DClinSci Year 3, 4 & 5

Aims:

to get to a successful Professional Doctorate!

Focus:

How to help you achieve this

sli.do

At today's event, we want to make sure we address your questions so we'll be using a simple audience interaction platform called Slido:

- Slido allows you to submit your questions as well as up-vote the questions of other participants.
- Questions with the highest number of votes are more likely to get answered by speakers.

Throughout the day, please submit your questions and we will endeavour to answer as many as possible during the Q&A session at 14:00.

To join, please go to www.slido.com and enter the event code which is **#HSST**

Shazia Dar

Libby Osborn

Kate Smith

Claire Moss

Jenefer Cockitt

Thanks to:

Karen Kirkby

Julia Handley

Anne White

Rebecca Dearman

Kai Uus

Garry McDowell

Life Sciences (extended pathway)

	Semester 1	Semester 2
Year 1	**A1** Semester: 1 30 credits	**Section B: Specialist Scientific Clinical Programme—FRCPath Part 1** (75 credits)
Year 2	**Section B: Specialist Scientific Clinical Programme—FRCPath Part 1** (75 credits)	**A2** Semester: 2 20 credits — Submit Research Project Form
Year 3	**C-Research Project** / **Year 3 workshop – September** • How to give a lay talk • Lit review vs systematic review / **A3** Semester: 1 30 credits	Submit Literature Review / **A4** Semester: 2 20 credits / Give Lay Talk
Year 4	**C – Research Project**	**Year 4 workshop - January** • How to write a thesis • How to write a paper • How to give a professional talk / **A5** Semester: 2 20 credits
Year 5	**C – Research Project**	Submit Thesis / Viva voce examination

Detailed Timeline for DClinSci

30th September 2018	research proforma submission appointment of academic supervisors
30th November 2018	Royal College of Pathology approval
31st December 2018	Planning/expectation meeting optional draft 1500 words for feedback
31st March 2019	Literature review submission
30th April 2019	Progress meeting (1)
May 2019	Lay presentation
31st January 2020	Progress meeting (2)
30th June 2020	Progress meeting (3)
31st January 2021	Thesis planning meeting
September 2021	End date (submission and viva)

Research proforma

Proforma

Aims of research

Principal research questions

Proposed methods

Potential impact of research

Summary of patient and public involvement

    500 words

Other considerations

Ethical approval required?

Animal work involved?

Funding? (grant applications?)

Intellectual property (Expectations document: part of UoM's

                 agreement with commissioners)

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Progression

███████████████████

A student's progression displays all the milestones, researcher development and any taught units for which the student is registered and the completion status of the student for each activity. The unit code links to a profile of the activity and, where the viewer has permission, it may be possible to access the content of forms associated with the activity.

An Additional Meeting Form is available to record the outcome of any meetings between a student and a member of their supervisory team other than those prescribed on the student's progression record.

Unit Code	Title	Deadline	Status	
FBMHM1200	C1 Planning Meeting	01/02/2017	Completed 10/2/2017	Edit
	C1 Planning Meeting	01/02/2017	Completed 10/2/2017	Edit
FBMHM1400	Submission and Approval of C2 Proforma	01/02/2017	Completed 17/2/2017	Edit
	Submission and Approval of C2 Proforma	01/02/2017	Completed 15/2/2017	Edit
FBMHM1304	Optional Formative Written Submission and Feedback	15/03/2017	Completed 13/3/2017	Edit
	Optional Formative Written Submission and Feedback	15/03/2017	Completed 13/3/2017	Edit
FBMHM2030	Progress Meeting 1 - PT	01/04/2017	Completed 5/5/2017	Edit
	Progress Meeting 1 - PT (FBMH)	01/04/2017	Completed 5/5/2017	Edit
FBMHM1301	C1 - Submission of Written Component (Literature Review and Innovation Project)	30/06/2017	Completed 30/6/2017	Edit
	C1 - Submission of Written Component (Literature Review and Innovation Project)	30/06/2017	Completed 30/6/2017	Edit
FBMHM1302	C1 - Feedback on Written Component	31/07/2017	Completed 31/7/2017	Edit
	C1 - Feedback on Written Component	31/07/2017	Completed 31/7/2017	Edit
FBMHM1303	Confirmation of Progression to C2	30/09/2017	Completed 5/10/2017	Edit
	Confirmation of Progression to C2	30/09/2017	Completed 5/10/2017	Edit
UVEXM0001	Expectations 1	01/10/2017		Edit
	Expectations 1	01/10/2017	Submitted 14/12/2017 Authorised 1 of 2	
FBMHM1305	C2 Research Planning Meeting	31/10/2017	Completed 6/2/2018	Edit
	C2 Research Planning Meeting	31/10/2017	Completed 6/2/2018	Edit
UVEXM0002	Expectations 2	30/11/2017		Edit
	Expectations 2	30/11/2017	Submitted 14/12/2017 Authorised 1 of 2	
FBMHM1030	Literature Report Submission	14/02/2018	Completed 1/3/2018	Edit
	Literature Report Submission - Electronic Submission and Confirmation of Receipt by Supervisor FBMH	14/02/2018	Completed 1/3/2018	Edit
FBMHM1040	Literature Report Meeting	28/02/2018		Edit
	Literature Report (FBMH)	28/02/2018	Form available	Edit
FBMHM2050	Progress Meeting 2 - PT	30/06/2018		Edit
	Progress Meeting 2 - PT (FBMH)	30/06/2018	Form available	Edit
FBMHM4900	Thesis Planning Meeting	31/12/2018		Edit
	Thesis Planning Meeting (FBMH)	31/12/2018	Form available	Edit

Literature Review (session this afternoon)

Summative 4000 word (+/- 10%) Literature Review (pass/fail)

It should include a range of sources but must include primary sources (peer-reviewed journal articles).

It should be well-structured with a good standard of scientific English and appropriately referenced.
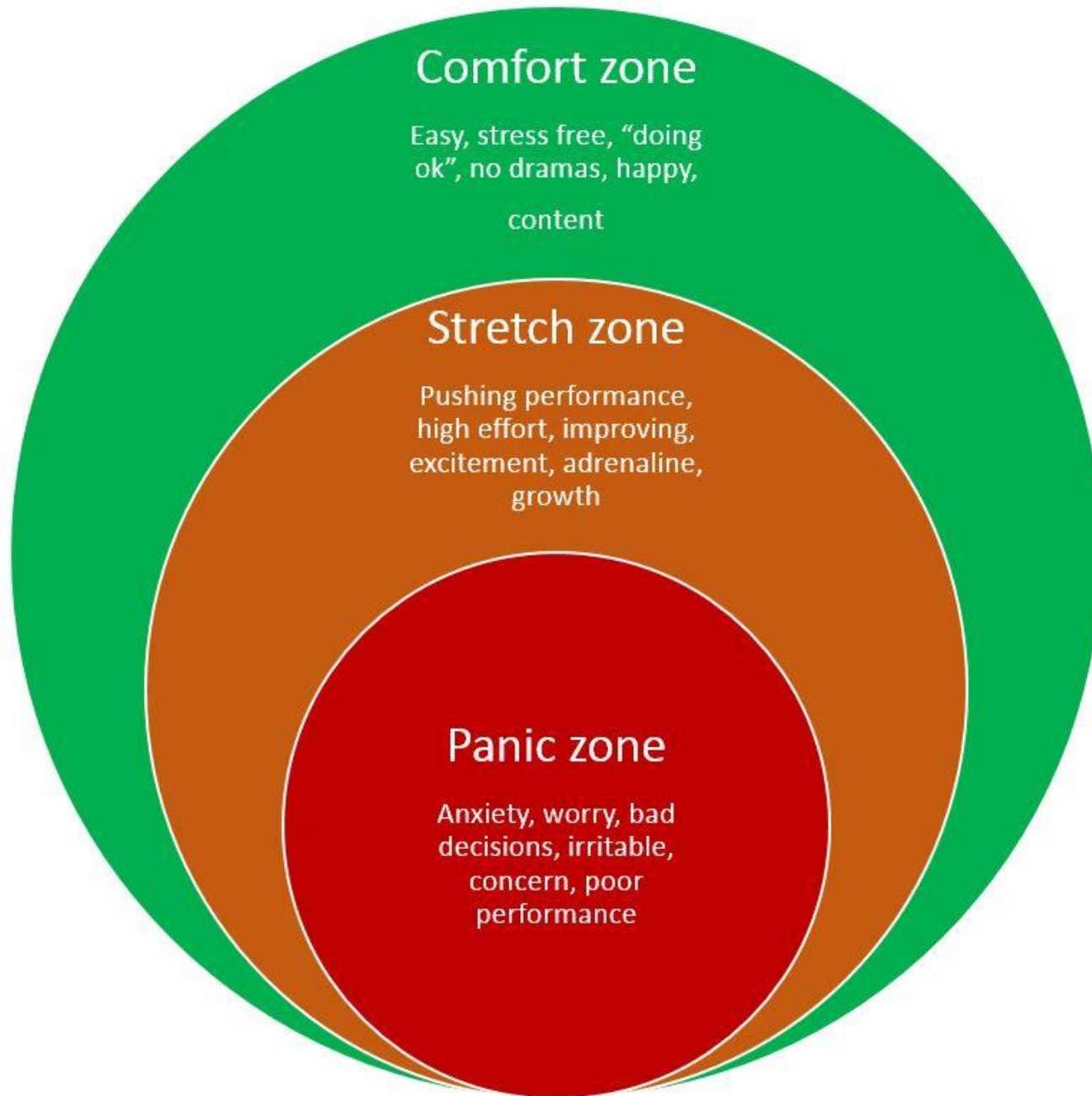
Lay Presentation (11.00-12.00 session)

For those doing Full DClinSci this will be on the main research project
for those not doing full DClinSci will be on innovation project
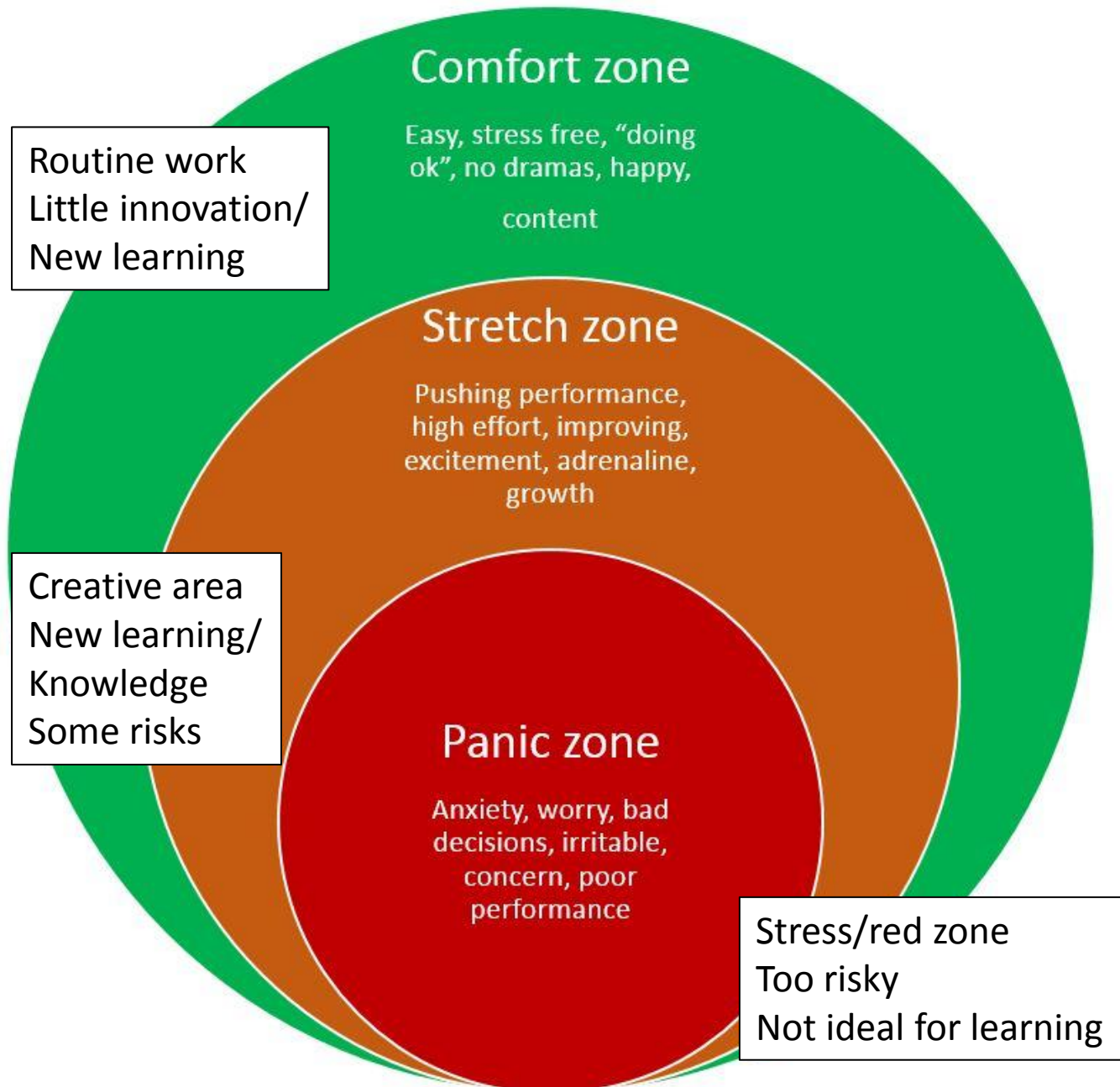
Assessed on:

Overall quality and clarity   *clear explanation of research*
how benefits healthcare sciences
use of lay language/explanations
values/attitudes/behaviours of leader

Powerpoint slides

Delivery   *body language, eye contact, audibility,*
confidence

Rohnke's comfort/stretch/panic model of learning

Rohnke's comfort/stretch/panic model of learning

Comfort zone

Easy, stress free, "doing ok", no dramas, happy, content

Routine work
Little innovation/
New learning

Stretch zone

Pushing performance, high effort, improving, excitement, adrenaline, growth

Creative area
New learning/
Knowledge
Some risks

Panic zone

Anxiety, worry, bad decisions, irritable, concern, poor performance

Stress/red zone
Too risky
Not ideal for learning

What Is Successful Research?

- Novel research which can be presented at national and international meetings

- Publishing your data in peer review journals

- Research that has an impact for health care (don't forget public engagement)

- Research resulting in a well-written thesis

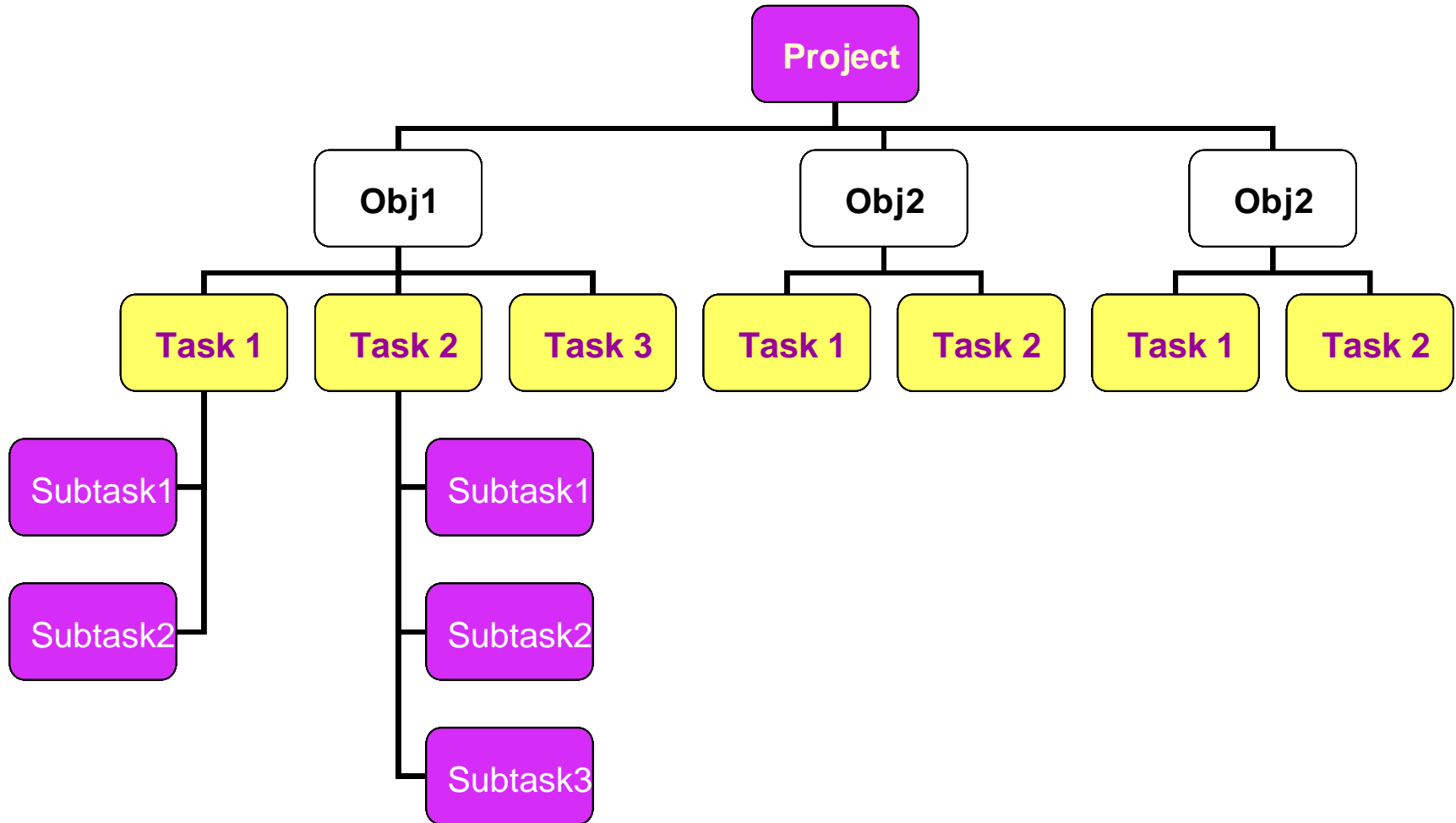- Negative results are appropriate for thesis!

What is an acceptable Research Project?

- **Good Background** showing the importance and clearly identifying where there are gaps in knowledge

- **Hypothesis** leading to Aims and Objectives
  need to define research question – what, why, how

- One, two or three sets of data that form chapters in a thesis or one or more papers

- Critical Evaluation

- **Discussion** of the outcomes and importance and impact

Project management
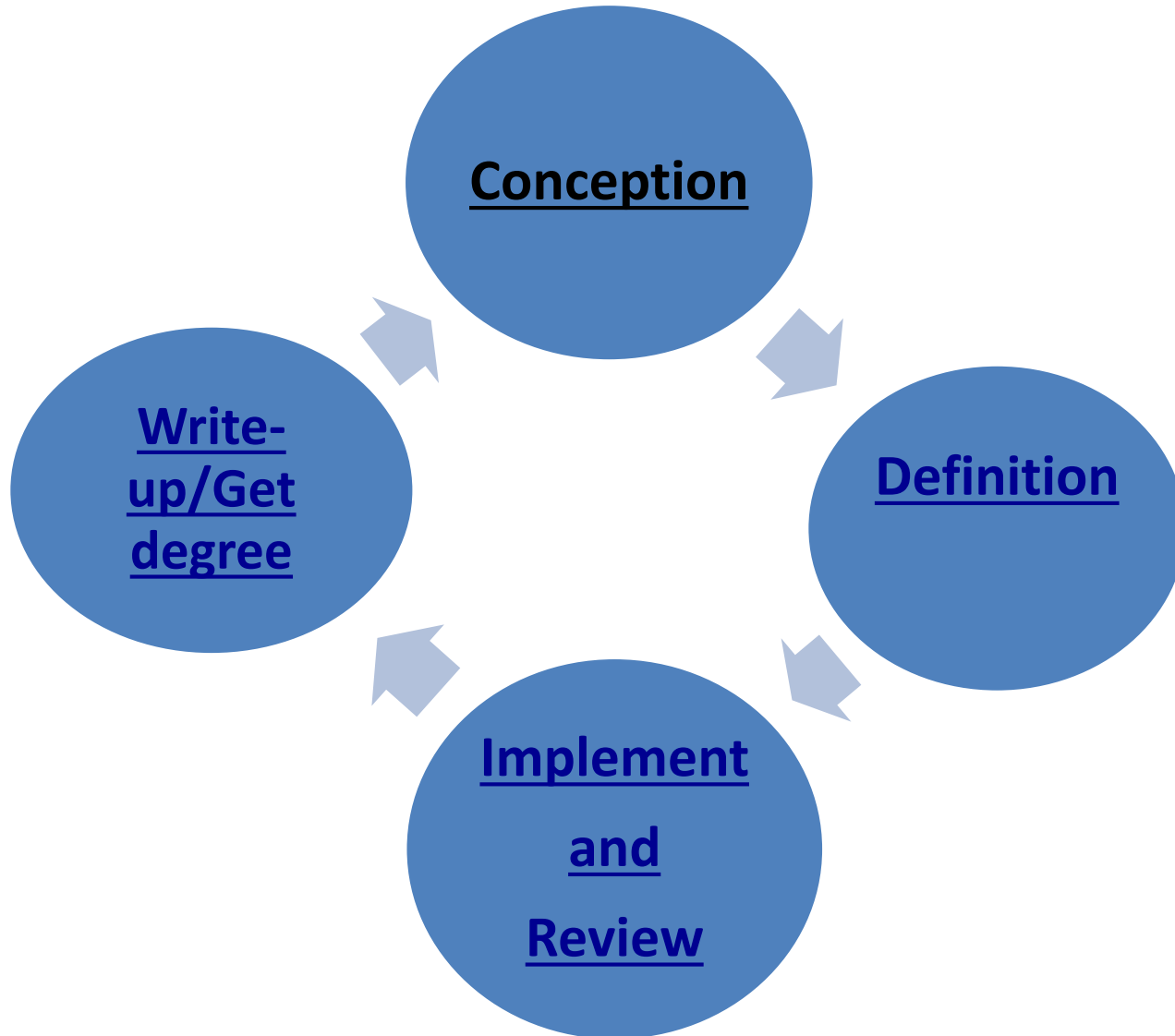
Drill- down – break project into smaller tasks and subtasks

```
                              Project

          Obj1                 Obj2                 Obj2

   Task 1   Task 2   Task 3   Task 1   Task 2   Task 1   Task 2

Subtask1        Subtask1

Subtask2        Subtask2

                Subtask3
```

Project timeline - Gantt chart

Objective # 2

	Aug	Sep	Oct	Nov	Dec

Task 1 — Enrol subjects

Task 2 — Conduct interviews

Task 3 — Analyse data

Task 4 — Risk factor gene polymorphisms

Review Evaluate
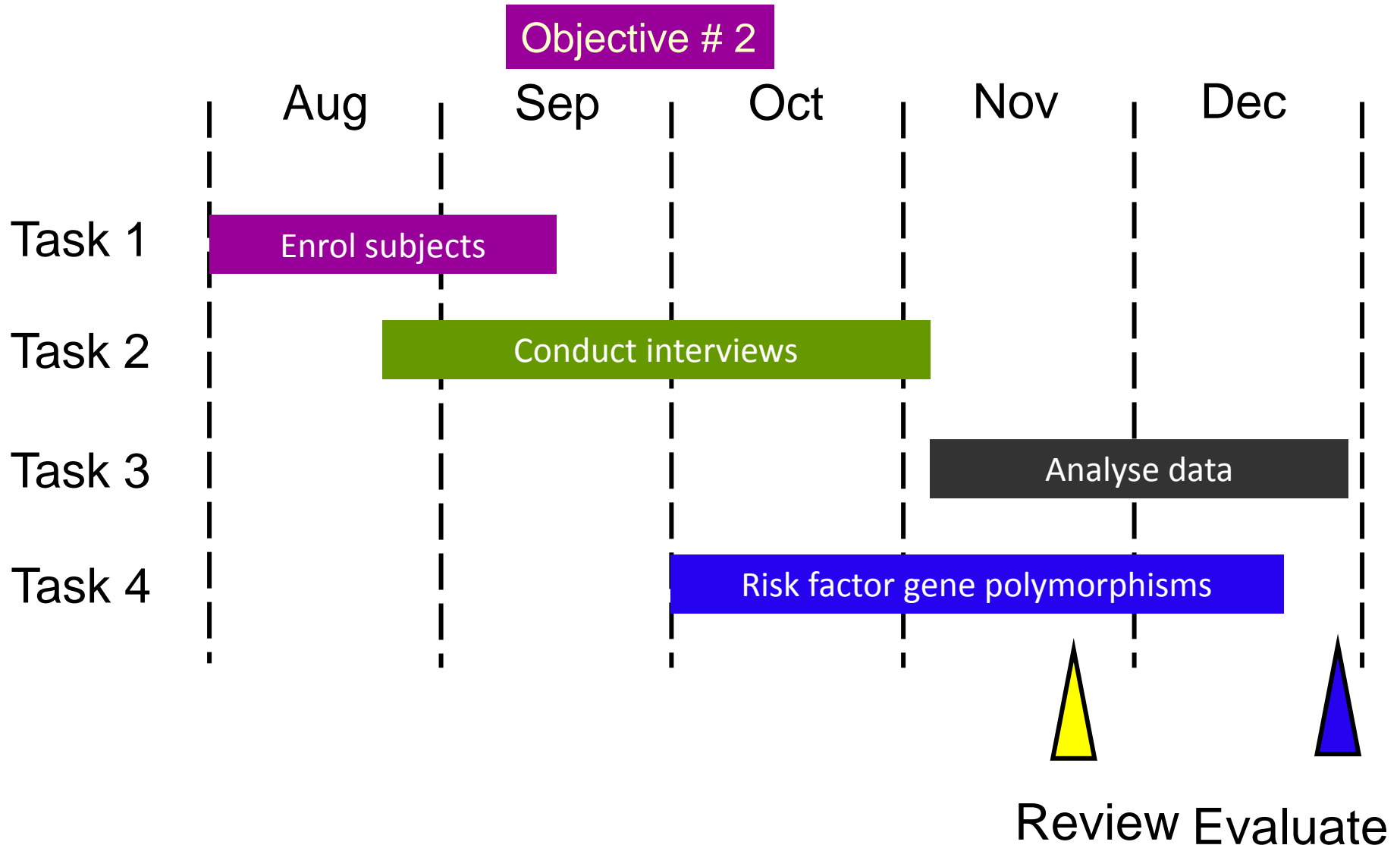
Cancer Research UK – Development Grant

Timelines

Month

```
0     3     6     9     12    15    18    21    24
|-----|-----|-----|-----|-----|-----|-----|-----|
```

4.1.1
4.1.2
4.1.3
4.1.4
4.2.1
4.2.2
4.3.1
4.3.2
4.3.3
4.3.4
4.3.5
4.4.1
4.4.2
4.4.3
4.4.4
4.5
4.6
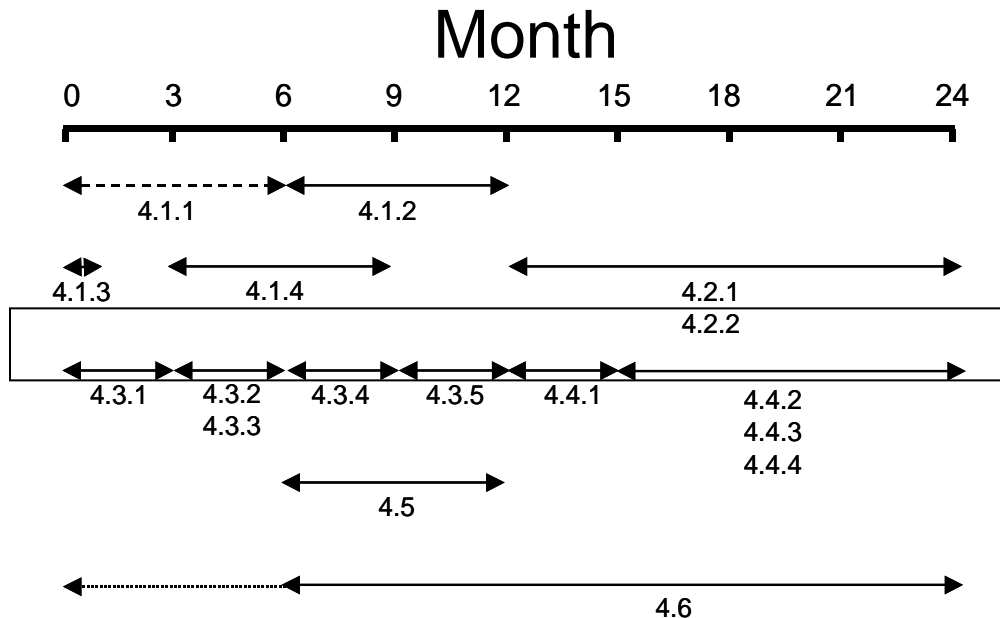
Milestones/Deliverables

4.1.1 Development of cell lines for rh opticin
4.1.2 Production and purification of rh opticin
4.1.3 Scale up of human adeno-opticin
4.1.4 Development of ELISA Assays
4.2.1 Proliferation/apoptosis studies
4.2.2 Migration, invasion and adhesion studies
4.3.1 Comparison of human/bovine adeno-opticin
4.3.2 Optimal single dose of (human) adeno-opticin
4.3.3 Histological and Western blot analyses
4.3.4 Multiple dosing with adeno-opticin
4.3.5 Adeno-opticin with HT1080 and MDA468 tumours
4.4.1 Pharmacokinetics (rh opticin)
4.4.2 Tumour growth delay studies (rh opticin)
4.4.3 Window chamber experiments
4.4.4 *In vivo* metastatic model
4.5. Immunogenicity studies
4.6. Determination of the biologically active sites in opticin

Triangle of Constraints
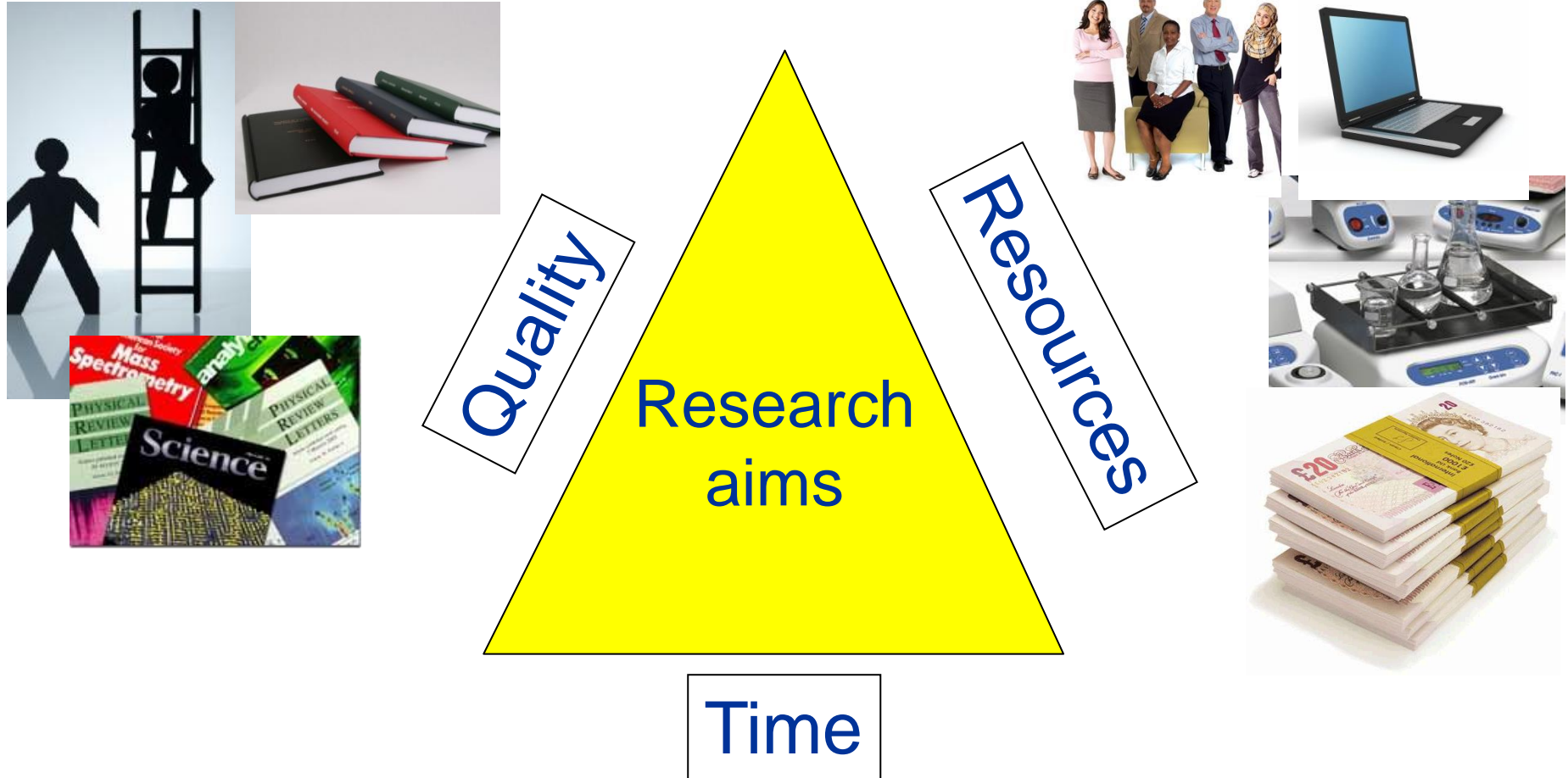
The Paper/results chapter: think in terms of "publishable units"

Treatment-related restoration of Langerhans cell migration in psoriasis.
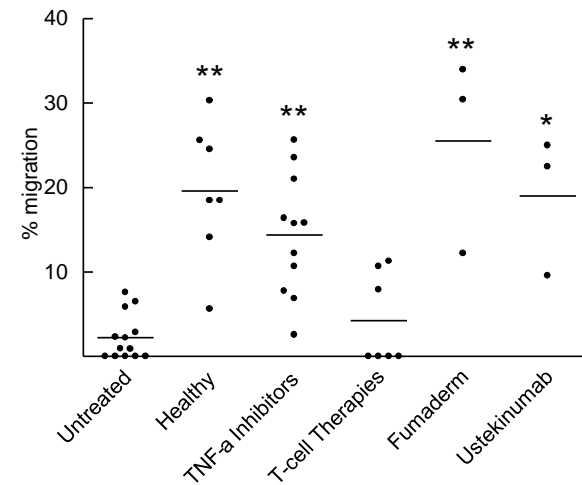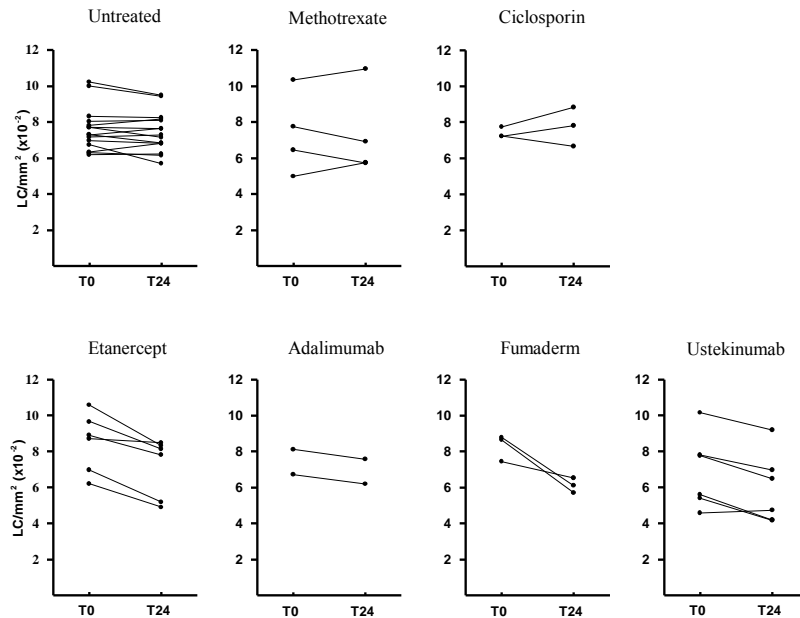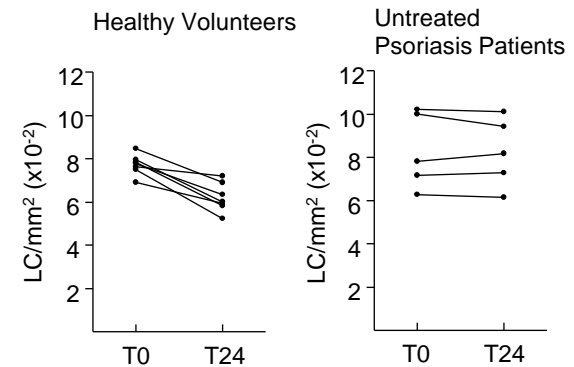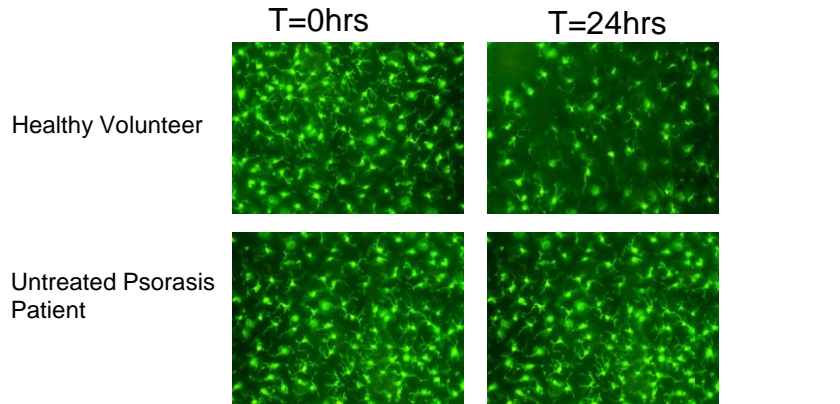
Beware scope creep

If you need to change the scope, ensure that:

- Everybody is aware of the impact on the schedule and outcomes of the project

Additional ideas!!!

Original plan
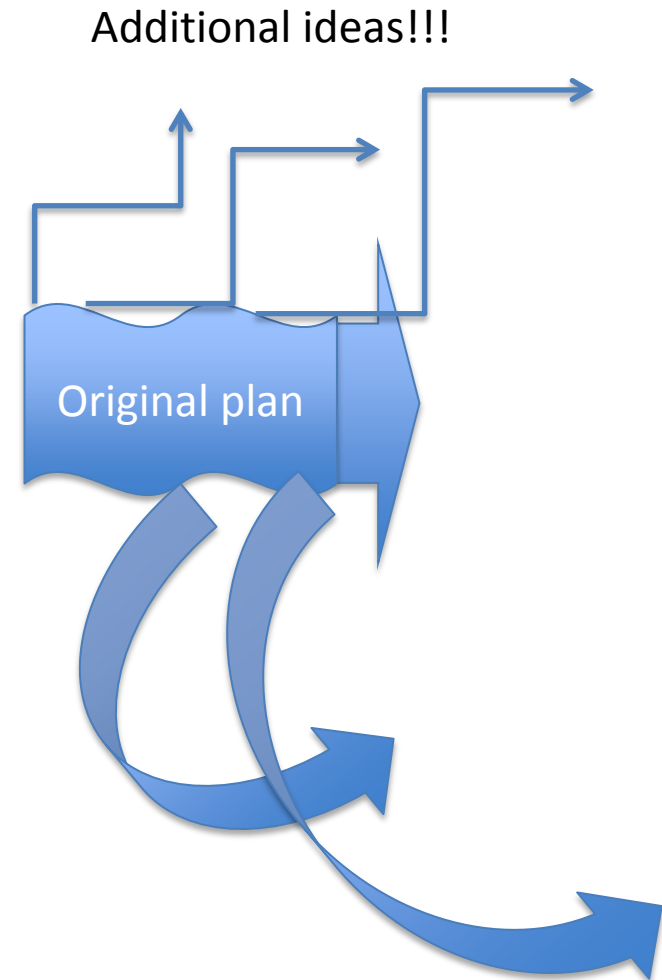
This is project management- at a distance/in a team?

Opportunity for greater success

BUT

Greater risk of things going wrong!!!

Engage all stakeholders in the research

Who will be affected?
Who will be needed for support?
Who will be interested in the outcomes?

Faculty/ University

Trust

Commissioners

Line manager

Project Team

Collaborators
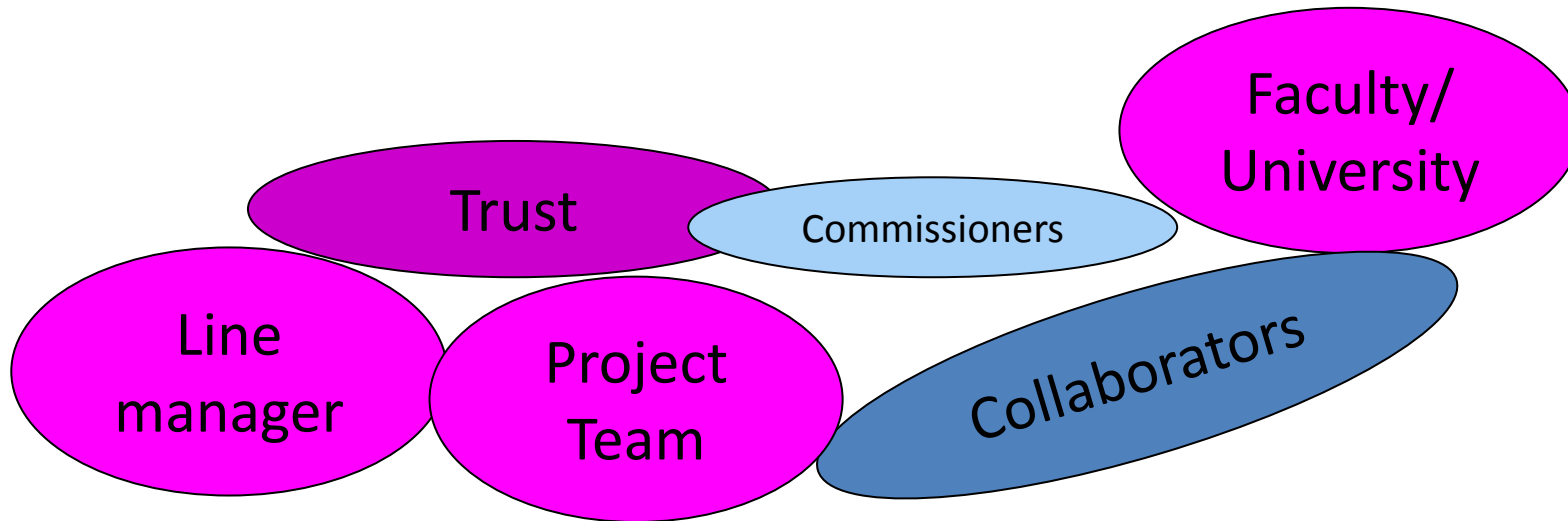
How do you manage the stakeholders expectations?
Think about reporting and communication - help each to appreciate the value of the project throughout

What do you need to know?

- What resources are you lacking to complete the project?

- How much responsibility does each supervisor have?

- What's their level of interest?

- How are you going to engage with each supervisor?

- Do you need to manage them?

- Are there potential conflicts between you and a supervisor? How do you resolve this?

- Are other collaborators involved and have you been involved in establishing guidelines with them eg author on a paper?

The reality of research

- Things go wrong!

- The direction of the research may change based on the results

- New data emerges from the research field

The project plan must anticipate all of this and more...

Use Risk analysis to structure your discussions

Risk (Probability x Impact)
1- 2 : Low
3 - 4 : Medium
6 - 8 : High
9 : Extreme
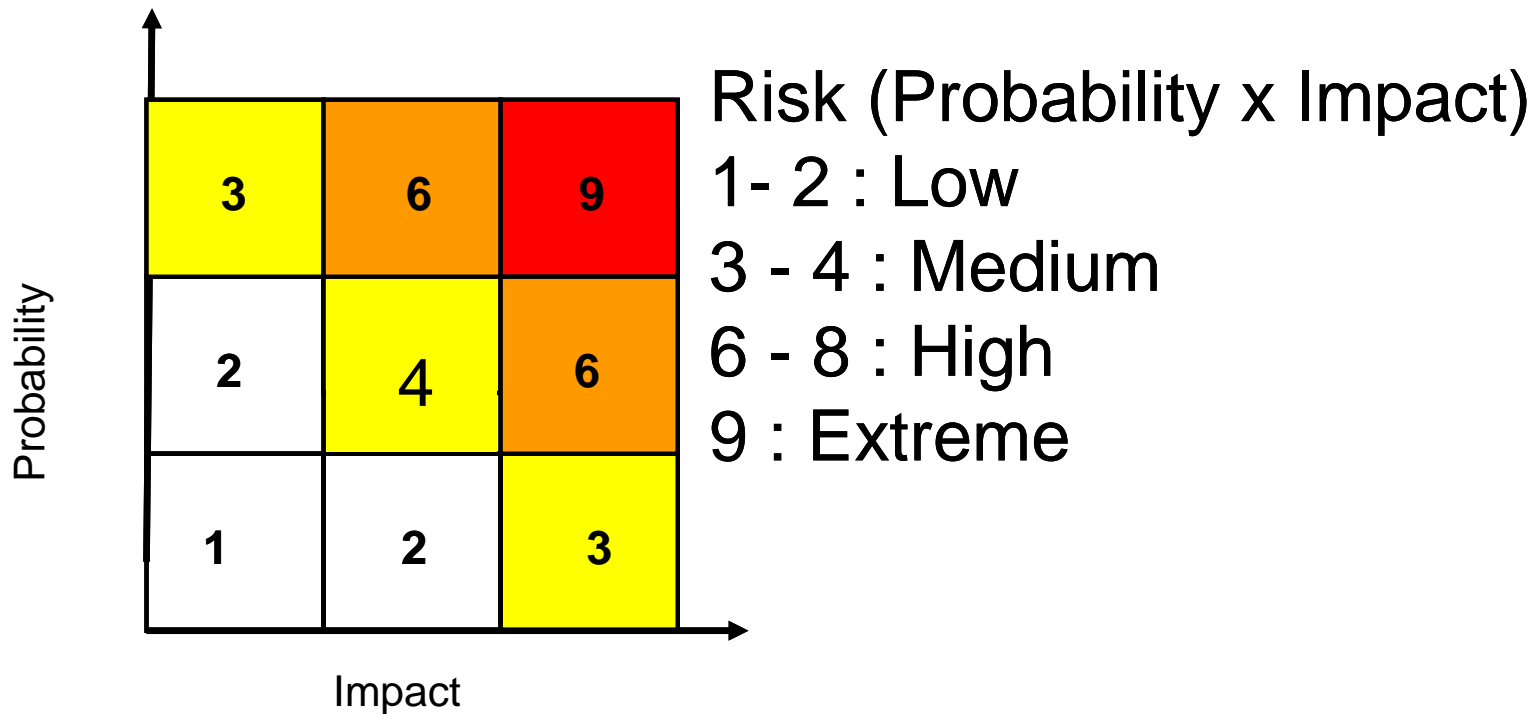
Minimise, eliminate or have a contingency

If you are struggling to develop a plan or behind schedule?

This can suggest:

- project objectives are unclear
- You are unconvinced about the project
- The project is too large
- Unsure of responsibilities
- Need additional support or experience

- *Respond to delays early*
- *Consider implications if you adapt the plan*
- *Can you increase resources and/or engage others*

How will you monitor progress?

- Your Workplace supervisor:
  - Should decide on an appropriate communication/monitoring system (type and frequency)
    - steering group meetings
    - regular project team meetings
    - weekly/monthly updates (paper or email)

- Your Academic Supervisor
  - Take responsibility for deadlines on University system
  - Adapt planning timelines from PhD and fix meetings

- Constant communication and transparency- particularly when things go wrong

Summary: research project planning

- Project planning
  - should be a tool not a straightjacket
  - should be dynamic with regular, fixed reviews of progress
  - It can help research team communication
  - It can check on common understanding
    - Between workplace supervisor and academic supervisor but also with line manager, team, collaborators, funders)

  - It helps to ensure research dissemination
    - Papers, presentations, Follow up funding

How do the roles of the two supervisors compare?

Workplace Supervisor	Academic Supervisor
• Detailed knowledge of the project background	• Understands the academic process for Doctoral degrees
• Understanding of the constraints on the student	• Has experience of supervising PhDs/MDs
• Usually close by to give day–to-day advice	• Understands the constraints
	• Can find the University person to provide guidelines for the degree

How do the supervisors interact?

- Usually by skype or teleconference.

- One facetoface meeting each year is important/preferable

- Who sets the dates for meeting?

- What happens if project not going well-who identifies this? Who do the supervisors get help from?

- Academic supervisor should take lead on reading drafts of thesis.

What to do if you need advice?

- Your Academic supervisor
  - Contact administrators re guidelines
  - Liaise with Programme Directors about project content
  - Contact MAHSE about deferrals

- Your Workplace supervisor
  - liaise with line manager about time constraints
  - Contact NSHCS on HSST
  - Get advice on funding from the Commissioners

The Examination Process-in brief

- Know when the deadline is for thesis submission

- Determine the appropriate format now and perhaps modify with time

- Nine months to go - suggest external examiner by discussing at supervisory meeting

- Which of your supervisors will read which parts of the thesis and in which order?

- Ensure care is taken to meet the University submission requirements

- Get advice from academic supervisors on the examination process at viva

- Celebrate!!!!!

What skills will you gain?

Collegiality
Team working
People management
Supervision
Mentoring
Influence and leadership
Collaboration
Equality and diversity

Subject knowledge
Research methods: theoretical knowledge
Research methods: practical application
Information seeking
Information literacy and management
Languages
Academic literacy and numeracy

Working with others (D1)

Knowledge base (A1)

Cognitive abilities (A2)

Analysing
Synthesising
Critical thinking
Evaluating
Problem solving

Communication methods
Communication media
Publication

Communication and dissemination (D2)

Creativity (A3)

Inquiring mind
Intellectual insight
Innovation
Argument construction
Intellectual risk

Teaching
Public engagement
Enterprise
Policy
Society and culture
Global citizenship

Engagement and impact (D3)

Engagement, influence and impact
The knowledge and skills to work with others and ensure the wider impact of research

Domain D

Knowledge and intellectual abilities
The knowledge, intellectual abilities and techniques to do research

Domain A

Health and safety
Ethics, principles and sustainability
Legal requirements
IPR and copyright
Respect and confidentiality
Attribution and co-authorship
Appropriate practice

Professional conduct (C1)

Domain C

Research governance and organisation
The knowledge of the standards, requirements and professionalism to do research

Domain B

Personal effectiveness
The personal qualities and approach to be an effective researcher

Personal qualities (B1)

Enthusiasm
Perseverance
Integrity
Self-confidence
Self-reflection
Responsibility

Research strategy
Project planning and delivery
Risk management

Research management (C2)

Finance, funding and resources (C3)

Professional and career development (B3)

Self-management (B2)

Preparation and prioritisation
Commitment to research
Time management
Responsiveness to change
Work-life balance

Income and funding generation
Financial management
Infrastructure and resources

Career management
Continuing professional development
Responsiveness to opportunities
Networking
Reputation and esteem

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A project isn't successful until it's finished!