Interactive Research Workshop via Teams
Research Project Management

12 July 2020

RBWH Education Centre

Facilitated by Prof Janet Davies
MNHHS Office of Research
MNHHS-Research@health.qld.gov.au

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Sponsors

Griffith UNIVERSITY

MENZIES HEALTH INSTITUTE QUEENSLAND

THE UNIVERSITY OF QUEENSLAND AUSTRALIA | Faculty of **Medicine**

QIMR Berghofer Medical Research Institute

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Agenda

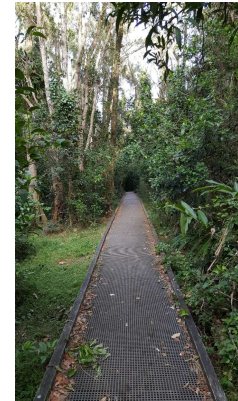**Part 1   Workshopping Clinical Research Project Management (15 min)**
- Sign post research education resources
- Project Management Frameworks and Principles
- Applying program logic to clinical research
- Tracking Project Progress: Gantt charts

Part 2   Exemplary Clinical Research Cases (15 min)

Andrew Claus   (title)

Deanne August   (title)

Part 3   Program logic exercise (16 min)

Part 4   Panel discussion and questions (12 min)

Please do not mention any confidential details of patients or research.

Microsoft Teams meeting
Facilitated by Prof Janet Davies
MNHHS Office of Research
MNHHS-Research@health.qld.gov.au

Professor Janet Davies
Assistant Director Research
Metro North Hospital and Health Service
Head, Allergy Research Group, QUT

- Multidisciplinary allergy research; molecular allergen characterisation, patient immunity, and environmental health.
- Lead investigator of the NHMRC AusPollen Partnership establishing national standardized pollen monitoring and forecast network.
- Research underpins more specific immunodiagnosis and treatment for subtropical grass pollen allergy.
- Supported by NHMRC, three ARC, NFMRI and other grants and industry engagements to enable both discovery and applied translational research to help people better manage allergic rhinitis and asthma.
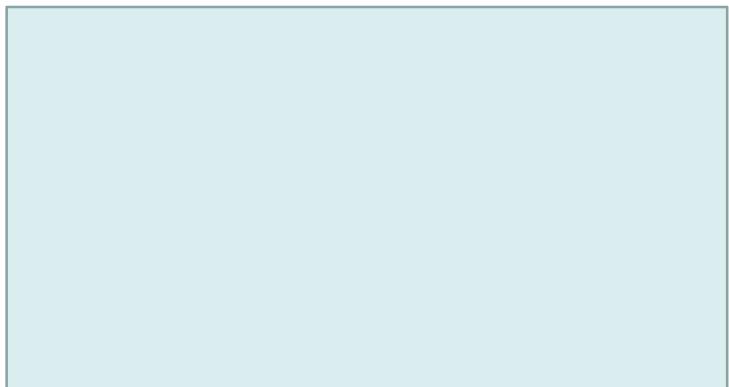
Dr Andrew Claus
Research Development Officer,
Tess Cramond Pain and Research Centre
Royal Brisbane and Women's Hospital

- Current projects range from systematic reviews, a drug trial, implementation of telehealth to development of a multidisciplinary clinical programme.
- His PhD was a laboratory-based study of spinal muscle function and pain.
- He has 10 years in academic teaching and research,
- His research experience expanded to include multicentre clinical trials as well as advising research higher degree candidates in the field of rehabilitation, focused on movement disorders and pain.

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Dr Deanne August
Investigator and Research Coordinator
Grantley Stable Neonatal Unit
Royal Brisbane and Women's Hospital, QLD Australia
Menzies Health Institute Queensland
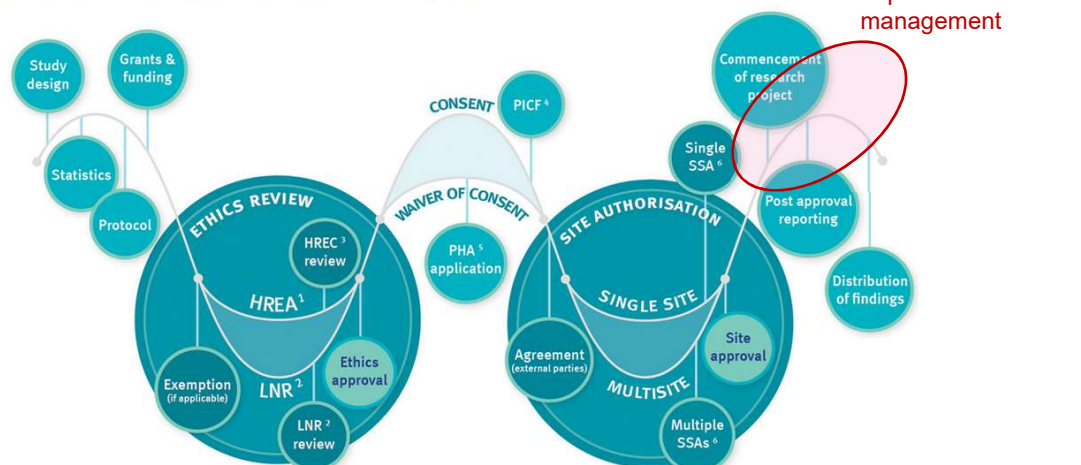School of Nursing and Midwifery, Griffith University

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Build your research experience and track record

| Develop skills and knowledge (online research resources) | Read and review (systematic review) | Plan for success (set SMART goals: Pilot study) | Connection and mentorship | Small grant/ Scholarship |
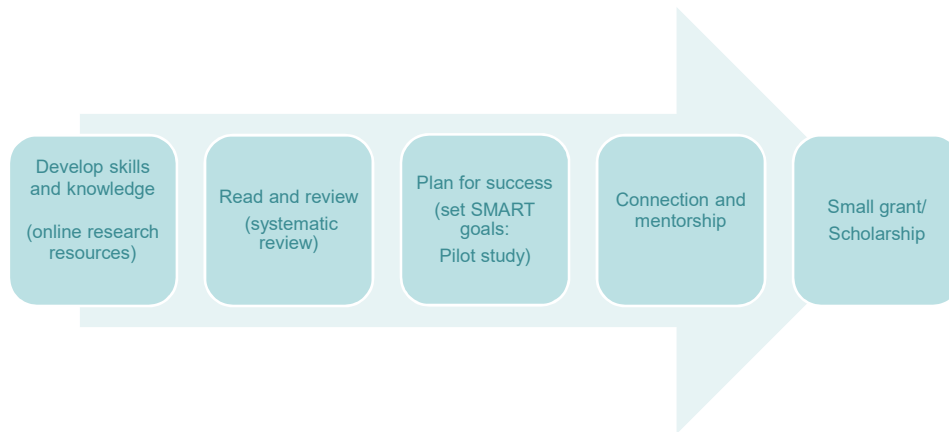
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Research process

Key steps in the research approval process are shown in the diagram below.

Research Project Implementation and management

Note: the above diagram does not represent proporational time speant in each stage. ¹ Human Research Ethics Application (HREA), ²Low or negligible risk (LNR), ³ Human Research Ethics Committee (HREC), ⁴Participant Information and Consent Form (PICF) - requires ethics review, ⁵ Public Health Act (PHA), ⁶Site Specific Assessment (SSA).

https://metronorth.health.qld.gov.au/research/ethics-and-governance

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Access to clinical research education resources and tools

https://metronorth.health.qld.gov.au/research
https://qheps.health.qld.gov.au/metronorth/research/education-resources

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Tools to assist research planning

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https://qheps.health.qld.gov.au/metronorth/allied-health/research/research-resource-map/protocol-proposal

https://www.health.qld.gov.au/cfahr/html/proposal

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https://qheps.health.qld.gov.au/metronorth/research/education-resources/advanced-clin-research

If outside QH, available upon request MNHHS-Research@health.qld.gov.au

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Other sources of advice

Managing a research project

Project management is an important skill for a principal investigator.

Having been successful in attracting funding for your project, you will now have to lead it from set-up to completion. The following pages take you through the key stages:

1. Settting up a research project

2. Monitoring a research project

3. Reporting on your research project

4. Making the most of your research project

and provide you with some project management tools for researchers.

Reflection:
lessons learnt
Ongoing,
outcomes & impact

vitae
realising
the potential
of researchers

https://www.vitae.ac.uk/doing-research/leadership-development-for-principal-investigators-pis/leading-a-research-project/managing-a-research-project

WILEY

THE WILEY NETWORK   INSTRUCTORS & STUDENTS   JOURNAL EDITORS   LIBRARIANS   PROFESSIONALS   RESEARCHERS   SOCIETY LEADERS

TOPICS ▼   CONTENT TYPE ▼   Search Researchers

THE WILEY NETWORK / RESEARCHERS / WRITING AND CONDUCTING RESEARCH / SEVEN ESSENTIAL TIPS FOR MANAGING A LARGE RESEARCH PROJECT

R RESEARCHERS

Seven Essential Tips for Managing a Large Research Project

Eva Lantsoght, Assistant Professor, Universidad San Francisco De Quito   📅 January 11, 2018

1. **Identify your research question**

2. **Master the literature**

3. **Learn planning skills**

4. **Identify your checkpoints**

5. **Use technology to your advantage**

6. **Take notes**

7. **Work with student**

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Research Proposal

Approvals

Project Grant / Scholarship

Program logic model for clinical research

- Good, simple process-driven framework
- Goal orientated; impact (short/ medium/ long term) focused; gives purpose
- Encompasses project lifespan from inception to impact
- Requires tracking of progress against (SMART) goals
- Based on addressing PICO research question
- Informs protocol development and practice

Input

Activity

Output

Outcomes

Impact
(know your end
goal)

Research Project Implementation

Internal Context, assumptions

External factors

Monitoring progress against measures of success, within given timeframe

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Research Impact

	Description of research impact
Knowledge	**New knowledge**, demonstrating the **benefits** emerging from **adoption, adaption or use** of new knowledge to **inform further research**, and/or understanding of what is effective.
Health	Improvements in health through **new** or **improvements in therapeutics, diagnostics**, disease **prevention** or **changes in behaviour**; **management** of health problems, health policy, health **systems**, and **quality of life**.
Economic	Improvements in **economic performance** through creation of new industries, jobs or valuable products, or **reducing health care costs**, improving efficiency in resource use, or **improving the welfare/well-being of the population** within **current health system resources.** *(An economic impact may also contribute to social or health impacts, including **human capital gains** and the **value of life** and **health**.)*
Social	Improvements in **health of society**, including **well-being** of end user and community. -may include improved ability to **access health care services**, to participate socially (inc. **empowerment and participation** in decision making) and to quantify improvements in the health of society.

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Planning timelines of research activity stages

PROJECT TITLE — The most engaging, insightful, best ever very important research project

Company Name
Project Lead

TASK NAME	ASSIGNED TO	START DATE	DUE DATE	DURATION	% DONE	DESCRIPTION	PRIORITY	MILESTONE
Design research project		1/03/2019	31/03/2019	30				Phase 1
Research resourcing (grant applications)		15/03/2019	31/05/2019	77				Phase 1
Research Ethics and Governance		15/03/2019	1/06/2019	78				Phase 2
Research activity milestone 1		15/06/2019	30/12/2019	198				Phase 3
Research activity milestone 2		16/12/2019	15/06/2020	182				Phase 3
Research activity milestone 3		16/03/2020	15/09/2020	183				Phase 3
Data entry		15/09/2019	15/09/2020	366				Phase 4
Data cleaning		16/09/2020	30/09/2020	14				Phase 4
Data analysis		1/10/2020	31/10/2020	30				Phase 4
Interpretation of project results		15/10/2020	15/11/2020	31				Phase 4
Report writing; draft 1		15/11/2020	15/02/2021	92				Phase 5
Manuscript submission; journal 1		15/02/2021	15/03/2021	28				Phase 6
Revision of manuscript journal 1		16/03/2021	16/06/2021	92				Phase 6
Proofs		17/09/2021	19/09/2021	2				Phase 6
Translation research outcomes into practice		1/01/2022	15/12/2022	348				Phase 7

**Template will be uploaded and if outside QH,
available upon request MNHHS-Research@health.qld.gov.au**

- Use a Gantt chart (eg Exel templates)
- Assign activity and milestones against time, based on protocol
- Include ALL steps in process;
  - Recruitment,
  - Data collection(s), interventions / experiments, follow up visits,
  - Data collation, cleaning, analysis and interpretation
  - Writing, editing, submitting and revising manuscripts
- Colour code types of activities
- Assign tasks and responsibilities
- Track progress for all aspects regularly
- Schedule a weekly activity timetable
- Report, review and share progress with team; students, collaborators, stakeholders

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Research Project Gantt Chart

Funded Project Activity   Continue until completion

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My tips for clinical research project

Planning, planning, planning (plan, do, study, act cycle)

Context; consider and note the clinical context in which your study will be done.
- does it change from commencement and completion?
- e.g. diagnostic practice in department, drug delivery protocols, staff changes

Regular study meetings
- Minute key issues discussed
- Capture the rationale for decisions (refer when reporting)
- Discuss how people at sites interpret and enact the protocol
- Note any differences in practice between sites or individuals
  - e.g. multidisciplinary team perspectives.

Track/manage the quality of data entry early: improve or clarify with data dictionary
- Saves time later for data cleaning; simple examples are "F" ; "f"; female; Y, y or yes; date & time formats

Record keeping and observation
Data quality in → robust data analysis → reliable interpretation → relevance of outcomes → **greatest impact**

People, people, people: communicate, encourage, value and support all members of your team; start to end

External factors

Internal Context, assumptions

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Metro North Hospital and Health Service
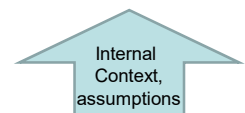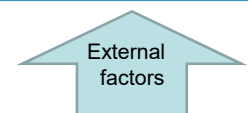
Andrew and De's lived experience of doing clinical research

Title:
Aim:
Hypothesis (if relevant):

Protocol/method/ activities	Outputs; Data sets

Outcomes:
e.g. New understandings of utility of the data collection tools
Lost key points? Insights to balance between rigour verses bias and loss of sensitivity to detect unexpected new finding.
New knowledge; design of next study, papers, skills?

Lived experience;
What worked well?

What didn't work?

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Metro North Hospital and Health Service

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Program logic framework for clinical research

Inputs	Activity	Output	Outcome	Impact

Internal   **External**

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Program logic framework for clinical research

Inputs

Financial; stipend, grant, in kind, Budget

Human; Chief and partner investigators, nurses, coordinators, lab team

Materials; device, drug, consumables, etc
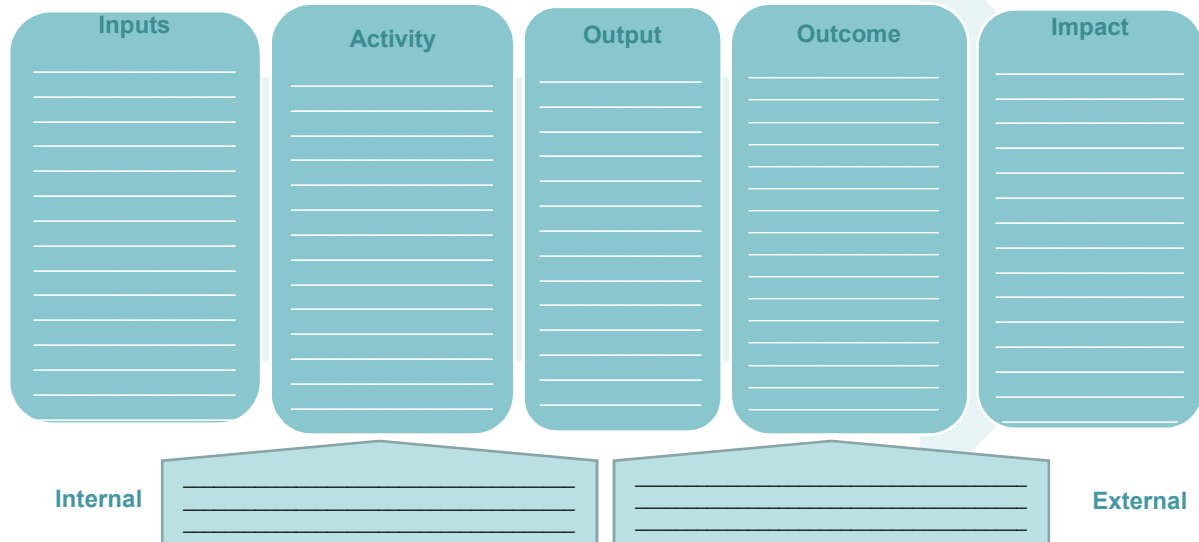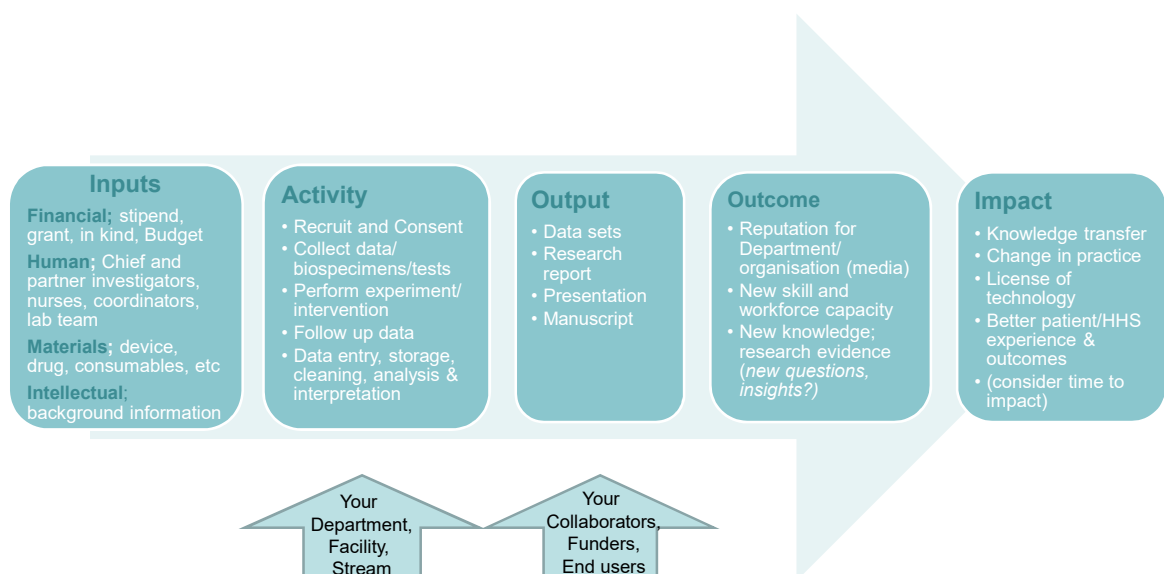
Intellectual; background information

Activity
- Recruit and Consent
- Collect data/ biospecimens/tests
- Perform experiment/ intervention
- Follow up data
- Data entry, storage, cleaning, analysis & interpretation

Output
- Data sets
- Research report
- Presentation
- Manuscript

Outcome
- Reputation for Department/ organisation (media)
- New skill and workforce capacity
- New knowledge; research evidence (*new questions, insights?*)

Impact
- Knowledge transfer
- Change in practice
- License of technology
- Better patient/HHS experience & outcomes
- (consider time to impact)

Your Department, Facility, Stream

Your Collaborators, Funders, End users

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For Discussion: practical considerations to reflect on

How did you approach managing the clinical research study?

What aspects of undertaking the research study worked well for your team?

Were there any contexts of your clinical setting that affected study success?

What did you learn that you would use in design and execution of future clinical research projects?

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