



THE HITCHHIKER'S GUIDE TO THE CAREER IN SCIENCE

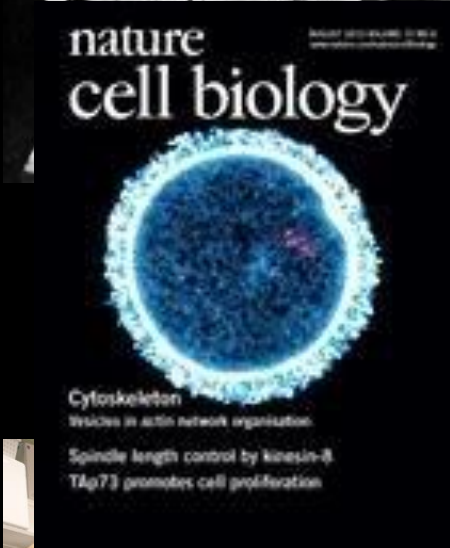
Zuzana Holubcová

MY CAREER PATH

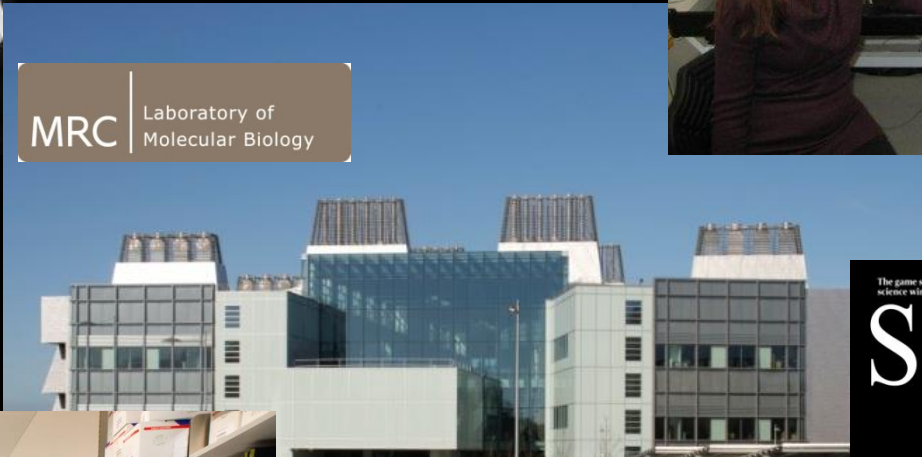
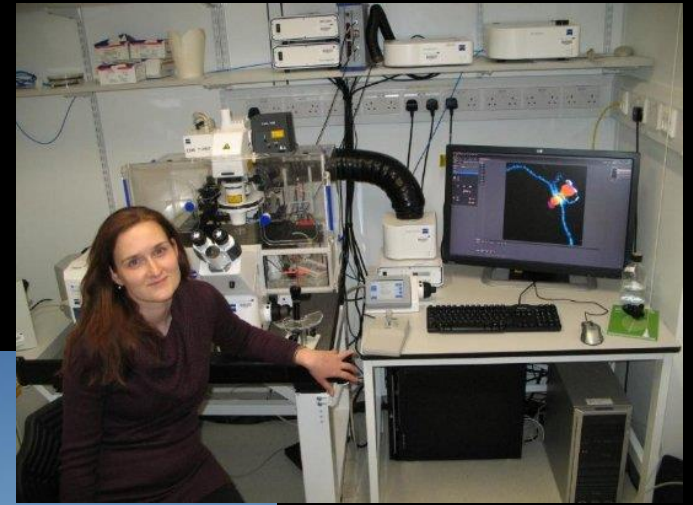




In this building
Bob Edwards
was successful in fertilizing a human egg
in vitro.
This work resulted in improved treatments
for infertility and laid the foundations
for human stem cell research.



MRC | Laboratory of Molecular Biology



CAREER IN ACADEMIA

CHALLENGES

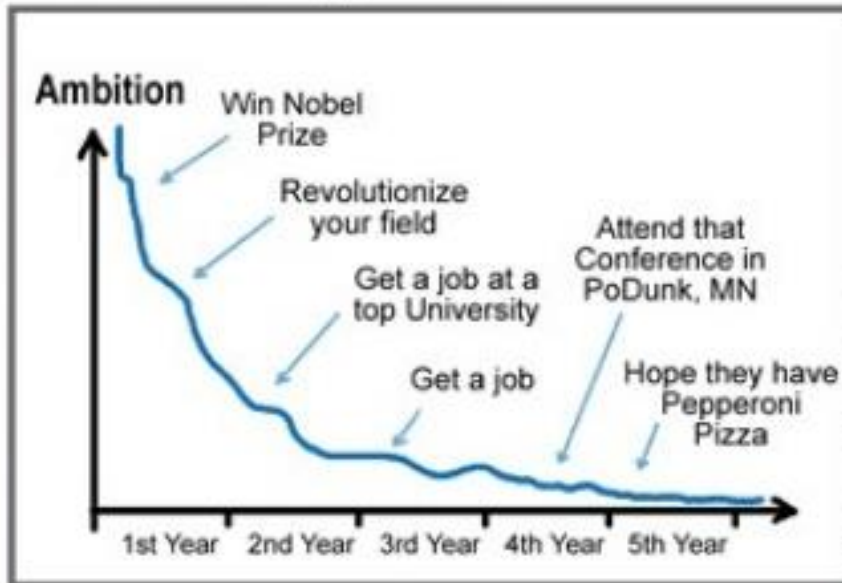
PROS

~~CONS~~

- The SCIENCE
- It's not boring
- The flexibility
- The community
- Travel
- The international friendships

- The work / life balance
- Loneliness
- The pressure to “be successful”
- Getting grants
- Lack of support
- Financial insecurity

YOUR LIFE AMBITION - What Happened??



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'Your Life Ambition'



The Post-Doc Fallacy

To incorrectly assume you'll have a job just because you have a PhD.

*e.g.
"Now what???"*

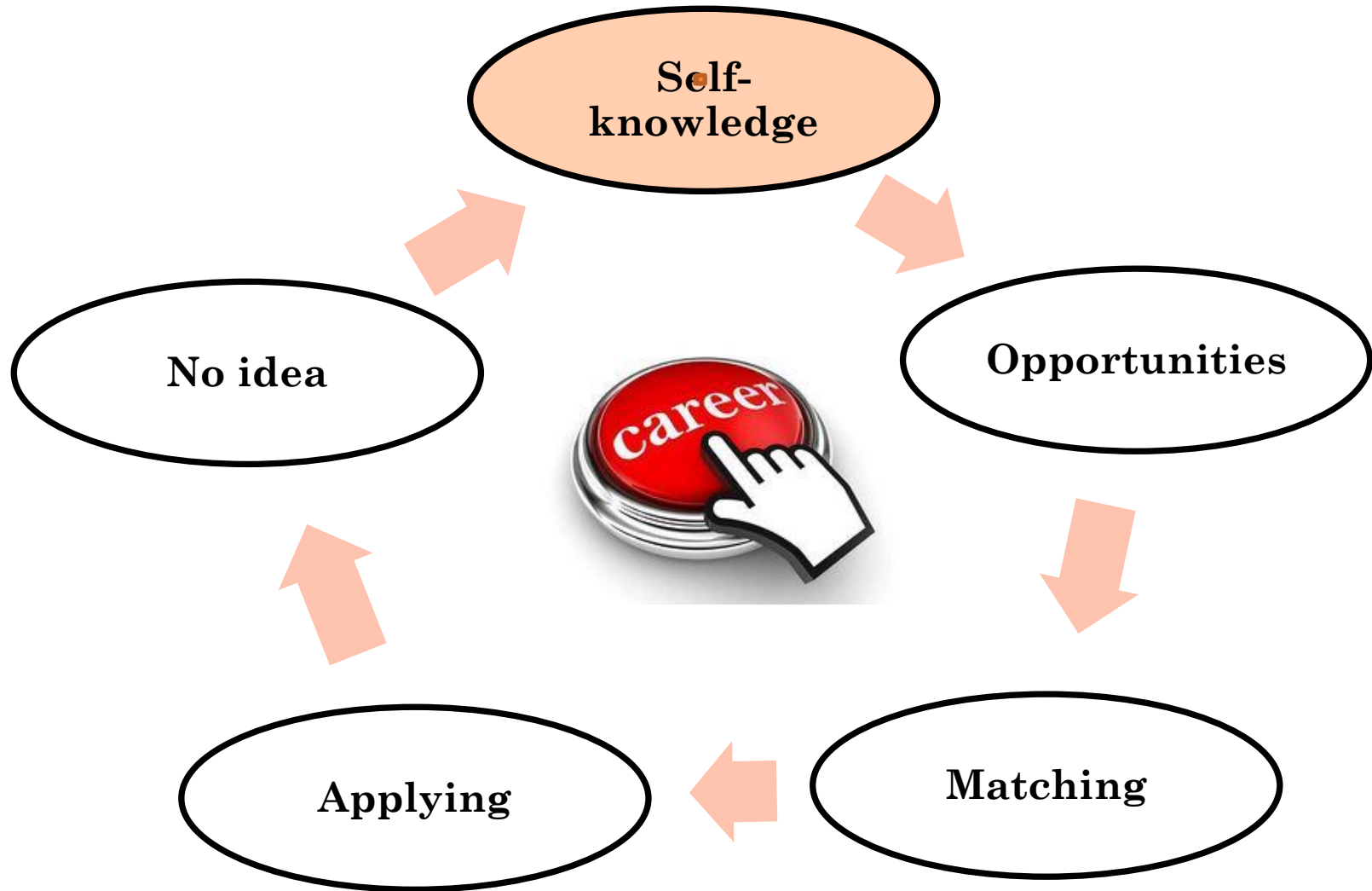
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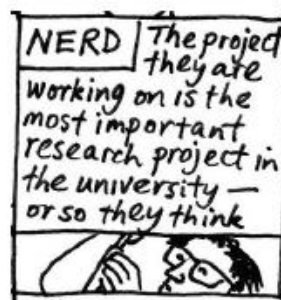
CAREER SERVICE

- Career advisors, CV and Cover Letters Guides, Take Away Materials, Prospects Career Planner
- Career events, Courses/Workshops
 - Personal Development
 - CV/Cover letter writing
 - Job search tools
 - Career Stories
 - Presentation of Recruiters, Headhunter, Entrepreneurs, Investors
 - Proposal writing
- One to one appointments, Interview Preparation, Mock Interviews
- CV/cover letter review/proof reading
- Database of alumni, vacancies and opportunities (incl. Fellowships, Internships and Regionally Based R&D Companies)

HOW TO APPROACH YOUR CAREER PATH

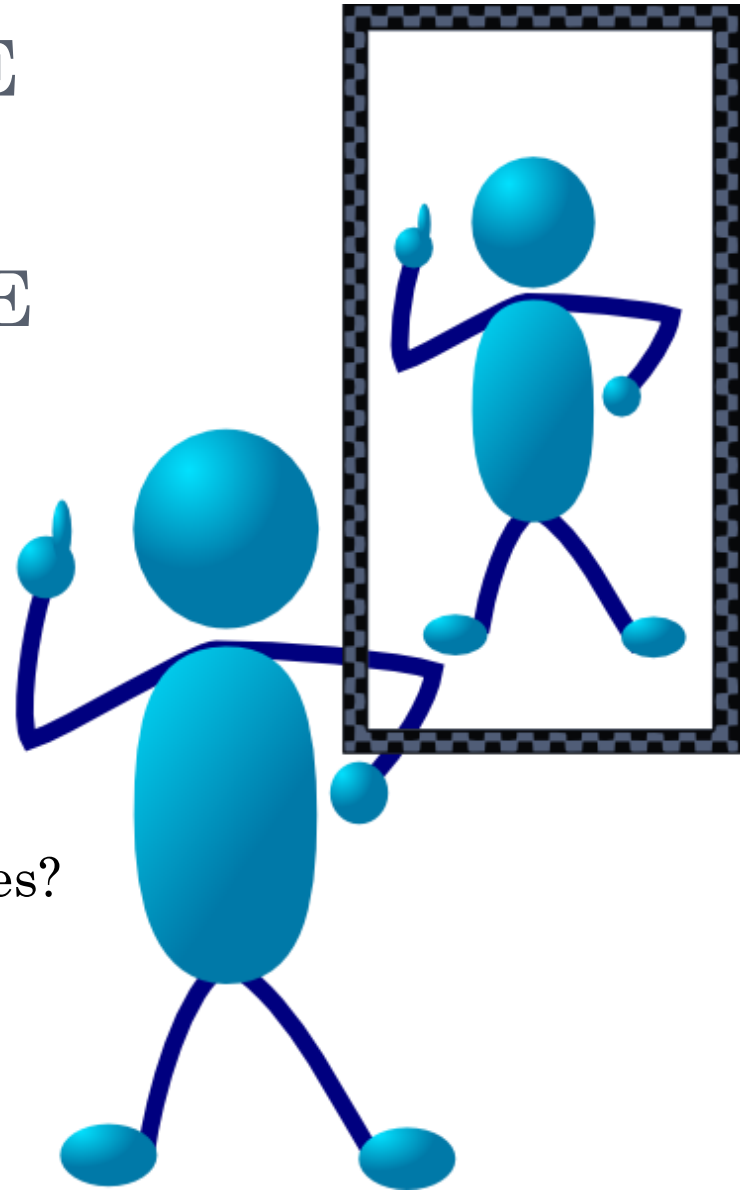


WHAT KIND OF PHD STUDENT/POSTDOC ARE YOU?



THE IMPORTANCE OF SELF-KNOWLEDGE

What are you interested in?
What motivates you?
What are your skills & attributes?
What are your priorities?



SELF-ANALYSIS

Work-Life Balance Team Work Independence

Risk Security Leadership Personal Growth Personal Possessions

Stability Competition Appreciation Creativity

Wealth Expertise Responsibility Respect

Leisure Time Work-life balance Income Travel

Challenge Excitement Flexibility Fun

Communication Sense of Achievement Friendship

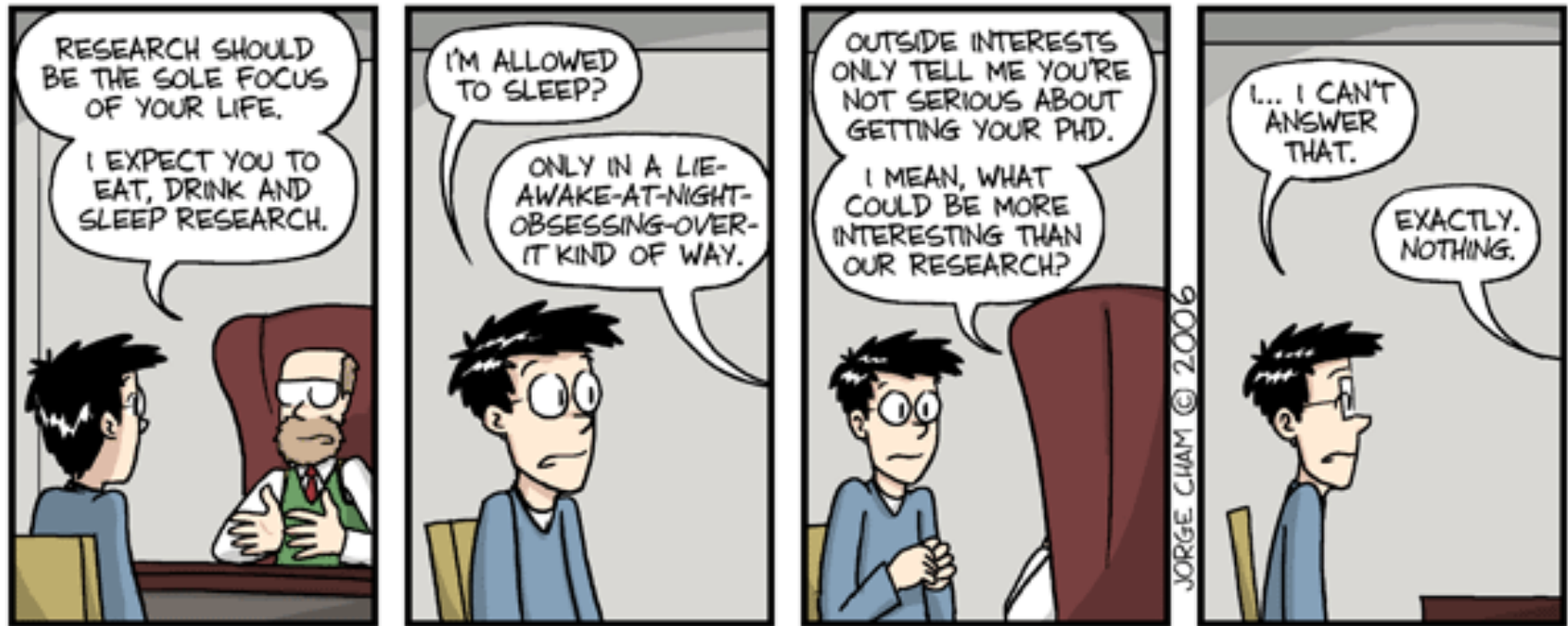
Predictable Working Hours Networking

Contribution to Society Engagement Promotion Opportunity

SELF-ANALYSIS

- Do you prefer to work alone, with little input / interference from anyone including your supervisor?
- Do you work best as a member of a team?
- Are you self-motivated or do you need a structure to help keep you on track?!
- Do you want feedback on how you are doing on a regular basis?
- Are you self-centred (even selfish ??) or do you happily contribute to the smooth running of the lab?
- Do you find it impossible to ‘say no’? Do you do too much outside your own research?
- How well do you know all your own strengths and weaknesses?!
- How well do these match to your career aspirations?
- Do you face up to your own weaknesses and address them or do bury them!

WORK-LIFE BALANCE



YOU AND YOUR PI (SUPERVISOR)

Which one (or more) fits your supervisor best?

Did you know before you arrived?

Which one do you aspire to be?

<p>Big talker</p> <p>These results have clear implications for the cure of cancer in our lifetime</p>  <p>(+) Makes your data seem really important (-) Doesn't really understand what you do</p>	<p>Slaye Driver</p> <p>You know, 60hrs a week just isn't going to cut it in this lab</p>  <p>(+) You get lots done (-) You forget your spouse's name</p>	<p>Demi God</p>  <p>(+) Power, prestige, better job prospects (-) You never see them</p>
<p>Control Freak</p> <p>Why didn't you use 25mM NaCl in the second wash?</p>  <p>(+) Knows exactly what experiment you're doing (-) Knows exactly what experiment you're doing</p>	<p>Science Wonk</p> <p>Why don't you try this new reverse gyropismatic amplifying DOR technique?</p>  <p>(+) Knows everything about science (-) He's a total geek</p>	<p>Laid-Back</p> <p>Make it quick, I've got a 2:00 tee-time</p>  <p>(+) Leaves you alone (-) Doesn't care about your results</p>
<p>Psycho</p> <p>WHAT DO YOU MEAN YOU MADE A MISTAKE!?</p>  <p>(+) Keeps you on your toes (-) Scary</p>	<p>Small Town Grocer</p>  <p>(+) Happy with his own little niche (-) Little Ambition</p>	<p>Rising Star</p>  <p>(+) Exciting Ride (-) Not much room for you</p>

THE IMPORTANCE OF KNOWLEDGE OF YOUR SUPERVISOR

- Step 1: Get to know your supervisor as well as you can... and work out what you need from him / her
- Step 2: Get to know as soon as you can how your lab works
 - Who has a successful relationship with the supervisor? !
 - One that you would like to have?!
 - How do they achieve that?!
- Step 3: Keep channels of communication open and develop strategies to keep his/her attention..!

WHAT ARE THE KINDS OF PROBLEMS THAT CAN ARISE?

- **Poor communication** - Lack of attention, lack of time with your supervisor!
- You are not performing up to his / her standards but you don't know how to improve.
- You think that he/she is not showing enough interest in your work.
- Poor relationships within the lab –you think that poor behaviour goes unpunished / even rewarded, you feel excluded
- You are actively discouraged from taking training courses
- You are afraid to bring up problems because you think it will be “held against you”
- Life – work balance: You and your supervisor don't agree on what is reasonable!

IF THINGS START TO GO WRONG....

- **You have to take the initiative to improve things before difficulties escalate**
- If you don't speak up, then how is he/she expected to know you are unhappy? He / she is very busy, so help by making things explicit , clear, and suggest remedies yourself..!
- Develop strategies to make things work better & discuss them with him / her
- Show your self to be hardworking, dedicated and that you play your part
- Talk things over early on! No supervisor wants to have an unhappy team.

CAREER STRATEGY

- Know WHY (Developing an understanding of your motivations and reasons for pursuing a particular career)
- Know HOW (Acquiring the professional and academic capabilities that are necessary to do the required work)
- Know WHOM (Building networks, relationships and sponsors; identifying helpful people)
- Know WHAT (Monitoring opportunities, threats and risks, requirements for the role)
- Know WHERE (Sourcing opportunities to enter the field, develop your capabilities and progress your career)
- Know WHEN (Judging the best timing for decisions and actions)

OUTSIDE ACADEMIA?

**Academic
Career**

**Industry
Research**

**Using Your
Science
Background**

**Something
Completely
Different**

Specialised,
familiar
but insecure

Options are
little wider
but still
research based

Using knowledge
and understanding
of science but not
hands on research
skills

Using transferable
skills rather
than specific
knowledge

Increasing search effort and likelihood of refraining
BUT increasing number of opportunities

CAREER „T“

BREADTH

Breadth

Have you applied your skills and knowledge? How many roles have you filled? Are these roles varied and diverse? What are the key achievements? Am I focused on the right thing? Are they visible to the others? Am I balanced? Am I well positioned to support my future aspirations?

DEPTH

Depth

What skills/expertise/knowledge do you possess? Am I future proofed? Can I step into different academic role? Do I have sufficient depth and confidence to do so? Am I not under-utilising my skills? Do others know about my skills? What new challenges must I set?

BUILDING YOUR ACADEMIC PROFILE

TEACHING

RESEARCH

ENGAGEMENT

- Effective teacher
- Knowledgeable about teaching and learning theory and principles
- Publish about teaching innovations
- Lead or play a key role in educational innovation and enhancement
- Discipline expert who guides new educational paths

BUILDING YOUR ACADEMIC PROFILE

TEACHING

RESEARCH

ENGAGEMENT

- Quality publications and sufficient quantity and regularity
- Collaborations
- Grant funding
- Track record of quality conference presentations
- Industry connections
- Supervising research students
- Patents, commercialised research
- Gaining research impact and recognition

BUILDING YOUR ACADEMIC PROFILE

TEACHING

RESEARCH

ENGAGEMENT

- Participate in university committees
- Provide workshops / seminars on area of expertise
- Conference /Eventsupport / Coordination
- Manage projects, programs, initiatives
- Participate in projects of team activities
- Contribute as a reviewer for academic journals
- Adviser to government / industry; Board membership
- Public speaker /Commentator/ Active social media presence

CAREERS OUTSIDE ACADEMIA

- Industry R&D – Pharma, Biotech, Physical Sciences Firms, CRO (Contract Research Organisation), Spin-offs
- Supportive R&D – Clinical Trial, Sales and Technical Support, Bioinformatics, Statistics and Computation Biology services
- Healthcare Science, Public Health, Government Labs
- Science Communication – Journalism, Publishing, Public Relations, Science Outreach,, Education
- Consultancy, Patent, Tech Transfer, Start-ups
- Finance, Modelling, Data analysis, Software Development
- Research Funding and Management – grant management, funding bodies
- Scientific Admin, Science Policy, Training and Support Roles
- EU and International Organisations, Local Government

TIME MANAGEMENT

- Use planner
- Make „to do list“
- Get organised
- Identify effective work time of the day
- Create rituals/habits
- Programme/social networks blockers
- Define your day priorities and tasks



4D TIME MANAGEMENT MATRIX

IMPORTANCE

HIGH

LOW

HIGH

DO

DEFER

LOW

DELEGATE

DUMP

URGENCY

	HIGH	LOW
HIGH	DO	DEFER
LOW	DELEGATE	DUMP

PROCRASTINATION



HOW MANY STYLES DO YOU RELATE TO?

Find yourself in this chart of the six styles of procrastination.

PROCRASTINATION
TYPE

PERSONALITY
TYPE

THINKING
STYLE

SPEAKING
STYLE

ACTING
STYLE

PSYCHOLOGICAL
NEED FOR



PERFECTIONIST



DREAMER



WORRIER



DEFIER



CRISIS-MAKER



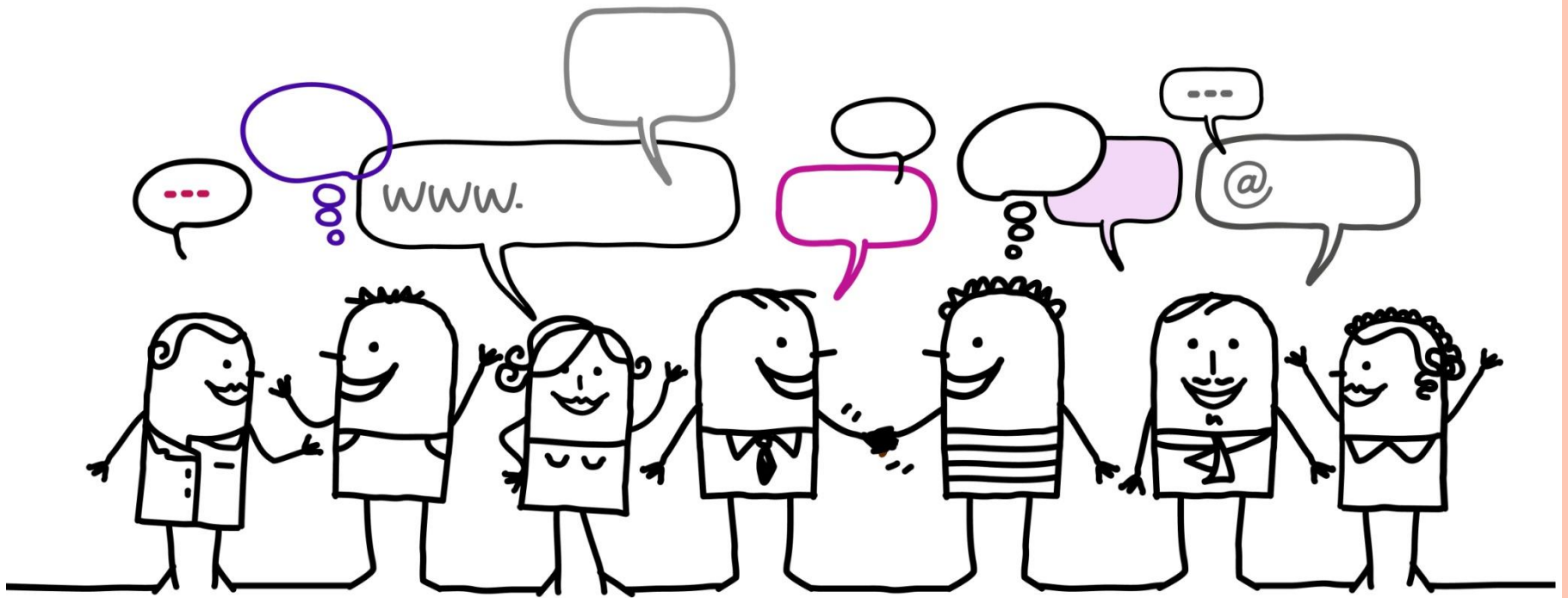
OVER-DOER

Critical	All-or-nothing	I should I have to	Flawless	Control
Fanciful	Vague	I wish	Passive	Being Special
Fearful	Indecisive	What if?	Cautious	Security
Resistant	Oppositional	Why should I?	Rebellious	Non- Conformity
Over- Emotional	Agitated	Extremes... "Unbelievable"	Dramatic	Attention
Busy	Compelled	Can't say "no"	Do-it-all	Self-Reliance

HOW TO MANAGE PROCRASTINATION

- Set a realistic goal
- Be realistic (rather than wishful) about time
- Break your goal down into small specific minigoals
- Just get started
- Reward your progress along the way
- Protect your time
- Use next 15 minutes
- Work in focus bursts
- Expect obstacles and standbacks

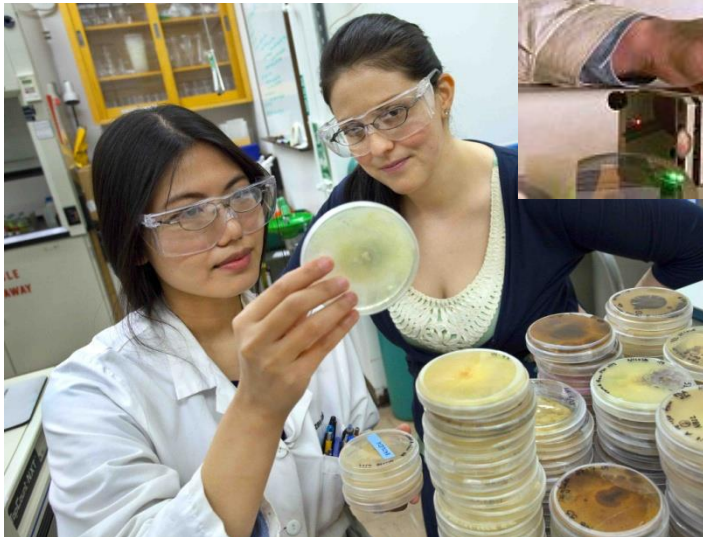
NETWORKING



NETWORKING

- Collaborations
- Student Conferences, Seminars, Summer Schools, Public Talks
- Be ready for the unanticipated „elevator talk“
 - *„career pathways are filled with unexpected kindness of strangers“*
- Social networks
 - Research Gate
 - LinkedIn
 - (Facebook)
- Membership in Societies, Student communities, Academic boards,..
- Volunteering

INTERNSHIPS



FELLOWSHIP APPLICATIONS AND STUDENT CONTESTS

○ Opportunity

- for a career review
- to develop/improve writing and presentation skills
- to shape your ideas

- to gain financial credit/funding
- to build networks and increase your visibility in the field
- to improve your CV and job opportunities





KNOW YOUR VALUE

„DO NOT GO FOR COMFORT, GO FOR CHALLENGE“



*LIFE'S TOO SHORT TO WASTE
TIME DOING SOMETHING YOU
DON'T LOVE DOING!*

