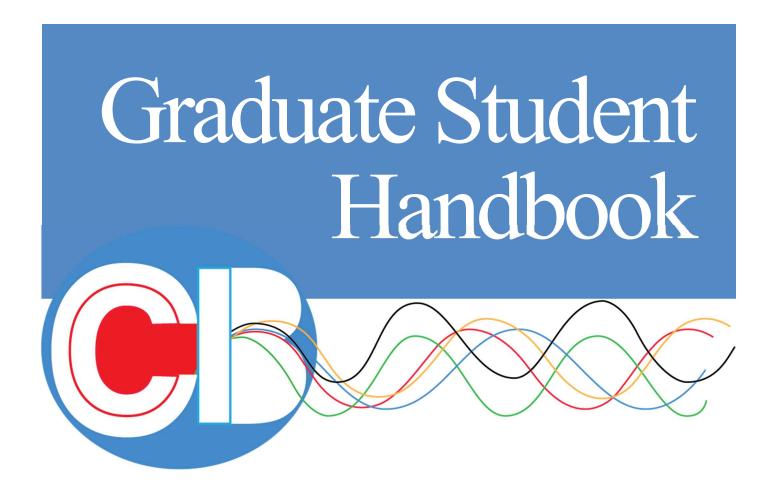
Center for Computational and Integrative Biology



### **RUTGERS UNIVERSITY - CAMDEN**

### **Center for Computational and Integrative Biology**

Dr. Grace Brannigan Director Dr. Eric Klein Graduate Program Director

Katarina Kawash Manager Sarah Johnson Senior Program Coordinator

### Welcome from the graduate program director

#### Dear Students,

Welcome to a new academic year as a CCIB Graduate student! This graduate student handbook is designed to help you navigate the program and clarify processes in a practical and easy-to-digest format.

### What you will find here:

- Specific information on requirements and processes
- General timeline for different pathways within the MS and PhD programs
- Answers to some of the most frequently asked questions
- Insights and suggestions for success

### What you won't find here:

- Links to every resource available
- Requirements/procedures/policies relevant to specific labs
- Significant duplication of information already available through the Graduate School Dean of Students websites, and/or Graduate Student Success Guide.

#### What's new:

- A little bit of information about Codes For Life.
- Transferring between the MS and PhD programs
- Miscellaneous updates to available resources.
- Corrections and clarifications suggested by CCIB members keep them coming!

Graduate students play an essential role in CCIB. I hope you find this handbook useful!

Best wishes for a productive year,

Dr. Eric Klein

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Graduate Program Director, CCIB,

ctor, CCIB,

Associate Professor, Department of Biology

## Welcome from the Student Organizing Committee Chair

Dear fellow students,

The Student Organizing Committee (SOC) Executive Board would like to join the Graduate Program Director in welcoming you to a new academic year in the CCIB. I am excited to serve as the Chair of the SOC for this academic year alongside Vice-Chairs Maria Schwarz (Experimental) and Caden Comṣa (Computational). As fellow graduate students, we would like to help you to get the most out of your time in the CCIB by fostering a welcoming, enjoyable, and productive environment for all students, both new and returning. The SOC supports CCIB students in several ways, including:

- Inviting and hosting the annual student-elected speaker for the CCIB seminar series
- Selecting and organizing student outings and social activities
- Leading discussions and choosing papers for the CCIB Journal Club, a weekly forum to discuss scholarly articles, and facilitating the weekly Graduate Hour with visiting seminar speakers
- Hearing student concerns and suggestions twice per semester at open committee meetings
- Representing the CCIB student body in the Graduate School by sitting on the Graduate Student Advisory Council and in the faculty union by acting as TA/GA Grad Student Program Representatives
- Facilitating CCIB student involvement in community outreach activities, such as Rutgers Day and the Philadelphia Science Festival
- Playing an active role in events supporting prospective and incoming students to the CCIB.
- Liaising between students and the CCIB Director and Graduate Program Director about student body concerns

The SOC was officially founded in 2018 by Daniel Russo to ensure the representation of the interests of the CCIB student body on campus. All currently enrolled graduate students in the CCIB automatically become full members of the SOC who receive all communications from the Representative Board and have full voting power in all elections. We encourage CCIB students to become involved with the Committee and our events to communicate concerns that they feel may need to be raised either within the Center or the Graduate School and build community in the program. Becoming an active member of the SOC gives you a voice in the issues that the Board raises and events we plan.

The Executive Board encourages questions and feedback to make sure we are genuinely acting in the interest of the CCIB student body at large. I am accessible by Slack using @ezry, or by e- mail at ezry.s@rutgers.edu. To address the whole SOC Executive Board, head over to the #ccib-soc Slack channel and use the tag @socboard.

Sincerely,

Helen Stott

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# Part 1: Progression and Requirements

The CCIB Grad Program offers three degrees: MS (thesis option), MS (capstone option), and PhD.

Your pathway to graduation will depend on which one you're in and (if you're in the PhD) whether you already completed an MS. This is because there is significant overlap between the MS degrees and the pre-qualifying stage of the PhD degree.

The distinctions among these timelines are shown in Figure 1, broken down by activities, required courses, milestones, and selection deadlines.

### **Activities**

Expected activities within the graduate program include, but are not limited to:

- Taking Courses
- Research within lab
- Research rotation
- Meeting with your committee
- Presenting at the CCIB Seminar
- Writing and compiling your Independent Study/Thesis/Dissertation

Not every program or track involves all of them; Figure 1 shows how these activities fit into the expected timeline for each graduate track. Frequently asked questions about each activity follow.

To use this chart, find the row corresponding to your program, and then find the column corresponding to the semester you are interested in. Selection deadlines (when you need to tell the GPD who your advisor or committee is) are in pink, between semesters, while milestones are in gray. The letters tell you what you need to be doing in a given semester, according to the legend at the bottom.

### MS

	Semester									
Plan	1	sel	2	sel	Milestone	3	sel	4	Milestone	
Thesis	C/(T or R) s/d	isor	C/R s/d	Committee	Oral Thesis Proposal	C/R/ M s/d		C/R/W s/p	Defense	
Capstone	C s		C s	Mentor	N/A	C/W s/i	Committee	C/W s/i		

### PhD

Prior Graduate		Semester										
Work	1	sel	2	3	sel	4	Milestone	5	6	7+	Final	Milestone
None or non-CCIB MS*	C Tor R I/s/d	or (PI)	C/R s/d	C/R/P m/s/d		C/R s/d	Qualifying exam			R		
CCIB MS (Thesis) with advisor change or CCIB MS	Tor R I/s/d	Advis	R s/d	R/P m/s/d	Committee	R s/d	Qualifying exam**	R/ P ftc	R/ M ftc	M (annually) P (spring semesters) ftc	W ftc	Dissertation Defense
CCIB MS (Thesis) with same advisor	R l/s/d		R s/d	R/P m/s/d		R s/d	Qualifying exam**					

 $<sup>^{\</sup>star}$ Up to 3 courses can be transferred in from a non-CCIB grad program, with approval of GPD, so  $\sim$ 1 semester of courses would be removed.

### **LEGEND**

Activities (cap letters)	Selection Deadlines	Specific Required Courses (lower case):
C: Courses		I: Lab Practices
R: Research within lab		m : Manuscript & Proposal Composition
T: Research Rotation		s: seminar
M : Committee Meeting		i : independent study
P: Present Seminar		p : masters project
W: Writing Thesis/Dissertation		d: dissertation research
		ftc: register for one credit only

 $<sup>^{\</sup>star\star} \ \text{Four semesters is maximum pre-qualifying period, but shorter is possible when following a C CIB MS.}$ 

### **Programs**

## Can I switch from the MS to the PhD?

You can definitely apply for the PhD! If you are a second-year MS student who has the endorsement of your PI, you will have a significant advantage in the application process. We still expect that you will have completed your MS by the time the PhD starts or soon thereafter, so this is not really a transfer.

### Can I transfer into the PhD as a firstyear MS student?

As a first-year MS student you are certainly welcome to apply for the PhD program, but we won't yet have gotten to know you by the time your application is due. Your application will be reviewed like an external application.

## Will my MS work count toward my PhD?

All courses from a CCIB MS, including Manuscript and Proposal Composition, count toward your PhD. Furthermore, any manuscripts that you publish as an MS student or based on your MS thesis will count for your PhD. However, you will still need to register for seminar until your qualification exam.

## Can I switch from the PhD to a MS?

Yes! Please discuss your choice and the process with the GPD. You will also need to fill out the "program transfer" form at <a href="https://graduateschool.camden.rutgers.edu/current-students/forms/">https://graduateschool.camden.rutgers.edu/current-students/forms/</a>

## What is Codes For Life?

Codes for Life (C4L) is a computational track within both CCIB graduate programs. C4L, funded by an NSF National Research Traineeship awarded in April 2022. Students in C4L have additional responsibilities but are also eligible for additional funding and benefits. This track is currently being developed, and more information will be incorporated in future versions of the handbook. If you are interested in joining C4L, please reach out to Grace Brannigan!

### **Courses**

As an MS student, you will take courses during most of your degree. As a PhD student, you should finish your required courses by the end of your fourth semester.

## Which classes do I need to take?

MS students (30 credits total)

- ☐ 4 seminar credits
- □ 20 "elective" graduate level course credits across STEM departments
  - Up to 12 can be from CCIB Essentials courses
  - Up to 3 can be from a rotation the first semester.
  - Up to 6 can be from 300 or 400 level undergraduate courses, but specific courses need approval.
  - Up to 5 credits can be dissertation research credits (You must be pursuing the Thesis option when you take them)
  - You will receive an individual list of additional "must-take" courses, before your first semester. If you join Codes For Life, you will need at least 1 class in each of the four C4L clusters.
- ☐ 6 Masters Project credits (Thesis Option)
- ☐ 6 Independent Study credits (Capstone Option)

### PhD students (70 credits total)

- ☐ 4 seminar credits
- ☐ 1 Credit of Lab Practices (\*\* NIH and NSF guidelines require a refresher every four years. 5<sup>th</sup> year PhD students are required to retake this course)
- ☐ 1 Credit of Manuscript and Proposal Composition
- ☐ 24 "elective" graduate level course credits across STEM departments
  - Up to 12 can be from CCIB Essentials courses
  - Up to 3 can be from a rotation the first semester (and *must be* unless you get an exemption).
  - **Up to 6** can be from 300 or 400 level undergraduate courses, but specific courses need approval.
  - You will receive an individual list of additional "must-take" courses, before your first semester. If you join Codes For Life, you will need at least 1 class in each of the four C4L clusters.
- □ 32 dissertation research credits (Before qualification)
- □ 8 additional credits (research or courses)

I am an MS student. Do I really need only 30 credits? Technically, you only need a total of 30 credits to graduate. However, many MS students end up taking more, either because they a) want to be full time for four semesters, which is 36 credits, and/or b) they are planning to continue for the PhD and need more than 30 credits of coursework to be prepared for the PhD.

How do I choose the 8 elective courses? Semester 1: You'll take a background survey, the GPD will give you your individualized requirements, and then the GPD can make additional course recommendations to you based on your background and interest.

Semester 2-4: Sign up for any "must-take" courses that are offered that semester and consult with your PI if you have room for more.

What does "ftc" mean? Do I have to take classes after my qualification exam?

It stands for "full time certification". After qualification, you can still count as full time if you only take one credit, if you also fill out the full-time certification form (the PhD Student (ABD) Full-Time Certification at

https://graduateschool.camden.rutgers.edu/current-students/forms/). Usually, your one credit would be 56:121:710 (Dissertation Research). Note that you still need 70 credits total, so if e.g., you are going to graduate that semester and have only 67 credits, you need to take 3 credits of dissertation research.

I need a class that RUC doesn't offer.

Students can take courses at New Brunswick or Newark with no additional tuition costs, after filling out the "Transient Credit" Form at

https://graduateschool.camden.rutgers.edu/current-students/forms/. Alternatively, if you think it's a class that many students in CCIB could benefit from, let's talk about getting it taught here!

Can I take a 300-level class?

Yes, up to two 300-level courses. This also requires the "G-Prefix" form at <a href="https://graduateschool.camden.rutgers.edu/current-students/forms/">https://graduateschool.camden.rutgers.edu/current-students/forms/</a> and approval from the GPD but is almost always approved.

I took graduate courses as an undergrad or while enrolled in a non-CCIB MS. Can I get credit for these courses? You can transfer in up to 3 non-CCIB graduate courses, with the "Transfer Credit Form" at <a href="https://graduateschool.camden.rutgers.edu/current-students/forms/">https://graduateschool.camden.rutgers.edu/current-students/forms/</a> and approval from the GPD. If you are an international student, you need to get WES evaluation/ certification.

What if these are CCIB courses?

All CCIB graduate courses you've taken transfer (no paperwork required), even if you took them before joining the graduate program. They don't count toward your transfer limit.

### What if I was in a CCIB-MS?

All courses transfer (no paperwork required), although you need to still be registered for Seminar until you pass the qualifying exam.

I don't have an advisor yet. Can I still take dissertation research? Yes, if you are in a rotation. These credits add to the minimum amount of time you are expected to spend in the rotation. So, for example, if you are taking 1 credit of dissertation research and 3 credits of rotation, you should be in your rotation at least 4 hours a week. Sign up for the GPD's section of dissertation research.

I'm trying to register but it says I need a special permission number (SPN). As of August 2020, CCIB courses shouldn't require these except for Dissertation Research, Masters Project, and Independent Study. You can get an SPN from the instructor of the section you've signed up for.

Where can I find course descriptions and syllabi?
Why am I required to take \_\_\_\_ class?

Check out https://ccib.camden.rutgers.edu/graduate-course-descriptions/

56:121:601 **Seminar (s)**: Seminars are how scientists present their work to each other. CCIB has a weekly seminar (Tuesday Free Period) with speakers from other universities or industry, CCIB faculty, and CCIB students. To get you in the habit of going and learning how to listen to and process seminars, MS students and all pre-qualifying PhD students in their first two years are required to be registered for a seminar "course".

Post-qualifying PhD students are expected to attend without requiring the structure of a course.

56:121:620 **Lab Practices (I)**: This course is evolving but is intended to satisfy NIH requirements for instruction in Responsible Conduct of Research.

56:121:630 **Manuscript and proposal composition (m)**: This course is also evolving, but we initiated it because PIs observed that many students (regardless of lab) had common challenges and blind-spots in producing publication-quality manuscripts or fundable proposals. The goal of this course is to address these blind spots all at once, in a group setting, and to teach you common tools and approaches for scientific writing.

56:121:710 **Dissertation research** (d): This is a course associated with your research activities – credits through this course count as "research credits". Unless you are currently doing a rotation, register for your advisor's section.

56:121:701 **Masters Project** (m) and 56:121:585 **Independent Study** (i): These are required courses for the MS Thesis and Capstone tracks respectively, to give you credit for composing your thesis or writing your review paper.

### Research

You've been admitted into the CCIB graduate program because we believe you have the potential to complete an original research project. To graduate with a PhD or MS (Thesis Option), you will need to convert that potential into research results that answer an interesting and relevant question in your field. These results will need to hold up to scrutiny by your committee, and PhD research will usually need to be communicated via peer reviewed publications.

### How do I choose the lab I'll be in?

Students match with a lab one of a few different ways:

- Reach out to a specific faculty member before they start the program. (MS Only)
- Continue in a lab where you have already done research as an undergraduate or MS student (MS or PhD)
- Do a rotation through three laboratories their first semester and choose the best match at the end of the semester. (See **Rotation**) If you are a PhD student and aren't continuing in a lab, the rotation is required.

### Do I need to come up with my own thesis research project?

In practice, no. In the CCIB graduate program, you are learning to do rigorous research in the hard sciences. Answering questions that have not been answered before is very challenging - **much** more challenging than taking classes.

Formulating the questions is even harder and usually graduate students don't start with this! Your PI will usually start you out with a main question they have already thought about. Sometimes they will have research funding for it, which means your support is tied to that specific question.

It is expected you will become more independent over time and would take a larger role in formulating questions before receiving a PhD.

### How do I know when I've done enough research to graduate?

Your advisor and your committee will make this determination, depending on whether you are doing the MS or PhD. There is no hard cutoff, but most students publish at least a few papers before receiving a PhD.

### Am I expected to do research/be in the lab over the summer?

Yes. There are special circumstances that may arise, but in almost all cases it is expected that PhD and MS (thesis) students will continue their research over the summer. Summer is an extremely valuable time for lab research because faculty are able devote their time to research over the summer. Most PIs will be actively involved in research projects over the summer in a way they just aren't going to be able to during the school year. Research obstacles are more likely to be overcome and papers are more likely to get finished and submitted during the summer break.

## Would it make sense for me to do an internship?

Almost never. The primary reason is that doing an internship, even over the summer, will increase your time-to-degree. In addition to the time away from the lab, summer internships mean you'll be losing out on valuable summer interactions with your PI, who will be much busier during the academic year. Early publications and progress can also be critical for getting research funding for the remainder of a PhD. For information on summer funding, please see **Part 2: Funding**.

One exception: If you are a very senior PhD student, who has passed the five-year CCIB-funding limit and/or will be graduating imminently, an internship might make sense.

In all other cases, internships not closely related to graduate research are discouraged. Regardless, all internships should be approved by your PI <u>prior to your application</u>. Failing to get this approval may jeopardize your future funding status, membership in your PIs lab, and enrollment in the program.

#### Rotation

### Do I have to do a rotation?

You do if you are a PhD Student and you have not already spent significant time in your proposed lab (like doing a MS). If you are an MS student you may, but you do not have to.

## How many labs will I rotate through?

Three over the course of the semester.

## How do I choose the rotations?

At least one rotation must be in a computational lab and at least one in an experimental lab. A list of potential labs (for both self-funding and CCIB-supported students) will be provided during CCIB orientation.

### I don't think any of the three labs I rotated in is a good match. Can I choose a different lab?

If the PI is willing (and if you are a CCIB-supported student, if the PI does not already have too many CCIB-supported students), yes. In special circumstances it is also possible to do a second rotation semester.

### Why does it matter how I'm funded?

We need to spread CCIB-support in a fair way across graduate faculty, so labs that already have too many CCIB-funded students will not be eligible for rotations from additional CCIB-funded students.

We don't have to worry about this for self-funding students, so they usually will have a wider selection of labs to choose from.

## What should I be doing during my rotation?

Each rotation will be about three weeks long. They are short rotations. You'll need to use this time wisely to become familiar with the research and approaches used by the PI, lab culture and practices, and the experiences of any students/postdocs in the research group.

You might also spend time:

- -Reading papers by the PI and other members of their field
- -Doing background reading to be able to understand these papers (textbooks can be very useful here, don't overlook them)
- -Speaking with other group members about their research
- -Speaking with the PI about a potential project you could do for your thesis/dissertation
- -Learning and practicing techniques used in the PIs lab
- -Attending research group meetings

## Do I need to turn anything in?

There is a single form that needs to be signed by the lab PI for each of your rotations, at the beginning and end of each rotation period, to be turned into the GPD by the end of the semester.

### **Committee Meetings**

You must defend your review article, thesis, or dissertation before a committee to graduate. If you are a PhD student, your advisory committee also oversees your qualifying exam, and will also meet with you at least annually until your defense.

I'm a MS Student.	Three faculty members, including:						
Who needs to be on my committee?	☐ CCIB experimental full member						
	☐ CCIB computational full member						
	☐ CCIB associate or full member						
	Your PI/mentor will fulfill the role of either the experimental or computational full member and will also serve as the committee chair.						
What is a "full member?" or an "associate member?"	These are categories of faculty membership in CCIB. They have nothing to do with "full professor" or "associate professor". Each faculty member has a certain voting status (full or associate) and a certain graduate advising status (dissertation or masters-only) which indicates what level student they're eligible to advise. You can find the lists for each category at <a href="https://ccib.camden.rutgers.edu/people/faculty-members/">https://ccib.camden.rutgers.edu/people/faculty-members/</a> . For your committee you don't need to worry about graduate advising status, just voting status.						
I'm a PhD Student.	Four faculty members, including:						
Who needs to be on my committee?	☐ CCIB experimental full member						
	☐ CCIB computational full member						
	☐ CCIB associate or full member						
	☐ External (outside RUC) member in a TT position or equivalent						
	Your PI will fulfill the role of either the experimental or computational full member and will also serve as the committee chair.						
S T U D E N T T A S K S	☐ Discuss committee with PI						
	Request participation from each committee member						
	☐ Send a list of committee members to the GPD for approval (PhD						
	Only: include a copy of the external member CV)						

☐ (PhD only) Send external member CV to the graduate school to get them added as graduate school adjunct

When do I need to form my committee?

MS: By the end of your second semester. PhD: By the end of your third semester.

How often do I need to meet with my committee? MS: You should meet once with your committee **before** the beginning of your third semester, to present the plan for your thesis. You do not need to write a proposal, although you can. You will meet with them again when you defend.

PhD: Most students do not meet with their committee until their qualifying exam. After you qualify, you should meet at least once a year until your defense.

After your committee meeting, your PI needs to:

M E N T O R T A S K S

☐ Initiate and fill out the Committee Meeting Report Form at <a href="https://go.rutgers.edu/4dhpsani">https://go.rutgers.edu/4dhpsani</a>

### **Presenting**

PhD students past their first year are required to present a seminar once a year, as well as a poster at the CCIB Retreat.

I'm first year MS or PhD student. Do I need to present?

No.

I'm a second year MS Thesis student. Do I need to present? Probably not in seminar, although you do need to present a public defense, and you may also be requested to present a seminar your second year if there is room in the schedule. You do need to present a poster at the CCIB Retreat.

How many other students will speak during my presentation session?	You'll share the time with one or two other students.							
How long should my seminar be?	15-20 minutes.							
Which semester	Second & Third year students: Fall semester							
will I present in?	Fourth years and beyond: Spring semester							
My assigned semester won't work. Can I switch?	Not unless you have extenuating circumstances. If you do, then you'll need to get approval of your PI and the GPD.							
How do I know what day my seminar is?	There will be 3-5 student presentation days per semester. Before the semester starts, the Manager (Karen) will let you know the available days and ask you to check with your PI. Then you'll send the Manager your first choice day, any presentation days for which you or your PI absolutely cannot be present, and the title and abstract for your seminar.							
I'm signed up for a certain day but	If your PI agrees, to switch you'll need to							
now something has changed, and I can't do it that	work out a new date with Karen and your PI							
day.	notify the Grad Program Director and Secretary							
	verify that dates are changed on the webpage schedule							

### **Writing**

I'm about to start putting together my thesis (MS) or dissertation (PhD). Where can I find formatting quidelines? The graduate school thesis style guide can be found at

https://graduateschool.camden.rutgers.edu/graduation/masters-thesis/

The dissertation style guide can be found at

https://graduateschool.camden.rutgers.edu/graduation/doctoral/

The graduate school provides the final word on questions involving dissertation formats.

How do I know how long my thesis/dissertation should be or what should go in it? You will need to discuss this with your PI, as every PI has different expectations. It can also be helpful to look at previous theses from your research group.

How do I turn my thesis/dissertation in?

Please follow the guidelines for your degree at https://graduateschool.camden.rutgers.edu/graduation/

I'm a MS (Capstone Option) student. What do I have to write? A comprehensive review paper of an area of research relevant to the CCIB. Your mentor (selected before the beginning of the second semester) will outline their expectations for you.

### **Milestone Exams**

### **MS Oral Thesis Proposal**

#### What is it?

An oral presentation on your plan for your MS thesis, given to your committee.

Do I need to write a proposal like the PhD students do? The program itself does not require a proposal, but your committee chair (your advisor) can. We expect that it would certainly be shorter than a PhD proposal.

STUDENT TASKS

☐ Get committee approved by GPD and the Graduate School (see "Committee" section)
Arrange a date for the thesis proposal with the committee.
☐ If it will have an in-person component, reserve a room with Karen (JHSC) or Peter (SCI).
☐ If you will have remote committee members or audience, schedule a zoom or WebEx meeting to get a link.
☐ Send an invitation to the committee members. Send them a reminder the day beforehand.
☐ Prepare your presentation! It would normally be about 30 minutes.

What if my proposal is not accepted?

The committee may either ask you to revise the proposal and present again, or they may say you need to move to the non-thesis option.

M E N T O R T A S K S  $\square$  After the oral proposal, send a message to the GPD letting them know the outcome. At present, there is no official form.

### **PhD Qualifying Examination**

#### What is it?

A written proposal and oral presentation on work already completed and the proposed project for the PhD.

S T U D E N T T A S K S

☐ Get committee approved by GPD and the Graduate School (see "Committee" section)
☐ Write a proposal for your PhD research. It should be structured like a fellowship proposal. Typically, it will be between 12 and 20 pages.
Arrange a date for the qualifying exam with the committee.
☐ Notify the graduate school to generate forms for the committee and graduate program to sign by filling out this form: <a href="https://graduateschool.camden.rutgers.edu/faculty/phd-exam-cert/">https://graduateschool.camden.rutgers.edu/faculty/phd-exam-cert/</a>
☐ If it will have an in-person component, reserve a room with Karen (JHSC) or Peter (SCI).
☐ If you will have remote committee members or audience, schedule a zoom or WebEx meeting to get a link.
☐ Send an invitation to the committee members. Send them a reminder the day beforehand.

	Give a presentation to the committee about work you've done so far,
	and your proposal for going forward. (This can be public. It doesn't
	have to be.)
	After student passes:
M E N T O R T A S K S	☐ Sign the paperwork from the Graduate School letting them know the student passed the qualifying exam.
	☐ Initiate and fill out the CCIB report on the exam and proposal at <a href="https://go.rutgers.edu/xl3v76q1">https://go.rutgers.edu/xl3v76q1</a> . You'll also need to upload a copy of the student's proposal.
When does this have to happen?	Scheduling: The GPD must be notified of the date for the exam by the end of your fourth semester.
	Exam itself:
	Expectation: By the end of your fourth semester.
	Hard deadline: By July 1 for you to count as post-qualifying for the subsequent fall semester. (If you will be on a GA, this is necessary for reducing your tuition cost. Even if you are not going to be on a GA, it affects whether you get FICA taxes taken out.)
Who should be	☐ Student
there?	☐ Committee
	☐ (Optional) Public audience for first part of exam

## What happens if I don't pass?

After your qualifying exam, the committee may decide that you did not demonstrate sufficient understanding of your project. Depending on the severity of this deficiency the committee has two options. First, they may "pass the student with homework". This means that the committee is optimistic that the student can successfully complete the PhD, but there were significant knowledge gaps during the defense. The "homework" can take several forms including writing a mini-review, giving a follow-up presentation to the PI or committee. If the PI/committee is still not satisfied, the student will receive a negative committee report which could lead to probation status (see Probation section below). Second, if the deficiency is deemed to be too significant, the committee may choose to fail the student for the exam. In this scenario, the student would graduate with an MS degree but would not be allowed to continue in the PhD program.

### **Defense**

#### What is a defense?

A public oral presentation on original research you completed that is reported in your thesis or dissertation, followed by private questions with the committee.

### STUDENT TASKS

Before defense:

☐ Write or compile your thesis (see "Writing" section)
Arrange a date for the thesis defense with the committee.
☐ If it will have an in-person component, reserve a room with Karen (JHSC) or Peter (SCI).
☐ If you will have remote committee members or audience, schedule a zoom or WebEx meeting to get a link.
Request an announcement of a MS or PhD thesis defense from
Peter. You will need to send your title and abstract, the time and date, the physical location (if any) and the video link (if any).

Distribute your thesis to the committee. (Recommendation: Two
weeks prior to defense for PhD, one week prior for MS)
(PhD only) Fill out the paperwork at https://graduateschool.camden.rutgers.edu/faculty/phd-exam-cert/
Send an invitation to the committee members. Send them a reminder the day beforehand.

### After defense:

☐ Make any changes requested by the committee
$\square$ Get your signature page signed by all members and turn into the
graduate school. You can request to do this electronically from the
Graduate School.
Complete all graduate school tasks under MS (thesis option) candidates" or "PhD Candidates" at <a href="https://graduateschool.camden.rutgers.edu/graduation/">https://graduateschool.camden.rutgers.edu/graduation/</a>
□ Provide signatures on forms initiated by the student

### M E N T O R T A S K S

Who needs to be there?

### ☐ Provide signatures on forms initiated by the student

 $\square$  Student

☐ Committee

☐ Open to public audience for first part of exam

## When does this all have to happen?

- Scheduling: The announcement of the defense must be made at least one week before the defense.
- Defense itself:
  - Roughly: Last few weeks of the semester intended for graduation
  - Hard deadline: 1 week PRIOR to the deadline for "Deadline for Submission of Application for Admission to Candidacy for Degree *Certificate and Thesis* Dissertation" at https://graduateschool.camden.rutgers.edu/graduation/

### **Part 2: Funding**

### **Salary and Tuition**

### **Academic Year**

Do I have to pay for graduate school? Or will they pay me? Specific funding expectations depend on which of the following scenarios you were admitted under:

**Self-Fund** - You fund your entire MS or PhD. You are still eligible for hourly pay, a fellowship that reduces tuition to nearly in-state levels, even if you are not an NJ resident, and other fellowships from the graduate school.

**GA Admission** - You were admitted by the PI, who must have at least 3 years of funding available, and who must plan to support you for your entire PhD. Admission must still be approved from the admissions committee but will usually be granted unless there are unusual circumstances. You are not guaranteed funding if you leave that PIs lab, although it is possible a new lab would pick up your GA.

**TA Admission (PhD)** - You were admitted through the general admission process with a TA line. You are guaranteed full funding (tuition + fees + insurance + stipend) for five years, *pending satisfactory performance*.

- Year 1 & 2: Full funding automatically comes from a CCIB TA line.
- Year 3+: it is expected you will be funded through an external fellowship or line. It is up to you or your PI to fund the GA. If you do not have this funding available, you still have guaranteed access to a CCIB TA line through Year 5 (see conditions below).

Who decides which class I TA for?

The CCIB GPD only decides what department you TA in. The departments themselves then assign TAs to courses.

You may or may not TA in your PI's home department, depending upon the distribution of TA skills and the number of agreed upon departmental TA lines.

It's Year 3 or later, and my PI doesn't have grant or startup funding available, and I don't have a fellowship. What now? If you don't have other funding and are performing satisfactorily, you may stay on a TA line Year 3-5, and sometimes Year 6. But your PI must be actively seeking support for you, which may include asking you to apply for fellowships.

You can search for fellowships for students and federal postdoc opportunities at grantforward.com. You should be able to login with your netid.

### Summer

Will I get paid over the summer?

Funding over the summer in the CCIB depends on the lab and the student, but generally, yes. It is usually arranged separately from academic-year support.

Is there a standard arrangement?

Due to recent changes in TA/GA salaries and the resulting impact on grant budgets, we are assessing the resources available for summer funding.

Can my PI pay more than \$3.500?

Yes, some PIs can and do, depending upon available resources in a particular year. It does not affect the CCIB contribution.

Can my PI pay less than \$1,500?

Not in the standard CCIB arrangement. If the total PI contribution is less than \$1500 for the summer, CCIB will not pay the match.

Is it okay to ask my PI about this?

Yes, discuss it with them well before summer starts! If your PI cannot fund you for the summer, it is fair for you to know as soon as possible.

What if my PI can't pay me anything over the summer?

If you're on a **10-month GA line**, you can request through payroll that it be distributed over a 12-month cycle, so you don't have a break in pay.

If you're on a **10-month TA or GA line**, you would also be eligible for any available teaching positions during the summer session.

### **Other Research Expenses**

What kind of internal funding is available for me?

In addition to internal fellowships, the Graduate School provides some funds for travel and small research expenses. These are all listed under "Student Funding" at <a href="https://graduateschool.camden.rutgers.edu/current-students/">https://graduateschool.camden.rutgers.edu/current-students/</a>

I want to go to a conference, is there funding available? If you are presenting a talk or poster, you can apply for the Dean's Graduate Student Conference Travel Grant (\$500). You need to apply using the link at <a href="https://graduateschool.camden.rutgers.edu/current-students/">https://graduateschool.camden.rutgers.edu/current-students/</a> before the conference. You must file for reimbursement through the CCIB secretary (not your PIs home department) and let the secretary know you have the Conference Grant. CCIB will contribute up to \$1000 per year for travel if a student is presenting and up to \$500 if there is no presentation.

# Part 3: Conduct, Conflicts, and Concerns

This section touches on several personal and interpersonal challenges that can arise during graduate training but cannot possibly cover everything.

Starting in Fall 2018, the GPD will host a graduate student "Strategies, Perspective, and Available Resources" (gSPAR) hour **once a semester.** They are not mandatory, but they are a chance for CCIB graduate students to discuss conflicts and concerns specific to graduate training without their PI present.

### **Student Conduct**

Science is a communal activity; these communities include your lab, your department, your field, other fields with potential collaborators. Learning to be a scientist requires learning to work within these communities.

## Doesn't RU already have a student code of conduct?

Yes, it does; the Rutgers University Student Conduct Summary is:

A university in a free society must be devoted to the pursuit of truth and knowledge through reason and open communication among its members. Its rules should be conceived for the purpose of furthering and protecting the rights of all members of the university community in achieving these ends. All members of the Rutgers University community are expected to behave in an ethical and moral fashion, respecting the human dignity of all members of the community and resisting behavior that may cause danger or harm to others through violence, theft, or bigotry. All members of the Rutgers University community are expected to adhere to the civil and criminal laws of the local community, state, and nation, and to regulations promulgated by the university. All members of the Rutgers University community are expected to observe established standards of scholarship and academic freedom by respecting the intellectual property of others and by honoring the right of all students to pursue their education in an environment free from harassment and intimidation.

More information on Rutgers University policy and how to file a complaint for violation of that policy is available through the Dean of Students office at https://deanofstudents.camden.rutgers.edu/

## Does CCIB have additional expectations?

Some unprofessional student conduct may not be so disruptive that it breaks official RU policy, but if you keep doing it, it will cause distress to other students and/or harm your own future career.

Being a scientist can require receiving very direct criticism about your work. In a supportive scientific community, it's especially important to balance this out by consideration at a personal level.

As an example, it's useful to consider "Is what I'm about to say **kind**, **necessary**, **true**?" because:

Untruthful speech should be particularly avoided by scientists, especially in a professional setting.

Even if it is truthful, most unkind speech is also unnecessary, and should also be avoided.

An exception: truthful and seemingly unkind comments can be a necessary part of scientific training and the scientific review process. All scientists receive them, and as you go through your scientific career, you'll have increasing responsibility to give this feedback.

As a student, the areas where you need to do this will be limited and usually designated by faculty.

Truthful and kind speech may actually be more necessary than you think.

A fellow student is being repeatedly inconsiderate, disrespectful, or unkind. What can I do? CCIB expects all students will treat each other with respect and consideration; if a fellow student makes statements that are unnecessary and unkind, let them know you see them that way. We expect that most of our students are pretty fair and gracious people who would rather not unduly upset each other if they can help it.

If you're not comfortable with that or if it doesn't stop the behavior, ask the GPD or Dean of Students office for a more structured mediation.

My behavior doesn't violate any policy. So, what's the problem? Even if you are not in strict violation of a policy, poor conduct reduces your chances of future success. Concerns like this may originate from your PI, or from other faculty members. The GPD will consult with your PI, and you may be asked to have a Conduct Improvement meeting.

This required meeting could include your PI, the CCIB GPD, Director, faculty member who witnessed conduct, or a subset of these faculty members depending on need and circumstance. The purpose is to discuss how such conduct could reduce your success in the future, as well as more desirable alternatives. It is considered a pedagogical rather than a disciplinary meeting.

### **Student Well-being**

I'm really
struggling with
\_\_\_\_\_. It's not
even related to
graduate school,
but it affects my
performance.

The Dean of Students office is a great resource for a range of personal student concerns, ranging from housing to medical issues to general student well-being. You can reach out to the Dean of Students office at https://deanofstudents.camden.rutgers.edu/

You may also consider accessing mental health resources at

https://healthservices.camden.rutgers.edu/psychinfo

Is it normal for graduate students to need mental health resources? Yes! It's common for graduate students (within CCIB and elsewhere) to find them helpful and/or necessary. Your brain is working overtime, so please take care of it!

I have a concern about safety or well-being of another student. Please consider reaching out to your PI, that student's PI, CCIB leadership, or filing a report at <a href="https://deanofstudents.camden.rutgers.edu/reporting">https://deanofstudents.camden.rutgers.edu/reporting</a>, which will notify someone from the Dean of Students office to reach out to them (this report can be anonymous).

I believe I'm being physically threatened or sexually harassed. This is urgent. Tell someone about your concerns as soon as possible. This could be your PI, the CCIB GPD or Director, the Dean of Student's Office, or depending on the situation, the Rutgers-Camden police.

You can get more information about the University's commitment at <a href="https://deanofstudents.camden.rutgers.edu/interimstudentsexualpolicy">https://deanofstudents.camden.rutgers.edu/interimstudentsexualpolicy</a>

What if it's by someone in who has power over me? CCIB is committed to addressing and preventing abuses of power by its members. In 2018, the CCIB adopted this statement into its bylaws:

The CCIB recognizes that scientific communities are necessarily highly hierarchical due to the discipline required for rigorous research and training. CCIB members shall follow the Rutgers University policies, including code of ethics, Conflict of Interest, and abuse of power. The CCIB will consider abuses of the trust implicit in this hierarchy particularly seriously.

Yes, but...this person is very important. I'm not sure you'll be willing to hear this. Not every incident that a student believes is an abuse of power will be considered one by the Rutgers University administration. But they will all be taken seriously and without reprisal for the student.

There is no one in CCIB or at Rutgers who is so important, talented, or irreplaceable that we will look the other way if they are violating the code of conduct.

### Student/PI conflicts

### **Mediation and Resolution**

I'm unhappy with my PI.

Our goal is for you build your scientific strength. Like a personal trainer, it is a PI's job to push you out of your scientific comfort zone. And like a personal trainer, we want to push you in a way that strengthens you, not that causes permanent injury.

How do I know if this is useful discomfort or not?

You can make an appointment with the Graduate Program Director to confidentially discuss concerns. They may ask to meet with your PI as well after meeting with you or have a joint meeting.

The Graduate Program Director is also my Pl. As the GPD I hope you will feel comfortable bringing up your concerns with me – but if you don't feel you can, please make an appointment to meet with the CCIB Director. They will take over the role of the GPD in your case, while I will only wear my PI hat.

What kind of concerns or conflicts are common in an advisor/advisee relationship?

These are some of the most common concerns from students about their advisors.

- 1. My advisor is not available often enough. I thought we'd be working more closely together.
- 2. My advisor micromanages me. Why are they telling me to do something I'm already doing?
- 3. My advisor says they don't like my writing or figures but doesn't tell me how to fix it. They just say, "redo it".
- 4. My advisor is so harsh. I'm trying so hard, but they seem angry at me all the time. Maybe I don't belong here?
- 5. My advisor is too nice and understanding. I need them to enforce firmer deadlines or else I won't get anything done.
- 6. I keep trying to talk to my advisor about my ideas for potential research projects, but they keep dismissing them.
- 7. I gave a paper to my advisor a while ago and they're just ignoring it. I did a lot of work on it, so why aren't they doing their part?
- 8. I'm a junior student being supervised by a senior student or postdoc who doesn't know how to mentor. I can't learn anything from them.

- 9. I'm a senior student who spends way too much time helping newer students. I don't have any time for my own work!
- 10. My project isn't working, and my advisor isn't able to make it work. I wish they would see that it's hopeless and I'm wasting my time.
- 11. It's time for me to graduate but my advisor doesn't see that.

Much of the time, these concerns are part of adjusting to a mentoring relationship that is different from one you've ever had before. In some situations, your advisor may have motivations or goals that are not apparent to you.

Even though they are common concerns, how you address and grow through these concerns is likely to affect your success as a graduate student. It can be useful to discuss them with other students, so if one of these describes you — even if you don't think it requires a one-on-one meeting with the GPD - I especially encourage you to come to the next gSPAR meeting or discuss it with your success circle.

For perspective, these are some of the most common concerns from graduate advisors (not just those in the CCIB!):

- 1. My student is talented but has very poor work ethic. It's frustrating when I know they could do a better job...but they just won't!
- 2. My student is very smart and dedicated but doesn't trust me to advise them. They don't understand the expected role of a PI.
- 3. I have a defensive student who nitpicks my feedback rather than listening to the overall message. I can never communicate required changes to them because they always find reasons to convince themselves I'm wrong.
- 4. My student gets really upset whenever I give them criticism or negative feedback, and so they don't improve. But I know they're capable of doing better and want them to have the confidence of a job well done.
- 5. My student won't get their paper out the door. It's close, but getting it submitted requires a concentrated effort and they don't seem to realize the importance for them or for me.
- 6. My student is a good student who is inconsiderate to others. I'm worried that after they graduate, they'll be less successful than they could be because they'll alienate their colleagues.
- 7. My student fails to satisfy their obligations too often. They always say they're sorry and have an excuse but they never do anything to make up for it, so they just fall further and further behind.

8. My student is progressing much too slowly and doesn't seem to realize it.

You might not think any of them describe you, but chances are that at least one of them does. It may be different from the one you think - if you feel comfortable, try asking your PI.

### **Switching Advisors or Leaving the PhD**

I am thinking of switching advisors. How do I know if this is a good idea? Is it even possible? Yes, students have switched advisors in the past. The earlier you do it, the easier it is, but it is possible to do even relatively late in the degree. For the best outcome, discuss thoughts of switching advisors with the GPD as soon as you start having them. The GPD may also be able to mediate or negotiate the situation in your home lab. There is no risk in discussing the situation early with the GPD!

I am sure I want to withdraw from my program. Does that mean the time I spent here is wasted? It depends on how much work you have already done and how much you are still willing to do. If you are a post-qualifying PhD student, you have already earned an MS degree, and can leave with an MS degree at any point! Your qualifying exam counts as the MS defense.

If you are a pre-qualifying PhD student you may have completed almost enough work for a thesis-based MS, and it might make sense to stick it out and graduate with a MS. Similarly, pre-qualifying PhD students and thesis-based MS students may also switch to a non-thesis-based MS for a faster graduation.

Most importantly, you need to talk with the GPD!

What if my advisor doesn't think I'm "progressing" in my PhD? If you get to the qualifying exam stage but the committee (including your advisor) is not confident about your ability to complete a PhD, they will let you know before you take the exam. This can be confusing and tough to hear, especially if you weren't expecting it – but it doesn't mean you don't have a bright future ahead of you! It just means that they don't believe you have the very narrow and specific set of traits that is needed to do a PhD in CCIB.

I have counseled PIs through this decision, so I know it was probably a very hard one for your PI to make. In most cases they are torn, because they see a potential path for the student to be very successful – just not as a PhD student in their lab or this program. Please talk to the GPD about how to go forward. In almost all cases, you will have the option to write up your research so far as an MS thesis.

I'm post qualifying, but before Year 6. My advisor no longer wishes to advise or fund me. Does that mean I have to leave the program? Aren't I guaranteed funding through Year 5? If you pass the qualifying exam but afterwards your advisor loses confidence that you will complete a PhD, they can refuse to keep advising you. This is not a decision most advisors take lightly or willingly, and it has happened very few times in the program's history.

If you can find another advisor, depending on your progress so far, you might be able to still complete your PhD within the program. The farther along you are, the more papers you've published, and the closer the new advisor is to your old advisor's project, the more likely this will happen. If you find another potential advisor, the change must still be approved by the Graduate Program Director.

If no other PIs will agree to advise you, you will have no options for completing a PhD and will meet the criteria for dismissal. If you join a new lab but the second advisor also stops agreeing to advise you, you will also meet the criteria for dismissal.

I'm post qualifying, Year 6 or later. Funding for Year 6 students is already scarce, even for students who are progressing well. The typical resolution here is for students to self-fund or become only partially supported by the program, taking on much more of their responsibility for completing their PhD.

### **Academic Warning, Probation, and Dismissal**

If you fail to maintain the required GPA, fail to make progress toward milestones, or have no feasible path to degree, you may be dismissed from the graduate program. In practice, to successfully appeal a dismissal to either the Program Committee or the Graduate School, you will need to present a reasonable path to degree. The formal policy is

#### MS and Pre-qualifying PhD

Each semester, the program committee reviews the scholastic record of all students in the program and decides about warnings, probation, or dismissal. The graduate program director notifies students of any action taken. Students who have a grade below B in a course receive a warning. Students whose records show more than two courses with grades below B or whose GPA is below B may be dismissed. Students may appeal in writing to the program director within one month of the decisions. Acceptable grounds for appeal are technical errors, new information, or extenuating circumstances.

#### Post-qualifying PhD

In all but extreme cases, students must be placed on at least one semester of probation by the Graduate Program Director (GPD) (not the advisor) before dismissal.

Initiating Probation. Probation for a post-qualifying student can be triggered by the following: 1) Two consecutive or three non-consecutive committee reports with progress from Previous Meeting that is "Significantly Below Expectations" or 2) Request from the PI to the GPD that the student be placed on probation, with justification and a summary of what the student must do to to get off probation. The GPD has the option to request that the PI go through the committee process above.

Concluding probation. The student must have at least one committee meeting during the probationary period, with the GPD present. After meeting with the PI, student, and committee members, the GPD can make one of three possible decisions: 1) Dismissal. The student can file an appeal with the graduate school. 2) Probation is extended for one semester, under a new advising structure. This could include a switch to an entire new lab or a much larger role for a co-advisor. 3) Student returns to good academic standing.

Students at any stage may further appeal dismissal to the Senior Associate Dean of the Graduate School at Rutgers Camden.



# Part 4: Community Resources

## **People and Roles**

#### **Inside CCIB**

Who should I talk to about \_\_\_\_?

Like any organization, CCIB divides work among people in several different positions. Some of the positions are held by faculty in their "service roles", which means they're doing some work for the institution in addition to normal teaching and

Many are elected positions with well-defined terms, like a mayor, rather than long-term jobs like a school principal. This means that during your graduate career, the person who does the job of the CCIB director, graduate program director, department chair may change, but the issues you should bring to them won't.

Role within CCIB	Reach out to discuss		
Director	- Serious concerns that you don't feel comfortable discussing with the GPD (including PI conflicts if the GPD is your PI).		
Graduate Program	- Course selection your first semester and questions for subsequent semester.		

Director	Course transfers.		
	- Major or ongoing conflicts with your PI.		
	- Concerns about TA assignments.		
	- Need for health accommodations.		
	- Concerns about your progress, and decisions about continuing in the program.		
	- Serious concerns about conduct of CCIB members not in your research group		
	- Questions about anything else covered in this manual.		
Business Manager	- When an office or administrator is not being responsive to your request for travel arrangements, keys, announcements, obtaining housing, etc.		
	- To reserve space in JHSC		
Systems Administrator	- Questions about/problems with running on the Amarel supercomputer.		
Secretary	- Reimbursements		
	- Travel arrangements		
	- Announcing your defense		
	- Reserving space in SCI		
Student Event Assistant	- Offers to help with events		
Student Website Assistant	- News that you won an award, published a paper, got featured in some press		
	- Reports of website inaccuracies, broken links, etc.		
Student Organizing Committee (SOC)	- See the welcome letter in the first few pages of this handbook		
Your PI	- Any questions related to carrying-out research,		

#### and

- Before applying to conferences or agreeing to present your work
- Before applying to internships or fellowships
- Before scheduling your defense or qualification exams
- Before reaching outside the group for specific research-related questions, especially to other non-CCIB faculty
- Questions about scientific research integrity and ethics related to your project
- Serious concerns about conduct of other lab members

### **Outside CCIB**

Roles Outside CCIB	Reach out to discuss
Department Chair (for your TA assignment, check Department webpages for contact info)	- Which course you will be TAing
Departmental Lab TA Coordinators (check Department webpages for contact info)	- Which lab courses or sections you'll be TAing (if assigned to a lab)
Departmental Secretaries (check Department webpages for contact info)	- Keys for non-CCIB space
Assistant Dean III (Graduate School)	<ul> <li>Annual Celebration of Graduate Student Research and Creative Activities</li> <li>Workshops and networking events for graduate students</li> </ul>
	<ul> <li>Graduate Student Advisory Council</li> <li>Graduation eligibility including thesis and dissertation style review</li> </ul>
Coordinator of Administrative Services (Graduate School)	<ul> <li>Processing of graduate academic approvals/ forms, including Transient Credit Approval, Transfer Credit Approval, G Prefix Approval, Incomplete Grade Extension Forms, Re- enrollment Forms, PhD Full Time Certifications, Change of Status Forms, Program Transfer, Withdrawal Forms, and Graduation Forms</li> </ul>
	<ul> <li>Student conference travel and research grants</li> <li>Scholarship funding and TA/GA contracts</li> </ul>
Associate Dean for Research and the Graduate School –	<ul> <li>You are appealing a dismissal or loss of contract</li> <li>You have specific suggestions for clarifying or improving the admissions/enrollment process</li> </ul>

Camden	(check with GPD first)
College of Arts and Science Dean	- There is almost no reason for a graduate student to reach out directly. Students who have done so in the past have not received the outcome they wanted.

## **Community Computing Resources**

### **High Performance Computing**

## Why would I need HPC resources?

If you have a program that runs from the command line, you can submit it to a high-performance computer (aka supercomputer) and it will run without using your desktop memory or computing power. You can also run many calculations at once, use a large amount of memory per calculation, or run some programs in parallel over multiple nodes so they run much more quickly than they would on a single node.

## What HPC resources are available?

The Rutgers Office of Advanced Research Computing (<a href="https://oarc.rutgers.edu/">https://oarc.rutgers.edu/</a>) provides several different kinds of resources. The most common resource is a supercomputer called Amarel. Anyone can submit jobs to Amarel, but you have to be part of a group that invests in Amarel to have high priority.

## How can I get access?

You request access via <a href="https://oarc.rutgers.edu/access/">https://oarc.rutgers.edu/access/</a>

## What does it mean to have high priority?

Higher priority users can "preempt" lower priority users. If you are preempted, your job is killed while it is running, and the other user's job starts on the node you were using. If you preempt someone else, you kill their job and start using the node.

#### Where will I have the highest priority?

When you submit a job, you specify the queue. As of August 2019, there are four queues you might submit to:

Queue Name	Number of Nodes (August 2022)	Relative Likelihood of Preemption	Relative Queue Time
main	~300	High	Moderate
cmain	~68	Possible but unlikely	Low
p_ccib_1	~10	CCIB users cannot be preempted	Moderate
Your PI's queue	The number of nodes your PI has	You cannot be	Depends on your

purchased	preempted	group

## How do I get support?

If you need help, you can try:

- Attending the Amarel training sessions when they are offered. You should do this even if you don't need help yet!
- Consulting the User's guide, Training Resources, and FAQ at <a href="https://sites.google.com/view/cluster-user-guide">https://sites.google.com/view/cluster-user-guide</a> There are a lot of resources here!
- Asking for help from another CCIB Amarel user.
- Asking for help from the CCIB Sysadmin, Tom Skipper (@Tom Skipper).
- Emailing the Office of Advanced Research Computing at help@oarc.rutgers.edu

#### **Slack**

#### What is Slack?

Slack (Searchable Log of All Conversation and Knowledge) is a communication platform for organizations. An increasing amount of rapid communication within CCIB is done over the slack site. It is the fastest way to get a response from the graduate program director.

## Isn't that what email is?

Not really. Slack is much better for informal, back and forth conversations (more like texting). It has a very convenient structure for organizing these conversations and associated files (more like a forum) and allows rapid acknowledgment of messages without generating more messages (like Facebook/twitter/Instagram). You can also video/audio chat and screen share. You just need to try it to see why people like it.

## How do I access it?

There are several options:

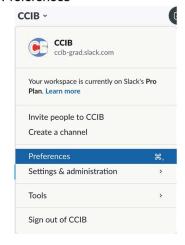
- Browser (ccib-grad.slack.com)
- Phone "Slack" App (android or iphone) and join the ccib-grad slack site.
- Desktop "Slack" App (on a desktop/laptop)

If you don't have an account, email the graduate program director and they will send you an invitation.

I am getting way too many notifications (or far too few). Access slack using one of the options above, and then follow the instructions below.

## Too many notifications? Too few? How to set your notifications

1) Use the menu in the upper left corner, and select Preferences



- 2) In the menu that pops up, choose "your notification preferences"
- 3) Read the options and choose the ones you want



4) Make sure to scroll down - there are many more useful options on this screen for customization!

## How can I find other channels?

Hover over "Channels" until "Browse all channels" pops up, as shown below:

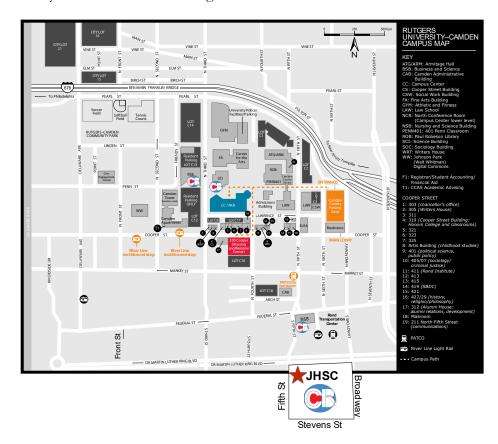


How can I make my own channel/acknowle dge messages/reply in a thread/video or audio call/notify a user group? You can search online for any of these questions, but if you want some more targeted tips for particularly common tasks, join the #guides\_from\_gb channel and select the "slack\_info.pdf" pdf file. You can click on it directly to view it (or download it).

#### **Locations**

## Where IS the CCIB?

The main headquarters of CCIB are in the Joint Health Sciences Center (jhsc), but CCIB activities and labs are spread out across several buildings on campus. Almost all of them have the word "Science" in them, but otherwise it can be hard to guess what faculty should be in each building.



The four CCIB buildings, marked by the logo on the map above, are:

- Joint Health Sciences Center (JHSC): This new state-of-the-art building opened Fall 2019 and is CCIB headquarters. The building occupancy is split between researchers from CCIB and from Rowan University, as well as Camden County Community College. It is not officially a Rutgers building and is not on campus maps, but it is added to the map above (on the corner of Broadway and MLK). Contains the

following CCIB graduate faculty labs: Brannigan, Corbett, Dehzangi, Fu, Geneva, Gonzalez, King, Klein, Lamoureux, Lee, Piccoli, Savage, Solesio, Qi, Yakoby.

- Business and Science Building (BSB): Contains the Computer Science and Math departments, but no CCIB labs. High performance computing hardware (Amarel) is on the first floor.
- Science Building (SCI): Contains some members of Biology (including the Grigoriev lab) and many experimental members of the Chemistry departments (including the Salas and Grgicak labs).
- Camden Nursing and Science Building (CNSB): Contains many teaching laboratories, as well as experimental faculty in the Physics Department (including the Griepenburg lab).

## Can I get a keycard to JHSC?

If you are a TA or GA, yes. If you are a graduate student but not a TA or GA, you will be given a keycard with internal access but not external access. We would like to give graduate students external access, but at present we are not allowed to do so and have no room for exceptions. This is a Rutgers-Camden rule, not a JHSC rule.

I'm an MS student doing experiments. I need an external key more than a computational PhD student does!

It really has nothing to do with being an MS or a PhD student, or with being computational or experimental. We can't give this access to graduate students, but we are allowed to give this access to some classes of employees, and TA/GAs count as employees who just happen to be students. (If you are a TA or GA and requesting access to other Rutgers buildings, present yourself as an employee, not a student.) If you truly need to be in the building during hours that security is not here to let you in, please let us know and we will see if we can find a solution. It won't involve a keycard, but we may be able to let you in some other way.

### **Success Circles**

## What is a success circle?

A small group of people who meet regularly to give each other professional support/guidance/mentorship/room to express frustration. In CCIB's case, it's a group of 5-6 students (both new and continuing, MS and PhD).

#### Is it required?

It is required for PhD and MS Thesis students, and optional for MS Capstone students. After our Fall 2020 trial, many students said they appreciated them but needed it to be required to attend.

## How often do we meet and what is the format?

This is a newer initiative that is evolving over time based on student feedback, and the setup varies by semester. Each semester an announcement with the setup for that semester will be provided.