UCD Graduate Studies

Handbook

Politics and Data Research Group

Stefan Müller

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About Us

The Politics and Data Research Group comprises researchers from Germany, Portugal, Spain, Taiwan, Tunisia, the United Kingdom, and the United States. We are based in the School of Politics and International Relations (SPIRe) at University College Dublin (UCD).

Our projects apply computational text analysis methods to address substantive research questions and provide policy recommendations. Stefan Müller leads the Politics and Data Research Group, which currently consists of PhD researchers and has previously included postdoctoral researchers and research scientists.

Current Members

- Stefan Müller (Group Leader, Associate Professor)
- Sarah King (PhD Researcher)
- Rebecca McDonnell (PhD Researcher)
- Mafalda Zúquete (PhD Researcher)

Former Members

- Brian Boyle (Lecturer, Newcastle University; formerly Postdoctoral Researcher)
- Alberto de León (Teaching Fellow, Universidad Carlos III de Madrid; formerly Postdoctoral Researcher)
- Yen-Chieh Liao (Assistant Professor, National Taiwan University; formerly Postdoctoral Researcher)
- Jihed Ncib (Data Scientist, Great American Insurance Group; formerly PhD Researcher)
- Robin Rauner (Policy Analyst, EirGrid; formerly Research Scientist)

Why Do We Need a Handbook?

Collaboration requires shared standards and expectations. This handbook shares our values, advice, and best practices. We hope this document is a helpful resource throughout your time at the Politics and Data Research Group. If you have any questions or concerns, please start a conversation. We welcome feedback that you may have on this document and how we can continue to improve the researcher experience across the academic spectrum. This handbook builds on the advice of Tendler et al. (2023) and WIN Physics Group (2023), and we closely follow some of their sections and recommendations.

This handbook does not replace the official information provided by UCD and the School of Politics and International Relations. Please also keep in mind that official university policy has priority over the contents of this handbook.

More information:

- Handbooks for SPIRe PhD students

- UCD Graduate Studies
- UCD Careers Network for Postdoctoral Researchers

Developing as Researchers

Developing Your Profile

We encourage all group members to dedicate time to developing skills which support their career progression. A key metric upon which researchers are evaluated is their publications. We recognise that not everyone wishes to make their career in academia. Our role is to cultivate your skills and expertise for whatever path you hope to pursue and help you find the next position when the time is right. There are several opportunities to get involved in a broad range of skill-building activities outside your primary research, including teaching, public outreach, and committee activities. Participating in these activities is beneficial not only for the individual but also for our research group as a whole.

When considering the next career move, we are dedicated to supporting individuals, regardless of whether they aim to stay in Dublin, take up a post at another institution, or leave academia. Stefan is happy to help with applications and interview preparation. Provided sufficient notice is given, we can provide advice, proofread applications, hold mock job talks, or practise interviews.

More information: McCrory Calarco (2020), Bellemare (2022)

Collaborating

Why collaborate? Collaboration in research enables researchers with complementary expertise to work on different aspects of a project, generating results that an individual cannot produce working alone. Individuals with common expertise can also publish more innovative research by exchanging ideas. Collaborations often lead to co-authored work, demonstrating your willingness and ability to work as part of a larger team.

When to collaborate? Although collaboration is almost always beneficial for all involved, it represents a commitment that should only be undertaken after careful consideration and should be discussed with your supervisor. Be clear on how much time you expect to contribute to collaboration. Collaborations can slow progress on your research while over-committing also risks not delivering for collaborators. If you and your supervisor cannot agree on whether to take on a new collaboration, seek advice from SPIRe faculty members and fellow researchers.

Teaching

We strongly recommend gaining teaching experience. If you want to work in academia, you must feel comfortable with, and enjoy, teaching, as this will be one of your main tasks. You can gain initial teaching experience by working as a tutor first. UCD also often allows PhD students to teach a standalone module. This can be good experience for understanding what is involved in delivering a module, and it can really help you on the job market.

Docter-Loeb (2026) provides a very good piece in *Nature* offering guidance for those preparing their first lecture or module. These tips are:

1. Build on existing materials rather than starting from scratch.
2. Seek advice from experienced colleagues and sit in on courses you'll teach.
3. Practise delivery repeatedly and anticipate likely student questions.
4. Check classroom logistics in advance (login, slides, adapters, microphone).
5. Accept imperfection early on because teaching prep evolves with experience.
6. Hook attention at the start by showing why the topic is useful and interesting.
7. Use storytelling structure (arc, conflict, memorable takeaways) to sustain engagement.
8. Read the room in real time and use pauses or practical questions to open discussion.
9. Make content personally relatable so students can connect it to real life or application.
10. Use interactive activities such as "think–pair–share" to break up lecturing and check understanding.

Open and Responsible Science

Open Science

Open science practices serve multiple aims for the scientific community. They facilitate reproducible research and accountability for data and findings, help the field move forward more rapidly by avoiding duplicate efforts, and align with increasingly common initiatives from funders and publishers. We are firmly committed to promoting the best open science practices.

Reproducible Research

Keeping your research outputs (code, data, figures, classifiers) in a reproducible state greatly helps you and others returning to them later (King 1995). Ensuring your work is reproducible is good scientific practice for documenting your progress and methodological approach. Most journals require the publication of all data and code. Therefore, you must make sure that your files are well-organised, clearly labelled, and accompanied by concise documentation. This not only supports transparency but also enables others to replicate, verify, or build upon your findings.

Discovering Mistakes

Catching past mistakes is an important aspect of good scientific practice and a key part of the research process. Mistakes happen to everyone, and having reproducible research outputs provides you or others with a better opportunity to catch and correct inevitable errors.

More information:

- UCD's Research Integrity Training (compulsory course for all PhD researchers and postdoctoral researchers)
- Open Science Framework
- AJPS Guidelines for Preparing Replication Files

Communication

Slack

Effective communication is a fundamental aspect of our research group, enabling us to collaborate efficiently and share valuable information. We have adopted Slack as our preferred method of interaction.[1] Within Slack, we use the *Connected_Politics Lab* workspace and the dedicated #politics-and-data-rg channel. This channel serves as a focused platform for sharing insights, posing questions, and discussing topics pertinent to our work. We also recommend familiarising yourself with other relevant channels within the workspace to stay informed about activities and events.

When communicating within our research group, it is essential to adhere to general guidelines to ensure respectful and effective interactions. Treat every team member with courtesy and maintain a positive tone in all your interactions. Follow appropriate communication etiquette. Regularly check Slack to stay updated and respond to messages promptly. When discussing sensitive or confidential information, ensure you are using the appropriate channels or private messages to maintain data security and respect privacy.

Actively participate in discussions related to our research area, sharing your insights, asking questions, and providing constructive feedback. If you come across relevant articles, papers, or resources, consider sharing them in the appropriate channels to facilitate knowledge exchange among team members.

Effective communication is a two-way process, requiring active participation and open-mindedness from all team members. By relying on Slack as our primary communication platform and adhering to these guidelines, we can establish a collaborative and productive environment within our research group. Let us work together to communicate well and share knowledge openly among team members.

Effective Planning and Weekly Check-Ins

Effective planning turns a daunting item into a series of small, clear, manageable tasks. We encourage using a task management app for planning your work (for example, *Todoist*), but an analogue approach should work just as well. The key is that your task management system makes it easy for you to dump tasks into a list and store them there until you can tick them off. If you did a task but forgot to add it to the list, go ahead and add it and tick it off! You earned it, and it is motivating to follow your progress.

[1] See Müller (2023) for an overview of using Slack for collaboration and communication.

Since supervising and coordinating a research group is difficult, Stefan has subscriptions to the performance management platform 15Five for all group members. You are free to opt out of using 15Five, but our prior experience suggests that 15Five is highly effective for staying on top of our priorities and for communicating progress and difficulties. You will be asked whether you want to join 15Five after becoming a member of the research group.

One-on-One and Team Meetings

Stefan seeks to meet the postdoctoral researchers weekly and PhD researchers every two weeks in person or via Zoom. Meetings will usually be scheduled several weeks in advance, but you can always contact Stefan on Slack if you would like to organise an additional meeting.

Throughout the teaching terms, we organise monthly brown bag presentations. During these meetings, we discuss a document shared by one member of the research group. This document can be a rough idea for a research project, a research design outline, a pre-analysis plan, or a full-fledged research paper. It is vital that all participants read the text before the meeting. Everyone will be invited to provide comments and suggestions. The document should be shared via email or the #text-and-policy-rg Slack channel by Monday of the same week.

Writing and Proofreading

Mutual Support

Publishing high-quality research is one of the core aims of the research group (King 2006). As a team, we support each other in preparing research papers. This involves attending our brown bag discussion lunches, providing suggestions on ongoing work, or proofreading each other's work. Below, we provide useful resources on writing and proofreading.

Writing Paragraphs and Sentences

Paragraphs are the fundamental logical units of a text. It is essential to apply a clear and consistent structure when writing paragraphs. This section leans heavily on Dunleavy (2003), an excellent textbook on writing for research. We strongly recommend reading a blog post (Dunleavy 2014) on the same topic. The key idea here is that a paragraph should follow the Topic-Body-Token-Wrap (TBTW) principle. The TBTW principle states that a paragraph should have a topic sentence, one or more body sentences, one or more token sentences, and a wrap sentence.

The opening *Topic sentence* is a 'signpost' sentence previewing the paragraph's topic to the reader. The sentence does not fully develop the paragraph's argument, but previews the point. A topic sentence should never consist of 'meta-language' connecting to earlier points. The linkage between points is taken care of by the wrap sentence (see below).

The *Body sentences* consist of one or more sentences laying out the core of the argument. Here you lay out your reasoning, describe findings, or draw implications. The body sentences should persuade the reader of the claim made in the topic sentence.

Body sentences can be followed by *Token sentences* providing examples, relevant quotations, or supporting facts pertinent to the body sentences. Token sentences are especially important in academic writing, which puts a high premium on backing up claims. At the same time, since token sentences lead the author away from the key point being made in the paragraph, they should be used sparingly.

Lastly, the *Wrap sentence* pulls the argument together, highlighting to the reader what to take away from the paragraph. Any meta-language linking to later parts of the text should also come in the wrap sentence. To be sure, not every conceivable well-written paragraph fits this scheme.

Dunleavy (2014) lists various common mistakes when writing paragraphs. We should try to avoid these problems.

1. Do not start a paragraph with a backward link to the previous paragraph. Open with a fresh topic sentence instead.
2. Do not start a paragraph with another author's name and reference, for instance: "Harding (2007: 593) argues…".
3. Do not stop a paragraph abruptly, but add a wrap sentence.
4. Do not write overly long paragraphs. Once a paragraph exceeds around 250 words, you should partition it.
5. Do not write very short paragraphs (under 100 words).

In addition to carefully structured paragraphs, make sure to write concise sentences. If a sentence exceeds 2.5 lines, you should consider splitting it into two sentences. You should avoid run-on sentences, i.e. two sentences that are squashed together. Follow this principle: "The most important goal for scientific writers is to write clearly" (Heard 2016: 10).

More information and useful resources:

- Short papers and guidance: Fiske and Kuriwaki (2021), Nikolov (2023), Holman (2023)
- Books: Cassuto (2024), Heard (2016)

Writing Abstracts

Fabrizio Gilardi (2021) has published an excellent template on how to write an abstract for a research paper:

> "Everyone agrees that this issue is really important. But we do not know much about this specific question, although it matters a great deal, for these reasons. We approach the problem from this perspective. Our research design focuses on these cases and relies on these data, which we analyse using this method. Results show what we have learned about the question. They have these broader implications."

We strongly recommend following this structure.

Visualising Data

Effectively visualising data and results from regression models is extremely important. As a research group, we actively work towards producing visually appealing and informative graphs. We should always be open to suggestions on changing or improving graphs and share best practices. We recommend reading and following the books by Healy (2019) and Wilke (2019) (both books are freely available online) and the detailed paper by Franconeri et al. (2021). We should aim for "inclusive" graphs (Katsnelson 2021), enabling readers with visual impairments to easily detect important patterns in the data.

Overcoming Writer's Block

Writing is the primary activity for scientists and is crucial for career advancement, but often we encounter challenges that hinder our progress. Overcoming writer's block is a common struggle for researchers. Hazelett (2025) provides several strategies to help you move forward:

- Writing is not just about producing text but also about refining your thoughts and ideas. Keep pushing forward, and the words will come.
- Start writing by creating a title, as it frames the manuscript's focus.
- Break large writing tasks into smaller, manageable tasks for better productivity. A task management app can help you divide large tasks into manageable ones.
- Set deadlines for writing tasks to maintain progress and meet expectations.
- Outlines boost productivity and help organise complex ideas.
- Practise writing for clarity and impact, focusing on simplicity and directness (see sections above).

In addition, the following approaches can help:

- Create a routine: Establish a regular writing schedule to build a habit. Consistency is key.
- Free writing: Spend 10–30 minutes writing without worrying about structure or grammar. This can help you generate ideas and reduce pressure.
- Change your environment: A new setting, such as a library or café, can provide fresh inspiration.
- Seek feedback: Share your draft with a colleague or the team.
- Take breaks: Step away from your work periodically to recharge. Overworking can lead to burnout.
- Be kind to yourself: Writing is a process, and it's okay to have off days. Celebrate small victories to stay motivated.

Templates for Papers and Presentations

The group maintains a folder containing templates for academic research papers and presentation slides. We recommend using LaTeX and Quarto for presentations and papers.

Travel and Conferences

Planning

The primary aims of attending conferences are to present your research, represent the group, and learn about your field. Use your time wisely: expect to be busy and plan ahead. Discuss your plan with your supervisor. Ask questions and be curious – most people love to discuss their research. Discussions can lead to new insights, collaborations, and often long-term friendships.

Looking Out for Team Members

Although rare, people can end up in vulnerable situations during work travel. We expect group members to look out for each other and strongly recommend establishing a medium for communication with team members attending the meeting. If you see a colleague who appears to be in an uncomfortable situation, consider whether you can assist them.

Expectations

While travel can be a perk of the job, it can also present challenges. Travel can be a hardship for those with a disability or caring responsibilities. People may also feel that travel to specific places is unsafe or not morally justifiable. You should not feel pressured to travel and should not experience disadvantages if you don't or can't travel. We can discuss your concerns and advise on means to alleviate them.

Logistics

There are several details that need to be arranged before travelling. Researchers need to consider what funding sources are available to cover travel and conference costs. We do not expect or encourage group members to pay these costs out of pocket. Instead, we always try to get external funding for attending conferences. Research grants may include a travel budget, and the Political Studies Association of Ireland provides support for early-career researchers. Note that the School of Politics and International Relations also provides some support for conference attendance. Sufficient time must be given to account for any additional considerations, including visa applications.

Additional information:

- PSAI Funding Calls for Early-Career Researchers
- The SPIRe PhD Handbook contains information on conference attendance

Equality, Diversity, and Inclusion

Our research group is deeply committed to Equality, Diversity, and Inclusion (EDI). We prioritise creating an environment where all members feel welcome, respected, and empowered to contribute their unique perspectives. We recognise that diverse opinions and viewpoints enrich our research, teaching, and collaboration, leading to greater innovation and understanding. We actively embrace and seek out diverse perspectives, incorporating them into our projects and discussions to ensure a comprehensive and

inclusive approach. In addition, we emphasise the importance of respectful communication, mutual support, and zero tolerance for any form of harassment or discrimination. By prioritising EDI, we build a culture of inclusivity and collaboration that enhances our collective intelligence and drives meaningful progress in our research group.

More information:

- UCD Equality, Diversity, and Inclusion
- UCD's Bullying & Harassment or Sexual Misconduct Policies
- Book on inclusive teaching and learning: Hogan and Sathy (2022)

Authors, AI Statement, and Dissemination

This document has been drafted and edited by Stefan Müller. The text has been proofread with the assistance of GPT-4 and Grammarly. The handbook is a living document and will be updated regularly.

Feel free to use parts of the handbook for your own team – we have also incorporated sections from existing documents (e.g., Tendler et al. 2023; WIN Physics Group 2023). We have made every effort to credit existing sources. If you have any concerns about the content or would like to suggest changes, please contact Stefan Müller. If your own handbook directly builds on our document, we would appreciate it if you could add a reference to the PDF version of our handbook.

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