

Demystifying Academic Culture: A Guide to Research Processes

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This guide is intended to provide insight into some overarching topics related to research. Families and researchers are encouraged to have open and clear conversations about the nuances of their own projects.

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Research Funding



1 Funding Applications

Research funding is typically applied for months or years in advance and can be time-limited or for a specified dollar amount.



2 Sources of Funding

Projects can be funded by a number of agencies and organizations at once.

Government of Canada

Tri-Council agencies:

Canadian Institutes of Health Research (**CIHR**), Social Sciences and Humanities Research Council (**SSHRC**), and Natural Sciences and Engineering Research Council (**NSERC**).

Other sources of funds:

- Government Agencies
- Institutional funds
- Non-profit groups
- Foundations
- Individual donors
- Researchers personal funds
- Private sector



3 Funding Requirements

Research funds can come with restrictions or guidelines including: where money can be spent, how funding can be used, a time limit on how long the funds are available, and more.



4 Use of Funds

Common uses include participant reimbursement, research materials and dissemination, and paying staff.



5 The end of a Funding Period

Many things can happen if funding disappears. Researchers can apply for new funding, or the study may change or end.



6 Financial Disclosure

Researchers are required to disclose funding sources and any conflicts of interest when publishing or presenting research.

Roles in Research

- Within research studies, there are various roles that are filled by members of the research team.
 - We have defined several roles here and presented a sample hierarchy of positions within a research study
 - These are only samples
- Terminology used and the structure of roles will vary across different research studies
 - Feel free to ask the research team you want to work with about the relevant terminology and structure for their study
- A final note: some positions in a study could be contract positions and may be time-limited
 - Do ask for a contact person who will support you throughout the study's duration

PI

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Principal Investigator

Responsible for all aspects of the research project

CO-I

=

Co-Investigator

Also responsible for the research project with complementary expertise to the PI



Also sometimes called a local principal investigator (Local PI) in cases of multi-site research

Research Coordinator

Manages administrative aspects of research study

Often this person will be your first point of contact

Psychometrist

Specialist in testing and assessment

In behavioural research, this person will spend a lot of time with participants

Statistician

Specialist in interpreting and analysing data

This person will not likely spend much time with participants

RA

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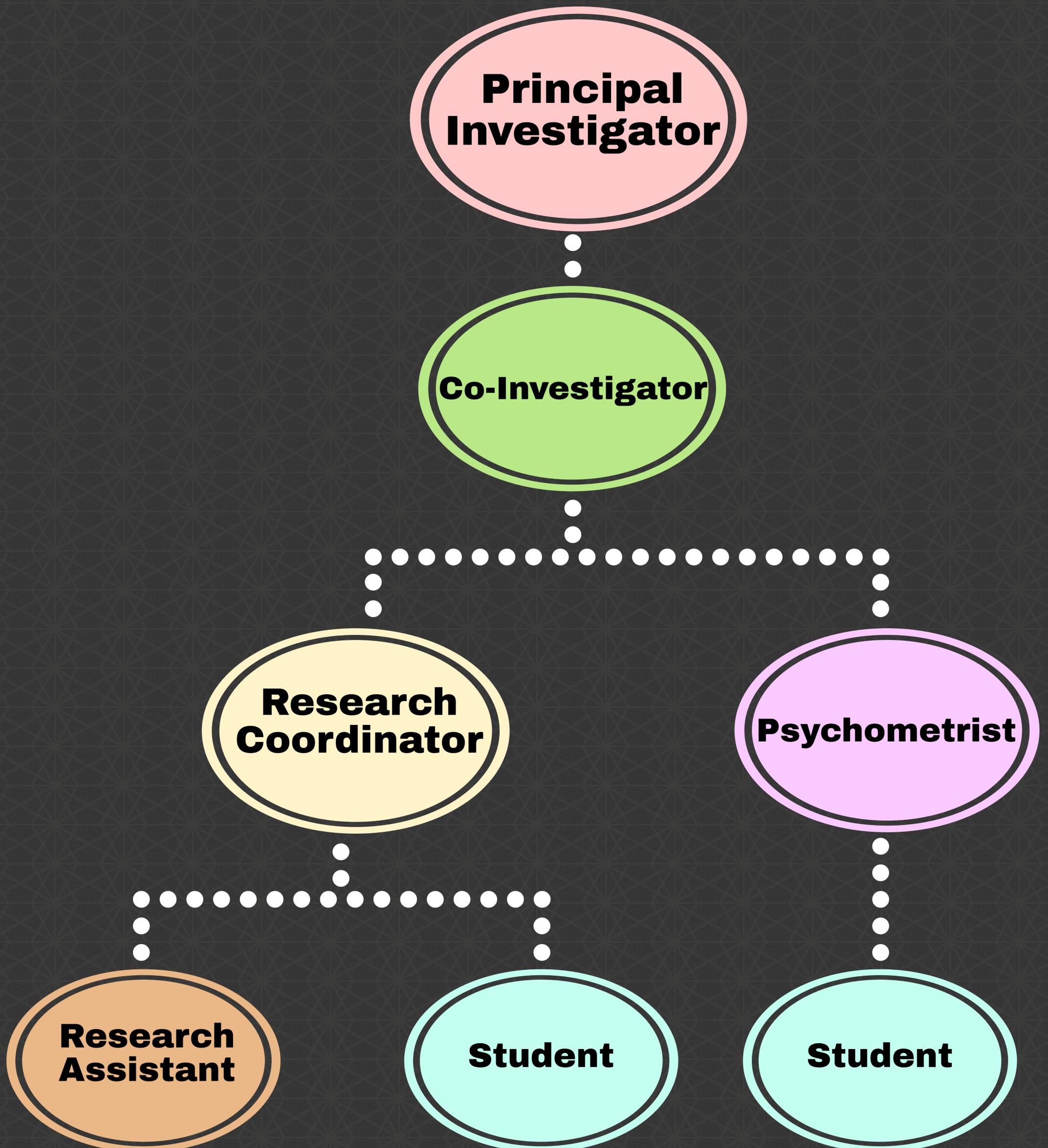
Research Assistant

Junior researcher, collects and processes data

Student

Can hold a variety of roles depending on their level of training

Research Hierarchies



Academic Publishing



Researchers are under a lot of pressure to publish articles



Academic publications are necessary for future jobs, promotions, and credibility



Once a study has been completed, it has to be written up if it will be published and this can take time.



Due to the value of publications, some researchers may be wary about releasing results of a study until they are published



To mitigate this issue and make sure that research gets out and is credited before formal publication, researchers can post drafts of their work in pre-print repositories



Note: Works found in pre-print repositories have not been peer-reviewed (see below)



In academic publishing, there has been a bias against publishing negative results and null results



Researchers are not paid for their publishing work



Peer reviewed publications are the most highly valued by hiring committees

What is peer review?



Peer review is a process whereby other researchers in the field evaluate potential publications on several factors to determine scientific merit

Reviewers evaluate, among other things:



Was the method used in the research written up with enough detail that it could be replicated?



Were the findings reported accurate?



Peer reviewers are often not paid for this work



Peer reviewers recommend to the editor whether an article should be published, sent back for revisions, or rejected



An alternative to traditional academic publishing is called Open Access

What is Open Access?

Open Access publishing is when an article's author retains the copyright to their article

Open Access

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Traditional Academic Publishing

- Author retains copyright
- Article free to access for the public
- Article may or may not be peer reviewed depending on the journal
- Article can be freely distributed or posted by author
- Some funding agencies such as those funded by governments require any publications made about funded work to be open access
- Publishing an open access article requires the author to pay a fee of possibly thousands of dollars

- Journal owns copyright
- Article is hidden behind a paywall or expensive subscription
- Article may or may not be peer reviewed depending on the journal
- Author is restricted as to where or how they post or distribute the article
- In some fields, open access articles are looked down upon by hiring committees and traditionally published articles are preferred
- Publishing an article in the traditional way does not cost the author any money



The following flowchart is an example of how the academic publishing process can work. The exact nature of the process can vary depending on a number of factors



The median time from when a paper is submitted to when it is accepted to be published in a journal, based on information in the biomedical article database PubMed is around 100 days as of 2015. (Powell, 2016)



The median time from when a paper is accepted to when it is published online, based on the same data above, is around 25 days as of 2015. (Powell, 2016)



If you are curious as to the results of a study you have been involved in that has been completed, feel free to ask members of the research team about them.

Academic Publishing Process Flowchart

