Professional options for life science PhDs
Daniela Klammer,
IST Austria Career Services
Outline

• Different industries
• Different jobs in biotech and pharma industry
• Ways to enter industry
• Remarks on transitioning
Medical Biotechnology

- Bioinformatics
- Data science
- Biochemistry
- Immunology
- Tissue cultures
- Gene expression
- Protein purification
- Fermentation technology
- Biomedical engineering
- Stem cells
- Neuroscience...

- Medical biotech
  - Diagnosis
  - Gene therapy
  - Implants, Artificial replacements
  - Devices/diagnostics
  - Vaccines
  - Gene profiling
  - Biopharmaceuticals (drugs, hormones, antibiotics)
Agricultural Biotechnology

- Bioinformatics
- Data science
- Biochemistry
- Plant science
- Gene expression
- Protein purification
- Fermentation technology
- Cell biology
- Developmental biology
- Veterinary medicine
- ...
Industrial Biotechnology

- Detergents (biodegradables)
- Food additives (e.g. citric acid)
- Food processing (enzymes)
- Biomaterials
- Biorefinery products
- Biofuels
- Environ. biotech. (detoxification, waste water treatment,..)

- Bioinformatics
- Data science
- Biochemistry
- Enzymes
- Biopolymers
- Gene expression
- Protein purification
- Fermentation technology
- Microbiology
- ...
Developing a new drug

12-15 years, 1.5 bill. EUR

- **Discovery research: identification of target molecules, test development**
  - 1-2 years

- **Lead structure identification**
  - 1 year

- **Lead optimization**
  - 2-4 years

- **Preclinical development**
  - 1-2 years

- **Clinical development (3 phases)**
  - 6-7 years

- **Approval**
  - 1 year
Developing a new drug
12-15 years, 1.5 bill. EUR
Discovery research

Lead optimization

Preclinical studies

Clinical trials

EMA review

Product launch

Sales

Research

Clinical development

Medical Affairs

Patenting

Regulatory Affairs

Pharmacovigilance

Marketing, Sales, Technical Support

Project management

Quality control

Chemical/biological development, operations, manufacturing
Research in industry vs academia

Industry
- Goal-driven (you influence your goals)
- Less independence, how much depends on position
- Often generalists
- Working in interdisciplinary teams is a must
- More vertical and horizontal career development options
- No need to acquire external funding, sometimes internal, competitive funding
- Greater potential for salary development
- More indefinite contracts, but jobs can be terminated; moves between companies usual

Academia
- Curiosity driven, but funding agencies and publishers have preferences
- Higher degree of independence
- Often more specialized
- Working in teams advantageous
- Little horizontal career options, limited vertical career options
- Need to acquire third party funding
- Reliable, moderate potential for salary development
- Precarious working conditions at the beginning, high job security for tenured jobs
## Research in industry vs academia

<table>
<thead>
<tr>
<th>Industry</th>
<th>Academia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Huge difference between different companies</td>
<td>Broad variety between institutions focused on teaching and research</td>
</tr>
<tr>
<td>Large global companies, more structure, more predictable, higher salary</td>
<td>Within institutions different positions</td>
</tr>
<tr>
<td>Larger companies usually have two types of career trajectories: expert track and people management track</td>
<td>Applied science $\leftrightarrow$ basic science</td>
</tr>
<tr>
<td>Start-ups, risky, more dynamic</td>
<td>In hiring stronger focus on potential</td>
</tr>
<tr>
<td>Smaller and medium-sized companies lesser known, usually pay less</td>
<td></td>
</tr>
<tr>
<td>In hiring stronger focus on skills (technical and soft skills) and working well with others</td>
<td></td>
</tr>
</tbody>
</table>
Research positions in industry – example BI

Jobs & Career Levels

Scientific Director – Group Leader
- **Leading**: Role model in Leadership, driving research strategy

Scientific Director – External Research
- **Leading**: Bringing external innovation into BI. Contributing to BI’s reputation in the scientific community.

Senior Principal Scientist
- **Driving**: efficiency, effectiveness and Team Science across the organization. Role modelling leadership competencies

Principal Scientist
- **Acting**: efficiently and effectively along the principles of Team Science and leadership competencies

Associate Principal Scientist
- **Learning**: and adapting to BI culture, leadership and processes

Prerequisite: Ph.D. + PostDoc

Boehringer Ingelheim
Research positions in industry

Research Lab Scientist Career Model

- **Distinguished Lab Scientist**
  - Project support, establishing/generation of novel methods/techniques, innovative pro-activity presentation to a greater audience etc.

- **Lab Scientist**
  - Gain competencies, learning/supervising, mentoring/teaching

- **Trainee Lab Scientist**
  - Less complex experiments, planning, implementation data analysis, documentation, communicating

Prerequisite: HTL, M.Sc./Mag. (Ph.D.)
Research position

• Common terms in the US:
  – Scientist I position – entry level, after MSc/PhD
  – Scientist II position – with postdoc experience
Data Science/bioinformatics

- Data science skills + understanding of biology
- Lots of data: gene expression, biomarker reliability, patient outcomes, personalized health, tying environmental data to disease patterns, or disease patterns to drug research, or drug efficacy to dietary trends
- Can be part of R&D or IT departments (function as consultants) or located within different therapeutic areas

*Personalized medicine:*

“It is more important to know what type of person has a disease than to know what type of disease a person has.”

Hippocrates
Data Science/bioinformatics

- Research on new approaches to analyzing data
- Help design and possibly even build analysis tools
- Examine existing open-source algorithms and apply them in novel ways or create new algorithms
- Investigate trends in diseases and drug development (collaboration with marketing)
- Provide quantitative support for business decisions
MODERN DATA SCIENTIST

Data Scientist, the sexiest job of the 21st century, requires a mixture of multidisciplinary skills ranging from an intersection of mathematics, statistics, computer science, communication and business. Finding a Data Scientist is hard. Finding people who understand who a data scientist is, is equally hard. So here is a little cheat sheet on who the modern data scientist really is.

MATH & STATISTICS
- Machine learning
- Statistical modeling
- Experiment design
- Bayesian inference
- Supervised learning: decision trees, random forests, logistic regression
- Unsupervised learning: clustering, dimensionality reduction
- Optimization: gradient descent and variants

PROGRAMMING & DATABASE
- Computer science fundamentals
- Scripting language e.g. Python
- Statistical computing packages, e.g., R
- Databases: SQL and NoSQL
- Relational algebra
- Parallel databases and parallel query processing
- MapReduce concepts
- Hadoop and Hive/Pig
- Custom reducers
- Experience with cloud like AWS

DOMAIN KNOWLEDGE & SOFT SKILLS
- Passionate about the business
- Curious about data
- Influence without authority
- Hacker mindset
- Problem solver
- Strategic, proactive, creative, innovative and collaborative

COMMUNICATION & VISUALIZATION
- Able to engage with senior management
- Storytelling skills
- Translate data-driven insights into decisions and actions
- Visual art design
- R packages like ggplot or lattice
- Knowledge of any of visualization tools e.g. D3.js, Tableau
Product Development

• Even more applied research
• Focuses on production of chemical and biological entity → drug products are created, formulated, and manufactured
• Advance drug candidates through clinical trials to commercialization
• Scientists develop formulations and produce clinical supplies to support trials
• Scale up chemistry or bioprocessing to allow for commercial production
• Nontherapeutic products (e.g. industrial enzymes, reagents, catalysts) also require product development
Product Development

• Background in chemistry/biochemistry/biotechnology or equivalent required:
  – Process chemistry, chemical development, synthetic chemistry, analytical chemistry
  – Formulation
  – Cell culture, recombinant technology
  – Fermentation
  – Purification
  – Bioprocessing and manufacturing engineering

• Often postdoc required
Project management

- Coordinates activities of the many scientific disciplines that are frequently involved in projects
- Ensure projects are moving forward in terms of timeline, scope, budget
- Risk assessment
- No direct authority over functional team members
- This job is all about communication and interpersonal skills
- Certificates in project management are advantageous (e.g. PMI or IPMA)
- PhD mostly required for research projects
- Most project managers have previously been team members
Clinical development
Senior Clinical Project Manager (m/w/d)

- Implementation and oversight of clinical trials in direct responsibilities
- Preparation and planning of clinical studies
- Project controlling (dates, cost, reporting, regular meetings, milestones)
- Collaborating with and managing external partners (vendors, clinical research centers)
- Planning, implementation, coordination and supervision of clinical trials
- Organization and management of study relevant documents (from concept to archival)
- Implementation audits from external partners and test centers
- Communication with the competent authorities and ethics committees
- Presentation of study results in the context of meetings
- Authoring or co-authoring internal Croma communications (i.e. project updates)
- Preparation of clinical submission documents for a regulatory audience, within a team environment and ensuring process, content, and submission/document planning expertise
- Creation and maintenance of MSOPs, SOPs and forms and further training, including development of appropriate workflows as relevant to clinical activities
- Conduct of internal trainings
- Ensuring critical review and interpretation of clinical efficacy and safety data
- Review and comment on documents in clinical program (e.g. protocols, IBs)
- Active role in improvement of CROMA processes and implementation of agreed improvement steps

- Scientific degree, preferred PhD in life sciences
- Prior clinical project management experience
- Demonstrated experience in in planning, monitoring, and conduct of clinical trials with medical devices and/or drugs/biologics
- Knowledge of the necessary processes of submission/implementation/completion of clinical trials with authorities
- Familiarity with relevant norms, standards, codes of practice and guidelines (e.g. ISO 14155, ICH-GCP)
- Experience in writing/creating SOPs
- Fluency in English and German (written and spoken)
Clinical development

- Typically MDs, but PhDs are hired, too
- Biological scientists tend to migrate to phase I jobs, project management, or clinical scientist positions
Regulatory affairs

- Manage regulatory approval process → center of drug development
- You learn the big picture, the minutiae, and how it all ties together
- Provide strategic advice for therapeutic and business development
- Oversee regulatory submissions process
- Primary liaison between companies and health authorities
- Required: Structured way of working, attention for detail, interested in writing, ability to keep the big picture in mind
- You will be constantly learning new technology, processes and science
- Specialized certificates and postgraduate programs available to learn regulations
- PhD not required, but not uncommon
Regulatory affairs
On the other side: European Medicines Agency

Moved from London to Amsterdam
Medical affairs

- Bridge between R&D, sales, and marketing: Brings together the product, the science of the product and the product’s impact on the marketplace
- Provide strategic advice for clinical development programs, for potential business development deals, and for sales and marketing efforts
- Phase IIIb and IV clinical trials can be part of medical affairs
- Medical support for company’s marketing efforts
- Post-drug approval efforts
- Medical background preferred, but PhD with general medical knowledge possible
Medical Science Liaisons

• Not allowed to promote or sell drugs
• Field application scientists
• Inform physicians of relevant new data
• Provide expertise about products and diseases
• Inform customers about latest clinical findings
• Answer questions, interact with industry experts, and find potential investigators for Phase II and IV trials
• Are permitted to discuss the latest clinical, safety, and other “off-label” information (not yet approved by EMA/FDA)
Medical Science Liaisons

MSL Activities

- 98% KOL relationship management
- 97% Delivering scientific presentations
- 97% Attending medical conferences
- 92% Educating KOLs and other Healthcare professionals
- 82% Support advisory boards
- 76% Identifying and Training speakers
Drug safety/ pharmacovigilance

- Monitoring of adverse side effects after product launch
- Review of case reports, maintenance of database
- Clinical experience and pharmacological knowledge are needed
- Highly formalized processes, great attention to details required for patient safety
- Often as move within company

“Drug safety is like detective work – you gather the clues and put together a complete story.”
PHARMAcovigilance Services that ensure safety and expedite approvals.
Medical Writing

- Summarize information from various sources to compile registration dossiers used in clinical brochures, expert reports, NDAs, and INDs.
- Follow regulatory guidelines
- Important to present data that support key conclusions
- Excellent career opportunity for scientists
- Much time is spent in interacting with content experts and team members
- Many different types of medical writers
Medical Writing
MEDICAL WRITER & CLINICAL DEVELOPMENT MANAGER (M/F/D)
PHARMA

Our client is a European pioneer in the development, marketing and distribution of medicines for people with rare and complex diseases. To enhance the Clinical Development team at the Vienna headquarters our client is looking for a Medical Writer & Clinical Development Manager (m/f/d).

Responsibilities

- Developing the design, synopsis, protocol, amendments and final reports for clinical studies
- Supporting regulatory interactions addressing questions and responses
- Preparing and contributing to scientific documents (e.g., safety annual reports, clinical trials, and submission documents)
- Involvement in the identification of potential investigational sites and providing support during trial conduct
- Managing clinical data internally and externally (incl. publications)
- Maintaining awareness of new developments within the company’s core therapeutic areas building upon own expertise through attendance at congresses, seminars, and meetings
- Offering medical/scientific advice and training to company’s personnel as needed
- Working closely with stakeholders including Department Heads, CSO and CMO
- Participating in multidisciplinary project teams and working with other functions in the assessment of new in-licensing opportunities

Professional Skills

- Natural science/scientific background (FH, university)
- Experienced in medical writing of clinical documents (clinical study protocols, clinical study reports, publications, clinical sections of dossiers, and regulatory documents)
- Experienced in clinical development, ideally in designing clinical studies, biostatistics, interpretation of clinical data
- GCP knowledge
- Strong communication and presentation skills in English and German
- IT skills (Office 365, Adobe Acrobat, alternatively MS-Project)
- Enjoying to work in a growing international company introducing solutions for rare diseases to new markets
- Preferring a high degree of independence and responsibility for assigned projects
- Being able to manage multiple projects, to prioritize and self-manage

The gross yearly salary provided for this function is a minimum of EUR 75,000 (excluding bonus) based on a full-time employment. Any potential overpayment depends on professional experience and qualifications.

We are looking forward to receiving your application addressed to Katrin Spögl, BA, MA quoting reference number E1132 to jobs2@spichtig.at
Quality

• Detail-oriented, interested in developing procedures and more efficient processes (GLP, GMP, GCP)
• Translate protocols developed in discovery research into SOPs (standard operating procedures)
• Guarantees that company is conforming to agreements made with the regulatory authorities
• Quality control for chemistry, microbiology, cell biology labs, animal groups
• Quality provides a good balance of administrative and laboratory work
• PhD not required, but advanced degree advantageous; PhD in technical fields are common at supervisory level; transition easier if you first work in discovery or preclinical research
Sales

- All about interacting with people
- For those who enjoy explaining scientific details
- Focus on working with physicians, hospitals and other health care professionals
- Entrepreneurial attitude required
- You operate independently, are individually accountable for your success, financial reward for results
- Excellent foundation for many other careers, particularly in marketing and business development
- Lucrative career option
- Pressure to reach quarterly quota
- Classical entry to industry
Marketing

• Data driven, understanding of business mind-set required
• Science to and psychology behind “positioning” products
• Develop strategies, responsibility for revenues → excellent prep for executive career path
• Analyzing market potential, competitive environment, customers’ and stakeholders’ needs
• Creating and executing marketing and promotional strategy including forecasts and budgets
• Organizing sales
  – Sales rep often an entry level function
Business Development

• Corporate development and strategy
• Competitive intelligence
• Portfolio management
• Technology scouting
• Analytics/financial analysis, understanding markets
• Assess value of patents, consideration of risk (e.g. legal)
• Negotiating deals
• Investor relations
• Networking
Patent Attorney

• Science degree + special legal training (3-4 years)
  – European and national trainings
• Need to understand the science to manage IP
• Drafting and filing patent applications
• Prosecuting patent applications through to grant, defending patents, opposing third party patents
• Good advocacy skills are key, good language skills needed
• Being able to give clear advice that is relevant to clients’ commercial goals
• Time management: You can’t miss deadlines!
Contract Research Organizations (CROs)

- Provide support to the pharmaceutical, biotechnology, and medical device industries via outsourced research services on a contract basis
- Biopharmaceutical development, biologic assay development, commercialization, preclinical research, clinical research, clinical trials management, or pharmacovigilance
- Tend to pay less than biopharma companies, but provide more training for entry-level hires
- More likely to provide broader exposure to the entire drug development process
Contract Research Organizations (CROs)

**TOP 10 CROs 2018**

<table>
<thead>
<tr>
<th>Rank</th>
<th>Company Name</th>
<th>Revenues, 2017 (US$ billions)</th>
<th>Income Ratio, 2017</th>
<th>Expense Ratio, 2017</th>
<th>Service Portfolio (units)</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>Laboratory Corporation of America Holdings (Covance)</td>
<td>10.441</td>
<td>12.14%</td>
<td>87.86%</td>
<td>31</td>
</tr>
<tr>
<td>02</td>
<td>IQVIA</td>
<td>9.739</td>
<td>13.44%</td>
<td>86.56%</td>
<td>92</td>
</tr>
<tr>
<td>03</td>
<td>Syneos Health</td>
<td>2.672</td>
<td>8.90%</td>
<td>91.10%</td>
<td>42</td>
</tr>
<tr>
<td>04</td>
<td>PAREXEL</td>
<td>2.441</td>
<td>4.40%</td>
<td>95.60%</td>
<td>79</td>
</tr>
<tr>
<td>05</td>
<td>PRA Health Sciences</td>
<td>2.259</td>
<td>9.69%</td>
<td>90.31%</td>
<td>27</td>
</tr>
<tr>
<td>06</td>
<td>Pharmaceutical Product Development (PPD)</td>
<td>1.900</td>
<td>5.00%</td>
<td>95.00%</td>
<td>44</td>
</tr>
<tr>
<td>07</td>
<td>Charles River Laboratories International Inc. (CRL)</td>
<td>1.857</td>
<td>6.65%</td>
<td>93.34%</td>
<td>4</td>
</tr>
<tr>
<td>08</td>
<td>ICON Public Limited Corporation</td>
<td>1.758</td>
<td>16.84%</td>
<td>83.16%</td>
<td>15</td>
</tr>
<tr>
<td>09</td>
<td>WuXi AppTec</td>
<td>1.011</td>
<td>12.00%</td>
<td>88.00%</td>
<td>5</td>
</tr>
<tr>
<td>10</td>
<td>Medpace Holdings, Inc</td>
<td>0.436</td>
<td>8.96%</td>
<td>91.03%</td>
<td>2</td>
</tr>
</tbody>
</table>

Lots of less known companies – worthwhile exploring.
Types of Consulting

• Management consulting (strategy, organization, leadership, marketing, production, logistics)
• IT consulting
• Technical consulting for specific industry sectors
• HR consulting (recruiting, talent management, staff development)
• Audits and tax consulting
Consulting

• Many companies notorious for hiring the best/smartest people
  – Hiring process can be very competitive
  – Case questions
• Often don’t care so much about discipline and experience
• Soft skills important ➔ interpersonal skills
  – You work with clients
• Project based type of work
• Lots of travelling (several days per week)

➔ PhD is a testimonial of your smartness
More information

• Many consulting companies organize recruiting events
• LinkedIn group: From PhD to Consulting
Beautiful bridges
Transitioning

• Postdoc experience often required, usually not an obstacle, but not always needed
• Consider doing a postdoc in industry if your previous research did not have (much) connection to industry
• Focus on research topics that are relevant for industry, e.g. disease related research
• Consider CROs, in particular for entry-level positions
Transitioning

Research jobs
• Topic of your research/technical skills relevant for industry
• You can use postdoc positions that bridge the gap to industry
  – Closer to engineering departments
  – Closer to medical departments/university

“Business” jobs
• Acquire business knowledge
• Project management skills
• Learn about biotech industry
• Communication skills
• Negotiating skills
Use professional programs

Example: Roche

Programmes

Trainee Programmes

Product Development Regulatory Affairs (PDR)-Trainee Programme
Start IT. Make a difference.
Start PT ORDP. Push boundaries.
StarTrack. Data Science to Personalised Healthcare

Fellowship Programmes

Roche Postdoc Fellowship Programme (RPF)

Rotation Development Programmes

Business Perspectives
Finance Perspectives
Foresight. Strategic Insights & Analysis Perspective Programme
HR Perspectives

https://career-services.pages.ist.ac.at/career-options-for-stem-phds/biotech-and-pharma-industry-programs/
Fast-track Leadership Development Program

A 2 year journey with international rotations across Central and Eastern Europe, each lasting from 4 to 6 months. The newly created Novartis Leadership Development Program offers you, our future Novartis leaders, a start in your career and gives you exposure to different functions and countries with opportunities to lead your own projects. The program offers two possible rotation flows: scientific (medical affairs, regulatory affairs, clinical trials, etc.) and commercial (marketing, sales, market access).

Look out for more information as our program opportunities open across the region. Click for the current openings in Russia
PFIZER PARENTERAL R&D
PROFESSIONAL DEVELOPMENT PROGRAM

What sets our program apart? Everything!

ROTATE
COLLABORATE
INNOVATE
IMPACT
Applied science institutions - examples
Industrial biotechnology

The use of renewable raw materials and biogenic residues in sustainable production processes offers alternative solutions for chemistry based on fossil raw materials. The aim of the Industrial Biotechnology Innovation Field is the development of biotechnological processes for the production of bio-based fine and platform chemicals for further processing in the chemical industry or in branches such as cosmetics, cleaning agents and plastics or adhesives.
Cooperation with the Max Planck Society

By continuing the »Pact for Research and Innovation«, the participating research organizations have renewed their commitment to the government to take further steps to enhance Germany's status as a leading scientific nation. One of these measures aims to bridge the gap between basic and applied research by improving cooperation between the Institutes of the Fraunhofer-Gesellschaft and those of the Max Planck Society. Since the initiative was launched, a whole series of research projects have been evaluated and approved by internal and independent experts.

Current projects:

- CarboGels – Carbon-Xenogel-Materialien für elektrische Energiespeicher
- NeuroOpto – Optogenetische OLED-auf-CMOS-Stimulatoren für die innovative Therapie neurosensorischer Erkrankungen
- RASCAL – Barstock Memory Scaling of Ultra-dense and energy-efficient data storage
- Smells4Health – Neue Plattform Technologie für klinische Chemie & medizinische Diagnostik
- eBoxCO2 – Strombetriebene CO2-Konversion durch synthetische Bioinkubatoren
- TWISTER – Turbulent Waste in Structured TERRain
- CLUSTERBATT – Bildung von Metallisystemen in Kohlenstoffmaterialien – Sichere Anoden für zyklenstabile Batteriezellen mit hoher Energiedichte
- Gyco3Display – Zucker-DNA-Kombinomoleküle als neue antimikrobielle Wirkstoffe
- Akustische Hologramme – Ein neuer Ansatz für 3D-Ultraschall
- High-QF – Optomechanikan hoher Güte für quantenrauschmindernde Gravitationswellendetektion
- DoWiMR – Kernspintomografiepolarisatormikroskopie auf Nanoebene
- PowerQuant – kraftstofffähige Faserlaser
- ZellMOS – Schlüssel für intelligente Zell-Implantate
- HEUSLER – Neue Magnetische Materialien ohne Seltenen Erden
Programs/certificates

- IST Austria’s Entrepreneur Lab ➔ business mindset, business skills
- MOOCs offer broad variety of courses on all topics
  - (industrial) biotech, project management, leadership, business skills
- Project management certificates from PMA or IMPA
- MSc programs in Pharmaceutical Medicine/biotech industry
- Postgraduate programs
Certificate of Advanced Studies
CAS Pharmaceuticals – From Research to Market

ETH Zurich offers the new postgraduate program „Pharmaceuticals – From Research to Market“. This program was established to prepare natural scientists for a successful career in the pharmaceutical industry and can be attended while working fulltime. Upon completion participants receive the certificate of advanced studies „CAS ETH in Pharmaceuticals – From Research to Market“.

Audience
The program addresses individuals with a degree in pharmaceutical or natural sciences working in the pharmaceutical industry or for the health authorities. Especially younger professionals benefit from the possibility to extend their knowledge in industry-relevant fields, which were not covered during their studies.

Participants not wishing to obtain a certificate are welcome to attend single modules and will receive a confirmation of attendance.

Content and goal
„Pharmaceuticals – From Research to Market“ provides an overview over the processes a drug goes through from development to marketing. The program builds on the participants’ background in natural sciences and adds knowledge in pharmaceutical development, production, quality management, regulatory affairs, project management as well as marketing and communication. In short, this program provides the additional knowledge that natural scientists need for a successful career in the pharmaceutical industry.
What else can you do?

You need to develop a feeling for careers that sound interesting! Emotions are an integral part of decision making.

- Do research on jobs that sound interesting to you
- Do an internship at companies
- Use ERASMUS+ for job shadowing
- Talk to people who work in industry
- Get in touch with alumni who work in industry
- Go to career events in Vienna (e.g. by YLSA)

Developing a feeling for careers takes time – it is a process!
What else can you do?

You need to develop a feeling for careers that sound interesting! Emotions are an integral part of decision making.

- Use LinkedIn
  - Complete your profile
  - Complete skills section
- Screen job ads to better understand the job market
- Use academic societies for career support
- Use online portals like glassdoor.com to research salaries

Developing a feeling for careers takes time – it is a process!
Large biotech investments happening in Vienna

**Octapharma Investiert 142 Mio. Euro in Wiener Standort**

* Eröffnung F&E-Zentrale und Spatenstich für Produktionsgebäude
* Insgesamt drei große Bauvorhaben von 2016 bis 2021
* Vorzüge der Produktionsfunktionalitäten
* 170 neue Arbeitsplätze seit 2017, 300 weitere geplant
* Expansive Entwicklung des Konzerns


Gleichzeitig mit der Eröffnung der F&E-Zentrale setzt Octapharma den Spatenstich für die dritte Großinvestition: Ein rund 79 Mio. Euro

**Boehringer Ingelheim investiert 700 Millionen Euro in Wien**

Es ist die bisher größte Einzelinvestition des deutschen Pharmakonzerns Boehringer Ingelheim: In Wien wird bis 2021 eine neue Zellkultur-Produktionsanlage errichtet.
2021 virtual biotech course

Transition to a Biotech Career
June 7-11 | From Your Location
An online course for students, postdocs, and jr. scientists.
Apply by April 30

Supported by

Biogen

ascb
an international forum for cell biology™
Young Life Scientists Austria - ÖGMBT

• Sponsorship of first year membership
• Career fair takes place in September
TUday – May 19, 2021

TUday @HOME
Die Jobmesse der TU Wien goes Digital
19|05|21
SEI DABEI | tuday.at

TUday 2021
Want to read up on specifics?
Next sessions

- March 31 – Career options for quantitative scientists
- April 7 – What do we know about career decisions of (STEM) PhD students and postdocs?
- April 14 – Career interests
- April 20 – Careers in higher education, science communication and policy
- April 21 – Skills & CV writing
- April 28 – Personality & Identity

https://career-services.pages.ist.ac.at/news/looking-to-the-future-general-track/
Thank you!

Questions?