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978-0-521-76586-2 - How to Succeed as a Scientist: From Postdoc to Professor

Barbara J. Gabrys and Jane A. Langdale

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HOW TO SUCCEED AS A SCIENTIST

From Postdoc to Professor

This unique, practical guide for postdoctoral researchers and senior graduate students explains, stage by stage, how to gain the necessary research tools and working skills to build a career in academia and beyond. The book is based on a series of successful training workshops run by the authors, and is enriched by their extensive interdisciplinary experience as working scientists.

- Discusses the tools needed to become an independent researcher, from writing papers and grant applications, to applying for jobs and research fellowships.
- Introduces skills required as an academic, including managing and interacting with others, designing a taught course and giving a good lecture.
- Concludes with a section on managing your career, explaining how to handle stress, approach new challenges and understand the higher education system.

Packed with helpful features encouraging readers to apply the theory to their individual situation, the book is also illustrated throughout with real-world case studies that enable readers to learn from the experiences of others. It is a vital handbook for all those wanting to pursue a successful academic career in the sciences.

BARBARA GABRYS is an experimental physicist with expertise in the structure and dynamics of soft matter. She has substantial experience in exploring different science disciplines through research, teaching and learning activities. Dr Gabrys was appointed Academic Advisor for the Mathematical, Physical and Life Sciences Division at the University of Oxford in 2007. She is a Fellow of the Institute of Physics and a Fellow of the Higher Education Academy.

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Department of Plant Sciences, University of Oxford



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To our parents
For life, love, sacrifices and shared wisdom.
And for never allowing us to think that being female could,
or would, hinder our career aspirations

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Preface

This book is based on a series of 20 workshops developed by Jane Langdale in 2005 for postdocs in the Department of Plant Sciences, University of Oxford. The topics were subsequently extended by Barbara Gabrys to cover other disciplines in the Mathematical, Physical and Life Sciences Division at Oxford. The motivation for the workshops and for the book, stemmed from a desire to help postdocs gain a thorough understanding of what being a successful academic entails, and to provide a set of tools to help them achieve that goal. The book can also act as a foundation for others who wish to run their own series of workshops – in each chapter we give an example of how we cover the topic.

We have written the book primarily in the context of the UK higher education sector. However, much of the content is equally applicable elsewhere. The main differences relate to the titles of the various academic jobs in different countries rather than to the expectations of what those jobs entail. Specifically – ‘Lecturer’ in the UK is equivalent to ‘Assistant Professor’ elsewhere; ‘probation’ is equivalent to ‘tenure-track’; and ‘Head of Department’ is equivalent to ‘Chair of Department’ (although Heads normally line manage academic staff whereas Chairs do not). Wherever possible we have used the more universal term Principal Investigator (PI) in order to avoid confusion.

Of course it is inevitable that everyone has to find their own path to success and has to develop their own way of doing things. What is presented in this book is very much a personal view based on our own experiences, it is certainly not meant to be prescriptive. Some of the suggestions will appeal to you and others may not – but it is always easier to modify an approach than to start from scratch. The bottom line is that most successful scientists thrive and excel because they are passionate about their subject – ‘work–life’ balance is essentially a misnomer because science is such an integral part of who they are. But there are skills that have to be mastered and the journey from postdoc to professor can be a challenging one. All too often, however, people focus entirely on the endpoint and forget what an exciting and fulfilling career we have – our main piece of advice is – ‘don’t forget to enjoy the journey’.

*Barbara J. Gabrys
Jane A. Langdale*

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