

Research Management 101

aka let's not find ourselves up Schitt's creek without a paddle

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Schedule



> What is "research management"?

> Vision

> Assemble

Activity

> Schedule

> Organize

> Manage

> Document

☆Activity





So what is this all about, anyways? Well \cdots

For you: Enabling a full and complete understanding of the current state and path of your research project

For your team: Providing structure and confidence in you, each other, and the research

For your research: Making it easy for you do it



Can you think of a time when you felt lost … dazed and confused … stressed … or straight up in a panic?!?!?! … about your research?



リサーチ・マネジメントとは何か? What is research management?

We uncouth Canadians have a saying (and also a rather hilarious sitcom), which is:

"Up Schitt's creek without a paddle."

> The creek is your path to success with the research project. Better be up!
> The water is how you get there. Better be clear and problem-free!
> The paddle is the tool to make it happen.
Better have some of those!





TROUBLE INTENSITY CHECK-LIST Location in Creek: UP DOWN UP DOWN Water Composition: CLEAR SHITTY Paddle: YES NO





Mnemonic device: 場所窓 (v/b-a-s(c)h-o-ma-do)

M	Vision	Assemble	Schedule	Organize	Manage	Document
	Vision Document	Roles Hat Tricks	Project Timeline	One Doc to Rule Them All 🖉	Communication, e.g., Slack, Zoom	One Doc to Rule Them All 🖉
	Team Overview	Team Data, e.g.,	Meetings	Folders and Files	Rally	Meeting Minutes
	Current Status	ORCID	Special Dates, e.g., Conference Deadlines	Repositories, e.g., OSF	Remind React	Resources, e.g., Zotero
				Protocols, Scripts, and Checklists		







A vision document can help you and your team ensure a shared understanding of the research and its ultimate conclusion.

Acts as a map of the research project.

Can be as simple as a ポンチ絵 (ponchi-e) or a short slide deck with the essentials, especially the team and current status.











Everyone has a role to play. You help decide. Some roles are obvious, and others may require asking people for more information about what they can contribute.

You also have to think about authorship order … in advance. Who does what, and how much each person does, should be decided now to set expectations and work schedules.

Of course, we have to be flexible. Things don't work out as planned. We're bad at predicting how long we're going to take to do tasks in the future (Kahneman & Tversky, 1979).





The Contribution Roles Taxonomy (CRediT) provides framework of research roles (Allen et al., 2014).

Developed in a workshop with Harvard and Wellcome Trust, and later adopted by Consortia Advancing Standards in Research Administration (CASRAI).

Used by Elsevier, PLOS, BMJ, Wiley and Springer … and you.

チーム集合 Assemble

14 CRedIT roles can be used:

- > List all Contributions per Author
- > Multiple Roles Possible
- > Degree of Contribution Optional: 'lead',
- 'equal', or 'supporting'
- > Shared Responsibility: All decide and confirm
- > Make CRediT Machine Readable CRediT tagged contributions coded in JATS xml v1.2
- > Can add roles as needed

Resources
<u>Software</u>
Supervision
<u>Validation</u>
Visualization
<u>Writing – original d</u>
<u>Writing – review &</u> editing

https://credit.niso.org

draft

チーム集合 Assemble



You should also gather all information about your team:

- > Work email(s) and Google email(s)
- > Slack and Discord accounts (if using)
- > ORCID ID (required by ACM and other publishers)
- > OSF account (if not using ORCID ID)

> Overleaf account

- > Zotero account (if using), Github account/s (if using), etc.
- > Google Scholar profile, ResearchGate, etc.
- > Professional SNS accounts and websites
- > Specific funding information (with IDs)



The Six Thinking Hats® (de Bono, 1985) provides a framework of ways in which project tasks can be divided based on skills and inclinations.

People are good at different things. Which hat suits you best? How about your team members? The White Hat calls for information known or needed. "The facts, just the facts."

The Yellow Hat symbolizes brightness and optimism. Under this hat you explore the positives and probe for value and benefit.

Risks, difficulties, Problems – The risk management Hat, probably the most powerful Hat; a problem however if overused; spot difficulties where things might go wrong, why something may not work, inherently an action hat with the intent to point out issues of risk with intent to overcome them.

The Red Hat signifies feelings, hunches and intuition. When using this hat you can express emotions and feelings and share fears, likes, dislikes, loves, and hates.

The Green Hat focuses on creativity; the possibilities, alternatives, and new ideas. It's an opportunity to express new concepts and new perceptions.

The Blue Hat is used to manage the thinking process. It's the control mechanism that ensures the Six Thinking Hats® guidelines are observed.

From https://www.debonogroup.com/services/core-programs/six-thinking-hats/













When you need to get something done or come to a decision, try it out.

Leader is the **Blue** hat.

Teams can either: > Take a hat each > Share the hats together

2 minutes per hat.

ACTIVITY	
Initial Ideas	Blue, White, Green, Blue
Choosing between alternatives	Blue, White, (Green), Yellow, Black, Red, Blue
Identifying Solutions	Blue, White, Black, Green, Blue
Quick Feedback	Blue, Black, Green, Blue
Strategic Planning	Blue, Yellow, Black, White, Blue, Green, Blue
Process Improvement	Blue, White, White (Other People's Views), Yellow, Black, Green, Red, Blue
Solving Problems	Blue, White, Green, Red, Yellow, Black, Green, Blue
Performance Review	Blue, Red, White, Yellow, Black, Green, Blue

From https://en.wikipedia.org/wiki/Six_Thinking_Hats

What hat/s do you tend to wear?



What hat/s do you never wear?



アクティビティ(10分) Activity (10 mins)

Let's try the hats out.

- > Get into groups of 5~6 (30 secs)
- > Choose a leader (the Blue hat) (30 secs)
- > Go through the hats to decide between a robot or a voice assistant for older adult group conversation
- > Blue time-keeps and takes notes
- > Blue, White, (Green), Yellow, Black, Red, Blue

Prepare to present in a <mark>2-min </br>decision and why</mark>









Research design: Month 'YY

プロジェクトのスケジュール

Project timeline

- Translation: Month 'YY
- Submit ethics: Month 'YY
- Development: Month 'YY
- Pilot testing: Month 'YY
- Recruitment: Month 'YY
- Run study: Month 'YY
- Analyze data: Month 'YY
- Write paper: Month 'YY

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	2023	FY23	2025	FY25		2027	FY27		
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		Ye	ari	
MILESTONE	Q1	Q2	Q3	Q4
Ethics, Development, Preliminary Testing				
Recruitment, Pilot Test				
Study 1: Al Moderation of Self-Expansion		S1		
Data Analysis, Short Paper (International)				
Recruitment, Pilot Test				
Study 2: AI Moderation with Vocalics				S2
Data Analysis, Short Paper (日本語)				
Recruitment, Pilot Test				
Study 3: AI Triad Disclosure				
Final Analysis, Journal Paper (All Studies)				



Timeline

Gantt Chart



What should be in the project timeline?



定期的なミーティングのスケジュール Scheduling regular meetings

> Time is precious. Scheduling busy people is difficult. This should be one of the first things you do together.

- > Decide on one day and one block of time (30-60 mins)
- > Commit to weekly or biweekly
- > Decide on a place (including Zoom)
- > Have an online backup (such as Zoom, Skype, Google Meet …)
- > Set up a calendar event with all email addresses invited
- > Be open to rescheduling, especially every quarter/semester
- > Divide the team into shorter, more frequent sub-meetings
- > DON'T FORGET HOLIDAYS ··· cancel or reschedule in advance





定期的なミーティングのスケジュール Scheduling regular meetings

Consider special milestones, deadlines, and objectives. For example, we often aim for ACM CHI, which has a strict schedule. That means our schedule has to be strict, too.

You can add deadlines as calendar events.

You may also wish to create a **post-submission schedule**. You may need to do a revision. You may need to fill out an ACM rights review form. You may need to make a video (give yourself two days). You may need to go through an onerous TAPs process. Etc. This takes time and needs to be scheduled.



Soal [™] CHI '25 Full Paper

Schedule 芦

- Research design: Jan. ~ Feb. 2024
- Translation: Feb. 2024
- Submit ethics: Feb. 2024
- Body Survey:
 - Materials: Feb. 2024
 - Pilot testing: Feb. 2024
 - Recruitment: Feb. 2024
 - Run study: Feb. 2024
 - Analyze data: Mar.-Apr. 2024
- Voice+Body Survey:
 - Materials: Apr. 2024
 - Pilot testing: Apr. 2024
 - Recruitment: May 2024
 - Run study: May 2024
 - Analyze data: May 2024
- Write paper: May 2024~







Create an anchor, one place where all information and engagements can be found.

Pin it on Slack. Bookmark it. Consider a URL shortener.



From Michael Mauro



This is just one way (my way, ahem) of doing it, but I daresay it's a rather awesome way. And you can use it.



Project NaniNani: Working File Edit View Insert Format	, Doc ☆ 🗈 🕗 Tools Extensions Zotero Help
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← Outline	Project NaniNani
Project NaniNani	Overview 🌐
Schedule	Members: Who (time zone) Timeline: <u>Month 'YY</u> to <u>Month 'YY</u> Zoom. etc.:
Roles and Time Commitment 🞯	Schedule 📂
Meeting Minutes	 Research design: Month 'YY Translation: Month 'YY Schwitz altrian Month 'WY
Day Mon. ??th, 202? Kick-Off 🖋 Wed. May ??th, 202?	 Submit etnics: Month 'YY Development: Month 'YY Pilot testing: Month 'YY
Copyright and Sharing	 Recruitment: Month 'YY Run study: Month 'YY Analyze data: Month 'YY Write paper: Month 'YY
	Objectives 🎯
	 Research goal: One sentence Research question(s):

RQ#: What





Open Science Foundation (OSF) is a free open science management service provided by the Center for Open Science (COS). You can:

- > Create a project website
- > Create a shared wiki
- > Preregister your research: create, claim, and commit
- > Upload supplementary materials

And more

公開研究者および投稿者ID ORCID



Open Researcher and Contributor ID (ORCID) is a free service that provides a unique ID to researchers (and other contributors, including students) around the world.

You can use it to sign into services like OSF.

You MUST get an ORCID to publish with most places, including ACM.

5 mins: <u>https://orcid.org/register</u>







You can create an account on OSF using your ORCID account:



https://osf.io/register

Then you can create a project.





No publication DOI

add DOIs.

And create preregistrations of your study protocol, which are saved to the Internet Archive.





WARNING: The draft auto-saves. Only one person should open the draft at a time.

Also … don't forget to register your protocol. The draft may stay forever, but it won't be public or "official."







組織は成功の証 Protocols, scripts, and checklists



Make a 手続き (protocol) document for running individual studies.

Include an overview, prep, what do say and do … in scripts and checklists.

Use figures when possible!

Use **colour-coding** based on roles and special actions ···



組織は成功の証 Protocols, scripts, and checklists





手続き・Procedure									
役割によって以下の情報に関して、大切な点か活動店は違色で強調表示していた: 【F】 ファシリテーター 【O】 観察者 【T】技術者									
各セッションの資料									
 ● 書類はプリントする 									
o <mark>4x 同意書</mark>									
○ 4x 各アンケート:ご注意!三種類がある:①Talk ②Body ③Voice									
• 4x ペン									
 参加者の ID は客アンケートに書く 									
● 共想法の資料, e.g., headphones, speaker, etc.									
○ 音声の条件がある場合で、机でスピーカーを置いてくれ									
• 1x カメラ、2x SD カード									
• もし参加者は持たないなら、スマホを受ける									
単語									
いくつかの特別な単語を使うので、ご注意ください:									
 研究・実験: 全体の研究 									
• セッション・日・試し: それぞれの日の実験									
• 主なセッション: 1・2日目のセッション									
 共想法セッション: 共想法のセッションの一つ(主なセッションにつきは2回) 									

Let's not forget ... everything that needs to be done, later.

For example, if you get a paper into an ACM conference: > Make publication ready version (1+ hrs) with all anonymized parts replaced, all final corrections applied, publication template in place, etc.

- > Make arXiv version and submit to arXiv (1 hr)
- Make video: slides, record, modify, YouTube captions (2 days)
 Make optional content: supplementary materials, video thumbnails, any final material on the repository (e.g., OSF)
 Prep for the trip: Registration, booking flights and hotels, get cash in the local currency, etc. (days)



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Computer Sc	ience >	Human-Compute	r Interaction
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Communication is one of the most important and understated aspects of research. Research is social. (Assuming you work with others … including your supervisor/professor!)

You are responsible for ensuring good communication.

Communication = "something, anything" including "no, I can't" Not communication = "..."





Tons of communication tools exist. Try to limit the tools used. People get overwhelmed with too many options.

> Email: a classic, necessary for things like conference results
 > Slack/Discord: chat for work but so much more
 > LINE/WhatsApp: realtime access

Decide on the tool/s. Set expectations (only during the week between 7:00-22:00, respond within 2 days, etc.).



If you're leading a project …

Rally: Short, positive messages that encourage people to act **Remind**: People forget (to check their calendar) so remind **React**: When things aren't done, you have to discuss and recoup

This is all straightforward. Your challenge is to be consistent. Be a robot about it! Automate, execute, carry on.

Without emotion. Be curious and kind. If not that, then be bland. Take a time out if you're feeling overwhelmed. Ask yourself, "How would I feel if I received this message?"











You've created an anchor, one place where all information and engagements can be found … now what?

Make sure the full and complete history of the project as represented in meeting minutes is contained therein.

> Date

> Attendees and absentees

- > Agenda, even "check-in"
- > Updates, decisions, and to-do's
- > ··· who, what, by when



- Seaborn:
 - Set admin meeting for tomorrow with Koike and Kato

You can't just store data willy-nilly. Your institution may have certain requirements. Ethics may have certain requirements.

> Google Drive: Great for online collaboration, but data likely used by Google, so be careful about ideas and anonymity
 > Dropbox/Box: Great for big files and anonymous documents, if you have a paid or institutional account
 > OSF: Great for all kinds of files, free and open, but be careful about ideas and anonymity, and hard to collaborate
 > Github etc.: You already know about these











Example: Perhaps you gather non-anonymous data that you then anonymize and wish to share for open science.

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Bring everyone on board with the same writing tool/s.

> Google Docs: Great for online collaboration, but templates are very limited, and can't use reference managers with ease: good to start writing or creating outlines for papers
 > Overleaf: Great for writing papers together, can submit directly to some venues, but some training needed (code-based LaTeX) needed, need paid account for best features
 > Word/Open Office: solid templates but hard to collaborate … make sure to use a versioning system in filenames, e.g., -v3ks



IATE



引用の記録 Keeping track of citations

Use a reference management software, such as Mendeley or Zotero. Zotero is totally open source.

Everyone can contribute papers and other sources on a group account.

Collections (folders) can be used to keep track of (sub-)projects.

Can upload/share PDFs.









Ultimately, no matter how much you prepare and how consistent you are, you can't control everything (especially other people) and the future is unpredictable.

> You can't control people, so choose good people (if you can)

> Life happens and people make mistakes (be flexible)

> People have different work styles (be a good leader and find out what they are and adapt)

> The Internet can cut off, Google can eat your stuff, etc.

> Maybe the research is no good and it's better to quit (rather than fall prey to the sunk-cost fallacy; refer to Thaler, 1980) Guess what? You're a project manager … of something. Surely you can think of *something*, right? A project going on right now … something you wish to start … or a blast from the past. Pick one and either:

① Create a vision document or ポンチ絵
 ② Create a timeline
 ○ Create and document to rule them all

Create one document to rule them all

Prepare to present in a 2-min \neq lightning round







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← Outline	Project NaniNani						
- Project NaniNani	Overview @						
Overview 🜐							
Schedule 👼	Members: Who (time zone) Timeline: Month 'YY to Month 'YY						
Objectives e	Zoom, etc.:						
Roles and Time Commitment 😇	• • • • • •						
Materials 👎	Schedule						
Meeting Minutes 🖬	Research design: Month 'YY						





Thank You

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