



Metro North Hospital and Health Service *Putting people first*

11 August 2020 | Live via Teams

Early and Mid Career Clinical Researcher Workshop

Research Workshop via Teams

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

Sponsors



Agenda

Part 1 Introduction (20 min)

Janet Davies and Dylan Flaws
including audience participation questions

Part 2 Lived experiences of clinical research higher degree journeys (3 min each)

Nicole Marsh, Sally Eames, Adrienne Young and Alka Kothari

Part 3 Panel Discussion

Part 4 Audience Discussion and participation

What's next & session close

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

RBWH Auditorium,

Facilitated by A/Prof Janet Davies,

MNHHS Office of Research MNHHS-Research@health.qld.gov.au

Clinical research education resources and tools

<https://metronorth.health.qld.gov.au/research>

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

[Metro North Hospital and Health Service](#) » [Clinical Streams](#) » [Research](#) » Education resources

Metro North Research Education Series

Digital Clinical Research Education Resources



MNHHS Office of Research
Clinical Research Education

This page has links to short videos of question and answer interviews on introductory topics related to core principles for clinical research.

[View the videos](#)



RESEARCH EDUCATION
Metro North HHS Webinar Series

The MNHHS Research Education Webinar Series is a series of online educational videos focussing on practical educational topics for researchers

[View the videos](#)

Introduction to Clinical Research Principles

Files with presentation slides from sessions on topics related to basic principles and processes for undertaking clinical research.

[Read more](#)

Advanced Topics in Clinical Research

Files with presentation slides from sessions on advanced topics on undertaking and communicating clinical research outcomes and translation of research knowledge into practice.

[Read more](#)

Interactive Research Workshops

Files with presentation slides and template documents from facilitated and peer to peer interactive research workshops aimed at consolidating learning and embedding research principles into clinical settings.

[Read more](#)

Clinical research education videos

Short videos of question and answer interviews on introductory topics related to core principles for clinical research.

After watching these videos, please [fill out our survey](#). Your feedback will help us improve the content and how the videos are delivered.

Designing Clinical Research Projects – Professor Patsy Yates

Key To Designing Clinical Research

Video Length: 16min 07sec

[Watch the video >](#)

Patsy's Top Tips for Clinical Research

Video Length: 3min 16sec

[Watch the video >](#)

Planning Biostatistical Analysis – Dr Joel Dulhunty

Planning Statistical Analysis for Research

Video Length: 15min 24sec

[Watch the video >](#)

Joel's Top Tips on Biostatistics

Video Length: 1min 57sec

[Watch the video >](#)

Reaching significant outcomes

Video Length: 3min 51sec

[Watch the video >](#)

Recommendations for Data Collection

Video Length: 3min

[Watch the video >](#)

Accessing information from the academic literature – Mr Chris Parker

Searching Academic Literature

Video Length: 7min 42sec

[Watch the video >](#)

Critical appraisal of research evidence – Professor Joan Webster

Defining Knowledge Gaps

Video Length: 8min

[Watch the video >](#)

[Metro North Hospital and Health Service](#) » [Clinical Streams](#) » [Research](#) » Education resources

Introduction to clinical research principles

Files with presentation slides from sessions on topics related to basic principles and processes for undertaking clinical research.

- + [Designing Effective Questionnaires](#)
- + [Designing a clinical research project](#)
- + [Making grant applications appealing to reviewers](#)
- + [Planning analysis when designing research](#)
- + [Seeking approvals to undertake clinical research](#)
- + [Using literature to define knowledge gaps](#)

MNHHS Research Education Webinar Series

The MNHHS Research Education Webinar Series is a series of online educational videos focussing on practical educational topics for researchers

Coordinated by the Metro North Office of Research: Dr Joel Dulhunty, Dr Tania Crough and Prof James Davies, Research@health.qld.gov.au

[More Research events](#)

How to Prepare an SSA Application in ERM – July 2019



Seeking Ethics Approval via ERM – May 2019



Differences between quality projects and research – 5 March 2019



[View Presentation](#)

Read and review

- Read literature in your field
- Access and utilize library services;
 - UQ on RBWH campus,
 - MNHHS library at TPCH
- Consider a systematic review
 - Lodge protocol PRISMA
 - Publish the systematic review → *track record evidence*
- Work together
 - Multiple separate reviewers of each paper
 - Joint publications
 - Team support and community of practice.
- Evidence of knowledge gaps to inform research direction
- Training information; pdf, video:
 - Prof Joan Webster and Mr Chris Parish
 - See MNHHS Research Education Resources

Accessing information from the academic literature – Mr Chris Parker

Searching Academic Literature



Video Length: 7min 42sec

[Watch the video >](#)

Critical appraisal of research evidence – Professor Joan Webster

Defining Knowledge Gaps

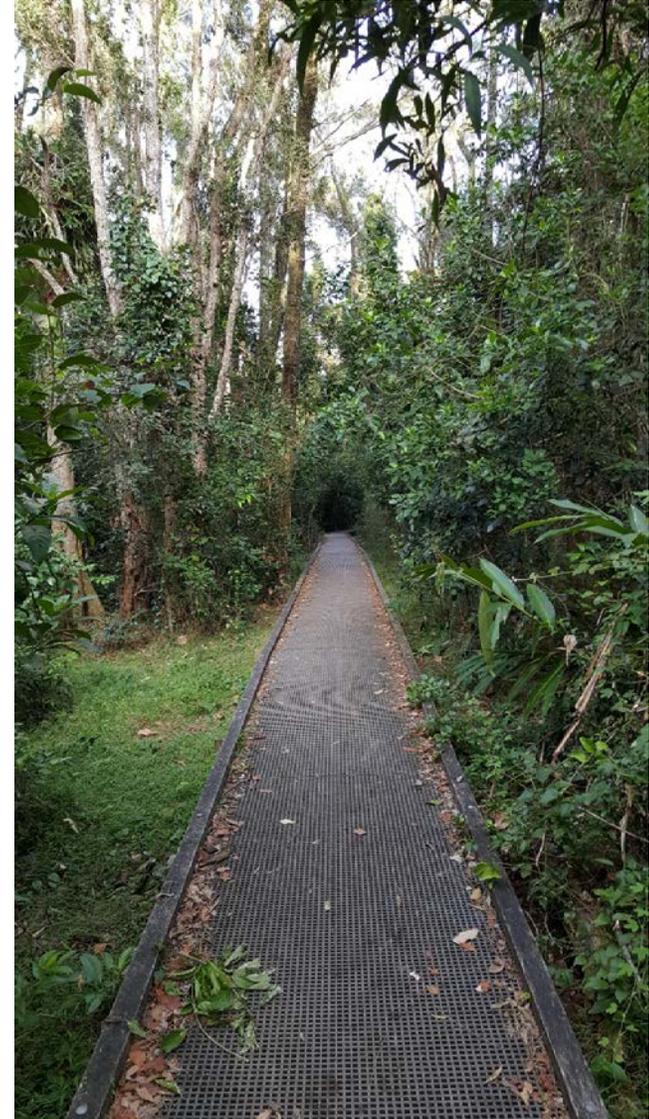


Video Length: 8min

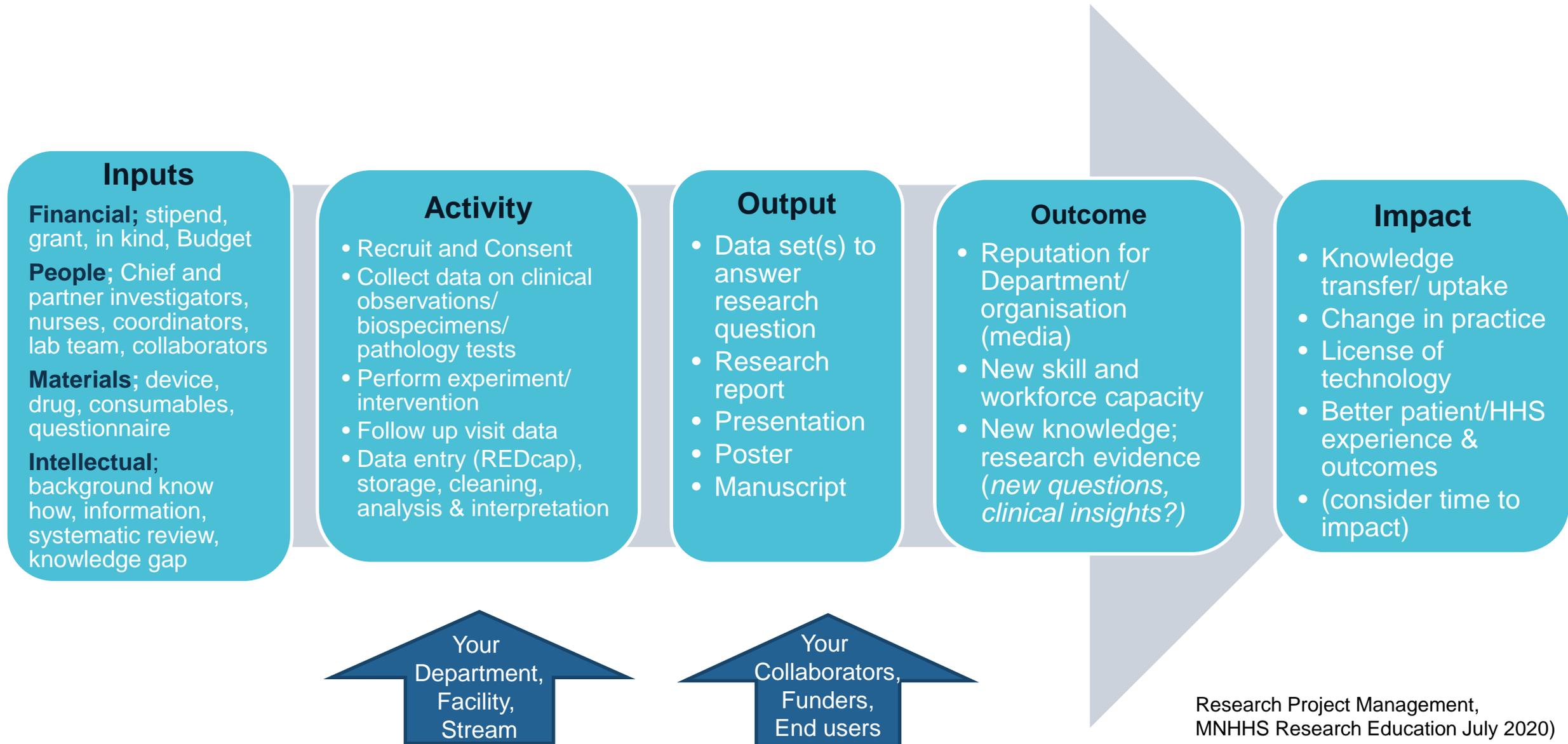
[Watch the video >](#)

Plan your research journey for success

- Training in research processes and skills
 - Protocol design, analysis, ethics, governance, reporting, presenting
- Use literature to identify clinical need targeting a key knowledge gap
- Set goals with realistic timeframes
 - plan to complete and succeed
 - Identify a good research mentor or peer support
- Devise and follow your own plan
 - how will you engage in research?
 - start small and manageable
 - track achievement against milestones
 - celebrate progress
- Consider research higher degree:
 - MSc, PhD



Program logic framework for clinical research



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

- Gantt chart (eg Excel template)
- Assign activity and milestones against time, based on research protocol
- Include ALL steps in process;
- Colour code types of activities
- Assign tasks and responsibilities
- Track progress
- Schedule a weekly activity timetable
- Report, review and share progress with team; students, collaborators, stakeholders

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

MNHHS Research Grants

Scheme	Grants to be awarded
Clinician Research Fellowships	5 P/T Fellowships for 4 yr support for clinicians
Collaborative Research Grants	Co-funded: each collaborating organisation (UQ, QUT, QIMRB) will award three (3) grants of \$25,000 in matched funding (total funds/project \$50,000)
Research Coordinator Grants	6 co-funded positions per grant round; positions for a minimum of 2 yr. (conditional extension into 3 rd yr).

Hospital Foundations, Disease focused Foundations, Universities, Institutes
Government agencies; QH, NHMRC, ARC, Cancer Council, Welcome Trust, NIH

MNHHS grants do not duplicate existing schemes:

e.g. RBWH and TPCF Foundations, Metro North initiatives like SEED, LINK and CAHRLI, and grants from philanthropic and academic institutions, nor national Medical Research Future Fund (MRFF), NHMRC, Medical Research Future Fund (MRFF) and the ARC.

METRO NORTH RESEARCH CHANCE FOR GRANTS!

Click here for the latest research funding opportunities for grants, fellowships, scholarships, travel and awards & prizes!



If you wish to pursue any of these opportunities, other schemes not listed, or have feedback please be in contact.

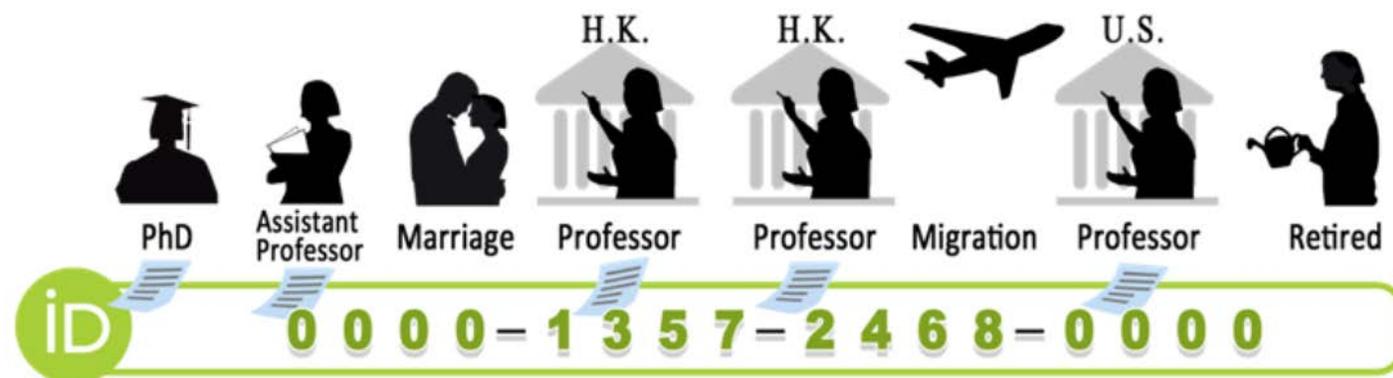
MNHHS-GRANTS@HEALTH.QLD.GOV.AU OR (07) 3647 9635



**Queensland
Government**

Establish your individual researcher identity: ORCID

- Requested by publishers, funders, institutions (inc MNHHS; ROI)
- Links you with your funding, affiliations, outputs, & metrics
- Auto populated (once established), exportable
- Travels with you during your career



ORCID
Connecting Research and Researchers

Registry

FOR RESEARCHERS FOR ORGANIZATIONS ABOUT HELP

Janet Davies

ORCID iD
<https://orcid.org/0000-0002-6378-4119>

Print view

Also known as
Janet Mary Davies

Websites & Social Links
Allergy Research Group
AusPollen Partnership webpage

Keywords
allergy, pollen, grass pollen, hay fever, IgE, asthma

Other IDs
Scopus Author ID: 7404982353

Employment (2)

- Queensland University of Technology: Brisbane, QLD, AU
2015-08 to present | Associate Professor Allergy Research Group (School of Biomedical Sciences, Institute Health Biomedical Innovation)
Employment
Source: Janet Davies (Preferred source)
- Metro North Hospital and Health Service: Herston, QLD, AU
2015-05 to present | Assistant Director of Research (Office of Research)
Employment
Source: Janet Davies (Preferred source)

Education and qualifications (2)

- Murdoch University: Murdoch, WA, AU
1990-02-01 to 1994-08 | Doctor of Philosophy (Biological and Environmental Sciences)
Education
Source: Janet Davies (Preferred source)

Audience participation !

Event code:
ResearchEd

How many other clinicians in your department do you know who are doing research?



Connection and mentorship

- Talk to others involved in research;
 - Work as a team;
 - Within your department,
 - Across disciplines
 - With peers
 - Serve as quality assessors for systematic reviews
 - Volunteer to help other research groups,
 - Join a team to gain skills and experience
- Find a mentor informally:
 - University schemes
 - Researchers in your clinical services
 - Clinicians in your department
 - Peers doing research higher degree
 - Research Coordinator Network
 - in MNHHS or your own facility
 - Ask experienced researchers for feedback on your writing; protocol, manuscript or funding application



Designing Clinical Research Projects – Professor Patsy Yates

Key To Designing Clinical Research



Video Length: 16min 07sec

[Watch the video >](#)

Patsy's Top Tips for Clinical Research



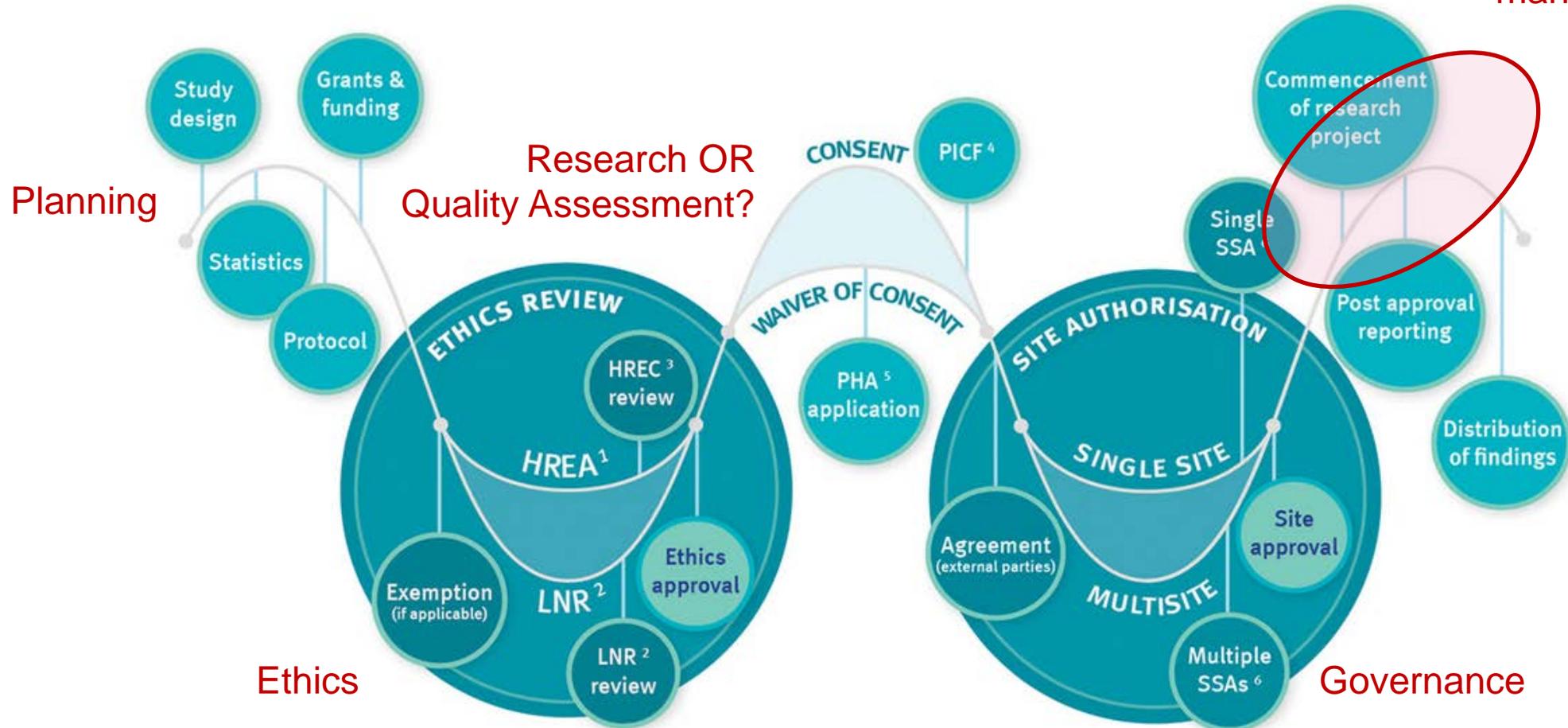
Video Length: 3min 16sec

[Watch the video >](#)

Research process

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

Research Project execution and management



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

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

Research Track Record

Framework for track record assessment: Impact

Research impact to be presented as a case study

2. Research Impact indicators			
Knowledge	Health	Economic	Social
Evidence of scientific reach and influence	Engagement Participation in clinical research Policy leadership Clinical guidelines Standards Development of product/intervention	Healthcare cost savings IP development Industry collaboration Start-up company Product to market Employment	End-user/public engagement Community health benefit Wellbeing of end-user and community Reducing inequalities

Set direction, build and frame your research track record from the outset

- Name, position(s), affiliation(s), qualifications (**year of award**)
- Current and recent employment (positions)
- **Outputs relative to opportunity** (limits to opportunity; interruptions, consequences)
- Contributions, Productivity, Quality, Leadership, Service and Engagement
- **Research experience**
 - **Grants, scholarships and fellowships**
 - team, your role, duration, source, title, \$
 - **Collaborations and projects**
 - **Papers/ presentations**
 - primary research, author position, journal quality, **impact**
 - **Patents, policy, clinical guidelines, change in practice**
- Set yourself **authentic goals** to work toward that align with **your purpose and your passion**



(inputs to research)

(research activities)

(research outputs)

(research outcomes/impact)

Resilience and perseverance

www.sli.do/

Event code:
ResearchEd

How long have you been doing a research higher degree?

Response Options: 1, 2, 3, 4, 5, 6, 7, more years

OR “completed <PhD/Mphil/other> in <x> years”;

OR “not doing research higher degree”

OR “not started yet”



Dr Dylan Flaws

my background

- Psychiatry Advanced Trainee
 - Interest in recovery post severe illness & injury
- MSc – Shared Decision-making
- PhD – Chest Pain Pathway
- Other research
 - Delirium
 - Redesign of the ICU environment



Early and mid career clinical researchers



Sally Eames

PhD
Clinical Evidence Development
Officer (CEDO)
Safety & Quality
Brighton Health Campus



Dr Adrienne Young

BHSc(Nut & Diet) PhD AdvAPD
Principal Research Fellow,
Allied Health Professions
Research Co-ordinator,
Nutrition and Dietetics
Royal Brisbane and Women's
Hospital



Nicole Marsh

Bachelor Nursing, Master Adv
Practice
Director of Research, Nursing
& Midwifery,
Director Clinical Trials,
Adj Assoc Prof Griffth Uni, QUT



Dr Alka Kothari

Senior Staff Specialist in
Obstetrics and Gynecology
and the Conjoint Site-
Coordinator of the
Northside Clinical Unit,
Faculty of Medicine,
University of Queensland, at
Redcliffe Hospital.



Title: Design and evaluation of a post-discharge education and support package for stroke clients and their carers

Supervisory Team: Prof Tammy Hoffman (UQ, now Bond); Prof Linda Worrall (UQ); Dr Kryss McKenna (UQ)

Clinical Directorate: left TPCH to enrol; now Community & Oral Health (COH) **Completion date:** 2011

Background and research purpose:

- Information / education provision crucial part of post-stroke care but needs poorly met
 - Client and carer information needs vary; tailoring required
 - Tailored information written resource previously developed and evaluated in isolation
- Developed and then evaluated an education and support package

Outcomes:

S1 & S2: gaps exist; needs vary

S3 (RCT):

- Self efficacy for accessing info ($p=0.004$), feeling informed ($p=0.008$), satisfaction with information received ($p<0.001$; $p=0.036$)
- Knowledge (primary), anxiety & depression, QOL and caregiver burden; non-significant

Research design:

Three studies:

- S1: Survey of services re: current practice
- S2: Survey of client and carer needs; 2 time points

Results combined with recommendations from the literature to develop an education and support package

- S3: multi-site RCT

Significance:

- 5+2 papers published
- multiple national and one international conference ppts
- likely underpowered; but including in Cochrane review
- opportunities beyond PhD



Title: Encouraging Assisting and Time to EAT: Comparison of mealtime interventions for older medical inpatients

Supervisory Team: Prof Lynne Daniels, Dr Merrilyn Banks, Dr Alison Mudge **Clinical**

Directorate: RBWH

Completion date: July 2013

Background and research purpose:



Research design:

- Pragmatic pre/post evaluation of three mealtime programs on RBWH medical wards
- Qualitative study with staff
- Repeated audits of practice over six months
- Critical analysis of implementation process and outcomes

Outcomes:

- Achieved improved nutritional intake and mealtime care in all three groups
- Highlighted need to facilitate changes in team routines and roles, as well as additional assistant to support fundamental cares
- Sustainability of some but not all practice change

Significance:

Outcomes sustained 5+ yrs
Now implemented in 12 Queensland hospitals;
being tested in Adelaide and Ireland
Future co-design work





Title: Prevention of Peripheral Intravenous Catheter Failure

Supervisory Team : Professor Claire Rickard, Professor Marie Cooke, Professor Joan Webster

Completion date: May 2019



Aim:

To identify effective methods to prevent PVC failure.

Objectives:

- 1) Determine modifiable risk factors associated with PVC failure and complications;
- 2) Evaluate the feasibility of large randomised controlled trial (RCT) of a vascular access specialist versus a generalist PVC inserter model to prevent PVC failure.

Research design:

- ✓ Systematic review with meta-analysis on PIVC failure
- ✓ Critical review of literature evaluating the effectiveness of specialist VAS and generalist PVC insertion models

Phase 1

- ✓ a multivariate regression analysis of an existing large dataset

Phase 2

- ✓ Pilot randomised controlled trial

Outcomes:

Phase 1

- ✓ Data from 1000 patients; 1578 PVCs were analysed
- ✓ PVC failure was 32% (n=1578)

Modifiable risk factors – IV flucloxacillin, 22g PVCs, number of accesses; paramedic insertion; insertion on the dominant side; bruising at insertion site; no additional securement, non-sterile tape or a tubular bandage

Phase 2

- ✓ 138 patients recruited
- ✓ All feasibility criteria met
- ✓ PVC failure was higher with generalist inserted 27/50 (54%) compared to a VAS 33/69 (48%)
- ✓ At 24 hours 19 (28%) patients in the generalist group did not have a PVC inserted

Significance:

- ✓ The data from the PhD provided foundation to support a successful NHMRC partnership grant (2019) *Difficult peripheral intravenous catheter insertion: Australian considerations for sustainable implementation of ultrasound guided procedures*



PhD Title: **Forgotten Fathers: the role of men in the journey through pregnancy and childbirth**

Supervisory Team : **Prof. L Callaway; Dr. J Dulhunty**

Clinical Directorate: **UQ**

Expected completion date: **2023 but (Optimistic) 2021** 😊

Background and research purpose:

- Fathers play a very important health role in the preconception, pregnancy and the post-partum periods.
- Obstetric services across the world are still largely focussed on the mother and baby, almost to the exclusion of fathers.
- The overarching aim of this PhD is to generate evidence to gain a better understanding of the needs of fathers and the gaps in their care, in the pregnancy journey.

Research design:

- Invited *literature review* –*Journal of Obstetric Medicine*
- *Qualitative study*- to explore the emotional and behavioural responses and coping strategies of fathers or expectant fathers who faced a significant traumatic event during a partner's pregnancy.
- *Quantitative study*-To explore the prevalence of symptoms of depression and subjective responses to trauma in fathers in the setting of adverse fetal, neonatal and maternal outcomes
- *Questionnaire survey*- To explore the factors that influence fathers' intention to attend, or not attend the birth of their child.

Expected outcomes:

- Detailed appraisal of the literature on the role of fathers from pre-conception through pregnancy to the postpartum period
- In-depth understanding of stressors and supports for fathers exposed to a traumatic pregnancy
- Thorough understanding of the extent of ongoing distress in fathers after a traumatic pregnancy
- To explore the intention and behaviors of fathers in relation to the birth of their baby

Significance:

- This review proposed areas for future research and recommended an evidence-based change in practice in maternity care, recognising the role of fathers in the pregnancy journey.
- Provide guidance on interventions that may support fathers exposed to a traumatic pregnancy
- To develop an understanding of the targeted interventions to provide support to fathers mental health in the setting of a difficult pregnancy
- Develop a better understanding of the needs of fathers during the process of childbirth.

Panel Discussion

- Why are you doing or considering doing a research higher degree?
- What did you learn about the process of doing research during the PhD experience?
- How well does the topic of your research align with your clinical practice?
- How are you using or would like to use your new skills and knowledge in clinical practice?

Audience Participation

- What topics or themes for networking sessions are of interest going forward?
 1. ieMR and **health informatics for clinical decision** support
 2. Adoption of **precision medicine** in practice
 3. Leading **clinical trials of therapeutic interventions**
 4. Accessing **grant funding** and research support
 5. Ethics and social license for **use of health data**
 6. Genome and exposome as **determinants of health**
- Please respond in slido with these or other suggestions

What's important in succeeding in your research career

- Alignment to authentic goals that you are passionate about
- Alignment to core role and duties
- Building your network and connections
- Accessing research support and research tools
- Resilience and perseverance
- Building your research identity and track record
- Planning and managing your progress
- A good supervisory team!
- A curious mind!

Next Session: November 10, 2020



Research designs and use of digital applications in virtual care

This session will showcase recent examples of research projects and clinical experiences for clinicians using digital health tools in virtual care settings.

Advanced topics in clinical research

Online Feedback Form (or use the chat now)

- Please provide feedback.
- Informs scope, design and improvement in research education sessions
- We will email link to the survey for attendees
- <https://metronorth.health.qld.gov.au/research/webinar-series/evaluation>

Metro North Hospital and Health Service
Royal Brisbane and Women's Hospital

Annual Introduction to Research Principles and Resources course for Health Professionals 2015

Session evaluation form

Name (optional): _____
Department/Faculty (optional): _____
Session name: _____
Session date: _____

1. Did the course meet your expectations? Yes No
If not, please explain why

2. Please provide a rating for the course (tick the box):

Aspect	Poor	Satisfactory	Good	Excellent
Overall rating for the course	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Course content	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Delivery method	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The venue	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

3. Suggestions for future improvement:

4. Other topics you would like covered in the course program for 2016:

Thank you for taking your time to complete this form. We value your inputs.

Sponsors



THE UNIVERSITY
OF QUEENSLAND
AUSTRALIA

Faculty of
Medicine



QIMR Berghofer
Medical Research Institute

