Session 7: B2: Going deeper in to how your project is planned

Charts, tables, Work Packages, Deliverables and other ERC essentials

Full scientific proposal

- Part B2 (Full scientific proposal), 15 pages
- Now we can expect they like the idea
- We have to make them believe it can be done
- We have to make them believe you have thought of everything
- We have to show them exactly how, when etc. everything will happen
- We have to cover all the weak points
- You can have alternative routes to success
- We have to be super specific!
- It is still a plan, changes are possible

Part B2, max 15 pages

Notice that this is up you: you can first write B1 then B2 or vice versa.

- Example of the structure of B2:
  - State-of-the-art and objectives
    - Overview to the existing research
    - The missing part of the big picture
    - Your contribution
    - Work-packages (or sub-studies, objectives etc.)
  - Methodology
    - Methods, theories, feasibility and work plan, risk analysis, timetable
    - Hightlight the outcomes again!
  - Resources (not just money, but people, networks, labs etc.)

-> Now in administrative forms

Template

ERC Starting Grant 2020
Part B2[1]
(not evaluated in Step 1)

Sections (a) and (b) of Part B2 together with section (c) Resources present in the online submission form should not exceed 15 pages. Budget table and References do not count towards the page limits.

Text highlighted in grey should be deleted.
Please respect the following formatting constraints: Times New Roman, Arial or similar, at least font size 11, margins (2.0 cm side and 1.5 cm top and bottom), single line spacing.

Section a. State-of-the-art and objectives

Section b. Methodology

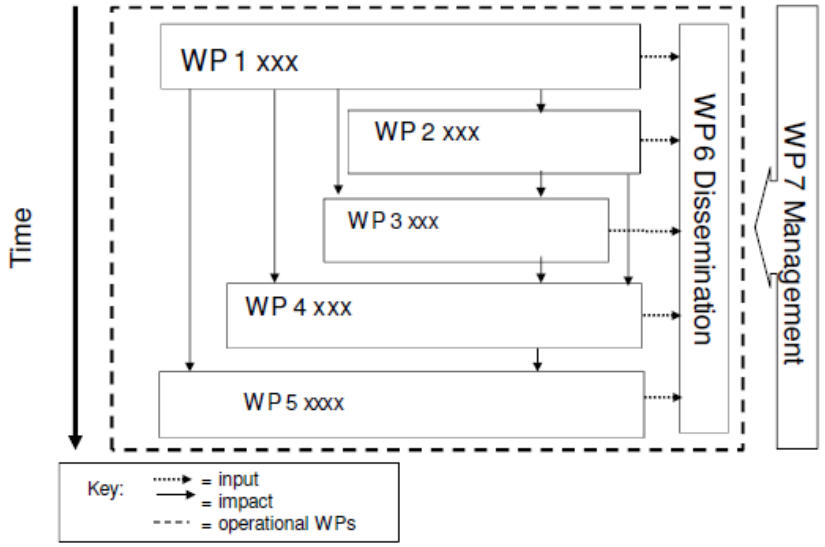
Do NOT include any description of resources or budget table here (Part B2). The Resources section and the detailed budget table are now part of the online submission form (Part A, Section 3 - Budget). This section 3 will be extracted and provided to the peer reviewers.

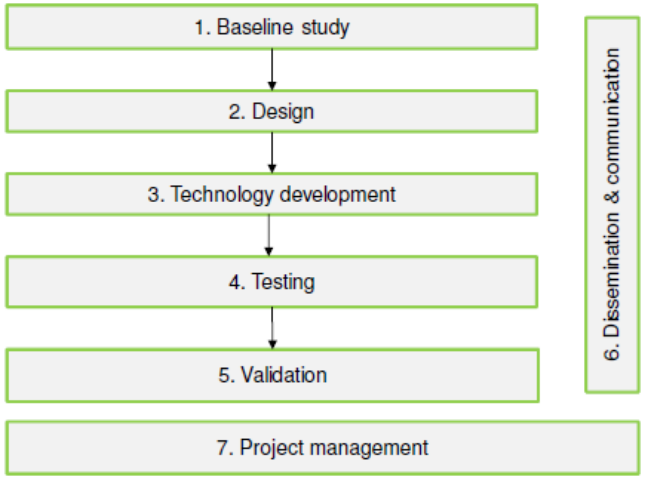
Practical tips for writing: work packages

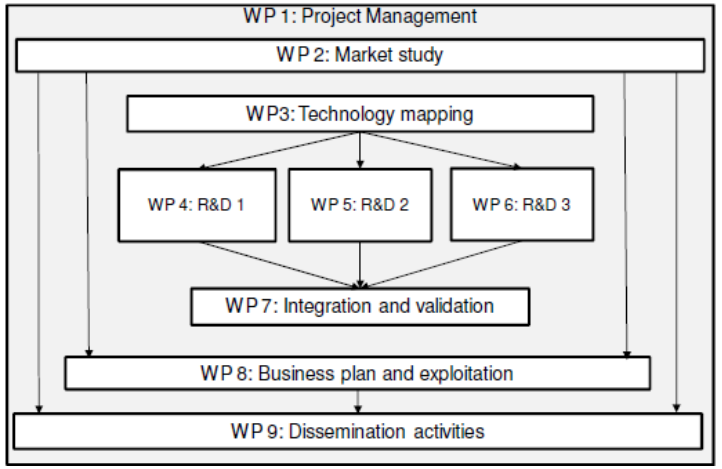
- Have to be clear units
- WPs are the basis for scheduling, resourcing and budgeting
- Clear starting and ending points
- Connected (or even similar) to objectives
- Milestones, deliverables and impacts
- Levels of details and tasks to match with the complexity of the project
- Take into account your own organisation's needs, e.g. administration (i.e. milestones)
- a management WP? Perhaps not necessary here

Practical tips for writing: Defining and presenting WPs

Objective	Required main activity = WP	Tasks	Resources	Outcomes / impacts related





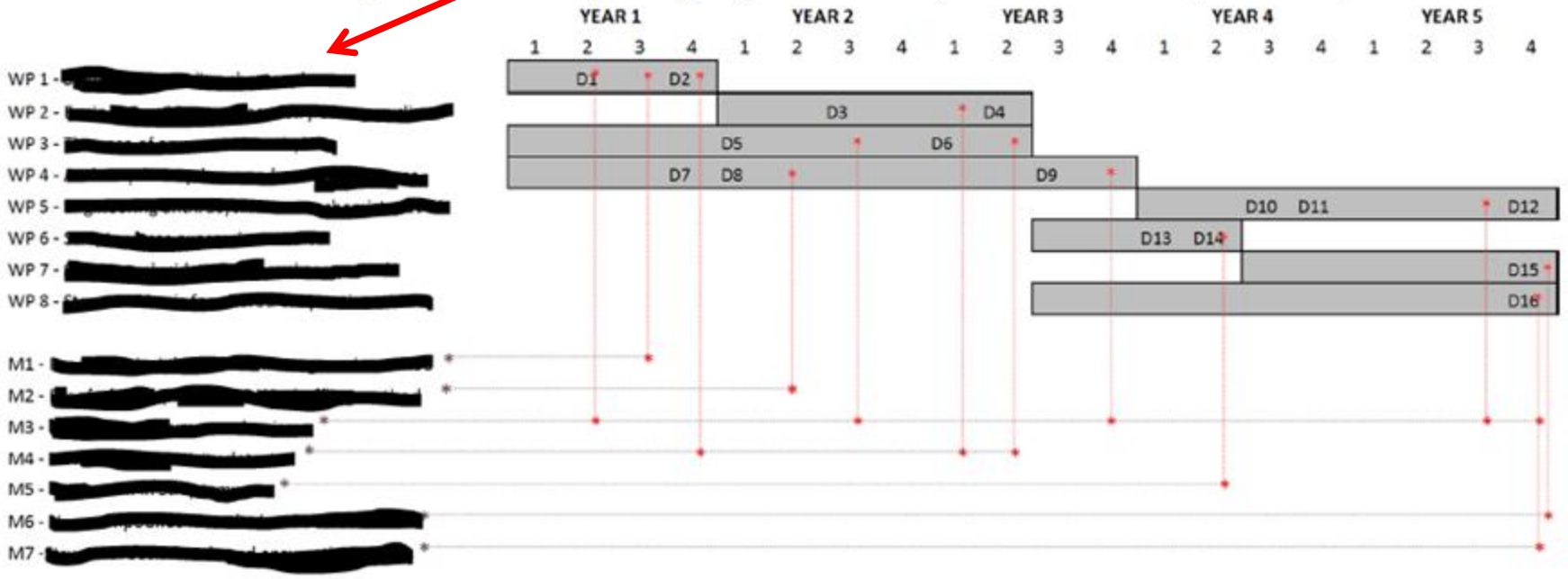


A lot of stuff in one (Gantt) chart

Give WP, Milestones and deliverables names that describe them

3 Key intermediate objectives (milestones) and time-table

Table 1. The relationships of the work packages (WP1 – WP8) and milestones (M1 – M7).



Practical tips for writing: project schedule presented in GANTT chart

	2016	2017			2018			2019			2020			2021	
	Sep-Dec	Jan-Apr	May-Aug	Sep-Dec	Jan-Apr	May-Aug	Sep-Dec	Jan-Apr	May-Aug	Sep-Dec	Jan-Apr	May-Aug	Sep-Dec	Jan-Apr	May-Aug
Mobility		University of Oxford											University of Stockholm		
WP/objective 1															
WP/objective 2															
WP/objective 3															
WP/objective 4															
Main publications and defence		P1			P2					P3, 4				Defence	P5
Milestones		M 1			M 2			M 3		M 4			M 5		

Practical tips for writing: risk managment

- Systematic way to monitor and avoid the risk occurrence
- Should be seen as an integral part of project management
- Most efficient, when an in-built part of the management procedures > **Can have deliverables**
- Create a culture of risk management in the project – cooperation, communication, mutual learning
- Risk management should be adopted to the project's needs: persons and cultures involved, working methods, management etc.

! When risk management has been carefully the occurrence of many problems has already been avoided!

Risk management cont.

- Risky projects are welcome. It must be clear, however, that

you are aware of the risks and know how to tackle them. You may present a „plan B“.

- The feasibility must clearly be shown. Find a balance between originality and realism.

’This has never been done before’	Why? Is is impossible? Is it trivial? Only now possible?
’This combines data from x and theory from y’	Is this suitable? Do you have the expertise on board? Why is it interesting?
’This will merge x and y for a larger picture of z’	Is this needed? Why not done before?

Practical tips for writing: risk managment 2

Risks:

The table below presents the most important risks related to the project. The risks are evaluated for their impact and probability (scale: 1 = none, 5 = substantial) and organised in the order of the risk sum (impact + probability).

Description of risk	Impact	Proba-bility	Risk sum	Contingency measures
Operational risk: Delays in the over-all project implementation	4	3	7	Active monitoring of the schedule and realisation of tasks and deliverables. Corrective measures and project plan checks.
Personnel risk: Changes in project personnel	5	2	7	Ensuring the motivation of the personnel. Careful documentation of all project phases. Active communication inside and between the project partners.
Economic risk: Over-spending, the project costs grow larger than the agreed project budget	4	2	6	Careful monitoring of costs; periodic cost summaries to be handled in the Steering Group meetings; re-direction of project activities and looking for other possibilities if some things turns out to be too costly to execute or purchase. Communication with the EC in problem situations.

Risk management

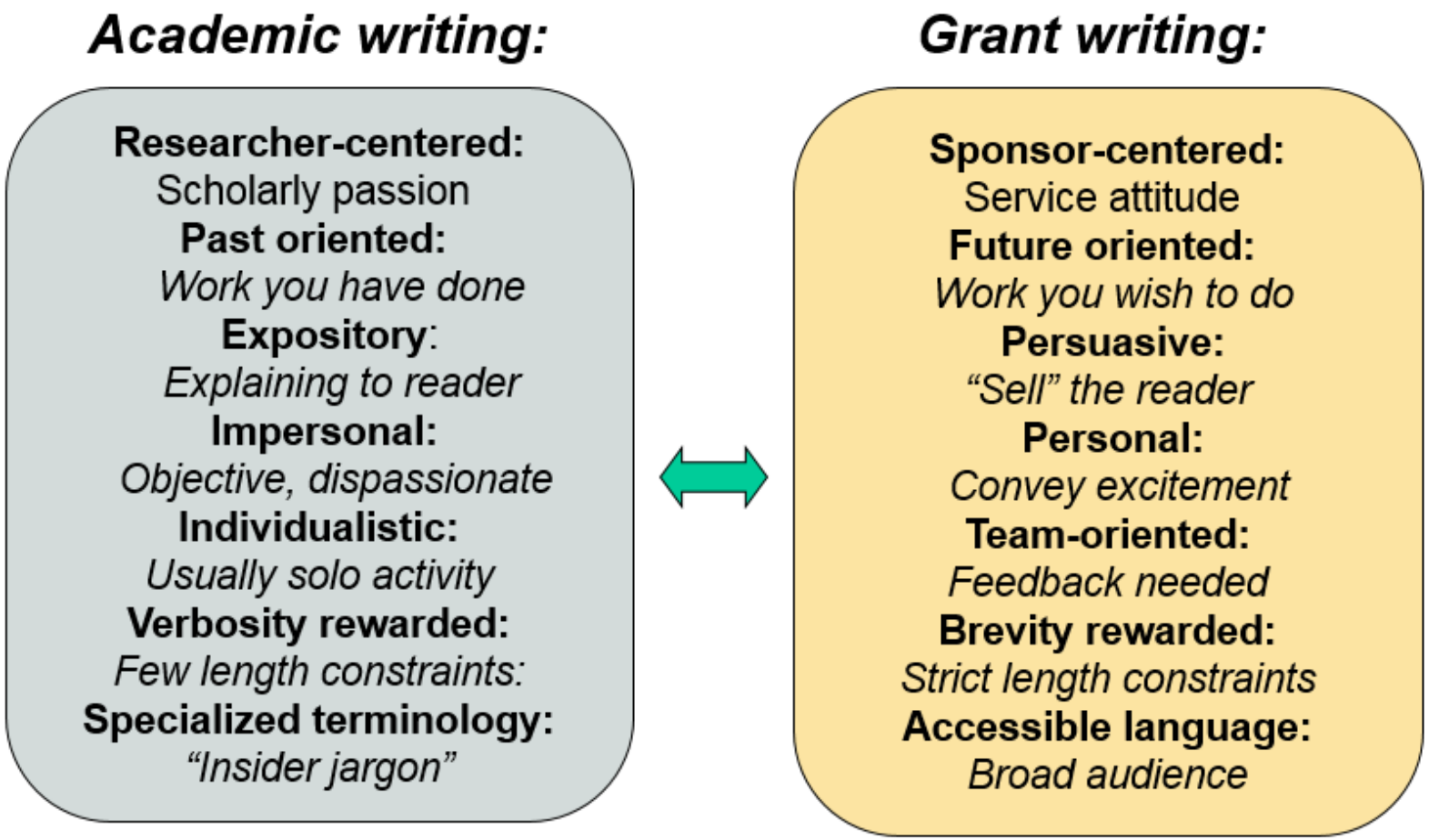
Challenge	Risk	Counter action
	High	
	High	
	Medium	
	Medium	

Risk management

Challenge	Risk	Counter action
Negative findings, i.e., no T1D markers found	High	Preliminary data support feasibility and suggest that negative findings are unlikely. Even if that would be the case for T1D, however, valuable information about the analysis of longitudinal proteomics data will be gained, which can be used in other longitudinal studies of complex diseases.
Overfitting	High	When dealing with complex, high-dimensional data, careful attention is needed to avoid overfitting. This will be done by computational cross-validation and, finally, by independent experimental validation in additional sample sets.
Lack of time	Medium	The DynaOmics team has access to excellent infrastructure resources and the research group of the PI already has in-depth knowledge and skills required to conduct the research.
Experimental data	Medium	The clinical cohorts are well established. Technologies to pursue the proteomics analyses are in place and the team has capacity to address any potential technical challenges. In particular, the main collaborators have world-leading expertise in proteomics technologies that provide the crucial complementary expertise to ensure success of the project. Since the planned analyses will, to a high degree, depend on already collected samples, there is no risk of not having samples available for the analyses.

Grant writing is fundamentally different!

From Robert Porter



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Common cures

- Have a problem
- Structure
- Get to the point (soon)
- Remember the reviewer
- Avoid jargon
- Illustrate
- Reveal you risks and address them
- Back to the abstract
- Get comments
- Play the game

Cure 1: Problem (one central one)

- What are you passionate about?
- What is the problem (and why is it important)?
- How is existing knowledge or practice inadequate?
- Why is your idea better?
- How is it new, unique, different?
- What will it contribute and who will benefit from it?
- How will solving it make the world a better place?

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Cure 2: Have a Structure

Always follow the format provided by the funder! Where none is provided, build your case in distinct sections:

I. Problem Statement; or Significance of the Research

II. Project Purpose (Overall goal + Specific objectives) *Cite "fit" with program / funder objectives!*

III. Methodology, Research Design; or Workplan (Activities + Timelines)

IV. Applicant / Team Qualifications and Capabilities

V. Expected Outcomes or Impact

VI. Budget (Summary + Justifications)

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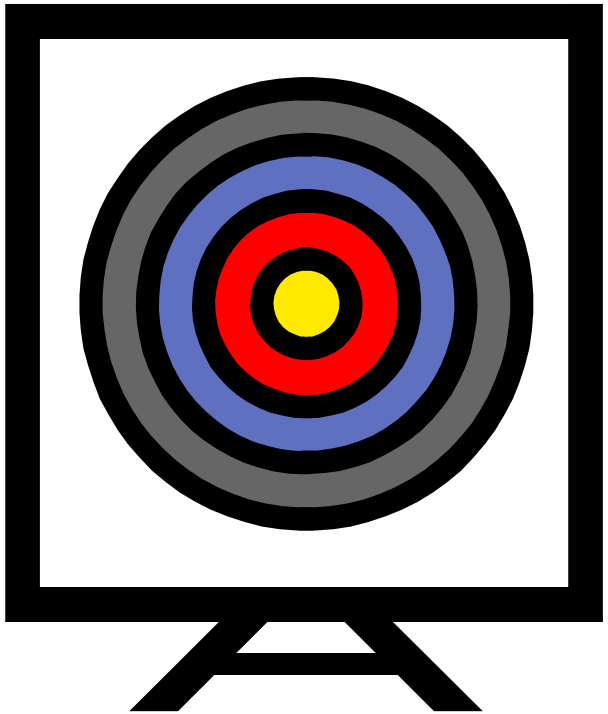
Cure 3: Get to the point

The “pitch” should be the opening 2 - 3 paragraphs of the proposal’s

very first section (after the abstract), regardless of what that section is called

It can be called

- RATIONALE
- INTRODUCTION
- BACKGROUND
- PROBLEM STATEMENT
- SIGNIFICANCE OF THE RESEARCH
- SPECIFIC AIMS…



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Get to the point cont.

I. Set the Stage – Lay Out the Problem *(“Who Cares?”)*

A. Get the reviewer interested at the outset

B. Identify the importance—stress the need

C. Summarize the state of the art (shortly, no literatude review!)

D. Describe (technical) challenges to solving the problem and potential benefits

II. State the theme – Your Solution

E. Describe the concept and establish credibility

F. Describe your project’s fundamental purpose

III. Create a Vision *(“So What?”)*

G. Show how your work will advance the field

H. Envision the world with the problem solved

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Cure 4: Remember the reviewer

- Pay attention to all review criteria (that is often available)
- Read evaluation standards carefully; then reference them in the project narrative
- Touch all the bases--not just the ones you're comfortable with
- Use clear, accessible language
- The more competitive, the more reviewer(s) will look for reasons to reject proposals
- Be exited and let it show

Cure 5: Avoid jargon

- Assume an uninformed but intelligent reader
- Stick with direct statements and active voice
- Avoid insider jargon and acronyms
- Don’t assume all abbreviations are known
- Use active language

• *It has been demonstrated by research that…*	• *Research shows clearly that…*
• *The SAP program is being implemented by our department…*	• *Our department launched SAP this year…*
• *Following administration of the third dosage, measurements will be taken...*	• *After dosage 3, we will measure…*

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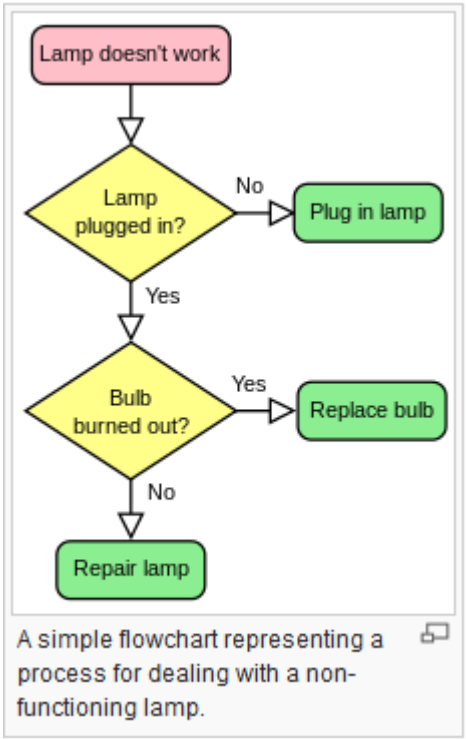
Cure 6: Illustrate

- At least larger projects have parts -
  > show their connections and flow!
- Infographics by for example web applications or PP



A simple flowchart representing a process for dealing with a non-functioning lamp.

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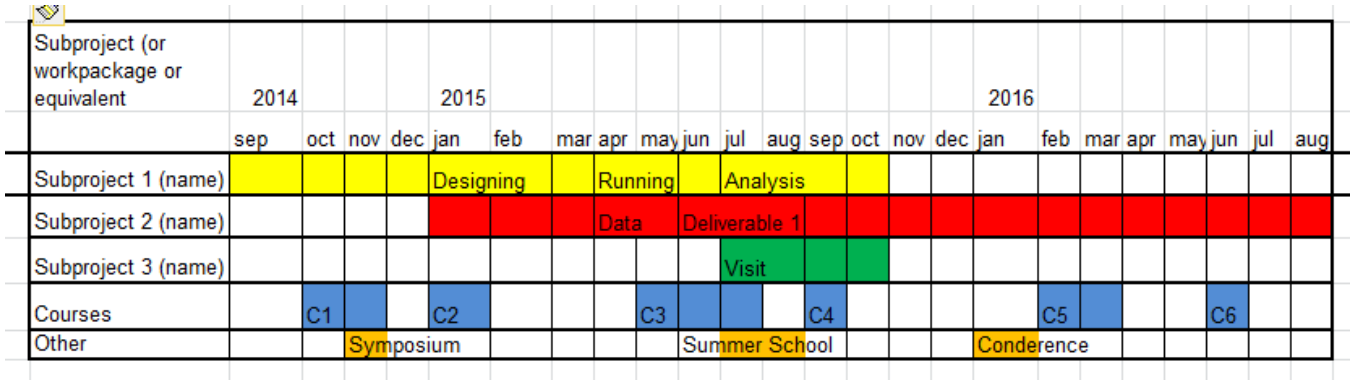
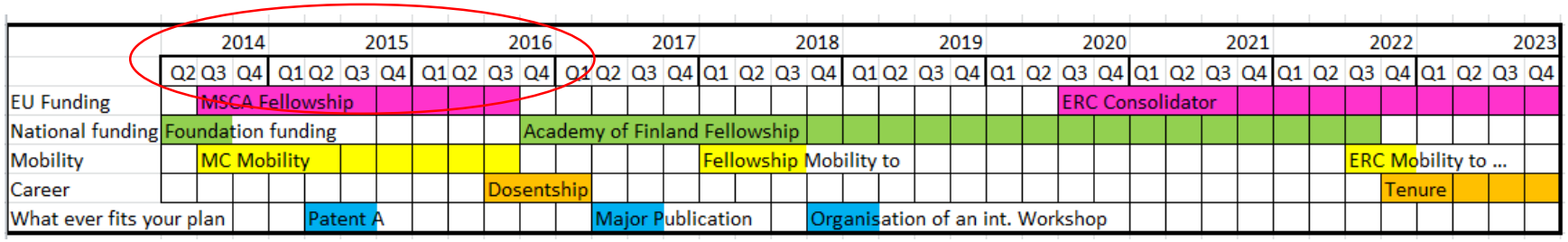
How to show your impact to you as a researcher (long term career plan)?





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Cure 7: Reveal you risks and address them

- Do not hide your risky spots -> reveal them in a risk table and have plan Bs
- Don’t give them any reasons to put your proposal in the ‘No’ pile!

Risk identification and contingency plans

Risks:

The table below presents the most important risks related to the project. The risks are evaluated for their impact and probability (scale: 1 = none, 5 = substantial) and organised in the order of the risk sum (impact + probability).

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Cure 8: Back to the abstract

- Written last, but read first by reviewers
- Must be an intriguing “first advertisement”
- Should reflect entire scope of project
- Summarizes project purpose and methods and even the expected outcomes!
- Must convey:
    - What researcher intends to do
    - Why it’s important
    - Expected outcome(s)
    - How work will be accomplished
- Has to be both CONCISE and COMPLETE!
- *This may be the only narrative that some reviewers will read*

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Cure 9: Play the funding game

- Fit research and grant writing into your job
- Find a mentor(s)
- Read successful grants; attend workshops
- Find collaborators; network
- Get on a review panel!
- Get funding alerts; conduct your own searches regularly
- Be first, be the best, be different
- Submit, revise & resubmit!

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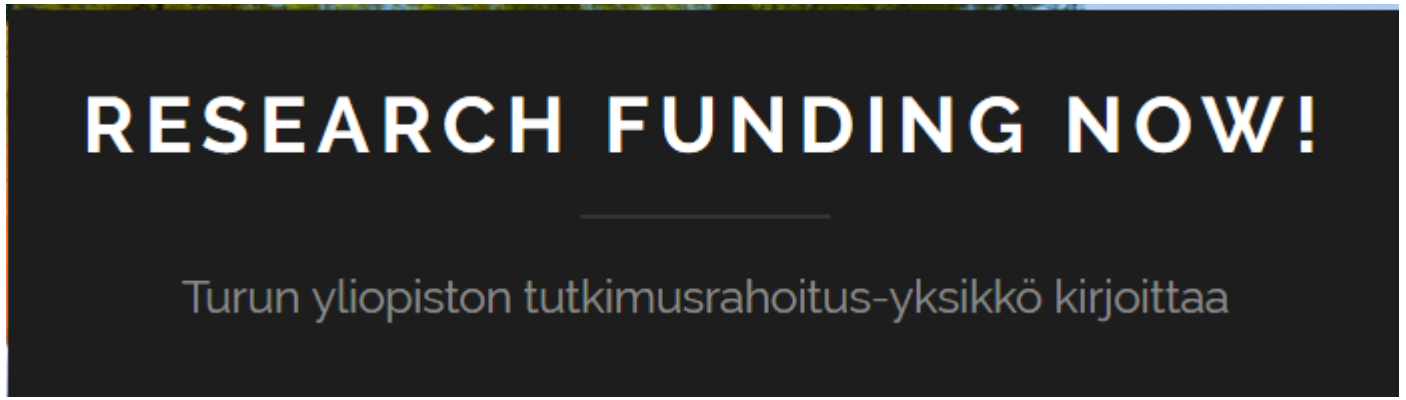
Extra cure 10

- Use your network and collaborators as a Scientific Advisory Board
- See more on our blog: https://blogit.utu.fi/researchfundingnow/2019/01/07/why-your-research-project-needs-a-scientific-advisory-board/



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Trends

- Targeted funding for young researchers
- Careers between industry and academia
- Open science in all its forms
- Short applications and pitching
- Ethics (EU framework and NIH)
- And still – societal impact
- Large flagship- type funding

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