



Presentation overview



- Aims and objectives
- Who am I?
- Who are you?
 - Deciding whether to work in industry
 - Transferable skills
 - Career paths
 - Routes of entry
- Words of advice
- Summary and questions

Aims and objectives



Aims:

- To illustrate what types of career pathways are open to you using examples from personal experience
- To focus on your transferable skills

Objectives:

- To reassure you that it is a great time to be graduating as a biologist
- To equip you with a few ideas and tips on how to obtain a job that you enjoy and a career in which you can excel



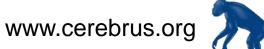


Cerebrus Associates



- I am the director of a consultancy business
- Sectors:
 - Petcare
 - Animal welfare
 - Food and drinks
 - Education and skills
 - Teaching
 - Policy evaluation and impact assessment
 - Scientific discovery and open innovation







"Statistically speaking, a male zoologist is rather an unemployable graduate"



Career timeline



1989	1996	1998	2003	2008	2012
University of Reading					
	IFR Institute of Food Research				
		ADAS			
				⊗ WALTHAM°	
					Cerebrus Associates Consultancy Research Innovation
Applied zoology BSc and PhD	Psychobiologist	Leader: pig welfare R&D	Technical Manager	Head of Behavioural Science	Owner and Director

Skills development



University of Reading		IFR Institute of Food Research	ADAS	provimi	⊗ WALTHAM°	Cerebrus Associates Consultancy Research Innovation	
Technical knowledge		Technical knowle	Technical knowledge	Technical knowledge	Technical knowledge	Technical knowledge	
Technical skills		Technical skills	Technical skills	Technical skills	Technical skills	Technical skills	
Individual learning (basic)	Individual learning (advanced)						
Scientific writing (basic)	Scientific writing (advanced)						
Presentation skills (basic)	Presentation skills (advanced)						
Team working (basic)	pasic) Team working (improving) Team working (improving) Team working (improving)						
	Experimental design (advanced)						
	Finance (b	asic)	Finance (improving)	Finance (improving)	Finance (improving)	Finance (advanced)	
		Writing and winning research contracts					
	Line management						
		Leadership (basic	:) Leadership (improving)	Leadership (improving)	Leadership (advanced)	Leadership (advanced)	
			Business admin (basic)	Business admin (improving)		Business admin (advanced)	
		(Sales (basic)	Sales (improving)		Sales (advanced)	
				Marketing (basic)	Marketing (advanced)	Marketing (advanced)	
					Senior management (advanced)	Senior management (advanced)	
					Ability to deal with ambiguity	Ability to deal with ambiguity	
						Portfolio management	

Salary











Will your career pathway look anything like mine?



Unlikely!



But do you want to work in industry?

Working in industry



Advantages:

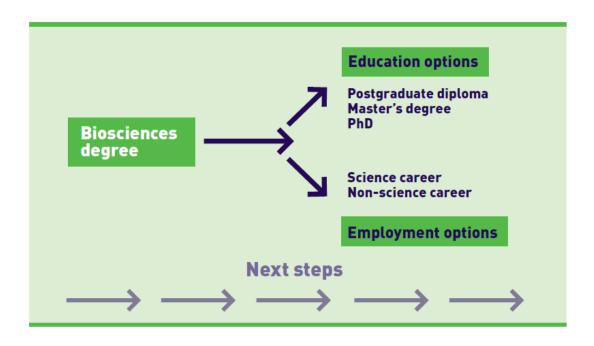
- Fast paced
- Product focussed
- Well resourced
- Lateral career moves possible (and encouraged)
- Attractive rewards packages

Disadvantages:

- Research more applied than fundamental
- Protection of intellectual property may limit ability to publish
- For some people change
- For some people culture

On graduation you have some simple choices





But, what is right for you depends on a number of factors. You need to do some planning!

Source: NextSteps





Think about your new skills?





Source: NextSteps

The top 10 skills employers seek



In no particular order:

- Analytical and research skills
- Communications skills (listening, verbal, written)
- Computer and technical literacy
- Flexibility and ability to multitask
- Initiative and self-motivation
- Interpersonal abilities
- Leadership and management skills
- Planning and organisational skills
- Problem-solving and creativity
- Teamwork







Think about what you really enjoy



"Do it with joy or do not do it at all"

"Choose something you love and excel at it"

Source: LSCC, 2013

Research



- Job roles, sectors, organisations, employers, study options, etc.
- Entry requirements, competition, etc.
- Salaries, work:life balance, etc.
- Sources include:
 - jobs.ac.uk, Society of Biology, IBMS, ABPI, Cogent, LANTRA,
 CIEEM, New Scientist, Nature Jobs, vitae.ac.uk,
 prospects.ac.uk, targetjobs.co.uk, step.org.uk





Good news...



- People will always require healthy food, novel medicines, clean water, sensibly-produced crops, and fuel that is carbon neutral
- Without a work force well trained in the biological sciences, none of this will happen
- It's a great time to be a biologist!

Case study: career development within the pharmaceutical industry



- The UK pharmaceutical industry employs around 73,000 people
- The UK pharmaceutical industry invests over £12.5million every day in R&D

Source: ABPI

Job opportunities in the pharmaceutical industry



Analytical Chemist, Analytical Chemist (Discovery), Animal Technologist, Biologist (biomarkers), Biologist (DPMK), Biologist (imaging), Biostatistics Manager, Business Engagement Director, Chemical Biologist, Chemical Engineer, Chemist (manufacturing), Chemist (process), Chemistry (discovery), Chemistry Outsourcing Manager and Synthetic Chemist, Clinical Data Manager, Clinical Quality Assurance Advisor, Clinical Research Analyst, Clinical Research Associate, Clinical Research Manager, Clinical Safety Scientist, Clinical Scientist, Clinical trials supplies, Commercial Director, Contract Manager, Dată Sciences Manager, Drug Safety Associate - Video, Drug Safety Officer, Epidemiologist, Executive Sales Representative, Geneticist, Graduate Trainee Biologist, Graduate Trainee Chemist, Graduate Trainee In Vivo Scientist, Head of Drug Safety and Local Safety Officer, Health Economics and Outcomes Research Manager, Healthcare Manager, Human Resources Manager, Industrial Placement (Medicinal Chemist), Industrial Placement (Medicinal Chemistry), Industrial Placement Biologist, Industrial Placement Chemist, Industrial Placement Pharmacologist, Industrial Placement Pharmacologist - Respiratory, Industrial placement student - biologist, Industry Accountant, IT Project Manager, Laboratory Technician (biology), Laboratory Technician (chemistry), Learning and Development Business Practice Lead, Legal Coordinator, Manufacturing Operative, Manufacturing Production Manager / Director, Mathematical Modeller, Medical Intern, Medical Physicist, Medical Writer, Medical writer (freelance), Medicinal Chemist, Medicinal Chemist, Medicinal Chemistry Director, Neuroscience Knowledge Adviser, Occupational Health Manager, Patent Attorney, Pharmaceutical Formulation Scientist, Pharmaceutical Technologist, Pharmacist (formulation), Pharmacist (preregistration), Pharmacokineticist (DMPK), Pharmacologist, Pharmacovigilance Scientist, Physical Chemist (discovery), Product Manager, Production Coordinator, Programme Manager, Project Manager / Director, Public Affairs and Communications Executive, Public Relations Executive, Public Relations Officer, Quality and compliance, Regulatory Affairs and Qualified Person, Regulatory Affairs Associate, Regulatory Affairs Consultant, Regulatory Affairs Executive, Regulatory Associate, Research Project Leader, Research Scientist, Sales Representative, Scientific Affairs Manager (Nutrition), Senior statistician, Specialist Medical Representative, Statistician, Sub-Regional Compliance Manager, Summer placement student, Synthetic Medicinal Chemist, Toxicologist, Toxicologist (Contract Research), Toxicology Study Director, Training Director, Training Instructor, Veterinary Surgeon

Source: ABPI

Information about salaries



- New graduates could start on a salary of about £25,000
- With an MSc you could expect about £28,000
- With an PhD you could expect about £31–32,000
- Employees can normally also expect a bonus and other benefits such as sports facilities, private healthcare and pensions.

Source: ABPI

Look for placements and internships



- Employers value graduates that have experience because:
 - You will have developed industry-relevant skills and experience
 - You will be familiar with business culture
 - You may have worked for your future employer already







Applications and interviews



- Prepare, prepare, prepare
 - If you don't know what you have to offer then you are in danger of selling yourself short
 - If you don't know what an employer is looking for, how can you give it to them? (Amy Horne, 2012)
- Read the job specification
 - Essential vs. desirable
- Research the role and employer
 - Website, structure, finances, personnel, philosophy, etc.
- Find out about how they run their selection
 - Competency based, skills assessment, presentation, psychometrics, etc.





Think about your new skills?





- Give me three GREAT examples of where and when and how you have demonstrated these skills
- Give me one GREAT example of when you got it wrong and what you learned to do differently – It's ok not to be perfect





Key messages



- Don't panic!
- Assess and review, research, set goals and action (repeat)
- Choose something you love and excel at it
- Know and develop your transferable skills
- Keep learning and growing
- Be a proactive and positive networker
- You will succeed





67 Lominger competencies



Action oriented, Dealing with ambiguity, Approachability, Boss relationships, Business acumen, Career ambition, Caring about direct reports, Comfort around higher management, Command skills, Compassion, Composure, Conflict management, Confronting direct reports, Creativity, Customer focus, Timely decision making, Decision quality, Delegation, Developing direct reports and others, Directing others, Managing diversity, Ethics and values, Fairness to direct reports, Functional or Technical skills, Hiring and staffing, Humour, Informing, Innovation management, Integrity and trust, Intellectual horsepower, Interpersonal savvy, Learning on the fly, Listening, Managerial courage, Managing and measuring work, Motivating others, Negotiating, Organizational agility, Organizing, Dealing with paradox, Patience, Peer relationships, Perseverance, Personal disclosure, Personal learning, Perspective, Planning, Political savvy, Presentation skills, Priority settings, Problem solving, Process management, Drive for results, Self-development, Self-knowledge, Sizing up people, Standing alone, Strategic agility, Managing through systems, Building effective teams, Technical learning, Time management, Total work systems, Understanding others, Managing vision and purpose, Work/life balance, Written communication.

What competencies are required for the role (i.e. the top six)?
What competencies do you possess (i.e. the top six)?
Are you under-skilled, skilled, or in danger of overusing the competencies?