Post-Doctoral Development Workshop

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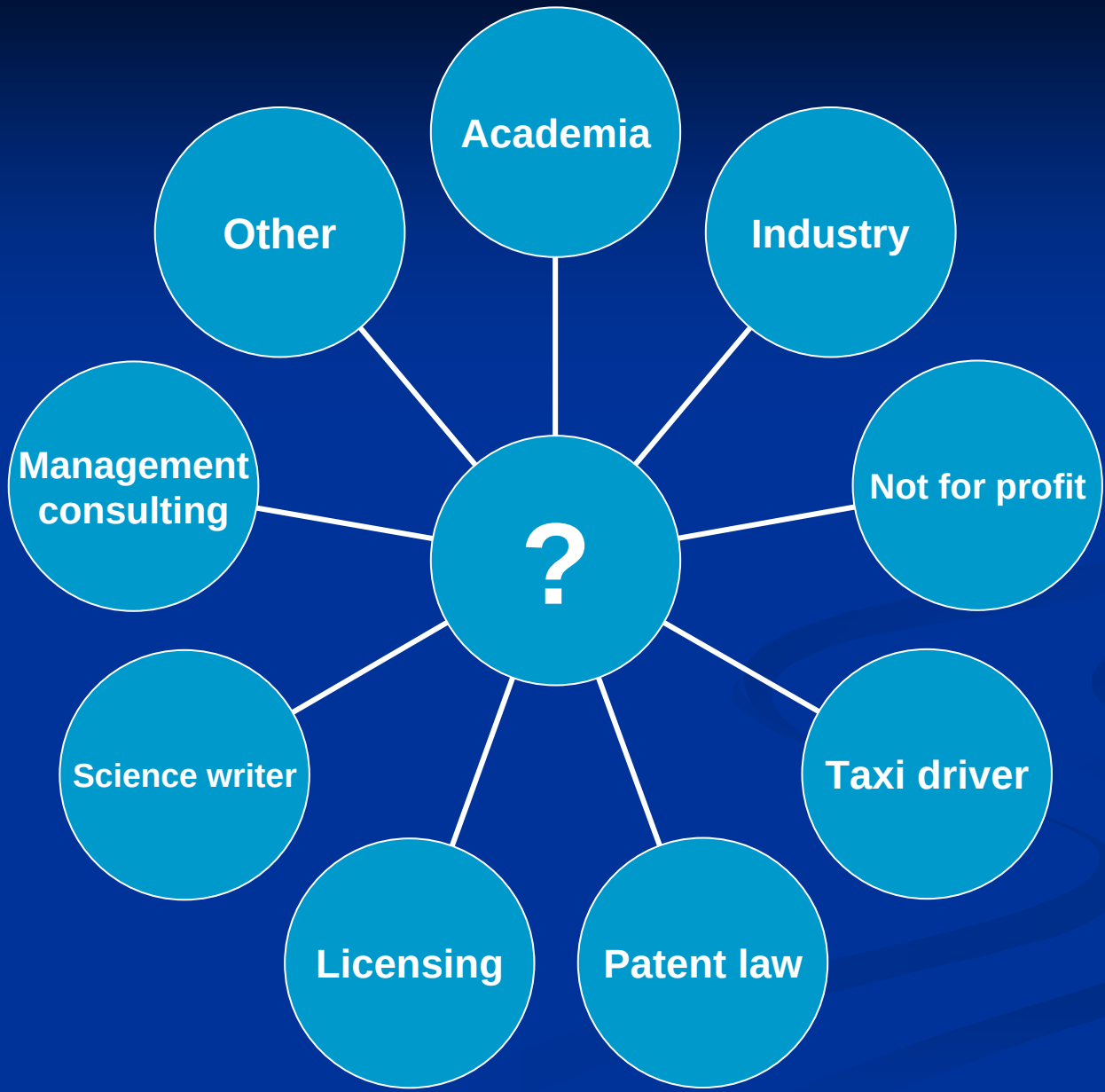
Anne Gurnett

Anne Gurnett - Brief Bio

- Lab technician/part time student
- Graduate student, Cambridge University. England
- Post doctorate studies in Parasitology at Cambridge, UK
- Merck and Co. Inc
- Consultant at TB Alliance (Public Private Partnership)


TAXI
Worried about the future? Yes I was too, when I first got my PhD


Academia
Other
Industry
Management consulting
?
Not for profit
Science writer
Taxi driver
Licensing
Patent law

Career choices

assuming you want to do some bench science

Academia

- Keep your soul
- Constantly write grants
- Academic freedom
- Independent research
- Publish or perish
- No direct 'boss'

Industry

- Sell your soul
- Lifetime job
- Market driven projects
- Patent driven
- Publishing curtailed
- Dizzying hierarchy

My Choice of 'Big Pharma'

- Senior Research Scientist 1986-1989
- Research Fellow 1989-1994
- Senior Research Fellow 1994-2001
- Director 2001-2006

The way it works
Departments

- Cancer
- Metabolic syndrome
  - Atherosclerosis
  - Diabetes
  - Obesity
- Infectious disease
- Neurological diseases
  - Alzheimer's
  - Depression
  - Etc
- Vaccines

- *Pharmacology*
  - *ADME*
- *Safety*
- *Molecular profiling*

The way it works
Teams

Early discovery

- Biochemists
- Cell biologists
- Molecular biologists
- In vivo biology

Lead support

- Chemistry

Drug development

- Pharmacology, safety

The way it works
Individuals

- Bench level PhD scientist
  - Work alone or with one associate
  - Specific defined project
  - Some lead identification (screening)
  - Assay development
  - Compound evaluation
  - Expected to generate real leads or measurable deliverables
- Contribute to 'project working groups'
  - Chemists, ADME, etc
- Can introduce novel directions but they had better be top notch

PUBLISH

Group leaders

- 2-10 team members
- Several projects
- Drug development or drug discovery
- May chair ‘project working group’
- Must generate real leads or measurable deliverables
- Expected to demonstrate people management skills
- Can generate novel new directions

PUBLISH

Directors/Senior Directors

- Manage teams of 10-50 people
- Expected to generate novel new directions
- Demonstrate scientific leadership
- Add to company pipeline
- Simultaneously drive several major endeavors
- Part of project management teams

PUBLISH

New choices

Global Alliance for TB Drug Development Consultant

Product Development Partnerships
PDPs
Private Public Partnerships
PPPs

"Public-private partnerships for health can be defined as arrangements that innovatively combine different skills and resources from institutions in the public and private sectors to address persistent global health problems."

Types of Health PDPs

- Aeras Global TB Vaccine Foundation
- Global Alliance for TB Drug Development
- Foundation for Innovative New Diagnostics
- International Partnership for for Microbicides
- International AIDS Vaccine Initiative
- Medicines for Malaria Venture
- Drugs for Neglected Diseases Initiative
- Institute for One World Health

Back ups

Academics vs Industry

- It is a commonly held conviction that an academic career represents the highest standard for scientific inquiry, while satisfying corporate business goals can be perceived as a less "pure" driver for research. Satisfying industry's expectations, however, does not necessarily have a negative impact on the quality of scientific decisions.
- Differences in the work environment between academia and industry are significant, particularly in the approach to research, which is much more collaborative in industry. Project ownership is shared; people share expertise and regularly aid others' projects.
- Substantially higher salaries, shorter work days, and impediments to publishing are persistent myths about working in industry. These myths persist because each contains an element of truth: salaries average somewhat higher, flex hours and the possibility of heading out the door at 5:00 p.m. are closer to the norm, and publication is sometimes constrained by proprietary considerations in the industry laboratory. But the myths convey a distorted version of the reality.
- The possession of a particular skill set may be more important to a company's hiring decision than an applicant's range of publications. But because of the collaborative approach to research, an industry scientist need not be limited by the set of skills that was initially attractive to the company. Gaining new skills is greatly facilitated through contact with colleagues and participation in their projects.