



**Center for Nanotechnology
and Molecular Materials**
at Wake Forest University

Carroll Group Rules and Responsibilities

Welcome to the Carroll Group of the Center for Nanotechnology and Molecular Materials at Wake Forest University. We are a group that uses engineered nanomaterials to address issues in technology development such as improving the performance of solar and lighting technologies, or developing smart therapeutics and bio-sensors. We are committed to maintaining the highest possible standards in the conduct, presentation and publication of our research and to engaging in the national scientific dialogue in nanosciences.

All members of Prof. Carroll's NANOTECH research group are bound by the rules and regulations of Wake Forest University together with those listed in this document. **It is your responsibility to know Group and University regulations. By accepting membership in our group, you formally agree to abide by these regulations.**

Membership

Continued membership in the group is based on:

1. Demonstrated laboratory skill
2. Enthusiasm and dedication to research
3. Integration into the group
4. Academic performance (for students)

If you are not meeting expectations, we will discuss options in an informal review.

1. Membership of the group is at the discretion of Prof. Carroll and is subject to yearly reviews. Typically new members begin with a six month probationary period.

2. Group members are required to attend ALL general group meetings and seminars. Each member must be ready to present progress in their research.

3a. Financial support for students is based on the satisfactory completion of any course responsibilities, demonstrated excellence in laboratory work and demonstrated service to the group.

3b. Progress on project assignments for postdoctoral fellows, research staff, and research faculty is a strict condition of funding from the group. It is group policy that 80% of a postdoctoral fellow's and research staff's time will be spent on assigned research while 20 % can be dedicated to "tangential" themes. For research faculty, service to the lab is in direct proportion to funding from the lab. All employment is subject to funding availability.

Funding

Financial support from the group is not guaranteed and depends on the availability of funds for a specific program, performance on **THAT** program, publication record, and to a lesser degree, service to the group. Funding outside of programmatic initiatives is uncommon and all funding is at the **SOLE** discretion of Prof. Carroll. All funding is subject to regular review.

4a. Each student must provide a written bibliographic overview of current work in their field of research. This overview should include current publications with *critical comments* as to the relevance to the current project.

4b. It is anticipated that all PhD. students will participate in at least one exchange experience with one of our collaborating labs. Generally, this exchange will be financed by the group.

5. All members are expected to present their research at a minimum of one professional meeting per year. To submit an abstract to a meeting, it must first be cleared through Prof. Carroll. Once accepted, YOU are responsible for arranging travel and accommodations. Expenses are arranged on an individual basis. Generally, the lab will cover travel and lodging in some form.

Working Hours

Group members are expected to work Mon. – Fri. from morning to afternoon unless otherwise approved. Generally, group members are expected to be in one of the Center's labs or offices and accessible to other lab personnel. If you are going to be away from the lab or office, please leave word with Prof. Carroll and your lab coworkers.

Holidays

All leave schedules must be coordinated among other lab workers and approved by Prof. Carroll.

6. All laboratory personnel are expected to provide a reasonable work week, irrespective of course requirements, teaching, etc.

Group members are allowed six weeks of leave with financial support (if they are receiving such support). Such leave includes sick leave, official University holidays, national and religious holidays, and is cumulative yearly. Excessive, unapproved leave, not health related, may result in a delay in graduation, or dismissal from the lab.

Release of Information

All information and data collected in the nanotech lab or as a result of nanotech funding is property of the lab and Wake Forest University. It is *not* personal property. Any information released without Prof. Carroll's approval, in any form, including: email, written, oral presentation, conversations with campus or outside collaborators, etc. will result in immediate dismissal from the lab and forfeit of financial support from the time of disclosure.

7. It is the policy of the laboratory that no information of any type may leave the laboratory without the direct permission of Prof. Carroll. This policy extends to the submission of publication manuscripts, grants, white papers, or the writing of joint grants.

Collaborators

In all cases it is Prof. Carroll who is responsible for establishing collaborations, providing initial correspondence and data, and arranging visits or exchanging information. Any researcher, who establishes or engages in communication outside of the lab with regards to laboratory activities without prior approval from the lab director, will be dismissed. This policy includes email, forwarding preprints or reprints, telephone or FAX, or personal conversations and is without exception.

8. Group members are expected to interact with visitors and collaborators of the lab as established by Prof. Carroll. Be courteous, punctual, and focused in your interactions. Respond to emails and calls right away. Discuss the scientific problems they are posing and find new approaches to help. BE INTERESTED!

9. All purchases and travel must be approved by Prof. Carroll.

10. All members of the group are required to publish in refereed journals. Generally, expect a publication list of no fewer than 10 papers before you graduate. For postdocs and research staff, expectations are for 4 papers per year minimum. **All publications MUST list funding source and Prof. Carroll as corresponding author unless specified otherwise. This applies to ALL group members.**

Publications

Publication of your results is your responsibility. You should give top priority to each manuscript. To submit a manuscript you must:

1. Construct a full manuscript in the format of the target journal. This should be complete with images, references, etc.
2. A paper copy of the manuscript, together with an electronic copy, and a print out of ALL references must be submitted to me for review before submission.
3. After I have approved the manuscript, the manuscript must be then submitted to all co-authors for approval. They are to be given one week for reply. This should be explained clearly and politely in the email using the phrase "I would like to submit by (date)..."
4. If corrections are submitted, they are to be made and the manuscript (with support information) returned to me for final approval.
5. Submit the manuscript and inform all co-authors.
6. When reviews are returned begin on corrections and a response immediately.
7. Submit response to me (along with support information and old manuscript).
8. After my approval submit response co-authors with a timeline for submission to the journal.
9. Resubmit.
10. The review process takes time, so be patient. Each two months that a paper has been out for review, please send a polite reminder to the editor regarding the manuscript's status. This is YOUR responsibility.

It is important to realize that publishing a paper represents a serious commitment to your colleagues. Remember, your colleagues and co-authors trust you to perform the 10 steps above in a serious and professional manner. Failure to do so will result in dismissal from the group.

11. Each researcher should keep a single notebook for all work performed in the laboratory. You should obtain a bound notebook, and the pages should be numbered front and back. There will be spot inspections of lab notebooks on a regular basis and notebooks remain the property of the NANOTECH group. **Originals must be turned in when you leave the group.**

Lab Notebooks

The cover should show:

- Your name.
- The laboratory name "NANOTECH, Carroll Group".
- The department address
- Your phone number and email address
- The date you started in the laboratory.

Your laboratory notebook should contain a credible record of everything you have done. This is your documentation of your data and should be complete.

- It should show the time and date you started any experiment.
- When any experiment is interrupted or stopped you should have a sentence explaining the situation and the reason as well as the time.
- You should do the same thing when you leave the lab for the day.

This is a working notebook and everything should be written in ink. You should write on every page, or alternatively use only front page and leave all back pages blank. Make your choice and stick to it. Fill in every page. If you want to start a new page for any reason, put an X through the blank region. Do not use white out. If you need to make a correction draw a single line through the wrong material and initial it. It should be legible under the line. It is perfectly reasonable to tape figures, diagrams, or sections of relevant articles into your lab book. This book is to allow you to go back many months from now and understand what you did from that information.

Information that should be included in your laboratory notebook :

- Objectives
- Questions
- References to publications, or part of an article itself
- Drawings of apparatus, circuit diagrams
- Data
- Calculations
- Graphs
- Interpretations
- Conclusions
- New ideas.
- Experimental Improvements

12. Research Faculty and Research Staff are expected to abide by the rules of the group as fully participating group members. While it is recognized that such positions afford a greater level of independence; support from the group (through salary, use of non-centralize facilities, etc.) requires that the group's head (Prof. Carroll) be informed and involved in ALL activities relevant to the group and its facilities. This includes writing grants, publications, guiding students, establishing collaborations, etc. This is in keeping with the general operating procedures of the Wake Forest University and in general agreement with accepted practices at peer institutions. There are NO exceptions.

Summary

It is the responsibility of each individual researcher to bring enthusiasm, professionalism, thoughtfulness, excellent work habits, and scientific integrity into the lab. This group strives to be one of the top labs in the U.S. in its field; accept that responsibility by taking your position and obligations seriously. Interest in your lab co-workers research, improving your own investigations, and connections of your research to the greater scientific community are required to make a competitive and contributing researcher.

NANOTECH Group Traditions

Working together: Generally, group members take an interest in each others work. Sharing the results of literature searches on a regular basis, discussion of relevant papers among group members to stimulate ideas, and group writing activities on lab publications with multiple group members as co-authors are an important part of the research environment at NANOTECH. It is important to support and participate in such activities.

Participation in seminars and colloquia: Attendance at departmental seminars and colloquia, center talks, and local seminars are typically well attended by NANOTECH personnel. Further, each group member should attend and be ready to present research results at each and every NANOTECH group meeting. Usually, presenters are chosen at random and a 5 to 15 minute overview is expected.

Group support: Each senior member of the group is expected to aid in the education of junior members of the group. It is generally accepted that ~ 10% of each researcher's time will be dedicated to the service of the group. This frequently takes the form of equipment maintenance and training.

Kehrwoche: When expecting visitors at the Center and at special times of the year, the group will typically come together for a joint cleaning exercise known as "Kehrwoche." All labs are cleaned fully and repairs are made throughout.

Coming together: The group will usually have two important gatherings each year: The winter party and the summer party. All food and drink are provided and attendance is voluntary. In years where we have graduation events; we meet for a congratulatory party and the presentation of the "graduation shirt."