

Developing the next generation

Guidance and good practice in the leadership development of early career researchers and academics

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The project team

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Executive summary

Improved efficiency and effectiveness in the development of the next generation of early career researchers and academics is crucial for the sustained growth of excellent research, innovation and knowledge leadership. The strength of growth in this area affects the UK's competitive positioning worldwide and poses a strategic challenge for universities. Academic and research leaders have multiple roles and responsibilities including effective development of future talent within efficient and effective working relationships. Many research and academic leaders are ill-prepared for the challenges of leadership, and 'learning on the job' does not equip them to develop the next generation in the broad range of skills required for leadership in a variety of careers. The Vitae Researcher Development Framework (RDF) maps out the competencies of successful researchers and highlights the competencies of successful research leaders in the Leadership Lens; the development of these competencies is key to the journey to academic and research leadership.

There are many contributors in the efficient and effective development of academic and research leaders and this project aims to assist current academic and research leaders, future leaders, and the wider academic community by uncovering academic and research leaders' reflections on their personal journeys to a leadership position, along with their insights into managing and developing talent. The project uncovered what academic and research leaders wish they had known about managing and developing talent when they started.

This project transforms the understanding of how to develop readiness for academic and research leadership by harnessing the reflections and experiences of those who have made the journey. Research leaders from different universities and disciplines were invited through interview to look into their everyday experiences within research communities.

The project outcomes include a series of toolkits for use by staff developers and academic and research leaders, and a series of guidance and reflection sheets for use with and by early career researchers and academics themselves. The guidance throughout this resource provides recommendations about good practice in effective performance management by academic and research leaders in the development of early career academics and research staff, taking account of the steps to becoming a successful leader encapsulated in the RDF.

Developing the next generation of research leaders resources include

- Research leaders views on the provision of leadership development
- Recommendations for the development of research leadership
- Leadership climate analysis tool kit
- Research leadership guidance and reflection sheets for early career academics and research staff
 - Career planning for leadership
 - Working with others
 - Building networks
 - Building a research profile
 - Achieving a work-life balance
 - Finding mentors and role models
 - Management and leadership
 - Culture and environment

All resources can be downloaded from the vitae website (www.vitae.ac.uk).







How to use this resource

What is it?

- A practical resource intended for use by staff developers in higher education institutions
- A series of toolkits and guidance documents around themes relating to the development of future academic and research leaders
- A source of guidance and advice on preparing for academic and research leadership careers
- Based on a research project conducting and analysing interviews of current academic and research leaders in UK institutions

Who is it for?

- Staff developers and HR can use the resources to, e.g.,
 - assess institutional provision and climate
 - develop new training and resources for early career researchers and academics
 - stimulate conversations with academic and professional colleagues
 - give out as worksheets during training.
- Current academic and research leaders can use the resources to, e.g.,
 - inform effective career development and mentoring conversations
 - provide your researchers with self-directed reflection and guidance sheets
 - reflect on your own journey to leadership.
- **Early career researchers and academics** can use the section 'Guidance from the top' to, e.g.,
 - inform career planning for research and academic leadership
 - have more effective development conversations with academics and research leaders
 - reflect on what it means to be a leader in a higher education institution.







Project background

The sustained growth of excellent research, innovation and knowledge leadership is crucial for maintaining the UK's competitive positioning worldwide. Improved efficiency and effectiveness in the development of the next generation of early career researchers and academics poses a strategic challenge for universities in achieving this growth. Academic and research leaders have multiple roles and responsibilities including effective development of future talent within efficient and effective working relationships. Principal investigators and research leaders, however are "less confident in staff performance management" than in their other responsibilities such as supervision. Whilst they recognise the benefit of more professional development for themselves and others, they are "less likely to feel valued for motivating individuals, providing careers advice, and managing and developing research staff"1. Many research and academic leaders were themselves illprepared for the challenges of leadership, and 'learning on the job' does not equip them to develop the next generation in the broad range of skills required for leadership in a variety of careers. The Vitae Researcher Development Framework² (RDF) maps out the competencies of successful researchers and highlights the competencies of successful research leaders in the Leadership Lens; the development and application of these competencies is key to the journey to research leadership. This project transforms the understanding of how to develop these competencies in readiness for research leadership by harnessing the reflections and experiences of those who have made the journey and placing them in a practical, experiential context.

There is a triangle of responsibility enshrined in the Concordat to Support the Career Development of Researchers³, uniting institutions, academic and research leaders and researchers in their responsibilities for the development of research staff for career pathways, including research leadership. Institutional actions can also be reflected in the acquisition of the HR Excellence in Research Award⁴. By focusing all stakeholders on the key priorities of developing the next generation of leaders, efficiencies can be found through targeting scarce resources and in shared purposefulness and effectiveness achieved through concentrating on what makes a successful research leader. This project aims to transform the practice of all these stakeholders by identifying priorities, mapped to the RDF and the Leadership Lens on the RDF, making recommendations and providing guidance as a result of analysis of the interviews with successful research leaders.

There are many contributors in the efficient and effective development of future leaders and this project aims to assist current academic and research leaders, future leaders, and the wider academic community by uncovering academic and research leaders' reflections on their personal journeys to a leadership position, along with their insights into managing and developing talent. A key part of this process was to invite academic and research leaders to look into their everyday experiences within research communities. To this end, the project captured leaders' reflections on their career and development journeys. Common themes emerged through semi-structured interviews with leaders in different HEIs and disciplines. These are reported here to enable greater clarity on the priorities for developing the next generation of academic and research leaders and to enable innovative and transformational practices across the sector.

- ¹ Principal Investigators and Research Leaders Survey (PIRLS), Vitae 2013 https://www.vitae.ac.uk/impact-and-evaluation/pirls
- ² Vitae Researcher Development Framework (RDF), Vitae 2010 https://www.vitae.ac.uk/rdf
- ³ Concordat to Support the Career Development of Researchers, Vitae 2009 https://www.vitae.ac.uk/concordat
- ⁴ HR Excellence in Research Award https://www.vitae.ac.uk/hrexcellence







Aims and objectives

The project aimed to uncover what academic and research leaders wish they had known about managing and developing talent when they started.

The project aims to provide:

- common themes and examples of what academic and research leaders would have found useful when they got their first grant or first lectureship by asking them to reflect on their own journey and the professional support that could have been better provided to enhance their own career development and transition to a leadership role
- guidance for senior academics and research leaders on how to manage the development of their research staff, particularly in relation to guiding, mentoring and supporting the next generation of research and academic leaders
- better understanding of the effective development of early career researchers and future leaders by all stakeholders within the HEI, including line managers, HR, staff developers and senior management, in order to enhance talent management and development, and help researchers (as future leaders across all sectors) transition into careers that are right for them
- the next generation of leaders with insights into formal and informal professional development of current academic and research leaders in order to empower them to take responsibility for their own formal and informal professional development.

Reflective approach

In summary, semi-structured face-to-face interviews were conducted with 18 academic and research leaders in 5 different HEIs and representative of a range of disciplines. The interviews were transcribed and analysed thematically using NVivo⁵ in order to draw out the key points, from which this report, containing guidance and training documents, is developed.

The interviews captured the perspectives of academic and research leaders on their leadership context, history, and reflections on:

- what they wish they had known and what would have helped them during their journeys, providing critical insights to inform efficient and effective mentoring, training, and development for early career researchers and academics
- current requirements as research leaders, including the rewards for developing talent
- positive management strategies to enhance their research staff performance and how they get the best out of research talent whilst recognising and enabling a diversity of future careers
- important attributes in managing research staff and building teams to maximise efficiency and research impact.

The full methodology is set out in Appendix 1

Outcomes, guides and resources

The project outcomes are presented as a series of guides in the forthcoming sections, to inform all stakeholders, including academic and research leaders, staff developers and aspiring leaders themselves, about priorities in developing research leadership talent more efficiently and effectively. These guides can be used to enable:







⁵ NVivo <u>http://www.qsrinternational.com</u>

- academics and research leaders to increase the impact of researchers and their contribution to the UK knowledge economy by helping to minimise the inefficiencies created by poor working relationships and under-prepared research and academic leadership
- institutions to assess the leadership climate in order to support academic and research staff to be better prepared for senior positions
- academic and research staff who wish to progress in leadership positions in academia to plan their professional development.

The resources are also available to download from the Vitae web site (www.vitae.ac.uk).

The guides provide recommendations about good practice in effective performance management by academics and research leaders in the development of research staff, taking account of the steps to becoming a successful research leader encapsulated in the Vitae Researcher Development Framework (RDF) and can be used for a variety of purposes:

- By academics and research leaders, describing the support that they can provide efficiently for the advancement of research staff towards research leadership and career pathways out of academia
- By institutions and research staff developers, looking to provide more efficient and effective support of early career research staff and how to engage academics and research leaders in preparing research staff for future leadership positions
- With and by early career researchers and academics, providing insights on how to have effective conversations with colleagues in leadership positions and for their own career development

Discussion and next steps

This report provides a suite of resources to assist institutions, academics and researchers in transforming the development of the next generation of academic and research leaders, mapped to the Vitae Researcher Development Framework (RDF). The leaders who contributed to the project came from different HEIs and disciplines and yet there were several common themes that emerged. When taken together, these common themes point to practical and experiential priorities identified by leaders themselves as important in the preparation of future academic and research leaders. These themes can be practically applied by institutions, for example, by using the Leadership Climate Analysis Toolkit to analyse current provision to identify any gaps, by considering the views and recommendations of the leaders who were interviewed, and by using the Staff Development Toolkits (developed from the combined reflections of the project team) as a starting point for creating new training and resources. However, whilst institutions have responsibilities to provide training and development (including mentoring) for research staff, research staff themselves have responsibilities for their own career development, as highlighted by Principle 5 of the Concordat to Support the Career Development of Researchers⁶, and the section 'Guidance from the top' provides resources that can be used by aspiring academic and research leaders themselves.

All the participating institutions in the project are adopting the resources and we invite others to make use of them in developing leadership programmes, perhaps developing their own case studies. The methodology could also be used to better understand the leadership development priorities of groups of research staff to enable equality and diversity in the research environment.

We hope you find the resources useful and welcome your feedback (https://www.vitae.ac.uk/about-us/contact-us).

⁶ Concordat to Support the Career Development of Researchers, Vitae 2009 https://www.vitae.ac.uk/concordat







Institutional strengthening for leadership

Introduction

For staff developers, HR, senior management, and current research and academic leaders

This section provides a series of toolkits from an institutional perspective and for current leaders of research staff. The guidance contained in this section enables a review of current provision and institutional climate to ensure that the needs of future leaders are met, effectively and efficiently. These recommendations are based on the real-life experiences of successful academic and research leaders.

This section provides

- Views on provision for leadership development from the leaders we interviewed
- Recommendations for the development of leadership
- Leadership climate analysis tool kit

The Leadership Climate Analysis Toolkit can be used to analyse current provision against the common themes emerging from the interviews with academic and research leaders to identify any gaps. You may also wish to consider the recommendations from both the research leaders who were interviewed and the Staff Development Toolkits (based on the combined reflections of the project team) in creating new resources to address any gaps. This would assist with pursuing an innovative approach to transform the development of academic and research leadership talent across the institution, grounded in the reflections of experienced leaders.







Recommendations for the development of research leaders

We have reflected on the outcomes from the interviews to create toolkits for use by staff developers to address each of the key themes identified in this document. These examples can be used as a starting point for creating new workshops and resources for use with aspiring and current research and academic leaders.

Career Planning for Leadership: Staff Development Toolkit

The following topics and discussion questions might form the basis of a workshop on career development for aspiring leaders, or be used to support effective career conversations during appraisals:

- 1. What guidance and structures are in place to ensure that all staff at your institution have useful appraisals?
- 2. How will you ensure your next appraisal conversation is worthwhile? Are there any additional tools or training that you need to help with this?
- 3. What are the things that are important to you for your future career, both professionally and personally?
- 4. How do you help the people you lead to understand the responsibilities of their next career stage?
- 5. What does your career road map or five year plan look like? What are the features of a useful career plan? How can a career plan form the basis of a career conversation with your line manager or with the people you lead?

Working with Others: Staff Development Toolkit

Our leaders felt that developing and maintaining a variety of working relationships is essential for becoming an effective leader in UK academia. We strongly recommend that this is reflected in any training and development that you include for early career academics and research staff and we suggest that the following topics and discussion points might form the basis of a workshop for aspiring leaders to work more effectively with others and within the structures of your institution:

- 1. What support and training do you need in the areas of communication skills, effective listening and team building? Are you making the most of these skills to grow strong and wide-reaching networks?
- 2. What methods do you have for managing upwards? Who do you need to manage and for what purpose?
- 3. How do you show that you value your team members and colleagues? Do you feel appreciated and valued by your line manager and colleagues / team-mates? If not, what could you do to appreciate and value them more as a first step to encouraging them to value you?
- 4. What do you know about how to get things done within your institution and across the sector? How are you reaching out and building working relationships across other departments? How can you remove the barriers between academics and professional services in your institution?
- 5. What support and training is there to assist having difficult conversations. Have you had experience of having difficult conversations with colleagues? What scenarios might you come across in the future and how do you think you would deal with them?







Building Your Network: Staff Development Toolkit

Networking is often a difficult topic to discuss with those at an early stage in their career – there is a tendency to view it as something suspicious, slightly amoral (it has the image of "using other people") and uncomfortable. Coupled with the importance of networking as highlighted by our interviewees, these are very good reasons for networking to be incorporated into good researcher development programmes. Whilst you certainly can run standalone workshops on networking, there are plenty of good resources available for free online which can be incorporated into workshops on other topics to encourage and support networking. For example, networking ice-breakers at the start of a workshop can be used to emphasise the importance of networking and also how to do it through natural conversation and to encourage researchers to remember facts about the people they are talking to. Not just what they do but what their broader sets of interests might be, which might be useful in opening up further opportunities.

Early career researchers and academics need to be encouraged to develop an "elevator pitch"-type description of their research so that they can easily communicate the core concepts to any intelligent person within a few seconds. They would also benefit from being encouraged to develop good listening and questioning skills in order to be able to build rapport and engage in constructive discussion with anyone.

Finally, the key point that aspiring leaders would really benefit from learning is that networking is not amoral – it is largely about showing interest in other people's research for the purpose of wider and mutual benefits – and is certainly essential to career progression in modern academia.

Building Your Research Profile: Staff Development Toolkit

If you are already running a programme of researcher training and development, then undoubtedly this will already incorporate sessions on writing and publishing. Other topics that you might wish to consider would be around supporting aspiring leaders in horizon scanning and helping them to identify potential funding sources. Obviously the main funders such as the EU (Horizon 2020), the Research Councils and large trusts such as the Wellcome and Leverhulme are key sources of information about the topics that they are currently inviting bids for.

Future horizon scanning can be more difficult; however, most funders will have published strategic plans indicating their broad priority themes for the future. You may also wish to invite successful academics in your organization to come and discuss topics with aspiring leaders, such as

- 1. How they do horizon scanning and keep up to date with their field
- 2. Where they think the research in their field is heading
- 3. How they adjust their approach, position their research or build their team according to their predictions
- **4.** The importance of building interdisciplinary teams for future impact and potentially significant breakthroughs

Achieving a Work / Life Balance: Staff Development Toolkit

Clearly our interviewees felt that effective time management and work-life balance were critical elements of effective leadership. We would encourage any university interested in developing research leaders of the future to include a workshop and resources to help early career researchers and academics to start to develop strategies and boundaries before they get to the point of being overloaded. We suggest that you include the following:

1. Identify and make explicit your university's policies on work-life balance and support for the well-being of staff. Encourage discussion around these – should they be revised? If so, how? What would make their implementation effective?







- 2. Are all staff made aware of the demands of jobs or new tasks and roles before they take them? Have a discussion around hidden pressures and the prevailing culture in academia that may not be overt in job descriptions but sometimes makes it hard for academics to cope.
- 3. Do you know if there is any additional support available for staff when they move to more senior roles? Perhaps workshop participants could make some suggestions of what leaders would find useful. They could base this on the information provided in the section 'Guidance from the top' or their own experiences. Examples might include job shadowing, having an effective handover from predecessors, and accessing supporting documentation such as reports.

In all of this, effective boundary setting and assertiveness skills are key. We suggest that you include an overview of these in any time management / work-life balance workshops you run. This would also be a good opportunity to promote any mentoring schemes or coaching services you provide in order to help future leaders learn how to say "no" and how to identify the "strategic yes".

Finding Mentors and Role Models: Staff Development Toolkit

Our research and academic leaders felt that having a variety of mentoring relationships was extremely valuable for enabling researchers to realise their potential.

The following discussion questions might form the basis of a workshop on mentoring for aspiring leaders, or be used to induct new mentors and mentees:

- 1. What is the role of a mentor?
- 2. How do the roles of a mentor and line manager compare?
- 3. What does a successful research leader look like?
- **4.** What can you learn from the strengths and weaknesses in the approaches of people who have led or managed you in the past?
- 5. Who has strengths in an area that you would like to develop in?
- **6.** What do you do to create an environment where people can come to each other for advice and discussion?
- 7. What schemes are you aware of across your organisation (or elsewhere)?
- 8. How would you approach someone to ask if they would mentor you?

It may also be useful to develop a formal mentoring scheme for aspiring research and academic leaders, either within your institution, or across a consortium of institutions, should resources permit. At the minimum, staff should be offered guidance on how to identify, select and approach their own mentor.

Management and Leadership: Staff Development Toolkit

Our research leaders felt that management skills and experience were an important aspect of progressing and succeeding in research and academic leadership.

We would encourage you to provide management and leadership programmes and workshops for aspiring leaders. In particular, you may wish to consider the following:

1. Do your staff benefit from the learning and experience of senior managers and leaders within your institution and outside? How can you encourage discussions around management roles and responsibilities between early career academics and those in leadership positions?





Brunel

University



- 2. Do principal investigators and line managers receive training in managing effectively? Perhaps workshop participants could identify best practice in management and think about where additional training might be useful. They could base this on the information provided in the section 'Guidance from the top' or their own experiences.
- 3. What opportunities are there for early career researchers to get involved in the governance of your institution? Do ECR reps sit on committees and steering groups? Are ECRs made aware of the potential benefits of taking part in these groups and do they know how to find out about them? Are line managers encouraged to make these opportunities available and to delegate effectively to the benefit of the professional development of the people they lead?

Particular skills workshop topics that might be useful include people management (e.g., effective recruitment, delegating, motivating, and communicating) and self-management (e.g., reflecting, decision making, confidence, and strategic thinking).

The interviewees often expressed areas of leadership and management that they find difficult and need to focus on. They were aware of the need to develop themselves continually and often did this by watching and learning from the behaviour of leaders around them, by reflecting on particular challenges in their daily role, and by putting in strategies to try to address those challenges. Particular leadership and management goals for the interviewees included being more reflective, letting people make their own mistakes, and saying 'no'. We would suggest that any training and development activities for future research leaders should support the art of reflective practice.

Academic leadership often starts off with no formal line management authority and we consider that it is important that those people are supported in being a "leader from any chair". We recommend that Vitae's resources in this area are used in the provision of leadership training, for example Preparing for Leadership for Research Staff (www.vitae.ac.uk/pfl) and the Leading Researcher booklet (www.vitae.ac.uk/leadership).

Culture and Environment: Staff Development Toolkit

Our research and academic leaders felt that in order to progress in an academic career, the culture and environment needed to be considered in terms of

- 1. creating a favourable culture for teams and individuals to flourish
- 2. understanding and interacting with the macro-environment
- **3.** supporting diversity in the community within which they work.

We therefore suggest that programmes for aspiring leaders should encompass these aspects. In particular, you may wish to consider including the following:

- 1. An overview of the learning and teaching, and research landscapes across the higher education sector, within the UK, EU and globally
- 2. The importance of building and maintaining effective teams. This could include topics from how to recruit the best staff, through to using theories and strategies to develop effective teams.
- 3. Using the Vitae Every Researcher Counts materials (www.vitae.ac.uk/everyresearchercounts) and reflective tools (e.g. 360° feedback, coaching, psychometric and occupational personality questionnaires, Myers-Briggs Type Indicator) to discuss diversity in teams in a constructive way
- 4. Supporting the use of mentoring in order to enable early career researchers to be paired with more experienced academics or those from another university, such as through linking to existing, wellestablished schemes







Views on provision for leadership development

Our research and academic leaders were specifically asked to identify their top five topics to be included in training courses for aspiring research and academic leaders. We have collated and summarised their views below by mapping them onto the relevant descriptor from the Vitae Researcher Development Framework (RDF).

Topics recommended for training mapped to the Vitae Researcher Development Framework (RDF)

Domain A Domain C

A1 Subject knowledge* C2 Research strategy*

A2 Evaluating* C2 Project planning and delivery*

C2 Risk management*

C3 Income and funding generation*

C3 Financial management

C3 Infrastructure and resources*

Domain B Domain D

B1 Ethusiasm* D1 Team working*

B1 Self-reflection* D1 People management*

B1 Responsibility* D1 Mentoring

B2 Preparation and prioritisation* D1 Influence and leadership*

B2 Time management D1 Collaboration*

B2 Responsiveness to change* D2 Communication methods*

B3 Continuing professional development* D2 Publication*

B3 Networking* D3 Public engagement*

B3 Reputation and esteem* D3 Policy*

www.vitae.ac.uk/rdf

Most of the descriptors identified during the interviews also belong to the Leadership Lens on the RDF (see Appendix 2) as indicated with an asterisk (*). Not all of the descriptors from the Leadership Lens were identified by the interviewees, however, this is to be expected given that the interviewees were specifically asked to describe topics that could be trained, rather than the qualities needed for successful leadership more broadly. Potential additions to the Leadership Lens are time management, financial management, and mentoring.

As well as important topics listed above, our interviewees also identified a number of recommendations for the format of training for the next generation of research leaders, including activity, role-play and case-study based training; the opportunity to interact with colleagues from other departments and subject areas; the importance of learning to find the information you need and apply to it a new context; and being prepared for the inevitable challenges of future leadership.

"I think it's true as a researcher as well as a leader, is you can't necessarily learn all the skills first that you might apply at some point in the next 40 years of your career; I think you have to learn to learn or something."

Additional supporting quotes can be found in Appendix 3.







Leadership climate analysis toolkit

As revealed during the interviews, successful leadership is about more than developing the necessary skills and experience. The following questions, based on the reflections of research leaders in UK institutions, are intended to prompt you to consider aspects of the organisational climate that will empower researchers and academics to achieve their leadership potential.

This toolkit could be used by staff across the institution, such as HR, senior management, academics and staff developers to give a snapshot of the current organisational climate and highlight areas for discussion and development.

Career planning for leadership The organisation enables early career researchers and academics to	Strongly disagree				Strongly agree
Learn about the roles they are interested in and know the criteria for progression		2	3	4	5
Take the time to plan ahead	1	2	3	4	5
Use appraisals as a tool to discuss and plan their career development	1	2	3	4	5
Factor their personal values into their career planning	1	2	3	4	5
Develop the skills they will need at their next career level before they get there	1	2	3	4	5
Be resilient and learn from failures	1	2	3	4	5
Take time to reflect and consolidate	1	2	3	4	5
Working with others The organisation enables early career researchers and academics to Communicate, collaborate, connect and work collegiately	1	2	3	4	5
Learn to manage upwards and to ask for help	1	2	3	4	5
Be prepared to listen to others	1	2	3	4	5
Invest in developing working relationships over time	1	2	3	4	5
Have difficult conversations in an honest and supportive way	1	2	3	4	5
Understand how to get what they need from other people	1	2	3	4	5
Building networks The organisation enables early career researchers and academics to					
Make effective use of conferences	1	2	3	4	5
Use networking as a development opportunity	1	2	3	4	5
Building a research profile The organisation enables early career researchers and academics to Grow their publishing track record	1	2	3	4	5
Engage in the process of getting funding				4	5
Perform horizon scanning and forward planning to build impact				4	5





	<u> </u>	Strongly disagree				Strongly agree
	Learn to delegate to other people, ask for help and say "no"	1	2	3	4	5
	Take time out of work on a regular basis	1	2	3	4	5
	Put family first and acknowledge that having a family will impact on career decisions	1	2	3	4	5
	Create a boundary between work and home	1	2	3	4	5
	Develop a strategy for dealing with emails and competing demands	1	2	3	4	5
	Selectively engage with opportunities and use the "strategic yes"	1	2	3	4	5
	ng mentors and role models organisation enables early career researchers and academics to					
	Recognise the value of informal mentoring	1	2	3	4	5
	Look for mentors in all places	1	2	3	4	5
	Use mentors to boost their confidence	1	2	3	4	5
	Not always take their mentor's advice	1	2	3	4	5
	Continue to seek mentoring relationships throughout their career	1	2	3	4	5
	rganisation enables early career researchers and academics to Understand what leadership is Develop longer-term strategies verses short-term actions	1	2	3	4	5 5
	Build a talented team					5
	Understand how the institution and academia works					5
	Be confident	1	2	3	4	5
The c	re and Environment organisation enables aspiring and current research and academic leader of Create a welcoming and invigorating environment within which					
	academics and researchers can excel		2	3	4	5
	Develop an appreciation of the landscape of HE and the context within which both teaching and research sit		2	3	4	5
	Enhance and enable performance	1	2	3	4	5
	Recognise the increasing importance of interdisciplinary (or multidisciplinary) working	1	2	3	4	5
	Appreciate the benefit that the variety of individual behaviours, experiences, attitudes, outlook and skills have to offer	1	2	3	4	5





Guidance from the top

Introduction

Guidance and reflection sheets on preparing for academic and research leadership; for use with, and by, aspiring leaders

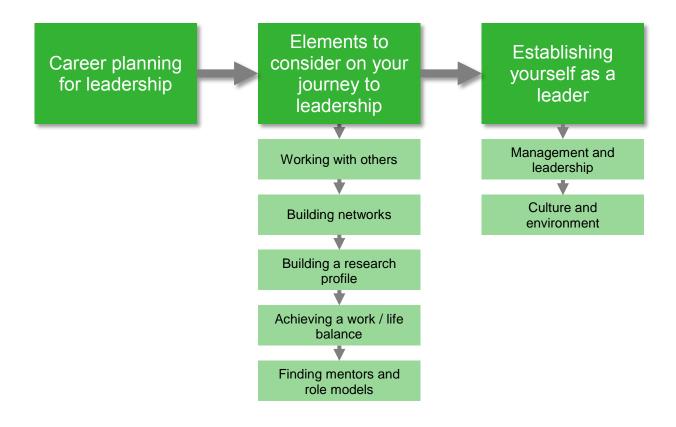
This section provides advice and insights from experienced, established and successful academic and research leaders to research staff, early career academics, and others about how to plan and develop a career towards becoming a successful leader in higher education. This section is provided as a series of eight separate guidance and reflection sheets that can be incorporated into workshops with early career academics and researchers, used as source material for mentoring conversations, or used by aspiring leaders for themselves. The preparing for research leadership guidance and reflection sheets can also be downloaded from the Vitae web site.

The eight guidance and reflection sheets are:

- Career planning for leadership
- Working with others
- Building networks
- Building a research profile

- Achieving a work-life balance
- Finding mentors and role models
- Management and leadership
- Culture and environment

We suggest that the sections are considered in the following structure:







Career planning for leadership

Advice from academic and research leaders

- Learn about the roles you are interested in and know the criteria for progression
- Take the time to plan ahead
- Use appraisals as a tool to discuss and plan your career development
- Factor your personal values into your career planning
- Develop the skills you will need at your next career level before you get there
- Be resilient and learn from failures
- Take time to reflect and consolidate

Mapping to the Vitae Researcher Development Framework (RDF)

B2 Self-management

B3 Professional and career development

Developing and planning your career were highlighted as important aspects of becoming a leader in academia. All 18 people interviewed have taken different routes to their academic and research leadership positions and here we capture what they found useful as they progressed their career, what they think would have been useful, and how they support the career progression of the people they lead.

It is evident from their experiences that there are steps that every aspiring leader should take in planning their career. Think about how they might apply to your own situation, now and in the future.

Learn about the roles you're interested in and know the criteria for progression

One thing that came out of many of the interviews was the importance of understanding what an academic role was and how this can differ in different institutions. The balance between teaching and research came up as something that differs not only between institutions but also between disciplines. Sitting on evaluation panels was described as being particularly useful for gaining an insight into research evaluation criteria and processes, potentially improving your own chances of getting grants.

"The honest reflection is that at some point I should really have looked a little bit more closely at what leadership at my University means...if anything I think I would have preferred to have stayed and carried on leading research within a defined group, not at an institute level"

Take the time to plan ahead

The career journeys of the leaders we interviewed were often not linear, for example, moving between higher education and other sectors. One piece of advice that came up often, as a result of this, is to spend time reflecting on career plans and directions, for example through a career road map or a five year plan. Although plans may change and adapt, our interviewees expressed how important it is to have specific and measurable targets to be able to monitor progress and recognise achievements. Other top tips included being open to unexpected opportunities, not pinning everything on staying in academia, and not restricting oneself to just one specific area of expertise.





"Thinking 'I'm going to be an academic and I don't need to have any other plans' is probably not an effective way of getting the most out of your postdoc position. You're going to ignore opportunities that that position's giving you because you don't think they're important. Even if you just want to squeeze the most out of it, you've got to have a plan B"

Use appraisals as a tool to discuss and plan your career development

Many of the interviewees reflected on the importance of having honest career conversations with their boss and other academics. Although they may not have realised the importance of this early in their career, it is something they now try to do with the people they lead. You may be entitled to a regular appraisal or review, and you should be proactive about using this opportunity to benefit your career progression.

"Obviously doing the reviews regularly and from the word go really, I think it's quite good to try and start having these conversations almost as soon as somebody's appointed. I would say to people, 'You need to think a bit about your career as you go along"

Factor your personal values into your career planning

The sense of being a good fit was often described as an important factor in deciding between institutions, research groups, and career directions, leading to the conclusion that the 'best institution' might not always be the best institution for you. When considering their next career move, our leaders thought about the value they could bring to a group or institution (and vice versa), the opportunities for career progression, the goals and motivations of the head of department, and the support available from the people around them, for example. Home life and commitments outside of work were also prominent in the decision making process for some, leading them to choose one particular country or career sector over another.

"I'm not defined by my institution, I'm defined by my work. And I think a lot of people cling on to their institutional status in ways that actually prevent them from fulfilling what they really could do if they were a little bit more free to do that."

"Once you have your career and two children you're kind of driving an oil tanker and there's quite a big turning circle."

Develop the skills you will need at your next career level before you get there

A key message coming out of the interviews was around practicing the skills that you will need in the future, both to secure the position, and to succeed once you are in it. Our interviewees were keen to help the people they lead to avoid a steep learning curve in the future by helping them to build the relevant knowledge now, for example through practicing grant writing, being involved in teaching and supervision, and acting as a peerreviewer. Our leaders reflected on how difficult it is to sustain a research career without taking on the broader academic responsibilities, which can require quite different skill sets that take time and effort to develop.

"Seize the opportunities that are offered to you, and I think possibly I'm saying that because I didn't quite realise half the time that I was being offered fantastic opportunities and usually I did take them but it wasn't that I realised well that will be fantastic for my career"

Be resilient and learn from failures

Taking risks and seizing opportunities will inevitably lead to some failures. Our interviewees have not been successful in everything and recognised that academic leaders will need resilience to cope with many rejections along the way. However, they also expressed how important it is to learn from those rejections and to be able to move on from them positively.

"I wish I'd known that you will fail at some things and I think that would have been useful for me to have known that beforehand, that everybody fails and things can go wrong and that's not a bad thing necessarily."







Take time to reflect and consolidate

A common feeling among our leaders was that challenges lie ahead and that they are still facing challenges in their career. However, they are not a group to shy away from those challenges. They encouraged aspiring academic and research leaders to question their motives, keep looking at those around them for inspiration and motivation, and celebrate even the small achievements along the way.

"Why do you want to do it? What's it for? Because if what you're doing it for is it's the next step on the ladder that's fine if that's what you want to do, you want to climb the ladder, but well... So I would always try and do things that made me happy and climbing ladders doesn't make me happy"

Your reflections on career planning for lea	adership





Working with others

Advice from academic and research leaders

- Communicate, collaborate, connect and work collegiately
- Learn to manage upwards and to ask for help
- Be prepared to listen to others
- Invest in developing working relationships over time
- Have difficult conversations in an honest and supportive way
- Understand how to get what you need from other people

Mapping to the Vitae Researcher Development Framework (RDF)

D1 Working with others

D2 Communication and dissemination

Without exception, all 18 senior manager interviewed for this study referred to the importance of working with other people to being able to achieve goals and lead well in an academic environment. There were a variety of contexts for this – networking, management, dealing with difficult people, meetings, giving feedback and the development of additional skills such as listening. What was clear in all of this is that academia is not a career option for people who want to work by themselves – contact with other people and the ability to interact with them in a way that achieves things positively is a key aspect of working in UK academia.

"...In being a research leader you have a responsibility...not just in leading a particular research area but actually leading a group of people. If you can't lead the group of people effectively then you're not going to achieve what you want to achieve."

Communicate, collaborate, connect and work collegiately

The foundations of leadership with and through other people in UK academia were expressed by the interviewees as being able to communicate effectively, collaborating and networking to become known by others, and seeking out opportunities to work with others that might build new contacts and open up new opportunities in the future.

"It's useful to build your network, it's useful to understand what's going on outside your immediate field, it's useful to make those contacts, and it's useful because...It will open up opportunities that you never think of, and increasingly as we do more and more collaborative work those things matter, you need somebody to be thinking of you."

Learn to manage upwards and to ask for help

One of the most important relationships you have is with your supervisor, principal investigator or line manager. It is important to be proactive about managing your projects through managing them. They are busy people and if you don't actively try to engage them in your work, they might just assume that you're getting on with it all right and that you don't really need the help.





"I always say to PhD students, 'Learn to manage your supervisor, your supervisor probably will be delighted to be managed,' and I think this applies throughout your whole academic career"

Be prepared to listen to others

Working with others gives you the opportunity to listen to many other people, such as collaborators, peer reviewers, your research group, and departmental colleagues. One of the key aspects of leadership is being able to gather all of this information together and process it effectively.

"Some of the most effective leaders I think are ones who draw in opinion and when you see them they're not threatened by that at all as a leader, they're very comfortable with both asking for and automatically receiving lots of advice from people, and that's perfectly fine and that's a good leader, in effect"

Invest in developing working relationships over time

It can take significant time and effort to find the right people to work with, to build a group that works towards a shared goal, and to develop positive relationships with the people you work with. However, our interviewees suggested that this effort is well worth it. By taking the time to find good people, you will be able to build a trusting and transparent environment that fosters long-lasting, effective and appreciative working relationships.

"I've been very fortunate to be able to work effectively with my research team and develop a good working relationship with them where we're supportive of each other actually and respectful of each other so that management of the team becomes a lot easier on a day to day basis and going forward, and even when they do leave the university that level of acceptance and respect still carries on and we continue to support each other in different ways."

Have difficult conversations in an honest and supportive way

Our interviewees expressed how challenging it can be to face up to some of the demands of leadership, such as having difficult conversations with colleagues and the people you lead. Having conversations around performance management and being able to give honest, critical feedback are important aspects of effective leadership.

"As happy as I am with them, I don't make it all sweetness and light or glowing, I'll say very positive constructive things but I'll always say, 'okay, what can we actually work on in order to make you stronger as an academic?"

"These are difficult conversations to have but if I left it later and we were off track the last thing I'd want to do is you to say to me, 'Well why didn't you say something a year ago?'"

Understand how to get what you need from other people

An element of being an effective leader in UK academia is understanding the 'barter economy'. This means demonstrating your negotiation skills and your ability to negotiate to get things done. Cultivating relationships across the institution will help you to work across departmental boundaries and find colleagues who can share their expertise in areas such as finance and human resources.

"If you're going to be an effective leader you've really got to understand the barter economy, which is that people will do you something as a favour but they wouldn't dream of doing it just because it says in their job description that they have to."





Your reflections on working with others





Building networks

Advice from academic and research leaders

- Make effective use of conferences
- Use networking as a development opportunity

Mapping to the Vitae Researcher Development Framework (RDF)

B3 Professional and career development

"It's useful to build your network, it's useful to understand what's going on outside your immediate field, it's useful to make those contacts, and it's useful because, you know... well it's useful in so many ways. It will open up opportunities that you never think of, and increasingly as we do more and more collaborative work those things matter, you need somebody to be thinking of you."

Our interviews with experienced academic leaders in UK universities revealed the importance of building and maintaining networks as a means of career progression, as illustrated above. The following quotes from the interviews are illustrative of the emphasis that our interviewees placed on networking.

Make effective use of conferences

Perhaps unsurprisingly, conference attendance came over as one of the most important ways that early career academics can build their network and get known within their research area. Our interviewees also emphasised the importance of starting early with this and not leaving it until a PhD or post-doctoral contract is near its end, and in particular to use conferences as a platform for meeting potential future collaborators, colleagues, and employers.

"Engage with the academic community, engage with the practitioners as well, go to conferences. I hate the concept and term networking because I never feel very comfortable thinking I'm networking but get to know people because they're going to be your colleagues if you stick in that field for years and years and years to come."

"Presenting at conferences and networking is probably more important than actually writing journal articles and really top drawer publications."

Use Networking as a Development opportunity

Our interviewees also commented on the importance of supporting networking activities for their own early career researchers and suggested ways in which this might be incorporated into training and development. They also acknowledged that social media is increasingly important for the new generation of researchers and academics – although they didn't always feel that they were the best equipped to advise on how to use it!

"Identifying opportunities for your researchers, for example, going to the key conference they should be seen at, introducing them to the right people to talk to, you know, identifying other training events that they may need and facilitating these so that they can go and benefit. And developing their sort of profile and giving them more visibility as well"







"if I knew anything about it beyond the very minimum I'd say, you know, be out there on the social media and the virtual media. So I don't know a great deal about it but, for example, I use academia.edu, as a result of that I think many, many more people are aware of my work than would ever otherwise have been, and they're people that I didn't have to go out and bash around the head about it."

Your reflections on building networks





Building a research profile

Advice from academic and research leaders

- Grow your publishing track record
- Engage in the process of getting funding
- Perform horizon scanning and forward planning to build impact

Mapping to the Vitae Researcher Development Framework (RDF)

C3 Finance, funding and resources

D2 Communication and dissemination

D3 Engagement and impact

Our leaders came from a variety of academic backgrounds and had different emphases in their current roles on teaching and research. One thing that came across clearly from all of them, however, was the importance of doing the "business" of research in order to progress with their career as research and academic leaders. The following quotes are illustrative of the points that our interviewees made around these topics.

Grow your publishing track record

There was no getting away from this core message from our interviewees – publishing papers was key to progressing in their academic careers and, if anything, they felt that the pressure to publish is more intense now than when they started out.

"if they want to be known for a particular piece of research they need to be the one that's writing the paper, presenting it and therefore they can't just give me a big pile of junk and expect me to re-write it, they have to take that responsibility. So encouraging independence is probably the most important thing."

Not only did the interviews reveal the importance of publishing for career progression, but our leaders also told us that they thought this was a key aspect their early career academics and research staff needed support and development for:

"Well we've actually produced some guidelines ... on how to get your papers more cited ... always make your work very clear, give it good titles that have broad appeal, write abstracts that people beyond your immediate field can understand, things of this kind. All of those give you more visibility."

"Most post docs are three years' time, which seems like an awful lot of time when you start, but time flies enormously fast in science, so you want to come out with a couple of really good publications by the end of that, so that requires planning by yourself, together with your supervisor and I think it is important to really think about what are the publications likely to be and how do I get there and work hard doing that."





Engage in the process of getting funding

The interviews revealed that the other most important part of 'doing the business of research' is that of getting funding through grants.

"So at that point I decided I wanted to stay in academia after I think the first postdoctoral term so I applied for my own funding to be a senior post-doc which I got, then I went through the fellowship. And getting the intermediate fellowship was the turning point because at that point I felt the academic world believed in me that I can be a successful researcher and deliver."

"You have to get the grants. If you don't get the grants you can't do the research. And then you need to get the research completed in order to get papers."

Perform horizon scanning and forward planning to build impact

Our interviewees referred to the importance of not only keeping up to date with changes in priorities from key funders such as the Research Councils but also commented that the most successful researchers that they know, engage in 'horizon scanning' in order to predict what is coming up in the future and then plan accordingly. The process of research can be slow and, as the second quote below shows, a long-term funding plan and sustained effort can be the unseen story behind high impact outcomes and a high profile career.

"And in trying also to scan the broader horizon as to how does the funding situation change, are there particular areas that are pushed by the Research Councils, by the government etcetera and how does that fit in to what we are doing here, so really trying to gather all the information and then from there trying to build up a vision of where we would like to be in five years' time"

"I was talking this week to one of our top life science researchers, just got elected to the Academy of Medical Sciences and he was telling me that he and his collaborators have produced what he called 4* papers and I would say they're more than that, they're in Nature and so on, and he told me it was ten years work to produce those papers and they cost two million pounds of cumulative grants. So that's a real example of how forward looking you have to be to get to that point."

Your reflections on building a research profile







Achieving a work-life balance

Advice from academic and research leaders

- Don't read or do everything learn to delegate to other people, ask for help and say "no"
- Take time out of work on a regular basis
- Put family first and acknowledge that having a family will impact on career decisions
- Create a boundary between work and home
- Develop a strategy for dealing with emails and competing demands
- Learn the "strategic yes"

Mapping to the Vitae Researcher Development Framework (RDF)

B2 Self-management

Many of the leaders interviewed for this study commented on how important it was to put appropriate boundaries in place in their lives to stop work from consuming everything. This section identifies top tips from our leaders about things they do to help with this. Aspiring research and academic leaders are encouraged to think early on about how to manage competing demands and prevent overload.

Don't read or do everything - learn to delegate to other people, ask for help and say "no"

Our interviewees reflected on the steep learning curve that they encountered when they stepped into a leadership position and found that the workload increased exponentially. In particular, most of them made reference to the fact that you can't do everything and that prioritising and not saying "yes" to everything were important skills to learn.

"I thought I had to read every document ... when we had to generate some random new document when I came into the new position, it never occurred to me to ask the people who had done the job in the previous year, or to ask for someone else to edit it for me. Or... I wouldn't have time so I would leave it too late to give someone else time to give me editing help. So start early and get other people to help you with editing, contributing."

"You need to be writing grants, you need to do community service and by that I mean reviewing papers, sitting on grant panels and all these things. Sitting on college committees, administrative work, supervising and mentoring people, so these are all demands whether you are a leader of a lab or a small research team or in my position and these are so many demands and it is very difficult to manage them all. So your own time management is really, really important and prioritising the different demands and learning to just juggle because most of them, no researcher is prepared for."

Take time out of work on a regular basis

Our leaders also recognised the importance of taking time out of work to prevent burn out – although it was clear that work overload was the norm and pressures on a daily basis made this hard to do. They also mentioned the importance of communicating positive messages to other people about taking time out in order to support their staff and set a good example.







"take time out....That's my other real lesson, because otherwise you burn out from it and it just becomes too much...making sure you take a lunch break and that is really, really important, make sure you do some exercise every day, you know, even if it's just making sure you walk; leave this office...I think that's really important to make sure other people are doing that as well, and that's a really, really important lesson to say, "Right, I'm switching off now. Alright, if I'm going to play a game on my computer at home that's fine, if I'm going to do the ironing it's fine," but don't feel guilty about it because there is another life outside of here."

Put family first and acknowledge that having a family will impact on career decisions

Several of our interviewees talked about balancing family and home life with work demands. In addition, several of our female leaders mentioned that you can't have everything at the same time and that being a leader and having a family can involve having to make some difficult decisions.

"I was invited to go to [US university], I was also headhunted to go to Australia and also move to [a UK Russell Group university], but I've got a family and the children were at a critical stage at school and I didn't feel the upheaval of moving was really in their interest."

Create a boundary between work and home

It came through strongly in the interviews that creating a boundary between work and home was considered to be very important. Many people mentioned that it was far too easy to take work and problems home with them, and that learning or creating strategies to prevent this from happening is important.

"I think my most important advice would be to make sure that the responsibilities and the tough things that you have to take on are something that you can leave at work and you don't take home with you. That would be my most important piece of advice. Stay human. And actually by doing that you don't grow too thick a skin to actually do the job effectively."

Develop a strategy for dealing with emails and competing demands

The interviewees felt that academic life had become increasingly demanding over the past 10-20 years and that there wasn't adequate support within the existing structures to help academics to balance competing demands. They commented on this and also on how they developed their own systems to help them manage. Aspiring leaders should think early on about whether they are prepared for the large workloads and competing demands and whether they would be able to devise effective strategies in order to cope.

"I don't think it's really clearly enough defined within the university structure about how you can manage those 2 parts, the essential elements of an academic's role if you like."

"I think what I've learned subsequently is I've got systems in place now which will allow me not to kind of fire through every single email before 10.00am, all the emails which had come through overnight, I can kind of find time during the day to do it. So I've developed mechanisms to help me balance that"

Learn the "strategic yes"

We identified the "strategic yes" from what our leaders were telling us about choosing strategically the additional activities that they wanted to be involved in, whilst acknowledging that they couldn't do everything. Their advice to early career researchers is to think strategically about being involved in activities that will contribute to career progression and are interesting – rather than trying to do everything.

"In this role you have to let stuff go I think. And I think there's power in letting stuff go."







"there's so much pressure on us to do things and to not speak up about it. I was on a research council panel meeting last week and I didn't mind the fact that I had very long days associated with it, but when they were sending me paperwork at midnight the night before the meeting I took the view that I wasn't going to read it. And I went to the meeting and said, "I haven't read this therefore I can't comment on it" and I was the person actually leading that section. And my advice was that they would have to defer it until the next meeting. Because there's a lot of pressure on people to do things and I just said, "Sorry that's not reasonable. You're asking me to do a job with integrity"."

Your reflections on achieving a work / life balance	





Finding mentors and role models

Advice from academic and research leaders

- Recognise the value of informal mentoring
- Look for mentors in all places
- Use mentors to boost your confidence
- Don't always take your mentor's advice
- Continue to seek mentoring relationships throughout your career

Mapping to the Vitae Researcher Development Framework (RDF)

B1 Personal qualities

D1 Working with others

The leaders interviewed mentioned the importance of mentoring and role models from two perspectives: the pivotal roles that effective mentors and role models had played in helping them to develop; and also the role for them, as leaders, to provide support and mentoring and to act as role models for the people that they lead.

The following suggested actions are derived from their experiences. They may be relevant to you, both as you aspire to leadership, and as an emerging leader.

Recognise the value of informal mentoring

Mentors and role models can take different forms, from formal structures and mentoring schemes to an informal conversation that helped someone see or do something new. The interviewees spoke about how they use informal mentoring relationships to use someone as a sounding board, to ask advice, to learn from someone else's perspective, and to be a mentor to others.

"The major thing is just talking to them about their plans, just sitting and listening while they explain what it is they want to do and why, and just kind of asking questions to help them clarify that"

Look for mentors in all places

Mentors and role models don't always have to be senior colleagues supporting junior colleagues. Mentor relationships can happen between peers, within a research team, with people from your wider network (e.g., telephone, email or Skype mentoring), and with people in a broadly similar career stage to you but from different departments, roles and subject areas.

"I think if you're a PhD student or early career post doc you've got to be generous in terms of your own time and you've got to give it to other people to build relationships and build partnerships and build mutual networks of support which will then benefit you in the future"

Remember that "supervising and mentoring are something quite different" and it can be useful to have mentors who are independent of your research. Valuable mentors and role models might also come from different sectors, particularly if you are looking for a new career direction. There is no need to restrict yourself to just one person.







"I had a number of very clear mentors that would guide me and offer me advice and that was really important to me."

Use mentors to boost your confidence

Mentors and role models increase people's confidence that they can do things. Many of the interviewees told us that a colleague or someone in their network had encouraged them to apply for positions of leadership, had helped them to see the bigger picture for their research or career, or had expressed confidence in their abilities. Without that encouragement, they might not have known what they could achieve.

"I think you often need somebody just to push you and say, 'Yeah you can do it'."

"Just helping people to lift their horizons and think yeah I can do that. I can do it. But not being unrealistic."

Don't always take your mentor's advice

Mentors and role models can inspire people to think of their own solutions and help people figure out what to focus on. Mentors can offer inspiration, share the lessons they have learnt, and talk through how they might deal with a problem. They may make suggestions and offer advice, but you may not agree and you don't always have to follow their advice. It may be frustrating when others don't take your advice, but letting go and allowing people to make their own mistakes is an important part of leadership.

"It's about giving people the tools to have the insight and the confidence and the wherewithal to do things for themselves."

Continue to seek mentoring relationships throughout your career

Mentoring relationships can be just as valuable in the later stages of your career as they were in the early stages. Our leaders often expressed continued support from senior colleagues, peers, and their research group. This includes the benefits of being mentored, but also of being a mentor for someone else.

"I think recognising mentorship is something which takes place through the whole trajectory of somebody's career, not something which stops"

"I think mentoring is about a two-way process because I think you do gain... So I've got a mentee elsewhere in the university at the moment and I think it's an equal sort of amount of what she gains and what I gain from it"

Your reflections on finding mentors and role models







Management and leadership

Advice from academic and research leaders

- Leading what? Set out a vision or direction
- Focus on longer-term strategies verses short-term actions
- Build a talented team
- Understand how the institution and academia works
- Be confident

Mapping to the Vitae Researcher Development Framework (RDF)

B1 Personal qualities

D1 Working with others

"I think what's certainly changed in higher education in the last 30 years is the nature of leadership which is now much more like line management and much more top down than it was when I started. And I think whether you're a leader or whether you're somebody who's being led, possibly voluntarily, you just have to get used to that change."

It was clear from the interviews that being a leader in a UK university is likely to involve an element of management. Our interviewees were responsible for line managing people, managing finances, leading and developing strategy and policies and of course leading and managing their own research and teaching. Common themes in the interviews included the challenges of managing and leading within a modern higher education environment, the complexity of meeting organisational goals, working with staff with differing contributions and motivations, and balancing administrative and mechanistic processes with the need to be innovative and creative in research. Based on our interviews, we have chosen here to differentiate between leadership and management. We found that our interviewees referring to exhibiting leadership characteristics as being different from learning how to manage things and people. In many cases, it seemed that the management was more problematic.

Leading what?

Our leaders referred to the need to set out a vision or direction for where they are going in order to take people with them. In addition effective leadership often involves discussing the options, making decisions, and communicating those decisions. Our interviewees referred to the need to be prepared and able to listen to and consult with those around them and emphasised the ability to communicate decisions clearly.

"Leadership in one sense is about it suggests follow ship. And I've always thought that leadership is about having something to lead on. So you've got to have a clarity around why would anybody want to follow you? If you believe in that kind of leader follower thing, and I'm not sure I do, but if you do believe in that why would anybody want to follow you? You've got to have something compelling and whether that's about who you are as a person or what you believe in or how you set out a vision of where we're all going, you've got to have something."







Longer-term strategies verses short-term actions

Typical leadership and management responsibilities for research and academic leaders include sitting on strategy groups and advisory committees, getting people to buy into strategy, line management, and delegating and working through others. Our leaders reflected on the importance of being able to fulfil these roles competently, in order to open up more opportunities in the future. They also thought aspects of their career progression might have been easier if they had practiced the relevant strategic and management skills before they needed them.

"In terms of leading research at a school level there's a lot more strategic thinking behind it and a lot more getting people to buy into that thinking and strategy, and I guess if there was anything I needed for the role that I've had to learn quickly [it was that]"

Build a talented team

Management and leadership are often about influencing from a slightly more remote level and working through people to other people. The advice that came through from the interviews was to find ways of working well with others and keep the right people around you to help get things done. Some important aspects of this were around identifying and capitalising on people's strengths, building an effective research team on a budget by distinguishing between stuff that people could do with and stuff that people can't do without, and knowing who can help and advise you (e.g. with recruitment) by getting out and talking to people in other departments, particularly administrators.

"if you've got a large research group, meeting up with everybody for an hour a week is a big drain. So you've got to look for the structures, maybe group discussions... but teaching them how to write, teaching them how to research, all those kinds of things come from talking to people. And I don't think there's any substitute for it. You have to give people time"

Understand how the institution and academia works

Our leaders stressed the importance of getting involved in the governance of an institution at an early stage. For example, they support and encourage their researchers to use committees to understand the formal structures and to develop leadership skills, to talk to other people in positions of leadership, and to make efforts to get to know the informal networks that can help to get things done. They also recognised that although it is very important to understand how the institution works in terms of governance structures, it is probably even more important to understand and be able to navigate the informal structures. Successful leadership in UK academia depends on the ability to influence others and get things done through them – even though you may not have a formal position of authority over them.

"It's the informal structure of institutions that make them work well. You have to do the governance, you have to of course all that stuff is massively important but you can sit and look at plans and data as much as you want, you've got to get out and understand the reality on the ground"

"There is a barter economy and if you're going to be an effective leader you've really got to understand the barter economy, which is that people will do you something as a favour but they wouldn't dream of doing it just because it says in their job description that they have to."

Be confident

Leadership and management positions can be lonely, and it takes a lot of confidence to make decisions that you believe in, especially when others around you disagree. Standing up for what you believe to be right and being prepared to stick your head above the parapet are key aspects of effective leadership – and also some of the hardest. Our interviewees recognised this and had also learnt that it is important to find the areas and people where they can get support.

"I found early in my career was that I spent too long worrying about how what I did would be received and whether or not it fitted the right traditional model to be looking the right way."







"It's about recognising it can be lonely, and trying to find those areas where you can seek comfort, advice, support, or just say it as it is"

Your reflections on management and leadership





Culture and environment

Advice from academic and research leaders

- Create a welcoming and invigorating environment within which academics and researchers can excel
- Develop an appreciation of the landscape of HE and the context within which both teaching and research sit
- Enhance and enable performance
- Recognise the increasing importance of interdisciplinary (or multidisciplinary) working
- Appreciate the benefit that the variety of individual behaviours, experiences, attitudes, outlook and skills have to offer

Mapping to the Vitae Researcher Development Framework (RDF)

D1 Working with others

D3 Engagement and impact

During our interviews with 18 people in senior management positions in UK universities, it was clear that academia has undergone considerable cultural and business change in recent decades and that this has consequences in terms of work-life balance, management, leadership and the balance of teaching and research. Our interviewees suggested that the most significant shift has been towards a performance-management style in combination with an increased emphasis on the importance of research and grant income.

The following are examples of interviewees who encourage team building, inclusivity, the nurturing of future academics and valuing the diversity of staff in institutions. These are all activities and skills to be encouraged and you should consider them carefully when you move into a leadership role.

Create a welcoming and invigorating environment within which academics and researchers can excel Researchers are advised to think about the people-aspects of leadership and the amount of time that developing a welcoming and supportive environment can take up. Too often researchers assume that the next stage in their career development is about doing more research, but as soon as other people are involved, time has to be dedicated to building a culture in which people will excel.

"... structure we have in my team of communication; formal meetings, informal meetings but it goes beyond that, it goes to celebrating personal birthdays as a norm in the team, we have to for every member of the team...it's part of the acceptance culture and belonging culture which I think helps create a good working relationship not just between me and them but amongst themselves, so they're very supportive of each other as well..."

In addition, interviewees recommended that early career academics and research staff think carefully about whether there is a "fit" between the culture of the team that they are planning to join and their own personal values and working practices.





"I think when you are looking for a position somewhere it is kind of important to have a look at the people around you. Do you fit in? Do they add value to your research, do you add value to their research? And to think about that when you are deciding on where you want to develop your career. What department you want to be in, what university you want to be in. So it matters on both levels and not only within the university"

Develop an appreciation of the landscape of HE and the context within which both teaching and research sit

Early career researchers and academics need to be able to understand the sector within which they work and the macro-environment that affects this. This understanding of the wider higher education sector was seen by our interviewees as being critical to career progression – particularly to strategic roles within universities.

"I don't know what the right word is but understanding the full map of the sector, of the structure, you know, with competing and often sometimes conflicting priorities, you know, and how to really approach this and manage this"

Interviewees also commented that some early career researchers benefit from the wider views that mentors can bring which enables them to develop an understanding of School / Faculty and University activities and life outside of the individual research group.

Enhance and enable performance

"how do you enhance the performance of people whose motivations you don't understand?"

Aspiring research and academic leaders are encouraged to think about how they can motivate the staff and students who work for them. For example, a number of interviewees referred to the importance of understanding the motivation of individuals and ensuring that they were praised when they had done a good job. But they also referred to the critical balance between praising people and having honest and difficult conversations when things were not working out. Researchers are encouraged to see the complexity of individuals and the importance of motivating people whilst also being prepared to deal with underperformance and to have difficult conversations when in a leadership role.

"I think it's also important to model good behaviour...running our grants competition is really about modelling how do you apply for external funding, how do you evaluate at a senior level, you know, these kind of applications, and by feeding back and explaining... It will give them a sense of resilience and the value of resilience and it will give us better outputs."

"Praising people, so I think that's important but also honest feedback and that can actually be quite difficult to give that without demotivating people."

Recognise the increasing importance of interdisciplinary (or multidisciplinary) working

Working across disciplinary boundaries was identified by interviewees as being important for researchers hoping to progress in an academic career. Specifically our interviewees referred to this as being the future of academia and therefore very important that early career academics and research staff recognise this and start to develop themselves at the intersection of their discipline with others.

"I firmly believe that the challenges of innovation are going to come at the intersection of disciplines rather than in the heart of pure discipline. I think there is work to be done in the heart of single disciplines but by and large the in community I'm involved in it's actually intersection of those disciplines [that's important] and I think we've got to get students away from the lonely scholarship of a PhD student into this team environment."





Appreciate the benefit that the variety of individual behaviours, experiences, attitudes, outlook and skills have to offer

Our leaders recognise that diversity in research teams helps the teams to be more effective and perform better. They also note that this diversity requires the leader to have something other than a "one size fits all" approach to development and support and that this necessitates a set of additional skills.

"making sure that you can provide them with the opportunities, that they can see the opportunities and where they are, make sure that they have the support, people with the experience that they don't have, a bit of networking, a bit of matchmaking, what senior staff tend to have is a lot of experience, what they tend not to have is a lot of time. What junior people seem to have is a lot of time but not a lot of experience. Now if you can bring them together as long as the matches are there, there is an opportunity to get some synergies and some hopefully outputs that result in some tangible contribution to both"

Your reflections on culture and environment			





Appendices

Appendix 1: Context and methodology

Aims of the project

Academic staff have multiple roles and many responsibilities competing for their time. The development of their early career researchers is something that they often do not, or feel that they cannot, prioritise – often to the detriment of developing future talent and supporting efficient working relationships. Improved effectiveness in the development of the next generation of researchers and academics is crucial for the growth of excellent research and knowledge leadership in the UK, and therefore in terms of the UK's competitive positioning worldwide. Many current research and academic leaders were themselves ill-prepared for the challenges of management and leadership and feel that their "learning on the job" does not equip them to develop the broad range of skills required by the next generation.

The aim of this project was therefore to research into the things that research leaders, principal investigators and senior academics wish that they had known when they started out and to use this information to develop guidance and training materials for the development of the next generation. The purpose of this is to improve the effectiveness and performance of early career researchers and academics as they progress, to assist with managing and developing talent, and to provide HEIs with guidance on how to enhance academic performance.

Although much work has been done on educational leadership generally, and several studies have looked at the qualities of successful academic leaders, there is little, if anything, that has sought to capture the experiences of those in academic leadership positions and to extrapolate from those experiences to help develop the next generation. We therefore consider that this project makes a unique contribution to the landscape of talent management in UK universities.

Methodology

We approached this project by identifying 5 different universities across the UK who were willing to take part in the research. Three of the universities were large, Russell Group institutions; one was a post-1992 and the fifth was a smaller, research-intensive university under the age of 50. Eighteen academics in leadership positions were identified across the universities, and approached for their participation in semi-structured interviews. All agreed and were split across disciplines, ages and genders as shown in Table 1.

While selecting candidates for interview, we made an effort to have an approximately equal split of male and female research leaders, to cover a spectrum of seniority in leadership positions, to represent a variety of disciplines, and to interview people of different estimated ages. In particular, we checked that each discipline was represented by male and female interviewees, and tried to include a mix of genders and disciplines for each institution where possible. We did not ask for or record specific demographic details, as the sample was too small to do a specific analysis by gender, age, ethnicity, or other background factors.

We identified seven key questions to use in the interviews

- 1. Please give a brief description of your backgrounds and how you came to be at this current point in your career?
- 2. What do you consider to be the key decision-points in your career journey? What factors at the time prompted you to make the decisions that you did?
- 3. What lessons have you learned in your position(s) of leadership?
- **4.** What do you wish you had known before you moved into a position of leadership? What would have helped you in your journey?







- 5. What 3 pieces of advice would you give to an early career researcher (post-doc / PhD student) who wants to develop their career in academia and become a research leader?
- 6. What do you do to enhance the performance of your researchers?
- 7. If you designed leadership training for academics / ECRs, what would be the top 5 topics that you would include and prioritise?

Interviewers were encouraged to probe further as they considered appropriate. The interviews lasted for an average of one hour and were audio-taped and then transcribed. Ethical approval was initially given by the lead institution, Brunel University London, and the consent letter was then used to obtain ethical approval for the project in each of the partner universities. Interviewees were all asked to sign a consent form and anonymity was guaranteed. All documents are held securely in line with the Brunel University London's data management code

Table 1. Anonymised demographics of interviewees

Gender	Discipline Discipline	Role/position	Age (estimate)
F	Arts & humanities	Vice, Deputy or Associate Dean	Mid to late 40s
F	Biomedical & biological sciences	Vice, Deputy or Associate Dean	40s
F	Biomedical & biological sciences	Vice, Deputy or Associate Dean	50s
F	Biomedical & biological sciences	Senior Lecturer or Reader	40s
F	Engineering & physical sciences	Head of Department or Department Lead	Mid to late 40s
F	Engineering and physical sciences	Dean or Head of School	Early 50s
F	Social sciences	Dean or Director of Research	50s
F	Social sciences	Senior Lecturer or Reader	
М	Arts & humanities	Vice Principal, Pro Vice Chancellor, Deputy Vice Chancellor	Late 50s
M	Arts & humanities	Dean or Director of Research	50s
M	Arts & humanities	Head of Department or Department Lead	50s
М	Arts & humanities	Dean or Head of School	50s
М	Biomedical & biological sciences	Vice Principal, Pro Vice Chancellor, Deputy Vice Chancellor	Late 40s
М	Biomedical & biological sciences	Vice, Deputy or Associate Dean	50s
М	Engineering & physical sciences	Vice, Deputy or Associate Dean	Late 50s
M	Engineering & physical sciences	Vice Principal, Pro Vice Chancellor, Deputy Vice Chancellor	50s
M	Social sciences	Dean or Head of School	Early 40s
M	Social sciences	Vice Principal, Pro Vice Chancellor, Deputy Vice Chancellor	Early 40s

Analysis

Once the interviews had been transcribed, the transcripts were uploaded to NVivo. We then performed a number of stages of exploratory and qualitative analysis.

1. A priori coding

First, we coded the transcripts in NVivo using an *a priori* coding system based on the questions used by the interviewers. These *a priori* codes were







- Advice to the next generation
- Improving performance of the next generation
- Key points and decisions on the career journey
- Lessons learned about leadership
- Things that would have helped on the career journey
- Topics recommended for training

2. Emergent coding

These initial categories were then widened to include the following themes / codes that emerged from the interviews:

- Being mentored on the career journey
- Mentoring for the next generation
- Work-life balance and time-workload management
- "Other" for other interesting aspects that arose from the interviews

3. Review and discussion of coding

Once the interviews had been coded, the project team reviewed the themes with the intention of cross-checking the coding and identifying what they considered to be the most prominent and important elements. The project team then met for a one-day discussion of the themes and agreed a list of 6 emerging key elements from the coded transcripts that could be used in developing the next generation:

- Careers and career planning
- Balance
- Culture and environment
- Working with others
- Management
- Mentoring and role models

4. Creation of the guidance documents

The project team reviewed the theme documents against the 6 emerging key elements, identified quotes belonging to each of these elements, and began to structure the quotes into subheadings belonging to each element. At this stage, a further two emergent themes were identified:

- Networking
- The 'business' of doing research

5. Sector feedback and creation of the final documents

During the final stage of analysis, we sought feedback from the sector on the 8 initial guidance documents, including how useful the key elements would be in training the next generation and what the appropriate format would be for the documents.

On the basis of this feedback, we created the final guidance and reflection sheets by identifying the appropriate subheadings to capture the advice relayed by the research leaders during the interviews. Each subheading was elaborated on by summarising messages and reflections identified from the interviews, supported by exemplar quotes.

The interviews produced a huge amount of high-quality information about the experience of academic leaders in UK universities. We recognise that only a fraction of this is captured in this documents and it is our intention to continue analysing the transcripts and producing further outputs in the future.



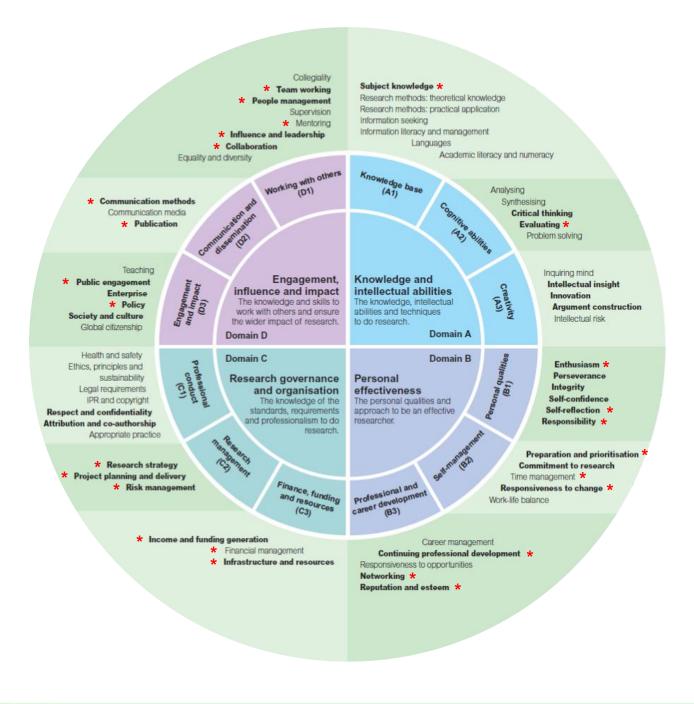




Appendix 2: Leadership Lens

Our research leaders were asked to suggest five topics to be included in training for the next generation of leaders. Their suggestions closely overlapped with the Leadership Lens on the Vitae Researcher Development Framework (RDF), as pictured below (the topics identified by our research leaders are indicated with an asterisk).

The full Leadership Lens and other lenses on the RDF can be found at www.vitae.ac.uk/rdflenses.







Appendix 3: Supporting quotes

Our research leaders were specifically asked to identify their top five topics to be included in training courses. We have collated and summarised these by mapping them onto the relevant descriptor from the Vitae Researcher Development Framework (RDF). The supporting quotes from the interviews are included below.

A1 Subject knowledge*

"Successful multi-disciplinary working because unless you work in a very particular area, and they're getting more and more scarce, you've got to be able to work in multi-disciplinary teams and then head multi-disciplinary teams and really keep everybody engaged...and people can quite easily I think feel slightly disenfranchised that they haven't got much to offer and people just march with their feet so they end up not coming to meetings so it's really important somehow that you let everybody see what their contribution could possibly be. So working in multi-disciplinary teams and the way you make them work successfully."

A2 Evaluating*

"In general I find the more negative conversations are always ones I don't really want to have, even now, even though I've done them, I still don't like doing them. I don't think you lose that, you have to just become accustomed to doing it."

"I think you need to have a good idea on how to deal with difficult situations and difficult conversations, I think that's a very important one."

"...make sure they can communicate effectively but also on top of that have things like difficult conversations, teach them how to deal with difficult situations."

"I've noticed quite a few of my colleagues are going through 360° evaluations at the moment, I in this last week have been interviewed three times by people doing this round the university. I found them quite valuable for myself actually because when I'm asked to say what I think about what's good or bad in close colleagues' performance and some of these colleagues are people I've worked with for ten years, it really becomes a self-reflective exercise and I actually begin to wonder why am I in the room, am I in the room for myself or for the person that I've been asked to help"

"The 360 degree was very powerful. In fact very moving. I was almost in tears when you know this woman was explaining stuff, well it kind of exploited me. She filtered it and it was so nice you know. I said, does this always happen that people say nice things. And there were challenging things and interesting things."

B1 Ethusiasm*

"I think it is absolutely vital that they keep, somehow at the forefront of what they're doing they're excited about it, they convey that excitement and they convey it in papers and in talks and so on."

B1 Self-reflection*

"part of it's being flexible and part of it's about recognising when you need to go away and learn some extra stuff in order to deliver the role that you're doing. So being self-aware of your current skills set and the skills that you might need to keep developing, and I think the skills sets keep... it's a continuous thing actually, you need to keep developing that"







"And I think if you recognise professional life being as trying to make the best of the position you're in all the way through then, that would actually give you quite a different perspective on what professional support and training, capacity building would be. It's rarely about specific skills, it might be about specific techniques and specific knowledge and specific skills to do a particular thing but taken in the round it's a career trajectory, it's more about giving people the tools to have the insight and the confidence and the wherewithal to do things for themselves. I don't know how you fix that other than finding a really good mentor for people, and I would say that that is the single biggest important thing for me would be to have somebody who's a good mentor."

"So it's not so much leadership training or how to be a leader, it's helping you understand all the stuff you need to do in order to be the best leader that you can be."

B1 Responsibility*

- "...how to develop your staff, how to make them feel valued, how to support them, and also how to deal with difficult or insubordinate staff, what if you have a rogue member of staff, and what the processes in the college actually are with all kinds of contacts listed."
- "...managing what a research problem is and how to create your own view of research problems as you move out from under the shadow of somebody who might have done it for you. The importance of things that aren't researching an academic career, teaching, administration, broader student pastoral support, your colleagues and working with them, all those kind of things."

B2 Preparation and prioritisation*

"Know how to prioritise and balance and that's a very..."do as I say, not as I do" element"

- "I think prioritising. The young man I was talking about, the thing he's not doing yet is prioritising, he doesn't understand that if something's important and urgent then he has to do that first. He just thinks that because something's urgent it goes first."
- "...managing different demands, time management. How do you split your time, how do you make sure you still run a top lab, your quality of science needs to be top, it's very competitive."

B2 Time management

"...organising time because I think that's something we have least of, I'm really bad at this I still think. You can tend to get side-tracked"

"Probably time management, because I'm rubbish at it."

"Time management comes into it. Another topic would be dealing with the data overload, how you and your group work with following the literature or being totally unable to follow the literature, how you manage your time and their time to try and keep up with some of it, but not get swamped by it"

"Training in time management skills, I think that is really important."

B2 Responsiveness to change*

"I would put change management; I think it's really important you understand the intricacies of change management and how frightening it is for people and how comfortable to stay doing the same thing all the time."

"Managing change... you know, trying to foresee it, manage it, help others through it"

B3 Continuing professional development*

"...having an understanding of road mapping your career very early on, you know, so around career development"







"I think this appreciation of your career path, identifying what it is that you want, what support you need, identifying a mentoring scheme, you know, that can facilitate that I think are very, very important."

B3 Networking*

"Networking is important"

B3 Reputation and esteem*

"I think it's always valuable to pursue a professional profile beyond your own institution, to be involved in professional activities, whether that's your subject area association, whether that's one of the research councils, whether that's working for a journal; all of things will give you a better peer view of your field, they enable you to build contacts, they enable you to see and start going down directions that you never knew were out there to go down."

C2 Research strategy*

"First is about proper research planning. As I say, not very detailed level but having a plan for your next sort of three or four years, knowing what it is... you know, what are the areas you're going to try and work on, how are you going to make those happen, what's the process to get you to the outputs and get the outputs where you want them,"

"Strategic plans, how to write them, and alongside that same on business plans as well"

"...develop a strategic plan. So I think in all aspects, whether it is lab related, so develop a research project, or whether it is ultimately head of department or something like what I do, I think this is critical, to be able to do this and to be given some options and advice on how you actually do this, because that is something that I personally have never learned, have never been trained in, that's normally when you do a PhD, a post doc, nobody ever mentions to you that you might need to think about this, but I think that would be really, really helpful."

C2 Project planning and delivery*

"I think if you're trying to run a project and somebody says to you, "So where's your critical path at the moment?" and you look blank your project's going to fail."

C2 Risk management*

"you've got the quality of the product, the timescale that you're delivering it in, the scope of what you've got to cover and the cost...it's understanding how to unpack that and what the options are when things don't happen the way that you expect."

C3 Income and funding generation*

- "...have a training around resourcing your research. Often, again, we can be very blinkered to think that for early career researchers if you work on stem cells your research has to be on stem cells, your income has to come from stem cell sources, but that's not the case, but often they don't know this. So there should, I think, be a session around resourcing your research and opportunities"
- "...the grant writing training, so especially because the research councils are now limiting the number of applications that we can put in, we need to, if we are going to have these future leaders or these fellowships coming out, they need to have some very good examples of successful grants, they need to understand that they need to write it strategically and not just be so excited about their very narrow topic"

C3 Financial management

"I think you've got to learn more than you think is wholesome about finance so I'd say a lot of training about finance, even stuff that you don't see the point of when you learn it."







"Personally I think I've got a poor grasp of how financial management works in the university because it's so opaque, I don't really need to know. It's difficult to know how you would actually find out without sounding stupid...But there's nothing obvious at that level which would allow me to come to terms with that. And I think that kind of quite technical specialist knowledge acts as a gatekeeper between senior management on an academic, intellectual, strategic side and on the support services kind of organisational, deliverable side."

C3 Infrastructure and resources*

"...just knowing how the organisation you're in works, it's surprising how little people know about the functions of the university, who does what, where to go when something needs ... when you've got an issue."

"I suppose that training leadership would happen in a particular organisation navigating the central services. HR, finance, grants and contracts, all these things you have to deal with when you are starting new and at least here at [Russell Group University] there is not a booklet or a sheet or two of bullet points as how do I go about applying for a grant, who are the people to contact, whom do I contact to give, how do I hire a person, how do I get my finances sorted, so that in a sort of, you know, each of those, some bullet points would be super helpful because otherwise everybody starts reinventing the way."

"And you suddenly realise when you begin to ask questions that a lot of people are as ignorant as you, that they don't know where to go either. And you kind of think "you must know, you have been here for years". And you think well they don't. So some kind of I suppose better induction in terms of where to go for what kind of things. And you do learn with time of course you do. But it can save a lot of frustration if you are told up front. And to make sure the information is up to date, like the person you are trying to find hasn't left five years ago which happens more often than you think."

"I do think that every new member of staff, be they postdoc or permanent staff, who comes into the college should have to have a formal training course in order to learn about all the systems, navigate the systems, think about these processes, etc. I'll sign up for it too."

D1 Team working*

"I would give some training on how to create a team, how to shortlist people and getting the best out of your interviews for jobs"

"I think that the thing that academics and early career researchers need a lot of is I think understanding how to build teams and people, I think understanding people. I think understanding how to deal with difficult situations because you will have them, all the way through right from the earliest part"

"...how do you have that conversation with your team especially when your team might have 21 different organisations in it?"

"Group size, designing your group size and interaction, how big does it really need to be. At which point does it ... are you no longer being productive?"

"Deciding how to run your group, which everybody has seen different models as they grow up"

D1 People management*

- "...how to develop your staff, how to make them feel valued, how to support them, and also how to deal with difficult or insubordinate staff, what if you have a rogue member of staff, and what the processes in the college actually are with all kinds of contacts listed"
- "...learning to manage other people, even quite early in your career you're probably starting to manage PHD students and so on and they are also junior researchers, so something on HR aspects of research."







"People skills, and that is everything dealing with difficult people, looking at people having different needs and how do you fulfil these needs, if you need to fulfil them and how do you make sure that for example in your research group you divide your time equally because what often happens is that you have some people who are happy and just get on with their work and then you have people who are maybe not that good who are extremely needy, so what happens, you give these people a lot of time but you neglect the people who could be doing even better if you spend more time with them."

D1 Mentoring

"An appreciation of what mentoring is... We use the word 'mentoring' a lot but I don't think many people understand what mentoring is and how that can be used effectively. So a training for early career researchers really would need some studying of mentoring and how they can utilise that to their benefit – I think that's really, really crucial."

"Somehow we need to train people how to supervise effectively and maybe how to mentor as well. Because although you may not necessarily want to mentor the people within your team it might be quite effective in the department to mentor people in other people's team and they can mentor yours. And I think supervising and mentoring are something quite different."

D1 Influence and leadership*

"Definitely have a session on research leadership itself, what does it mean, how is this different to leadership in a general context or in a sort of a public sector context as opposed to research, because it's very different I think"

"...they have to have the basic skills, but also leadership and thinking about leadership is a different thing, and the ways that different people do it. I suppose something I have talked about quite a lot on my leadership course is the fact that so many of the examples are men and quite a lot of the speakers are men and it looks like there's only one way to do leadership in a way so I suppose the more different examples we have the better in terms of training and letting people see what the options might be... it's also good to see women in the roles of leadership doing things in a different way."

"Leadership's not management, making it clear because the two terms are often used interchangeably and they're not the same. And I think many of our leaders and many of our managers don't know the difference."

"Principled negotiating, remembering that you're going to actually have to work with these people afterwards and remembering the gender differences in negotiating for oneself are extremely different and so being negotiated with as well as negotiating."

"If you can't get people to buy into your vision what are we doing? How can you get anything achieved?"

"Strategies of how to engage people...I think it is way more difficult when you are a head of department or Dean of Research because you don't have that immediate contact anymore and you probably, I don't know, but you are probably seen as the guys at the top and I think it becomes increasingly more difficult to have this engagement and this sort of personal touch with people and get the buy in from people into change or things like that, so yes, strategies of engagement and leading change"

"If you're going to have a leadership programme you need to have some really inspirational people teaching on it if because... some people were really quite inspiring and then others you thought, "Well yeah, I know you're in that position but I can't see quite what inspires me to be like you, why should I be?" you know, it doesn't come across. So you need some really inspirational people who obviously have a lot of self-belief and are really good speakers, have a very clear vision of where they're going, and not only just having a vision of where they're going but then how they're going to take people with them. Because I think poor leaders are people who may have really good visions but just don't







understand anything about how to take people with them, because if you don't take people with you you're just going to end up with all these difficult conversations. You'll still have them, even if you do take the majority there's always going to be some of the minority who really don't want to know and won't come"

D1 Collaboration*

"Developing collaborations"

D2 Communication methods*

"I think communication is probably the number 1. How are people going to understand what you want to make happen? How are you going to elicit their support, aside from the mechanics? Communication, time-management, managing conflict, that really comes under communication. Developing a collective sense of direction and identity I suppose."

"...being able to communicate effectively and clearly, especially in research, and there can be some very strong views, especially if you work in a research team; so you work in a collaborative group where you have a professor that's been banging on about a theory for years and years and yet you know and others know that that's past its day. Being able to communicate your own ideas across in an effective way so that it's heard, it's listened to in research I find very challenging because often senior people can be very dismissive, if they haven't thought of it they don't know it"

D2 Publication*

"...writing research proposals and papers, because they're so important. So that kind of would be really important. And understanding funders and who to go to for what journals would be the same thing."

"How to write the four star or five star publications and how to think about these publications from the moment that the grant starts."

"...publication strategy, grant winning strategy, very important right across the university"

D3 Public engagement*

"I was just thinking about academic impacts when I started this work, and we're very applied in what we do. So you almost need a different mindset to think about all the different types of impacts that you can have, and I think if we had more training around that it would be wonderful."

"Formal project management training including the nuts and bolts of costing grants, writing grants in terms of the strategic vision of them, ideas for dissemination, ideas for public engagement, communicating or framing your findings for different audiences, of course ethics"

D3 Policy*

"Trying to do a little bit of, you know, sort of foresight activity around what are the opportunities, what are some of the immediate threats, how do you think things might change in the next steps. Of course it's hard to sort of see too far forward but things like sometimes you can have a sense that certain funders are shifting in what they're interested in and sometimes that's towards what you want and, sadly, sometimes it's away from what you want, but it's quite useful to be thoughtful about that... Yeah, so just thinking about the environment, in its broadest sense, around you."

"And I think some sort of introduction on how to be an effective member of your organisation. So how to work within their politics, within their mission statement within whatever, that kind of thing."

"You've got to understand the constraints that the people above you are under. There are some things where they cannot say yes to, there are some things you can ask for where they're in a position where they can't say yes"







As well as important topics listed above, our research leaders also identified a number of recommendations for the format of training for the next generation of research leaders, including activity, role-play and case-study based training; the opportunity to interact with colleagues from other departments and subject areas; the importance of learning to find the information you need and apply to it a new context; and being prepared for the inevitable challenges of future leadership. The supporting quotes are included below.

"I'd probably do activities because I don't think the topic stuff matters. So for example send me on a training course with a load of PowerPoint slides for a day, I don't care what that topic is, I don't want to do it. Offer me an hour with somebody smart, to sit and talk to them, that's what I want. Somebody that understands mentoring or somebody that understands coaching or just sitting in a room, some of the most valuable activities were sitting in rooms with people in broadly similar positions to me, not necessarily the same roles, definitely not the same subject areas, and doing things like action learning"

"I'm a very bottom up person, I'm always suspicious of theory, and the kind of training I like is case study-based where you say, "Okay, here's a case study, here's the problem, what are the options, what are the pros and cons, work with other people to try and build a consensus about what to do." And I think that's more sort of how to deliver the training but I think just sitting down and, you know, going... Death by bullet point is not helpful."

"A lot of practical sort of role play. I mean this is often common management stuff in any case, but we don't do enough of that, where you know you have people sat around a table or whatever and somebody comes up with a scenario and actually it's facilitated and led by somebody who will actually follow it through as a bit of role playing and maybe give us all a sheet of paper which says whatever. There's loads of different techniques. But something a bit serious or quite serious and of longer duration than half a day."

"I think it's true as a researcher as well as a leader, is you can't necessarily learn all the skills first that you might apply at some point in the next 40 years of your career; I think you have to learn to learn or something."

"is it's better to leave it in the very specific context and to say, "Yeah, I know this is a problem to do with literary criticism or some other academic discipline that you don't know anything about but the skill we're trying to get you to pull out of this is generic, and there's actually an advantage to looking at something where you don't understand the specifics but you just have to understand enough of them to pull out the methodological approach.""

"So I guess rather than leadership programme, a late career programme saying well know you're in this position these are the five things that you need to learn to be good at, what would be much more helpful would be to recognise that every new post doc will at some point be a leader of some sort and to help them develop mechanisms at that point which will allow them to manage their time effectively, articulate things effectively and recognising every single thing which happens, good or bad, will actually allow them to analyse their ability to do things and find ways of doing things in the future. So it's almost like a forward looking tool-kit for a leadership career which will actually blossom in ten or 20 years' time rather than something which will help you as a kind of sticking plaster at the point where you're suddenly taking on this big job."











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Vitae, is an international programme led and managed by CRAC, a not-for-profit registered UK charity dedicated to active career learning and development. Working in the UK since 1968, when we ran our first project to support transitions of doctoral researchers to industry, Vitae has great expertise at enhancing the skills and career impact of researchers locally, within a global context.

We work in partnership with UK and international higher education institutions, research organisations, funders, and national bodies to meet society's need for high-level skills and innovation.

Vitae aims:

- Influence effective policy development and implementation relating to researcher development to build human capital
- Enhance higher education provision to train and develop researchers
- **Empower researchers** to make an impact in their careers
- Evidence the impact of professional and career development for researchers

Vitae and its membership programme is led and managed by CRAC: The Career Development Organisation.

Further information on our activities with HEIs, researchers and employers may be found on this website, www.vitae.ac.uk