wellcome centre integrative neuroimaging

Lab Handbook

WIN Physics Group

(Abridged)

Welcome to the WIN Physics Group! We are a team of researchers based at the Wellcome Centre for Integrative Neuroimaging (WIN) at the University of Oxford. We wrote this document to ensure that all new members of WIN Physics and the wider research community have an insight into how our group operates. Here, you will find detailed information about life as a group member, what we expect from our researchers, and the support we can offer to your research development.

We hope this document serves as a useful resource throughout your time at the WIN. We expect new members to read this document by the end of your ***first month*** *of joining our lab. If you have any questions or concerns, your PI or line manager will be very happy to discuss. We welcome feedback that you may have on this document, and how we can continue to improve researcher experience across the academic spectrum.*

\- *The WIN Physics Group*

Roles & Expectations

Our group consists of *Students*, *Early Career Researchers (ECRs)* and *Principal Investigators (PIs)*. Here, we describe the responsibilities of each role, challenges they may face, what you can expect from them, and in return what they can expect from you.

Students

Who do we mean? Anyone actively working toward a research degree, including Masters and DPhil students, and both Oxford-enrolled and visiting students.

Day-to-day: Students are responsible for much of the research in our group. The vast majority of their time is dedicated to their own research project, but they also do other "research adjacent" work. A week typically includes: supervisions, one-to-ones with other group members, general lab meetings, and educational activities.

Support for students: Students are trained professionals and their ideas should be taken seriously by the entire group. Students can expect to meet with their supervisors regularly in a supportive environment. They should feel empowered to point out mistakes made by group members or admit when they do not understand something. Supervisors should provide regular feedback and encourage students to develop their own ideas to progress their project.

Expectations of students: Students are an integral part of the wider lab and frequently play a crucial role volunteering to help with tasks the group needs to function. Supervisors can expect students to provide regular updates on their progress, and participate actively in group activities. Students are expected to recognise that their research is a form of training and struggles are a part of the learning process.

Challenges: Navigating a first major research project is a difficult task. To be successful, students must also develop "soft skills" including effective communication and time management. Unexpected difficulties are part of the research process - learning how to cope with setbacks takes experience, fortitude, and patience. These stressors can be exacerbated by additional factors throughout the degree, including the isolation of leading a research project, difficulty navigating work-life balance, and distance from long-standing support networks.

Early Career Researchers (ECRs)

Who do we mean? Postdoctoral researchers and junior fellows

Day-to-day: The ECR stage is marked by a transition to increasing independence. ECRs spend the majority of time on their own research, whilst also collaborating on a broader range of projects. ECRs often have several further responsibilities, including sitting on committees, student supervision, and teaching. ECRs may also be asked to stand in for PIs when required, and help with or lead grant applications.

Support for ECRs: ECRs can expect senior group members to dedicate time to their career development, alongside practical advice and feedback on their progress. Senior members should create opportunities for ECRs to take on increased responsibility, grow independence, and interact with the wider research community. Where ECRs are involved in supervision, students should take ECR guidance seriously, respect other demands on their time, and ensure their contributions receive appropriate credit.

Expectations of ECRs: Having recently navigated a PhD/DPhil themselves, ECRs can provide valuable support to a student's career development. ECRs often have more time than senior group members to guide students in their research, can advocate on a students behalf, and often know who to approach when particular issues arise. PIs can expect ECRs to facilitate the dissemination of expertise in the group, and support students by providing crucial constructive feedback.

Challenges: Transitioning to increased independence places considerable responsibility on new ECRs. The role is often accompanied by changes in research group and/or topic, which requires adjustment. ECR positions are inherently transitional, and this stage in a researcher's career is often accompanied by growing personal commitments (e.g., starting a family). Managing a diversifying workload, the uncertainty associated with fixed-term contracts, and reduced supervisory support can be difficult.

Principal Investigators (PIs)

Who do we mean? Senior academics leading research groups, often with a faculty title .

Day-to-day: Research is a core component of any PI's job. Most senior PIs engage in research projects via supervision and collaboration, typically directing multiple projects in parallel. In addition, PIs shoulder numerous responsibilities that are not directly research related, including committees, group logistics, leadership in large-scale initiatives, and teaching. PIs must often switch their work context from hour to hour and regularly spend entire workdays in meetings on disparate topics.

Support for PIs: Students and ECRs can help PIs by reliably completing tasks they have agreed to handle. It is helpful to learn to distinguish which decisions need PI input, and which can be acted on independently. Flexibility in scheduling can be a great help for a PI who has multiple demands on their time. Finally, it is helpful to understand how PIs communicate to help foster an effective working relationship.

Expectations of PIs: Students and ECRs can expect PIs to provide support and clear communication of expectations. PIs should play an active role in the research being undertaken, whilst offering guidance and mentorship on a broad range of research and career topics. PIs should advocate for more junior researchers, often acting as a "sponsor" to identify opportunities for career advancement. Students and ECRs can expect their PI to make time for regular supervision meetings. PIs should support group members during career transitions, including to other institutions or outside academia.

Challenges: PIs find themselves managing conflicts at short notice, and handling delicate situations that may impact many people. Busy PIs will regularly receive >100 emails per day and send nearly as many. As a result, short emails are easier to respond to, and terse responses from PIs are more likely to reflect efficiency than criticism. Whilst delays and mistakes can be interpreted as carelessness, they are often simply a consequence of navigating everything that requires attention. Nevertheless, PIs should remain open to feedback that their challenging workload is leading to problems for group members and be open to discussions around improving group management.

Core Staff

We expect group members to *always* treat core staff with respect, and to value their time and high degree of professional expertise. Core staff are highly trained individuals, often with unique expertise not held by members of the WIN Physics Group. When their contributions go beyond what would be considered conventional ‘support’, they should be recognised appropriately (for example, co-authorship on an upcoming publication).

Research Group Culture

Workplace Conduct

We aspire to an inclusive work environment, in which all members can thrive and achieve their goals.

Conduct in meetings: The WIN Physics Group meets weekly throughout the academic year. We expect all group members to attend whenever possible, and have a strict ban on use of devices (laptops and phones) as a matter of respect for presenters. We aim for an atmosphere where people feel comfortable asking questions regardless of seniority. Questions should be asked in a respectful and friendly tone, and criticism should always focus on the research rather than the individual.

Work interactions: Many of our desks are in “open plan” offices. Be considerate of people around you who may have different needs/preferences, and follow basic open plan etiquette (for example, avoid distracting noises or spilling out into adjacent spaces). Longer and louder discussions should take place in dedicated meeting rooms or a social area. Meetings via online video platforms can be draining, particularly for neurodiverse individuals. We encourage members to balance the benefits of these platforms against the downsides, and appreciate that the needs/preferences of others may differ.

Socialising: Building a cohesive group means getting to know each other. Group members often have lunch together at work or socialise outside of working hours. We regularly gather at a local, family-friendly pub after work, during lunch, and at tea breaks. We want everyone to feel welcome at pub gatherings - alcohol consumption is always optional, and professional but friendly behaviour is expected at all times. None of these events are obligatory, and non-attendance will not impact our commitment to your professional development.

Inappropriate behaviour: We expect all group members to contribute to a positive atmosphere grounded in mutual respect. We do not tolerate bullying, harassment, victimisation, or discrimination. If you feel you have been subject to harassment, contact your PI or a harassment advisor. If you witness or suspect someone else is being subjected to inappropriate or unwanted behaviour, discuss it with them confidentially or raise it with a PI or harassment advisor. For relatively minor cases (e.g. inconsiderate interactions that stop short of bullying), you can speak to the person who is behaving inappropriately if you feel comfortable doing so. However, you should not feel you have to resolve any situation yourself; resources and mechanisms for this are listed below.

University bullying and harassment resources: Harassment policy, Harassment advice, Responsible bystander advice, NDCN harassment advisors

Work and Wellbeing

Looking after your long-term wellbeing is crucial to being able to achieve your full potential.

Setting expectations: A key aspect of being happy in your career is having clearly articulated and agreed expectations. However, it is often difficult to predict how long a given task or step will take. Agree target project timelines, but remain flexible, and be understanding when timelines slip. Communication is key to managing expectations and setting work boundaries. If you feel your workload is impacting your wellbeing, you should discuss it with your PI or line manager.

Working hours: In general, we do not dictate expected working hours. In the interest of researcher wellbeing, we do not encourage regular long working hours.You will benefit a lot from working in the lab, but group members are not required to spend their whole working day there. Researchers should find a schedule and approach that works for them, discuss this with their PI or line manager, and raise concerns if they are struggling to be productive. You should not feel obliged to reply to emails or other communication platforms outside of your own working hours, and should respect the working hours of your colleagues.

Work-life balance: A healthy work-life balance helps to manage the stresses of academic research. This means making time to do things you enjoy and for necessary personal activities. Beyond adopting daily working hours to sustainable levels, we strongly recommend taking several week's holiday per year completely away from work, including work-related email. Timing for your holidays is generally up to you, but you may need to work around other constraints or deadlines.

Mental wellbeing: Time to relax away from work is a critical contributor to mental wellbeing. If a colleague mentions that they aren't feeling okay, the most important thing is to simply listen to their concerns. If you are feeling mentally unwell, you can take sickness absence to rest and relieve stress (see the University's standard annual allowance of sick leave). You should not feel obliged to explain to your PI/line-manager why you are taking a sick day. If you are uncertain what mental health support provisions are available, , speak with your PI/line-manager, HR (Staff) or the NDCN graduate team (Students).

Resources: University Work-Life balance Support, University Mental Wellbeing

Equality, Diversity & Inclusion (EDI)

We are firmly committed to creating an inclusive environment that celebrates the diversity of our group members and promotes equal opportunity. By cultivating a culture of inclusivity and respect, we strive to create a sense of belonging which supports the innovative work of our group.

The Personal & The Professional: Every group member represents a unique intersection of experiences and identity, and should feel comfortable bringing their whole selves to work. We aim to nurture this by understanding how our differences interact with both our professional and personal lives, and influence our individual aspirations and needs.

Support: Personal background frequently intersects with mental wellbeing, and workplace exclusion and inequality can contribute to mental ill-health. PIs and line managers receive training on how to support group members and can talk through issues you face, whether or not they are your direct PI or line manager. They will treat these conversations as highly confidential, provided it doesn't ethically compromise them or pose a risk to your wellbeing.

Building communities: EDI spans a broad range of topics and issues. Many are unfamiliar when first encountered and can be uncomfortable to talk about. WIN holds regular educational events aiming to normalise respectful and thoughtful conversations related to EDI, particularly around how these issues manifest in academic workplaces. These sessions aim to help you understand the challenges your colleagues face and how you can act in solidarity. We encourage everyone to consider engaging with our Member Networks dedicated to different communities, which can also provide peer support.

Resources: WIN EDI Strategy, University EDI Unit, University Occupational Health, Student Specific Wellbeing, EDI Calendar, Annual Leave Policy

Good Citizenship

Our success is largely down to individual members pitching in to help each other.

Being a good citizen: As a member of the physics group, you are strongly encouraged to get involved with some form of lab service. This kind of "good citizenship" ensures the smooth day-to-day running of physics group activities and ensures that the burden does not fall unfairly on a few individuals.

What constitutes good citizenship? Anything that primarily benefits the lab rather than you personally. Examples include teaching, advising colleagues, group admin, and volunteering for studies. Note, there is no expectation that everyone does all of these activities, and no need to justify abstaining from some forms of good citizenship

Finding a balance: Good citizenship activities can be time consuming. It is important that they do not significantly impact your research progress. We also recognise that not everyone has the capacity to take on additional work - for example, due to disability or caring duties. We recommend discussing any potential activities that may take time away from your main research with your PI or line manager.

Developing As Researchers

Career Development

Building your skills and preparing for the next career move

Developing your CV: 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. Publications demonstrate the ability to see projects to completion, open up opportunities for career progression, and are valued in academia and industry. 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 right next position when the time is right. There are several opportunities to get involved in a broad range of skill-building activities outside of your main research, including teaching, public outreach, and committee activities. Participating in these activities is beneficial not only for the individual but also for WIN as a whole.

Career progression: When it comes to considering the next career move, we are dedicated to supporting individuals, regardless of whether they aim to stay in Oxford, take up a teaching post at another institution, or move out of academia. We are happy to help with applications and interview preparation. We can introduce you to alumni or colleagues who can offer advice. Senior members have established relationships with academic and industry colleagues world-wide and can often provide an introduction. We are particularly experienced with securing personal research fellowships. Fellows in the WIN Physics Group are keen to pass on their hard-won knowledge, so don't hesitate to ask for advice

Open & Responsible Science

Our commitment to engaging with the best scientific practice

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 duplication of effort, and are in line with increasingly common initiatives from funders and publishers. Our centre is strongly committed to promoting best open science practice. As a Wellcome funded centre, WIN also has to conform to certain open access publishing requirements, details of which can be found on the Open WIN community website.

Reproducible research: Keeping your research outputs (code, data, figures, etc) in a reproducible state greatly facilitates you and others returning to it at a later date. Ensuring your work is reproducible is good scientific practice for documenting your approach and catching mistakes, whilst facilitating data sharing on open platforms. WIN

resources for reproducible research practices can be found on the Open WIN Tools webpage.

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 a better opportunity to catch and correct inevitable errors.

Research conduct: Our group is wholly committed to ethical and responsible research conduct. Please talk to your PI/line manager if you are unsure of the ethical implications of any given action, if you feel pressure to engage in ethically compromising behaviour, or if you observe research misconduct happening around you. If you feel you are being asked to engage in practices that you are uncomfortable with, it is always best to respectfully raise your concerns in the first instance. If you feel your concerns are not being given serious consideration, please talk to your PI/line manager, a secondary advisor, the head of group/division, or a trained harassment advisor. If the issue cannot be resolved locally, refer to University guidelines for reporting research misconduct.

Collaborating

How to get the most out of scientific collaborations

Why collaborate? Collaboration in research enables researchers with complementary expertise to work on different aspects of a project, generating results that cannot be produced by an individual. Individuals with common expertise can also produce more innovative research by exchanging ideas. Collaborations often lead to co-authorships, and demonstrate your willingness and effectiveness 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 PI/line manager. Collaborations can slow progress on your own research, while over-committing also risks not delivering for collaborators. If you and your PI/line manager cannot agree on whether to take on a collaboration, seek advice from an independent PI.

Setting expectations: Be clear on the amount of time you expect to contribute in a given collaboration. There are no universally-accepted formulas, but senior academics usually have a good sense of norms for co-authorship. If you and your PI or line manager feel that an authorship is warranted, you can expect them to negotiate this on your behalf. They will also have a feel for when this discussion should be had; in general it is good to have these discussions early. When considering whether to offer co-authorships on your papers, discuss this with your PI/line manager early, and revisit when it comes time to publish, noting the WIN Authorship Guidelines.

Travel and Conferences

Our expectations about travel, including collaborative visits and conferences

Conferences - The Basics: Conferences provide a fantastic opportunity to present your work and engage with external colleagues. They typically include scientific talks, posters and educational sessions. If you find a conference you want to attend, talk to your PI/line-manager. Considerations include: match to your research topic, readiness of your research for presentation, opportunities to learn, timing, and logistics.

Planning & what to expect: The primary aims of attending conferences are to present your research, represent the group, and to learn about your field. Use your time wisely: expect to be busy and plan ahead. Discuss your plan with your PI/line manager. 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 labmates: Although rare, people can end up in vulnerable situations during work travel. We expect lab members to look out for each other and strongly recommend establishing a medium for communication with labmates attending the meeting. If you see a colleague who appears in an uncomfortable situation, consider whether you can assist them. Should you encounter problematic behaviour by a conference attendee, please talk to a PI or conference organiser.

Expectations: Whilst travel can be a perk of the job, it can also present challenges. Travel can be a hardship for those with disability or caring responsibilities. Furthermore, people may feel 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. A PI can discuss your concerns and advise on means to alleviate them.

Logistics: There are a number of 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 towards these costs out of pocket. Sufficient time must be given to account for any additional considerations, including visa applications and arranging suitable childcare for families.

Public Engagement

How we engage in public engagement initiatives, and how you can get involved

Why do public engagement? Much of the research we do is supported by public funding, whether through government or charitable means. We have a responsibility to engage with this key stakeholder to explain why this funding is important. Our group has a long history of public engagement, and are extremely fortunate to have generous funding from Wellcome to enable exciting and innovative engagement.

Benefits: Engaging in public engagement brings several benefits to the researcher. It improves our communication skills, teaches us how to distil complex ideas to a general audience; motivates our research through closer connections with those who benefit from our findings; provides inspiration from the public; forms connections between scientists; and enables us to pass on our enthusiasm for science to others.

Getting involved: There are several opportunities to get involved during your time at WIN, whether being part of an established activity, developing your own event, or becoming a WIN Public Engagement Ambassador. Please reach out to a member of the WIN public engagement team to discover more about how you can get involved.

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