



THE PATH TO BECOMING A SUCCESSFUL ACADEMIC PRINCIPAL INVESTIGATOR

KAREN MADSEN, PHD
UNIVERSITY OF ALBERTA

CANMEDS ROLES COVERED

	Medical Expert (as <i>Medical Experts</i> , physicians integrate all of the CanMEDS Roles, applying medical knowledge, clinical skills, and professional values in their provision of high-quality and safe patient-centered care. <i>Medical Expert</i> is the central physician Role in the CanMEDS Framework and defines the physician's clinical scope of practice.)
	Communicator (as <i>Communicators</i> , physicians form relationships with patients and their families that facilitate the gathering and sharing of essential information for effective health care.)
	Collaborator (as <i>Collaborators</i> , physicians work effectively with other health care professionals to provide safe, high-quality, patient-centred care.)
	Leader (as <i>Leaders</i> , physicians engage with others to contribute to a vision of a high-quality health care system and take responsibility for the delivery of excellent patient care through their activities as clinicians, administrators, scholars, or teachers.)
	Health Advocate (as <i>Health Advocates</i> , physicians contribute their expertise and influence as they work with communities or patient populations to improve health. They work with those they serve to determine and understand needs, speak on behalf of others when required, and support the mobilization of resources to effect change.)
X	Scholar (as <i>Scholars</i> , physicians demonstrate a lifelong commitment to excellence in practice through continuous learning and by teaching others, evaluating evidence, and contributing to scholarship.)
	Professional (as <i>Professionals</i> , physicians are committed to the health and well-being of individual patients and society through ethical practice, high personal standards of behaviour, accountability to the profession and society, physician-led regulation, and maintenance of personal health.)

CONFLICT OF INTEREST DISCLOSURE

No relevant relationships with any commercial or non-profit organizations

The Expectation



Academic
Position

Post Doctoral
Fellowship
3-6 years

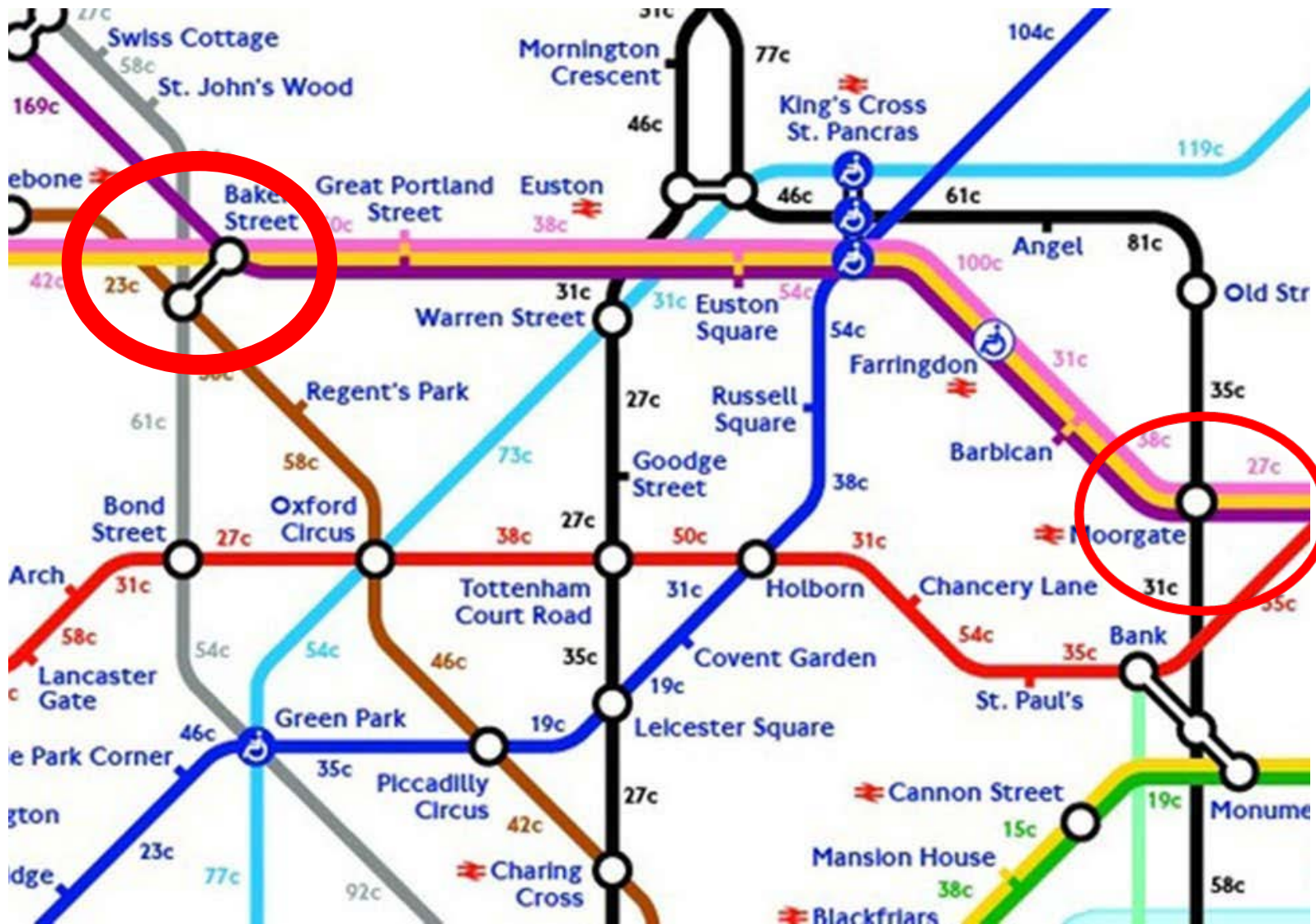
Graduate Degree

- Masters
- PhD

4-5 years

Undergraduate
Degree
3-4 years





The Reality

More than one way to get there...

You can take side trips and still reach your destination!

MY JOURNEY



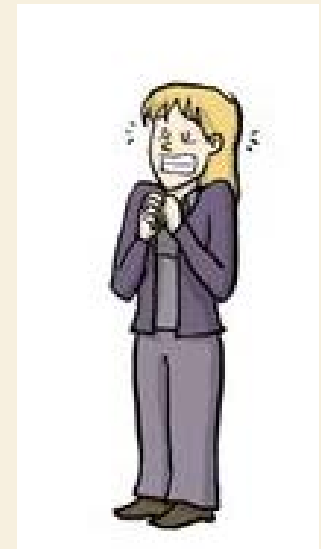
BSc Zoology
University of Manitoba



2 years
MSc Biochemistry
University of Manitoba



Re-energized
3 years
PhD Gastrointestinal
Physiology
University of Calgary



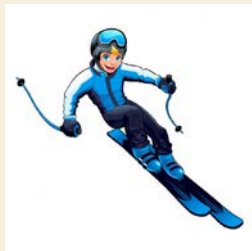
Assistant
Professor
University of
Alberta

Need \$\$\$\$

Disillusionment

Research is
exciting!

5 years
PDF
University of Alberta
Research is challenging!



3 years



1 year







KEYS TO SUCCESS

FOLLOW YOUR PASSION**

*****If you are not passionate about your current program find another program.....***

HAVE IDEAS

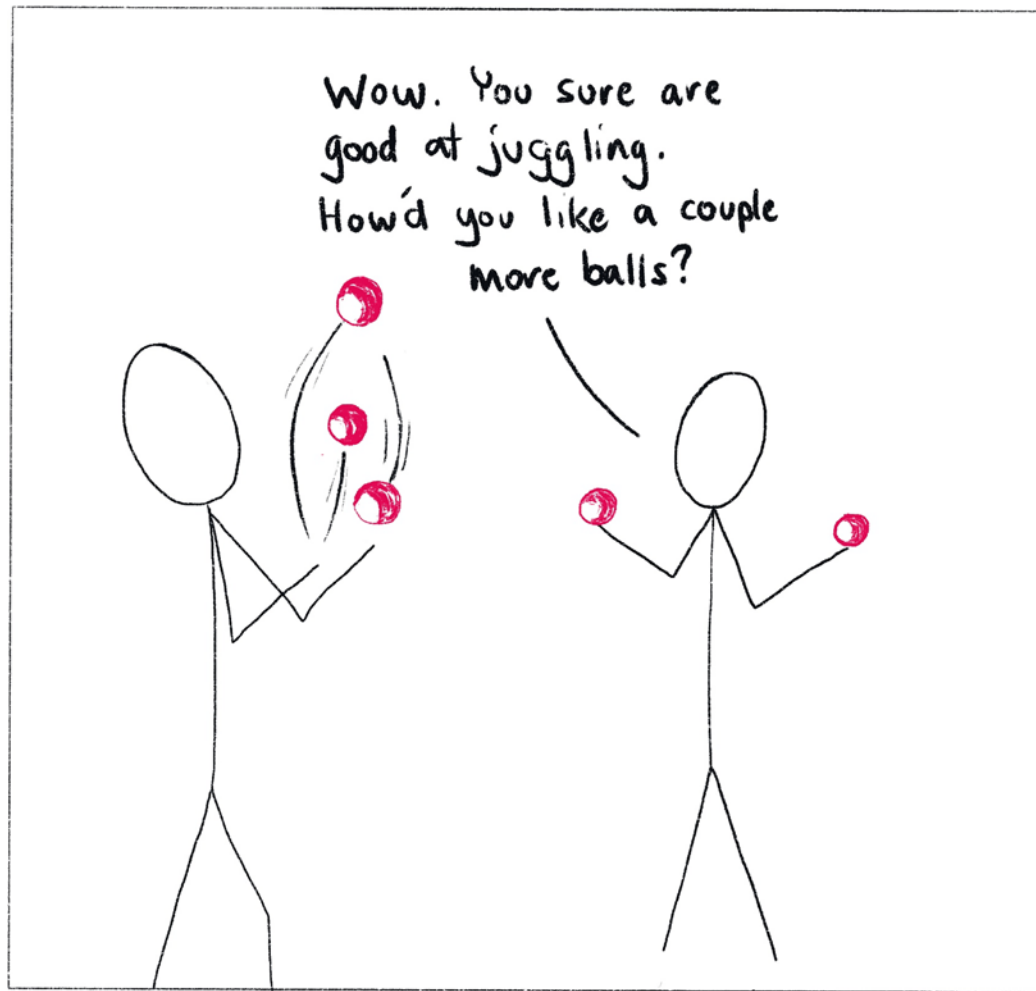
- Creativity is important
- Be receptive to new ideas
- Go to seminars outside of your comfort zone
- Attend conferences and spend time at posters
- Accept the fact that somebody probably thought the same thing 10 years ago





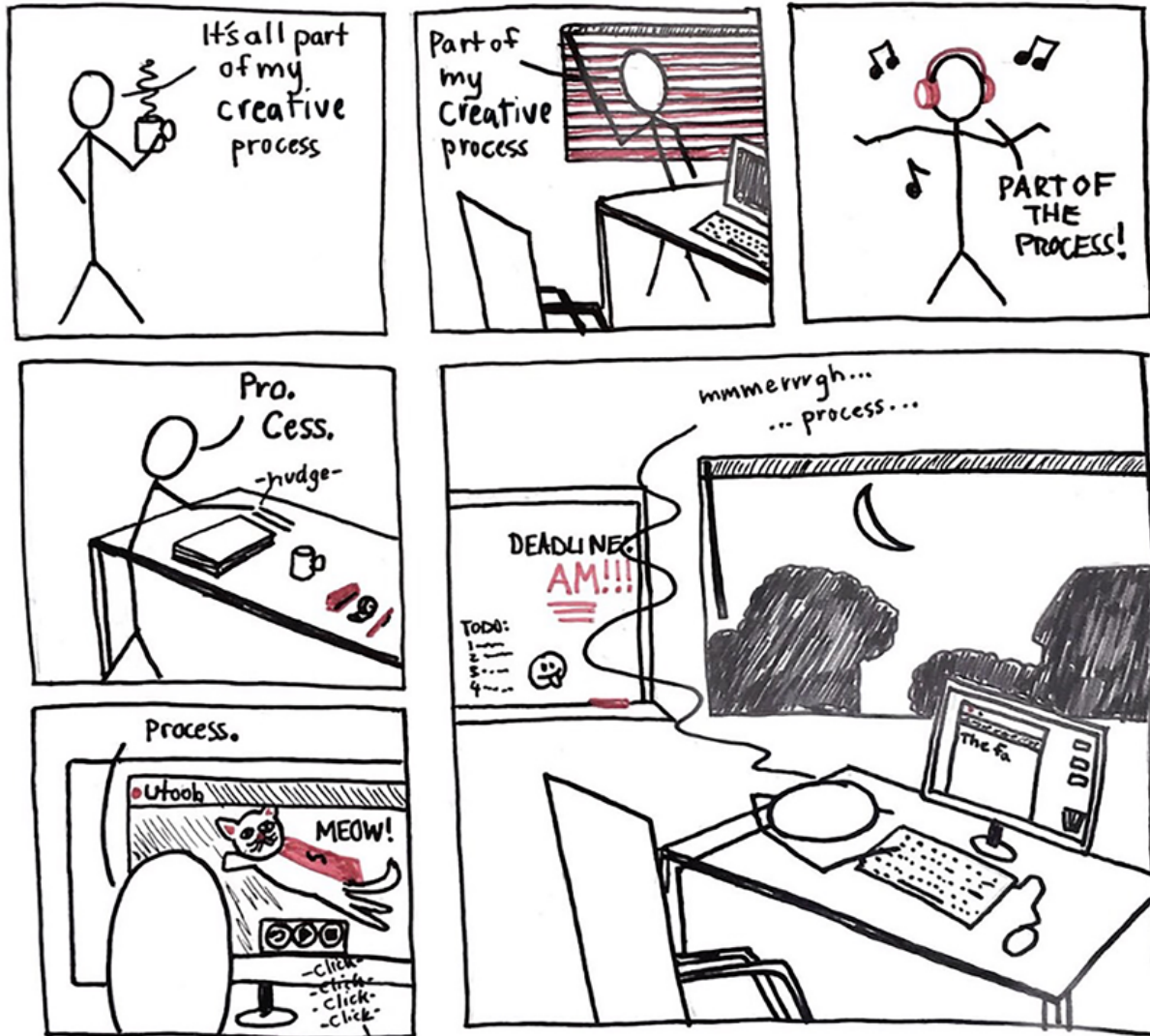
KEYS TO SUCCESS

TIME MANAGEMENT AND
DISCIPLINE



Being in academia means learning to juggle research, teaching, and administration

Be aware that the more successful you become at juggling the more balls you will be asked to juggle....



The Creative Process
@redpenblackpen

PUBLISH PAPERS

- You must develop the discipline to sit down and write!
- Self-motivation is critical!

PUBLISHING IS CRITICAL TO YOUR SUCCESS

- Early publication record will depend primarily on your research supervisor
- Publish the first chapter of your thesis as a systematic review
- First author papers are critical, but you should also take the opportunity to help other people in the lab to show that you are able to contribute to other people's projects
- Must balance between quantity and quality!
- As a trainee you could possibly finalize and write up other unfinished projects while working on main project





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FINISH YOUR PROJECTS

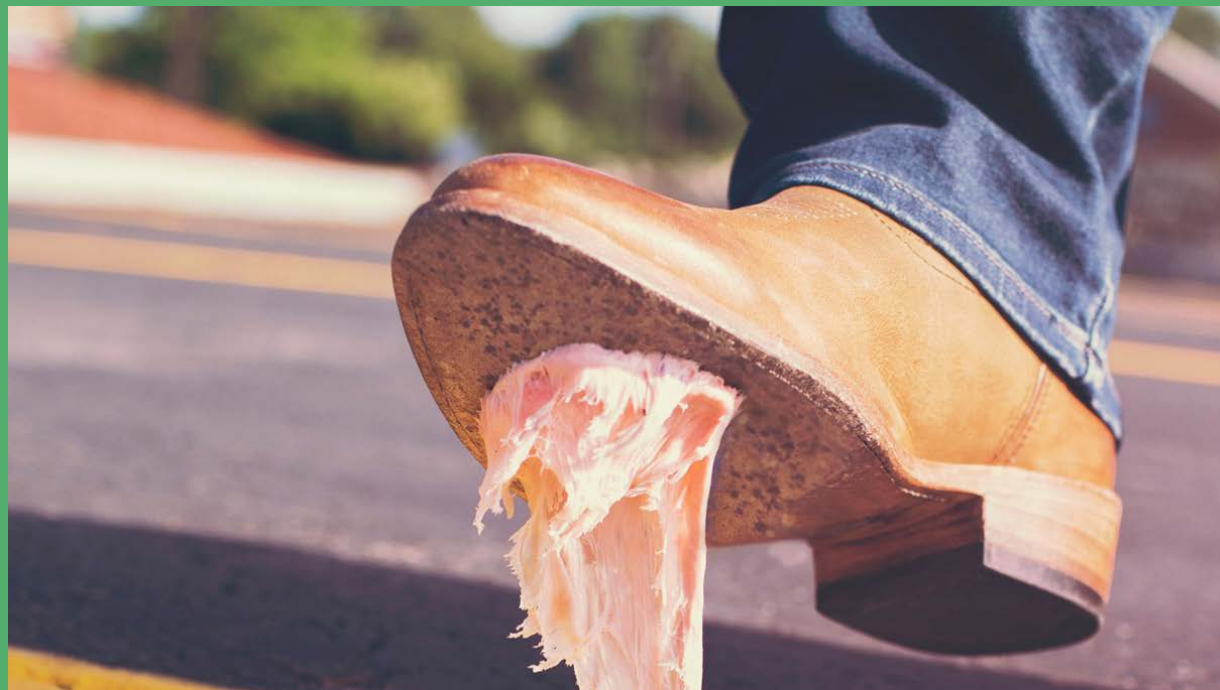
Everyone has a “graveyard” of uncompleted and /or unsuccessful ideas!

Important to finish projects and also important to have more than one ongoing



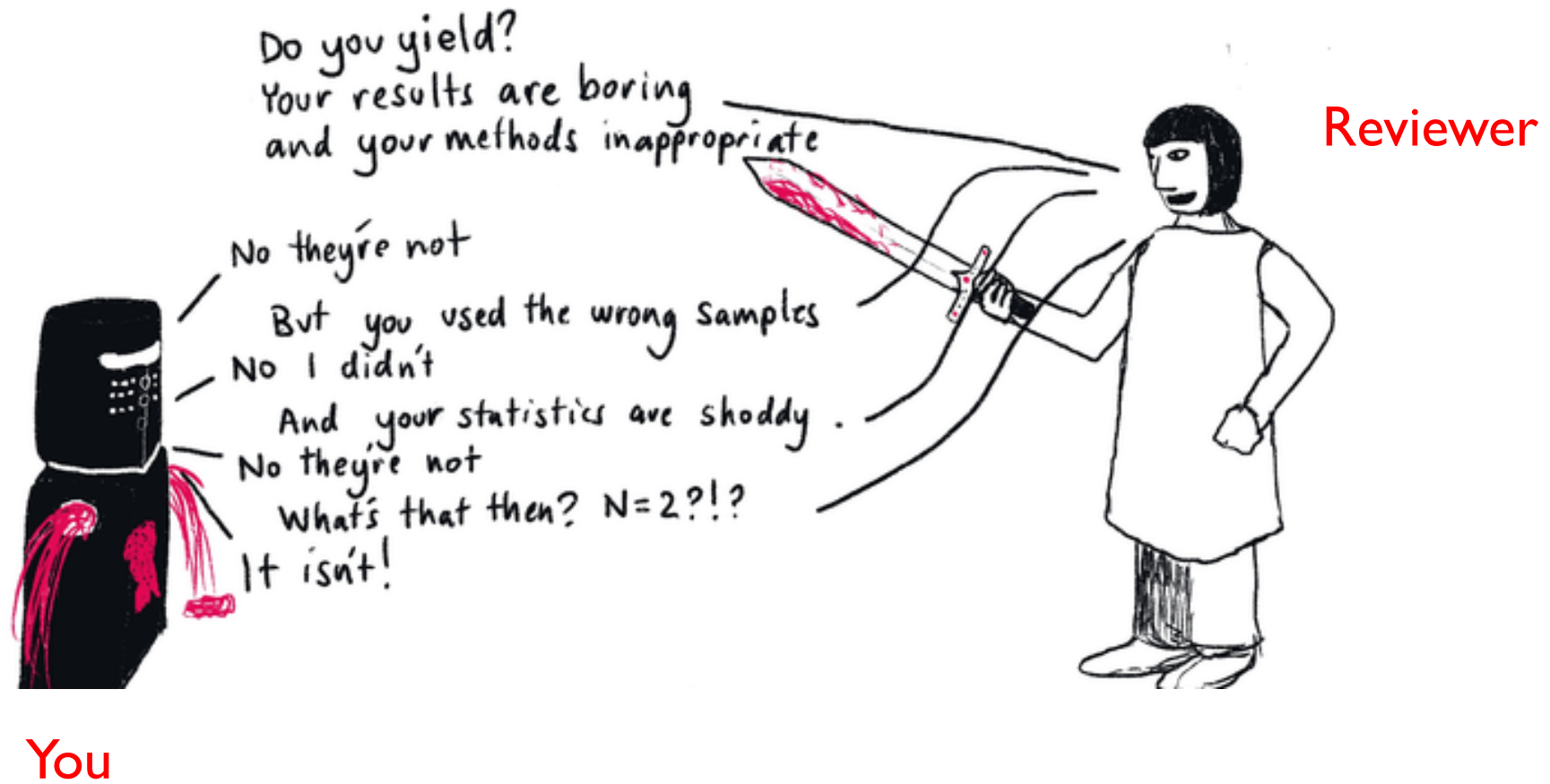
KEYS TO SUCCESS

RESILIENCE



NO MATTER HOW GREAT YOU ARE
YOU WILL FAIL AT SOME POINT

YOU MUST PERSEVERE AND BOUNCE BACK



Defend your position but also remember you might be wrong.....

Listen to and welcome criticism!

Learn from your failures.



KEY TO SUCCESS

**COLLABORATE AND BUILD A
NETWORK OF MUTUALLY
SUPPORTIVE PEOPLE**

BUILD COLLABORATIVE RELATIONSHIPS THAT COMPLEMENT YOUR OWN RESEARCH INTERESTS



NETWORK

- Go to conferences and meet people face-to-face
- Spend time at posters talking to the presenters
- Attend social events
- Design experiments while having drinks in the bar
- Nurture your colleagues
- Be kind
- Don't step on top of other people to get to your destination
- Develop and enhance your professional reputation





KEYS TO SUCCESS

MENTORS



EACH OF US HAS CAUSE TO
THINK WITH DEEP GRATITUDE
OF THOSE WHO HAVE LIGHTED
THE FLAME WITHIN US.

ALBERT SCHWEITZER

How do you choose a
mentor?

QUALITIES OF A GOOD MENTOR - MY EXPERIENCE



Dr Grant Gall
PhD Supervisor



Dr Jon Meddings
PhD Committee



Dr. Richard Fedorak
PDF Supervisor

- Made science relevant and **EXCITING!**
- Instilled a sense of responsibility and discipline
- Took me to conferences and introduced me to people
- Good mixture of trainees in the lab
- Always available for questions
- Really knowledgeable
- Very patient
- Wanted me to succeed
- Gave me the tools and then stepped back
- Provided guidance, knowledge and freedom

Maintain relationships with your mentors and other faculty you admire after you finish your degree and move into an academic career

HOW TO FIND THE RIGHT POSTDOC POSITION

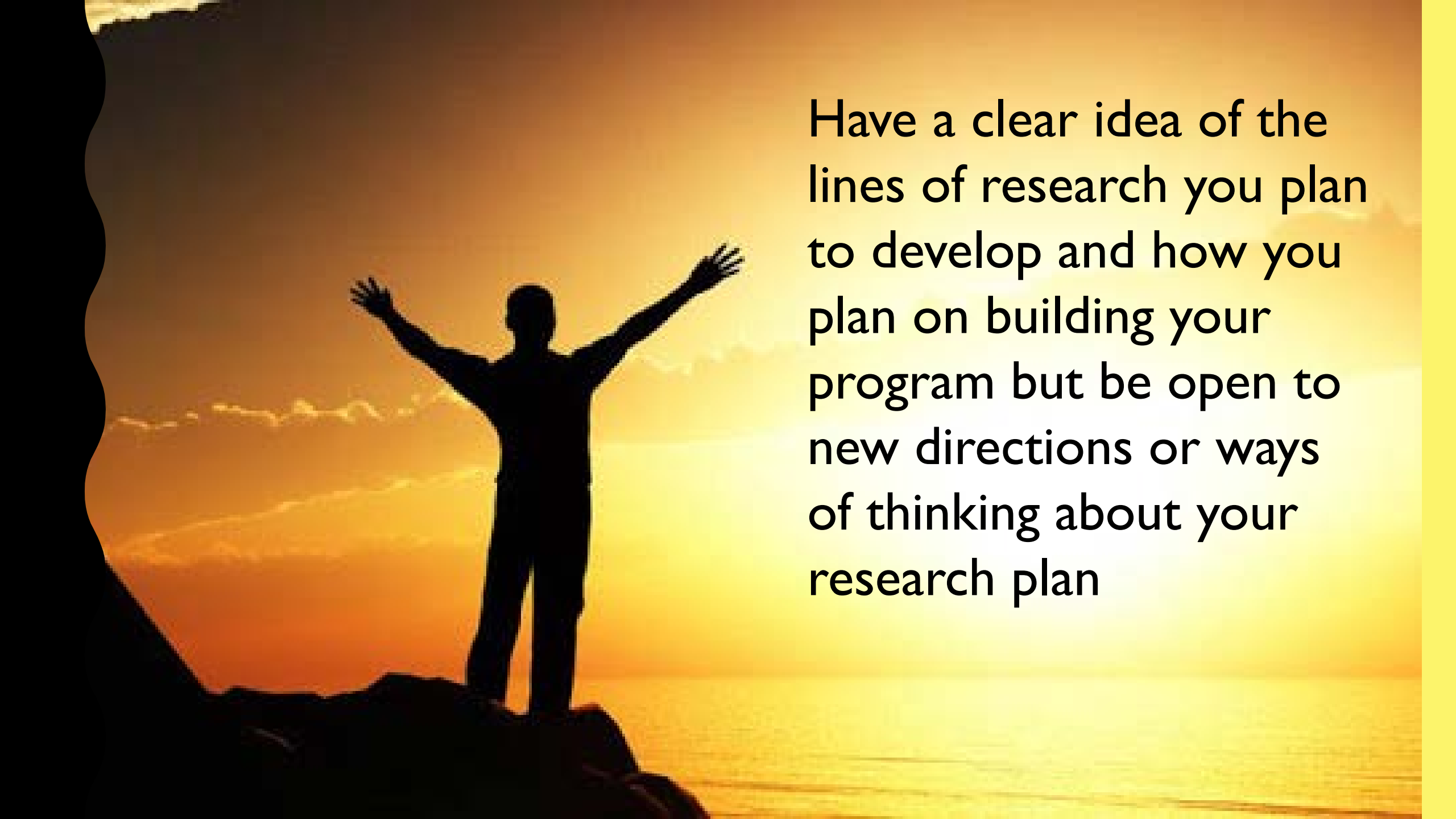
- Start looking the final year of your PhD - Get advice from your PhD supervisor
- Know what you want – try to find a position that will help you achieve your goals (academic/industry/teaching/translational)
- Look for opportunities outside of your PhD specialization to expand your skill set
- Talk to potential supervisors about research topics, their expectations, and available funding.
- Is the lab using state-of-the art techniques?
- Talk to the members of the research group. If the potential supervisor doesn't let you , that is not a good sign
- Does PI give postdocs freedom to work independently? Is the lab collaborative or competitive?
- Look at the publication record of previous trainees from the lab.
- Established vs New Principal Investigator? Established PI has rank and influence, while new PI is likely to spend a lot of time in lab and will give you more direct training



DURING YOUR POSTDOC FELLOWSHIP

- Focus on publications and abstracts
- Quality of publications is usually preferable to quantity, but don't delay publications to get that higher impact
- Apply for travel awards, abstract prizes, small grants
- Attend conferences and talk to people
 - Let people know you are or will be looking for a position
- Get experience in teaching and improve your presentation skills
- Get involved in administrative roles – committees, organize seminar series, CAG involvement
- Take on supervision of undergraduate and graduate students in the lab
- Decide what path you want to take – always have back-up plans
- Do you really want to be an academic?



A silhouette of a person standing on a rocky outcrop with their arms raised in a gesture of triumph or hope. The background is a vibrant sunset or sunrise over a body of water, with a warm orange and yellow color palette. The sky is filled with soft, wispy clouds. The overall mood is one of optimism and achievement.

Have a clear idea of the lines of research you plan to develop and how you plan on building your program but be open to new directions or ways of thinking about your research plan

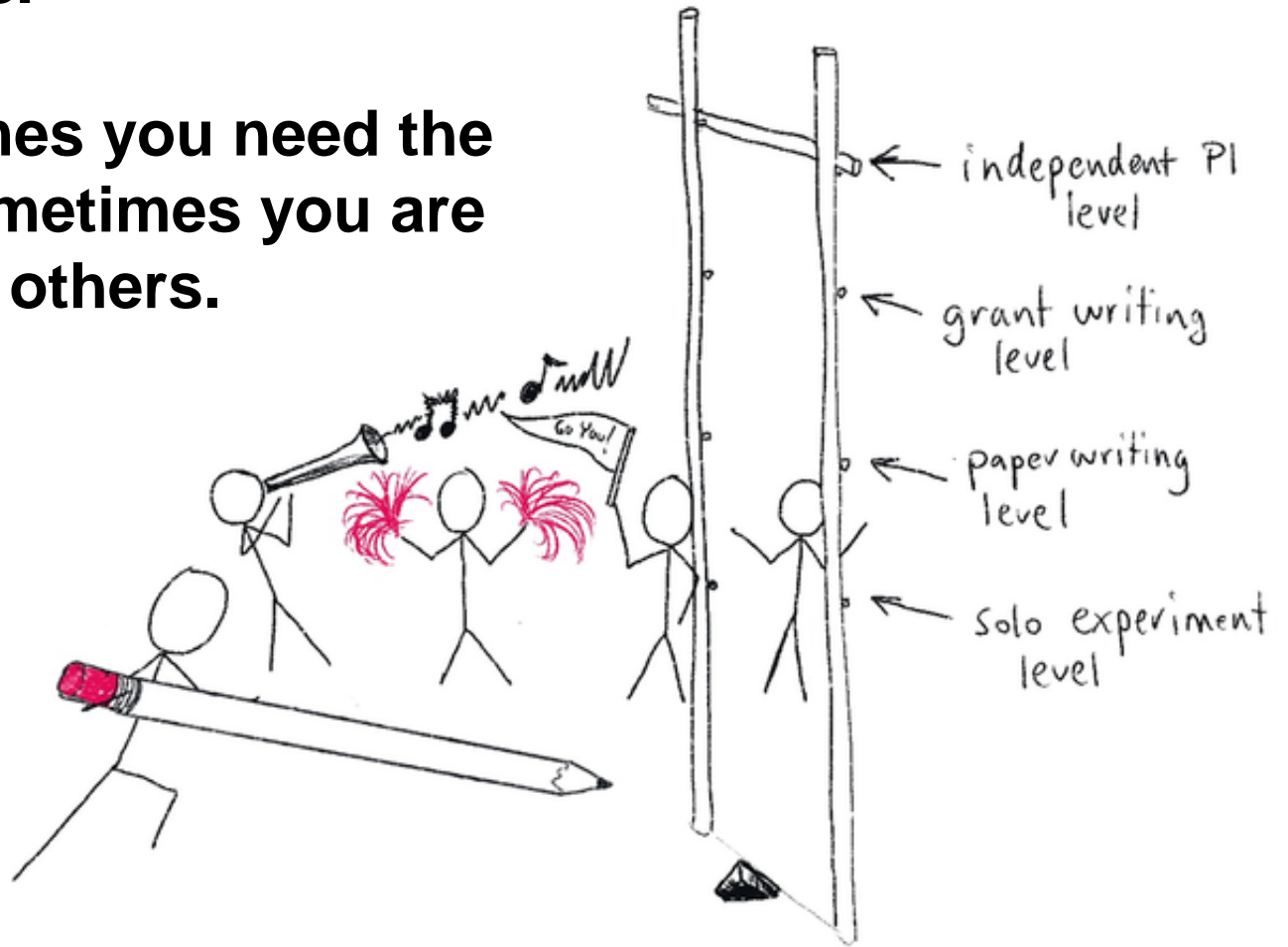
HOW TO MOVE FROM PDF TO ACADEMIC POSITION

- **PUBLISH**
- Start applying for positions during your fellowship - apply for everything – gain experience in job interviews
- If you do get an interview, make sure you thoroughly research the people you will be meeting
- Have your colleagues listen to your presentation and critique it. Be dynamic!
- Hiring committees receive hundreds of applications
- ***Recommendations from someone the committee knows carry a lot of weight*** – SEE PRIOR RECOMMENDATION TO NETWORK
- Importance of teaching varies greatly but always good to have some experience



Get help and help others.

Remember that sometimes you need the cheering section but sometimes you are the cheering section for others.



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THE END and GOOD LUCK