Social Epidemiology of Global Aging (SEGA)
Research Group Handbook

Welcome!

You are probably reading this manual because you've recently joined the Social Epidemiology of Global Aging (SEGA) Research Group in the Department of Epidemiology at the University of Michigan. The SEGA Research Group is directed by Dr. Lindsay Kobayashi, and is housed in the Center for Social Epidemiology and Population Health (CSEPH) in the Department of Epidemiology.

This document outlines our mission, guiding principles, expectations, and general research group policies. It also indexes important resources for our research group.

This is a **living document** that will change as our group grows and our projects evolve. We will revisit our core principles, values, and expectations at least annually.

Our mission

Our mission is to conduct rigorous epidemiologic research into the social determinants of healthy aging, and to have fun while doing it! The **ultimate goal** of our research is to provide policy-relevant evidence that can be used to improve population health and reduce health inequities. To achieve this goal, our projects aim to identify modifiable aspects of structural social and economic conditions that can be leveraged to improve population health and health equity. Our research takes a global perspective. This means that much of our work is focused on global health inequities, and aims to include population-based data from diverse high-, middle-, and low-income countries.

We have four main research themes, each of which has several sub-projects:
1) Social determinants of healthy cognitive aging in rural South Africa
2) Cross-national comparisons of later-life cognitive function
3) Social determinants of healthy cognitive aging in older cancer survivors
4) Mental health and well-being among older adults as affected by social and economic changes during the COVID-19 pandemic

Our guiding principles and values

Our group is committed to ensuring a safe, friendly, and inclusive environment for everyone. Our group is founded on principles of respect, inclusion, equity, open discussion and communication. We value integrity, compassion, thoughtful inquiry,

teamwork, collaboration, and active learning. We have a commitment to pursuing the social epidemiology of healthy aging while respecting these foundational ideals.

Our research mission has a firm commitment to health equity through our theoretical positioning, research questions, data sources, and policy focus. Specific projects will vary in their explicit goals, but all projects are conducted within this framework.

We are an anti-racist research group. We achieve this through educating ourselves, and taking actions within the research group, the department, the university, and the broader scientific community to combat racism and promote equity.

We do not tolerate any form of harassment or discrimination, including on the basis of race, ethnicity, national origin, socioeconomic background, religion, gender, gender identity or expression, sexual orientation, disability, body size, or physical appearance. If you notice or experience any harassment or discrimination, tell Lindsay immediately. If Lindsay is the problem, or if you don't feel comfortable talking to her, here are objective third parties within the department who you can reach out to (suggested by research group members): Briana Mezuk, Belinda Needham, Elvira Rivera, and Kate Wilhelmi.

Science is a public good, and most of our research is funded by taxpayer money. We will use our time and this money responsibly, and conduct research that will ultimately serve to improve population health and health equity. **Success is contagious**, and science is not a zero-sum game. The achievements of your group members are positive for your own success; it benefits all of us to be in a successful research group.

Expectations and responsibilities
Everyone:
- Our research group is founded on respect, inclusion, equity, and open communication. We do not tolerate derogatory language, stereotyping, verbal or physical harassment, racism, sexism, or any other form of discrimination, both within and outside the group.

- We are free to express ideas, challenge ideas, and are encouraged to contribute to group discussions.

- We support each other, and do not compete against each other.

- When we provide feedback on each other's work, we make sure that any criticism is kind and constructive. If you are critical of someone's work, you must

give them an actionable suggestion for how to improve it. Conversely, we are open to constructive criticism and actionable suggestions from others.

- All team members are always learning. All team members are able to teach something to each other. It is positive to admit when you don't know something, as that is how growth happens and what allows us to teach each other.

- Science takes time. Do not rush your work. It is okay if something takes you longer than you expected or promised. It's okay to make mistakes, but mistakes should not happen because something was rushed. Communication on a project is useful for setting expectations and understanding each other with respect to timelines.

- If you do make a mistake or find that someone else has made a mistake, tell your collaborators. Mistakes happen, we address them, and move on. It's best to catch mistakes as early as possible, especially before we submit or release our findings, so double check your work, and ask someone else to check it as well.

- Academic misconduct is not tolerated. This cannot be emphasized enough. This includes falsification of data, omission of data, plagiarization, or any other fudging of research findings.

What you can expect from Lindsay:
- I will support you to the best of my abilities, including in research, on an interpersonal level, and with your career goals.

- I will provide you with timely feedback on your work, including ideas, paper drafts, presentations, and grant applications.

- I will connect you to resources to facilitate and support your work needs (e.g. software, computing) - let me know what you need.

- I will be available (via email, Slack, telephone, and Zoom meetings) to discuss your regular work progress, career development and goals, and anything else you'd like to talk about. All conversations with me are confidential and private. I will provide fair and unbiased advice and support to you to the best of my ability, and will connect you to other people and resources, as needed.

- I will be transparent about the reasons behind my decision-making.

- I will support your career development by writing recommendation letters, discussing your career goals with you, introducing you to people in the field, and helping you identify opportunities for research funding, education, and jobs. It is essential that you request letters well in advance of their deadlines.

Research Associates:
- Develop your weekly work schedule and goals, in consultation with Lindsay.

- Weekly progress updates in team/individual meetings. Ongoing, timely communication, particularly if you are faced with challenges. Here is the link to our weekly to-do list - please fill out on Mondays prior to our team meetings.

- Participation in team meetings is expected. If you are unable to attend a meeting, please let those involved know in advance and provide any updates you have in writing so they can be discussed in your absence.

- Get your work done in a timely manner, but without rushing it! Estimating project timelines is iterative, and learned through experience. We will discuss deadlines as projects come up and evolve.

- Help each other out with tasks, as needed and as instructed by Lindsay. However, do not take advantage of each other's labor in getting work done. We always attribute each other's effort and contributions to teamwork.

- Think about your longer-term career goals, and how this experience will contribute to your skills and training. Be open with Lindsay about what you want to do, and she will help you as best possible to gain the skills you are looking for.

MPH ILE Students:
- Develop your ILE research project, with guidance from Lindsay, beginning in the Fall of your ILE year.

- Keep to the ILE schedule and turn in the project milestones on time. If you will have trouble meeting a deadline or are struggling with how to achieve one of the milestones, reach out to Lindsay (or one of your peers!) as early as you can.

- While you are in classes, the Monday research team meeting is optional, but strongly encouraged, as is filling in the weekly to-do list. Feel free to include

coursework goals in the to-do list, in addition to research, if you'd like to use it. These meetings may be helpful if you want to talk through any research or coursework challenges with the group, or if you just want regular check-ins to help with accountability.

- If there is funding available and appropriate tasks, there may be part-time employment opportunities, but this is not guaranteed.

MPH Internship Students:
- Develop a work plan and goal for your internship, jointly with Lindsay, that will lead to a final report or product at the end of your internship.

- Think about and communicate with Lindsay or other relevant team members any specific skills or experiences you want to gain during your internship (e.g., practice working on a specific type of data analysis; practice writing a specific style of writing such as a manuscript, report, or grant; working on IRB or project management)

PhD Students:
- Develop your dissertation research, with guidance from Lindsay.

- Keep to the department's recommended timeline for completing your coursework, comprehensive exams, prospectus, and dissertation. Regular meetings with Lindsay, your committee members, other faculty, and building relationships with your cohort as well as regular short-term goal setting and planning will make this big-picture goal manageable.

- While you are in classes, the Monday research team meeting is optional, but strongly encouraged, as is filling in the weekly to-do list. Feel free to include coursework goals in the to-do list, in addition to research, if you'd like to use it. These meetings may be helpful if you want to talk through any research or coursework challenges with the group, or if you just want regular check-ins to help with accountability.

- Assemble your dissertation committee after you complete your first year of coursework and the comprehensive exams.

- Identify and apply for grants or fellowships, as needed.

- Even if you do not need the funding, it is recommended to GSI at least one course for the teaching experience. This is good for your CV and for your development as an epidemiologist and academic.

- Remember that the PhD is a marathon, not a sprint. It is easy to burn out. See work-life balance, below.

Postdoctoral Researchers:
- Complete a postdoctoral blueprint when you first start, and each year thereafter. Review with Lindsay and your other mentors, if applicable.

- Develop your independent line of research, with guidance from Lindsay.

- Build a network of mentors, collaborators, and friends in your field both within and outside of U-M. Lindsay will introduce you to people and discuss strategies for building your network in epidemiology.

- Identify and apply for grants and fellowships. Publish papers.

- Take advantage of career development opportunities offered by the university.

- Give seminars, conference presentations, and guest lectures each year.

- Help out and give peer mentorship to the graduate students and research associates in the group, where needed and appropriate. This is good mentoring and management experience that will help you in your first faculty position.

- Plan the first one or two papers that will come out of your independent postdoctoral research, and how they relate to your broader and longer-term research career plans. This is important for your future job talk!

Our general policies
Communication channels:
We use Discord, email, and Zoom to communicate, as well as in-person meetings. Discord is for more casual and rapid communication and to store/share links and documents, and email is for more formal and longer communications. Email should be used for communications with collaborators outside our group, and for anything that you do not want to fall through the cracks. Work products should be shared via email.

As of Fall 2022, the Monday research team meetings are hybrid, in SPH I Room 2645, with a Zoom link for those who cannot attend in person. The Monday check-ins are to review everyone's goals for the week and to troubleshoot any problems impeding our work for the upcoming week. One-on-one meetings are in-person in Lindsay's office (SPH I Room 2661), or via Zoom as needed.

Work-life balance:
This is so important! It is easy to burn out in academia, because there is no time limit to research and a seemingly endless number of papers to write and skills to learn. It can be a crazy career path. Build in regular breaks - daily, weekly, monthly, and annually.

Create your own boundaries, whatever that means to you and works for you, and stick to it. Lindsay will never expect or encourage you to work in a way that necessitates working on evenings or weekends or in a way that causes burnout. Our group structure and workflow is created with the intention of making sure we are happy and enjoying our research, while challenging ourselves, learning, making friends, and [not burning out](#).

Flexible work schedules and hours are fine with Lindsay, just communicate with her and others when needed regarding work hours. This does not apply to students who are taking coursework, but you may find it helpful to set work hours regardless.

Communication within the research group follows approximate business hours (9am to 5pm ET, Monday to Friday). You can send messages outside of our business hours, but no response is expected. Lindsay will never expect you to respond to work emails that are received on evenings or weekends. There are exceptions, such as if a deadline is approaching, but we try to avoid last-minute scrambles by planning ahead.

Authorship:
Authorship can be a contentious topic, and almost everyone in academia experiences an uncomfortable or awkward authorship issue at some point in their career.

Authorship is meaningful, and has to have credibility. The best approach is to have an up-front policy regarding authorship on a project. We follow the [ICMJE authorship guidelines](#). More specifically, authorship in our group is typically as follows:

The lead author is usually the person who conducts the statistical analysis and writes the first draft of the manuscript.

The second author is usually someone who works closely with the lead author in one or more of the following: developing the study concept and theoretical framing, collecting the data, preparing the data, designing the statistical analysis plan, conducting statistical analysis, discussing and interpreting the results, and editing the paper. Sometimes the second author conducts the statistical analysis, but this should be discussed and agreed upon up-front because conducting the statistical analysis is a large time investment. This is a common point of contention, and why I prefer to have the lead author do the analysis plus writing.

The middle authors play a variety of roles, which vary depending on the type of paper. These include study design, theoretical framing, data collection, helping with statistical analysis, interpretation of results, and editing of the manuscript. The ordering of middle authors is typically in relation to effort on the project.

The senior author is usually the person who provides the 'big picture' oversight and mentorship on the project. This is usually Lindsay, unless she is first author. The senior author may be someone else in cases where we use other people's data or collaborate with other research groups.

Resolving conflict:

Conflicts come up in scientific research, just as in most aspects of life. We aim to resolve conflicts in healthy and constructive ways, rather than letting issues simmer. Conflict can be healthy and productive, lead to new ideas, build relationships, and get people and groups out of ruts. We have to approach it in a healthy way to make sure this happens. Here are our principles for managing and resolving conflicts:

- If you are unsure of a colleague's tone in written communication, it may be more productive to meet and discuss the issue over Zoom.

- We actively work to accept colleagues and peers as valuable contributors to our research group, even if we do not agree with them. Approach conflict with an open mind and be willing to engage with differing opinions.

- Try to avoid conflict by communicating clearly, making a plan, honoring your word, and being a cooperative and approachable team player. When conflict does arise, address it individually using "I" statements as much as possible and using tools of effective conflict resolution.

- If the conflict is not resolved and is impacting your work or working environment, please bring your concerns to Lindsay, or one of the suggested third parties if

you do not feel comfortable speaking with Lindsay. Also, it can be difficult to know when an issue should be escalated to the department, school, or university level, and it's best to take steps upward rather than to jump upward.

- Here is some guidance on productive vs. unproductive conflict:

Productive Conflict	Unproductive Conflict
Focuses on issues	Focuses on people
Focuses on solutions	Focuses on the conflict
Focuses on the future	Focuses on the past
Brings people together; they cooperate	Polarizes people; they compete and take sides
Involves trust and respect	Involves blame, shame, threats
Is about clarifying positions and perceptions	Involves assumptions, inaccurate statements, or unexamined positions

Meeting expectations:
If you are ever unclear on expectations, feel like your workload is too much, or don't see the connection between daily work and longer-term goals, please say so! Lindsay's goal is to make sure that expectations are always clear and that we are all happy with them. If you have concerns, please reach out to the relevant people in the group to make sure everything is clear! If you're struggling with your work due to physical or mental health or any other personal issues, please see the Resources section, below.

Troubleshooting:
Our group calls on Monday and Friday are a place where we can share any challenges or problems we are having, so that we can troubleshoot them together. You can also use each other and Lindsay as resources! As with above, please reach out early if you need help troubleshooting your work.

Recommendation letters:
Lindsay is happy to write reference letters. After requesting and confirming the letter, please complete this Letter of Recommendation template and return it to Lindsay. Please give at least **two weeks' advance notice** (more time is desired, if possible) to ensure that I can write you the strongest letter of recommendation possible.

Scientific conduct

Data sharing and security:
Internally, we share all of our data and code in Dropbox. There are project-specific subfolders in Dropbox. Currently, these are:

"NCI R03 Education & CRCD"
"COVID-19 Coping Study"
"NIA R01 - HCAP Harmonization"
"AHDSS HAALSI"

Within projects, we usually keep separate folders for all data files ("Data"), Stata do files ("Do files"), and subfolders for each paper within a "Manuscripts" folder. You're welcome to approach file organization as you like, just make sure to keep files organized in a way that others will be able to understand, with clear file names that include the version date. Some project folders have different layouts because we work with collaborators outside of our group who use different systems.

Externally, each person is welcome to publicly share their code for their papers. We have a group GitHub repository in progress, and guidance on reproducible and publishable code is forthcoming (also see below!).

Never save data to your computer's hard drive or remove data from the shared Dropbox. If there is a security breach on your computer (e.g. malware or hack) or if your laptop is lost or stolen, and if there is study data saved to your hard drive that is private or potentially identifiable, we have to report it to the IRB and inform study participants of a potential data breach. **This can never happen**. Keeping data only in the shared Dropbox is best, because we can simply unshare the Dropbox folder to your computer in the event that there is a security breach or theft, preventing research ethics problems.

Never share data over email (code sharing is encouraged, though!), and do not share data with anyone outside of our group before checking with Lindsay - more to be written, TBD.

Reproducible research:
TBD

Research ethics:
TBD (everyone must complete the PEERRS research ethics training)

Onboarding

Here is a to-do list to make sure you have access to everything needed to get started:
- Get your U-M MCard
- Email Abbi Crowder (CSEPH Administrator) to be added to the CSEPH google calendar, Slack channel, and email list, and to arrange for access to the CSEPH office suite on your MCard
- Make sure you have access to U-M Box, Dropbox, and Zoom
- Make sure Lindsay adds you to all of the following:
    - Monday research group meeting calendar invite
    - "Research Group Admin" Dropbox folder
    - All relevant project-specific Dropbox folders
    - SEGA Discord server
    - Weekly task list
- Complete PEERS Human Subjects Research Protections training and Responsible Conduct of Research & Scholarship (RCRS) training and save your PEERS certificate to the "Research Ethics Certificates" subfolder in our "Research Group Admin" Dropbox folder

Resources

If you notice or experience harassment, discrimination, or misconduct, please reach out to Lindsay or a trusted third party immediately. If you are experiencing physical or mental health concerns, Lindsay's door is always open to talk. **The health and well-being of our group members comes first, before work**.

Here are some useful resources:

Anti-racism resources:
We are compiling an anti-racist reading and resource list. Please feel free to add to it, and add your name, if you wish, so that people can reach out and talk to you about it!
- Resource list curated by Black students
- CSEPH BLM resource list (in Dropbox -> Research Group Admin -> CSEPH Documents)
- Antiracism resources for epidemiologists
- How To Be An Antiracist by Ibram X. Kendi
- The Mismeasure of Man by Stephen Jay Gould (Lindsay can lend this book)

Sexual misconduct:
- U-M sexual misconduct reporting & resources

- [U-M policy & practice on student sexual and gender-based misconduct and other forms of interpersonal violence](#)

Mental health:
- [U-M counseling & psychological services (CAPS)](#)
- [Mental health resources for Black, Indigenous, and People of Color (BIPOC)](#)
- [Mental health resources for COVID-19](#)

Funding sources

Our research is funded by a variety of sources. As of Summer 2023, these include:

- **The National Institute on Aging at NIH** (R01 on SES and dementia in HAALSI; R01 on HCAP Harmonization; R01 on social determinants of dementia; R01 on Gateway to Global Aging Data; R01 on immune system and dementia)

The research grants (awarded, pending, and submitted) that support our group financially and intellectually are found in our shared Dropbox folder. Please read these if you are interested - it is good to understand what an NIH grant looks like, and they provide detailed information on our group's ongoing projects and future directions. The research grants belonging to our group are **highly confidential**. **Do not remove them from the Dropbox folder or share them with anyone outside of our group.**

References

This research group manual is informed by the following documents:
https://github.com/alylab/labmanual/blob/master/aly-lab-manual.pdf