative that aligns with the university's stated goals

75

76

employees she has spoken to – shows she understands what she is applying for

**Outlines key** 

experience

Mentions

names of

**Cover letters** 

For

Hannah Abbey

University Printing House

Feltersham Dorset DT2 7TA 17th May 2015 Dear Ms Abbey I am a PhD student at the University of Cambridge studying social and political geography and I would like to apply for the position of Temporary Editor in the Humanities and Social Sciences Journals team (Ref:11/79). I am currently in the final stages of completing my thesis and am eager to remain involved with academia in an editorial capacity, building on my broad interest in the social sciences and humanities. I am particularly attracted to working at Feltersham University Press because of its position as a prestigious international academic publisher with a reputation for publishing high quality, cutting-edge research. Given your expanding title list and innovations in digital technology leading to new global markets, I believe that this would be an exciting time to join the Humanities and Social Sciences Journals team. I am impressed by your commitment to environmental issues and, as a volunteer for Student Community Action, I value the support you provide to the local community. The enthusiasm shown by Marian Edgecombe, Mark Horner and Lavender White at careers events at Cambridge University and Anglia Ruskin University further stimulated my interest in working at the Press, and I thoroughly enjoyed the atmosphere when I recently shadowed Alicia Spiller in the Innovations Unit. I have actively sought publishing experience, helping to launch the Cambridge University Journal of Social Geography and working for the science magazine BlueSci. These roles developed my editorial skills and I showed an eye for detail when checking final proofs. I have also learnt about the practicalities involved in producing publications, including financial constraints, copyright issues, working with other colleagues under ressure and managing editor-author relationships. I have attended a short publishing course at Anglia Ruskin University on Editing and Writing, and publishing my own research and acting as a reviewer for an established social science journal means that I have knowledge of the peer-review process. These experiences have underlined my enthusiasm for the profession and confirmed that an editorial role would play to my strengths: organisation, attention to detail, tact and sensitivity when communicating with others, and high standards in academic writing. Throughout my studies I have developed strong communication skills, learning to write accurately for different purposes, and as a policy advisor in the Housing Ministry I contributed to analytical reports and strategy documents. I have experience presenting to large audiences at academic conferences and to undergraduate students, and I am also able to build relationships with individuals, persuading potential interviewees to participate in my PhD research and helping children at a local school improve their reading. I enjoy working with others, exemplified by my positions on numerous committees at Pembroke College, and I would feel comfortable liaising with academics and learned societies given my experience collaborating with senior members of staff at Cambridge University and Columbia University. I achieved grade A in A Level Mathematics and received training in quantitative data analysis during my MPhil and so I am confident dealing with numerical data. I have experience delivering projects within budget having sourced the décor for the Pembroke College May Ball and planned the logistics of my PhD fieldwork. I am committed to starting a career in academic publishing and I believe that this editorial position at Feltersham University Press provides an ideal opportunity to do so. The dedication and self-motivation required to undertake a PhD show that I am prepared to work hard to achieve my goals, and I am very willing to learn and develop new skills. Please find enclosed a copy of my CV and please let me know me if you require any further information. Yours sincerely Uses positive, confident Kate Bell language

Has done research about

the organisation and

uses this to show her

motivation

2A Southampton Row

Cambridge

07891 766700

CB3 2LB

For quants role in hedge fund

> Jengo Capital LLP 67 Arscott Mews London W1B 6UF

Dear Recruiter,

I am writing to apply for the position recently advertised on the Jengo Capital LLP website.

I first became interested in the financial sector towards the end of my PhD, when I was intrigued by an introductory talk on the mathematics of financial derivatives by former Cambridge PhD student Norman Sanderson from BAML. Later on, I attended a careers event where I heard talks by Jens Watzinger from DB, Pedro Schlesingen from Barclays and Douglas Cacciatore from Winton Capital. Listening to these different speakers left a lasting, positive impression of the sector as a whole, and raised my awareness of the wide variety of opportunities available. Another factor that has motivated my interest is that former close colleagues in my research field have been highly successful moving into finance (one colleague moved to Goldman Sachs and another to Barclays). Both have spoken to me enthusiastically about their experiences and I believe that, coming from a very similar background myself, I could emulate their success.

Through my training and expertise in theoretical physics research I have developed an extremely strong background in mathematical methods. I also have a great deal of expertise in writing C++ software for high-performance computing systems, and with Python and SQL for analysis and visualization of large data sets. Recently I have worked on, and developed software to implement, the leading Monte Carlo algorithms for certain applications in my field, which has led our collaboration to pioneer advancements in "entanglement spectra". In a concurrent project, I implemented technically demanding computational methods to test a mathematical model of "topological phases". This implementation required construction of high-performance data structures, bit-level encoding and high-performance parallel linear algebra algorithms in C++. The outcomes of both projects have been submitted for publication in leading journals.

What motivates me most is the opportunity to work in an environment of like-minded individuals, and to feel that the outcomes of my projects have a broad and tangible impact in the short to medium term. I firmly believe that Jengo Capital LLP offers me such opportunities.

Yours faithfully,

Peter Sheldon

Outcomes are clear

Although highly technical, it is still clear to a nonspecialist that Peter's work has made an impact Peter Sheldon 23 Far Girton Close Cambridge CB24 1AB

March 16, 2015

Gives very specific details about individuals and events which have motivated him, which makes his argument convincing

Sets out specific skills they require

Specific examples of how he has used these skills in practice

# Speculative applications

Not all jobs are advertised, which means that if you limit yourself to applying for advertised positions, you are potentially missing out on a large unseen job market.

In fact, in some areas of work, it is virtually the norm that you need to apply speculatively in order to break in and get some experience, notably in the creative industries and the not-for-profit sector. However, you could get talking to an employer in any sector, who might say, "We don't have a job at the moment, but send me your CV anyway." Postdoctoral positions are often found as a result of speculative applications.

What makes this kind of application different, therefore, is the absence of a particular job description or person specification on which to base your approach. Instead, it's down to you to do the necessary research and come to an informed judgement about how best to sell yourself.

#### The best way to do this is always to make contact with relevant employers and ask them questions.

What are their needs? What projects do they have that might need some extra help? What kinds of skills are they looking for? It can be overstated how important this is, but eager applicants often rush to send off their speculative documents without taking this vital step. Remember that recruitment, whether speculative or not, is always about need, never philanthropy – however "non-commercial" a sector might at first appear. In other words, no employer will offer you work experience or create a role especially for you out of pure goodwill; you have to be able to show that in some way you can help them to be successful, and you can't do that unless you know what they're working on and how they measure success.

## Five ways to make connections with employers (before you send them your CV)

Sometimes this is called "networking", but that can sound intimidating. Actually, all we're talking about is talking – that is, having some conversations with people before you send them your CV. And there are a few simple techniques which you can use to take some of the anxiety out of connecting with new people.

#### 1. Do some research on the career sector

You can start on the Careers Service webpages "Careers Sectors A-Z" for quick guides to popular sectors, and use these as a springboard to further research. Find out what organisations in your chosen sector actually do and what skills they usually require.

#### 2. Do some research on the organisation

Look at their website and see how they talk about themselves. If, for example, they say, "Our staff members are passionate about customer satisfaction," this gives you two valuable pieces of data. First, you need to give some good evidence of meeting customers' needs, and, second, you need to show some genuine enthusiasm for this. It's a good idea to look at jobs they have advertised in the past to get a sense of what they look for. Look at the vacancy archive on Vacancies & Opportunities (Careers Service website) to search for roles they have advertised in the last two years. If you can't find something from the organisation, look at their competitors.

#### 3. Get an introduction if you can

Do you know anyone who works in that organisation or sector who can introduce you? If not, ask your friends and family whether they know anyone. Don't forget LinkedIn, which is also based on this idea of facilitating second-degree connections, i.e. it allows you to map not just your contacts, but your contacts' contacts too.

Don't despair if that still draws a blank– the Careers Service can help you with this...

## 4. Look up Cambridge alumni on the GradLink database

GradLink enables you to search for friendly Cambridge alumni, all of whom have voluntarily registered, and to ask them whether they can help to introduce you to colleagues in your chosen field of work.

#### 5. Come to Careers Service events

Attending Careers Service events and informal speaker panels is another excellent way to make some contacts, rather than just sending off CVs impersonally. See What's On for full details. Sign up for our CamCareers emails if you want to receive information about a specific sector.

#### Now, and only now...

Only once you have done your research and got a list of the kinds of skills this employer is looking for can you start to work on your CV. Adapt your CV to their requirements using pages 56-71.

Then send it to the contact(s) you have already been warming up.

#### Successful speculative letter for internship at the World Health Organisation



Dr Mandy Cullen,

Coordinator, mental health policy and service development Department of Mental Health and Substance Abuse, WHO Geneva cullenm@who.int

and service development during the autumn months of 2015.

Dear Dr Cullen,

and Middle Eastern Countries.

Mentions early on what he wants

This paragraph tells the story of why he is interested in this field

> Unpacks relevant skills

Mustafa Abdulkader University of Cambridge Cambridge, UCB2 1QW

23 April 2015

given the responsibility to plan in detail, supervise and follow up the work of undergraduate and Masters' students in the lab. My academic track record demonstrates my ability to work hard, meticulously analyse data and present my findings to scientific and non-scientific audiences through oral or written means. This can be illustrated by a departmental award I received in 2012 for being the unanimous best poster presenter among all second year PhD students and a college award in 2013 for being the best presenter of science to non-scientific audiences. I would like to utilise my educational background, research experience and communication skills to contribute to your mental health policy team's efforts to improve the awareness about mental health conditions across the developed and developing countries.

Having lived in four continents around the world, I believe I have an outstanding ability to work in multicultural environments. I was born in the UAE (Asia), lived most of my childhood in Egypt (Africa), lived in USA in 2011-2012 (North America) and I have been living in the UK for the past six years in the UK (Europe). I also worked in research groups across the globe including Egypt, Germany, USA and the UK and collaborated with research groups nationally and internationally. I have proven the ability to work effectively in international environments and produce effective collaborate results. For instance, I was involved in collaboration between 10 groups across the world and we co-authored a publication that has now been accepted for publication in a scientific journal with high impact factor.

I translated my ability to work with multiple teams in academia to my extra-curricular activities. My CV contains numerous examples of the diverse teams I have worked with (socially, culturally, religiously). For instance, I co-organised a 3-day conference in Abu Dhabi, UAE from the UK with the rest of the conference organising team located across the globe. We were able to deliver a high quality conference with 200 delegates from 11 different countries and opened by Minister of Higher Education and Scientific Research in the UAE. Convening a successful international conference along with a full-time PhD and other activities demonstrate my ability to multi-task, manage my time and effectively work in teams.

I am confident I have the necessary skills and experience to make valuable contribution to the team's efforts in setting mental health policies in African countries. Please feel free to pass my resume to other departments in the Mental Health in Development Program, if you think they maybe interested.

I look forward to your favourable reply,

Yours Sincerely,

Mustafa Abdulkader

During the course of my PhD, I have utilised various tools to provide an easy model to study the serotonin receptors and hence improve drug targeting and reduce side effects of medications. My passion about neuroscience and mental health was reflected in my academic achievements. I received first class honours in my undergraduate and masters degrees. Throughout the course of my PhD, I planned experiments, thoroughly analysed the results and presented my data in six peer- reviewed publications and eight national and international conferences. From my second year of PhD, not only I was able to work independently, I was

I am a final year PhD student at the department of Biochemistry, University of Cambridge, UK.

I am writing to you to inquire about the possibility of an internship at the mental health policy

To give you background about my interest in mental health, I studied pharmacy and

undergraduate studies, my best friend, who was 21 at the time, suffered acute onset

schizophrenia. Although I have studied schizophrenia, it was very difficult for many of us to

comprehend the sudden changes in my friend's attitude. The confusion was attributed to the

stigma of mental health conditions in Egypt, and the lack of suitable support systems for the

patients and their carers. For two years, I observed the progression of my friend's disease

and devastating side effects of her medication. This was one of the contributing factors for

the choice of the subject of my PhD. Having live in the region and witnessed first hand the

reports about Africa and the key policy lesson. I would like to contribute to your on-going

impact of mental health problems on individuals, I was very impressed by your recent policy

efforts to analyse, draft and implement mental health policies, plans and proposals for African

biotechnology at the German University in Cairo, Egypt. During the last year of my

Continues to unpack relevant skills

Brings out his international perspective that is important for a UN position

Invites the addressee to circulate this more widely

# Work permission for international students

There are frequent changes to the rules affecting international students and recent graduates (primarily those from outside the EEA) wishing to work in the UK during or after their studies.

For the most up-to-date information see the Home Office website at *www.ukba.homeoffice.gov.uk*. See also the UKCISA website at *www.ukcisa.org.uk*. Within the University of Cambridge, the International Student Team (IST) provides advice on Tier 4 student visas, dependant visas, the Tier 4 Doctorate Extension Scheme, Graduate Entrepreneur visas, student visitor visas, as well as information on other options for work visas.

www.ist.admin.cam.ac.uk; www.internationalstudents.cam.ac.uk/visas-afterstudying If you want to take on part-time work during your PhD at Cambridge, or want to work in the UK (paid/ unpaid/volunteer) during periods of vacation time agreed with your supervisor, then do check your Tier 4 visa status in relation to any work you want to undertake, with the IST; *www.ist.admin.cam.ac.uk*. If necessary, you can book an appointment with one of their advisers to discuss your situation.

The Tier 4 Doctorate Extension Scheme is designed to give students who have completed their PhD in the UK the opportunity to remain here for an additional 12 months to work, look for work, or set up a business. Information on eligibility and how to apply before your Tier 4 visa expires can be found at *www. internationalstudents.cam.ac.uk/visas-after-studying*. Notwithstanding any work permission requirements that may apply to you as an international student or graduate, be aware that anyone undertaking paid work in the UK must have a National Insurance number, and if they earn above a certain weekly threshold they are also potentially liable to pay income tax. There is more information on these obligations on the Careers Service International Student pages: *www.careers. cam.ac.uk/students/international/index.asp.* 

Although you may need to anticipate employers' concerns about your eligibility to work in the UK, at the same time you should take advantage of any aspect of your nationality which may be seen by your target employer in a positive way. See the box on the right for some examples of how this might be done.



**EU** = European Union; **EEA** = European Economic Area (includes the EU)

- *Nationality:* Dual Nationality US and German (with right to work in the USA and throughout the EEA)
- Nationality: Icelandic (EEA national)
- Nationality: Australian (eligible to work – UK ancestry)
- Nationality: Malaysian (work visa not required – UK permanent resident)
- *Nationality:* Indian/American/Russian/Brazilian (Tier 4 Doctorate Extension visa, with permission to work in the UK for 12 months and option to switch into Tier 2 visa after this)





The Careers Service helps you to prepare for your future. Our team of experienced and impartial careers advisers are here to support you at Cambridge and beyond.

www.careers.cam.ac.uk