GMB Faculty Survey

Last Modified: 06/20/2012

1. How many GMB students are currently in your lab?

Text Response (numbers in parentheses are number of respondents)
0 (35)
1 (20)
2 (8)
3 (11)
4 (1)
5 (1)
6 (1)

Statistic	Value
Total Responses	78

2. How many students in other PhD programs are currently in your lab, and which programs are they from?

Text Respons	se
0 (24)	
1 (18)	Biochemistry and Biophysics (2) Biochemistry and Biophysics, Mol. & Cell. Biophysics Training Program (1) Bioinformatics and Computational Biology (3) Biology (4) Biophysics (1) Curriculum in Toxicology (2) Neurobiology (1) Pathology (2) Pharmacology (1) Functional Genomics at NCSU (1)
2 (10)	 1 Biochemistry and Biophysics and 1 Physics 2 Bioinformatics and Computational Biology (1) 1 Bioinformatics and Computational Biology and 1 Biology (1) 1 Bioinformatics and Computational Biology and 1Pharmacology (1) 2 Biology (1) 2 Cell and Molecular Physiology (1) 1 Computer Sciences and 1 Statistics (1) 2 Microbiology and Immunology (1) 2 Oral Biology (1) 1 Pathology and 1 Pharmacology (1) not specified (3)
3 (12)	all Bioinformatics and Computational Biology (1) all Biology (4) all Cell and Molecular Physiology (1) 1 Cell and Molecular Physiol., 1 Cell and Devel. Biol., and 1 Microbiol. and Immunol. (1) all Microbiology and Immunology (1) all Pharmacology (1) not specified (3)
4 (6)	all Biology (1) 1 Biology, 2 Cell and Developmental Biology, and 1 Pathology (1) 2 Biochemistry and Biophysics and 2 Biology (1) all Microbiology and Immunology (1) not specified (2)
5 (4)	1 Biology and 4 Biophysics 3 Biology, 1 Epi, and 1 Microbiology and Immunology (1) all Cell and Molecular Physiology (1) 4 Pharmacology and 1 Pharmacy, Div. of Medicinal Chemistry and Natural Products (1)

3. Not counting current students, how many GMB Students have been in your lab in the last five years?

Text Response	
0 (43)	
1 (18)	
2 (10)	
3 (6)	
5 (1)	
6 (1)	

4. How many GMB student dissertation committees have you served on in the last five years?

Text Response
0 (9)
1 (7)
2 (16)
3 (9)
4 (9)
5 (6)
6 (4)
7 (4)
8 (6)
11
12 (3)
14
17
around 20is
Many - I don't know the exact number

#	Question	Don't know/No Opinion	Very Dissatisfied	Dissatisfied	Nuetral	Satisfied	Very Satisfied	Responses	Mean
1	Degree requirements for GMB students?	5	0	5	6	43	18	77	3.83
2	Professional development of students of students entering GMB from BBSP?	9	0	0	10	42	16	77	3.73
3	Opportunities for GMB students to improve their scientific communication skills after BBSP?	13	0	1	8	34	21	77	3.64
5	The transition process from BBSP to GMB?	22	0	0	8	30	17	77	3.26

5. With respect to GMB students, how satisfied are you with the following?

6. How satisfied are you with the following aspects of the program?

#	Question	Don't know/Don't participate	Very Dissatisfied	Dissatisfied	Neutral	Satisfied	Very Satisfied	Responses	Mean
1	Friday Seminar Series (and required attendance for students prior to oral exam)	6	1	1	9	42	18	77	4.74
2	Annual Retreat	8	1	3	5	29	31	77	4.81
3	Tuesday student seminar series (and required attendance for students prior to oral exam)	10	1	0	12	33	21	77	4.56
4	Didactic courses available in GMB	7	2	4	15	41	8	77	4.36
5	Thesis committee meetings	5	1	6	5	37	23	77	4.78
6	Monthly social hours	27	0	0	13	25	12	77	3.58

7. GMB students are required to take a written exam after the end of their first or second year, depending on when they complete the necessary course requirements. The written exam is administered by a committee of 6 GMB faculty. Students are assigned a set of research papers, where they are expected to master the material over a two week period prior to completing a two day written exam. How satisfied are you with the content and format of the written exam?

#	Answer	Response	%
1	Very Dissatisfied	1	1%
2	Dissatisfied	2	3%
3	Neutral	15	20%
4	Satisfied	30	39%
5	Very Satisfied	11	14%
6	Don't know/Don't participate	17	22%
	Total	76	100%

8. GMB students are required to take an oral exam, usually during the third year. The exam consists of a written dissertation proposal followed by an oral defense of that proposal. The proposal is written in a grant format which is provided to the student's thesis committee for evaluation. The student then prepares a formal presentation of the proposed work for the committee, which evaluates whether the thesis plan is appropriate and feasible. How satisfied are you with the content and format of the oral exam?

#	Answer	Responses	%
1	Very Dissatisfied	2	3%
2	Dissatisfied	8	10%
3	Neutral	5	6%
4	Satisfied	33	43%
5	Very Satisfied	21	27%
6	Don't know/Don't Participate	8	10%
	Total	77	100%

9. How many collaborations leading to papers have you had with other GMB faculty in the last five years?

Text Response
0 (19)
1 (10)
1 collaborator, three papers
2 (11)
3 (4)
4 (5)
5 (5)
12
Numerous. Co-author on more than 15 papers with other GMB faculty.
12
three different labs generating 9 papers
4 or more
14
7
16
At least 3
I am new to the program.
6 (2)
two separate collaborations yellding three papers
15
Eight
>5 papers, all with the same GMB faculty member; lots of informal collaborative interactions, about methods, etc.
seven
I am not sure who all the faculty are but I believe I have 12 pubs jointly

10. How many collaborations leading to papers have you had with non-GMB faculty at UNC in the last five years?

Text Response
0 (18)
1 (11)
2 (10)
3 (6)
4 (6)
5 (5)
6 (3)
7 (2)
9 (2)
Co-author on more than 10 papers with non-GMB UNC faculty.
12
4 or more
3, multiple papers
8
12
Also At least 3
20+
Four published One in revision One submitted
over ten
14 Some are the same pubs

11. How many collaborations leading to joint grants have you had with other GMB faculty in the last five years?

Text Response
0 (43)
1 (14)
2 (7)
3 (4)
4
5 (2)
Co-investigator on 4 funded grants with GMB faculty, Co-PI of one submitted application and co- investigator on one submitted application.
Collaboration with 4 current GMB faculty underway, submission of revised grant application is pending.
One major RO1 funded; several other submitted (totla of 4 other GMB faculty)
2-successful, 1 pending

12. How many collaborations leading to joint grants have you had with non-GMB faculty at UNC in the last five years?

Text Response
0 (41)
1 (16)
2 (8)
3 (4)
4 (2)
NA Note on all the above questions: can someone in GMB pull all this information from CVs? I'm not even sure which faculty that I work with are in GMB and which are not It is also not clear if you want the number of collaborations, or papers/grants? And if you collaborated with the same person on two independent projects/papers, is that one or two?
7

Co-investigator on 6 funded grants with non-GMB faculty in past 5 years.

#	Answer	Responses	%
1	Very Dissatisfied	3	4%
2	Dissatisfied	2	3%
3	Neutral	11	15%
4	Satisfied	31	42%
5	Very Satisfied	26	36%
	Total	73	100%

13. How satisfied are you with the interactions and camaraderie among GMB faculty?

14. Scientific Specialization (rank 1-3 with #1 being the most closely related) Which categories do you consider the student research in your lab to be most associated with

#	Answer	1	2	3	4	5	6	7	8	9	10	Responses
1	Genetics	19	18	7	0	0	0	0	0	0	0	44
2	Genomics	6	9	15	0	0	0	0	0	0	0	30
3	Gene Expression	9	11	10	0	0	0	0	0	0	0	30
4	Complex Trait Genetics	6	4	7	0	0	0	0	0	0	0	17
5	Molecular Biology	20	11	10	0	0	0	0	0	0	0	41
6	Cell Biology	11	11	11	0	0	0	0	0	0	0	33
7	Biochemistry	9	4	5	0	0	0	0	0	0	0	18
8	Developmental Biology	11	4	5	0	0	0	0	0	0	0	20
9	Bioinformatics	2	6	9	0	0	0	0	0	0	0	17
10	Computational Biology	3	1	11	0	0	0	0	0	0	0	15
	Total	96	79	90	0	0	0	0	0	0	0	-

15. What, in your opinion, is the greatest strength of the GMB Curriculum?

Text Response
camaraderie (2)
The concerted effort to form a community of scientists and a training philosophy rather than just an administrative unit.
Diverse opportunities for students.
The retreat.
diversity (2)
Great seminars, student support, faculty
Terrific faculty and students
its diversity but also its focus on eukaryotic systems
Interdepartmental interactions.
Graduate student training
Interaction of students through seminars and retreat. Strong mentorship of faculty.
Broad range of expertise among the faculty, relaxed atmosphere in the curriculum, freedom to tailor coursework to student's interests
well run established program
the strong collection of faculty and diversity of students doing different kinds of research who seem to have a sense of community
The colleagial nature of the faculty. Great interactions, great training for the students. The training grant sets the program apart. Great job!
flexibility diversity of faculty interests and expertise
Opportunities to present Tuesday seminars
Students and faculty are exposed to a broad range of biological questions and model organisms through the retreat, regular meetings and seminar series.
Interdepartmental, diversity of molecular methods, reagents and resources
The fact that it can successfully include a diverse range of faculty from across the campus in a shared and robust training mission.
The inter-departmental network of labs, and the quality of students.
the large diversity and high quality of faculty
Seminar series, sense of community, annual retreat.
Program is run well.
Collaborative faculty and outstanding students.
Faculty / colleagues (3)
Breadth of research (5)
opportunities for students to focus on tracks
I am new to the program.

The leadership (Duronio, Hermreck, Marlow, etc.) and the maintenance of the training grant. A close second is how close the students are as a group.

The students enjoy the interaction with other students and postdocs (Friday happy hour). The students love the retreat, they all are very eager to go and present their work.

The students and their training in presentations.

The strong interactive nature of the program.

Though it brings in a broad spectrum of faculty, there is still a significant amount of interaction amongst the labs and this benifits the students.

getting good students

It is extremely well organized and cohesive

The breadth of research that goes on. The retreat is a testament to this. I love browsing the poster sessions and seeing what everyone is doing.

diversity of topics, interactive

there are many strengths including outstanding faculty, diversity of research interests, collegial environment, generally high quality of students

The interdisciplinarity of the curriculum.

A diverse group of smart faculty who are very collegial.

Excellent pool of students, great leadership from Bob and Sausyty

background in molecular biology and genetics

Large. Number of PIs.

The quality of students and the broad interdisciplinary aspects of the curriculum

Strong cohesive faculty. Numerous opportuntities for collaboration.

Multi-disciplinary

Its ability to maintain a very strong sense of community despite it being interdepartmental and despite it not beginning until the 2nd year. I think these will be real challenges to maintain if there is a change in leadership as Duronio set a high bar in keeping the "glue" in this program despite the changes all around it.

interactive nature of most PIs. Overall top notch science being done. Many different sub-areas have great strengths in current curriculum that provide resources and synergy. The program is quite good, and the students overall are of high quality. Friday seminars usually quite good. Retreats are awesome.

Promotes strength in important areas of research

The diversity of research (of faculty and their labs that students can choose from) although this can be considered either a good thing or a bad thing (due to a lack of focus).

16. What would you like to see improved in the GMB Curriculum?

Text Response

I would like to see two tracks, Genetics and Molecular Biology. I would like to see the Genetics Track establish new requirements for coursework and exams.

sub focus areas?

nothing

i've heard there is some consideration of renaming it "genetics". is suppose the name is no big deal....but i think the current name accurately reflects it

I am currently pretty satisfied.

NA

I think that it's gotten too big and too broad and has lost its focus on Genetics.

Need a to identify strong set of core modules for all students to master. Increased focus on quantitative courses and basic computing skills. Probably could better cordinate cross-course listings with other curriculums to identify which new courses are necessary and decrease redundancy. Think a good course in population genetics would be useful.

a few faculty meetings on campus- not restricted to those that can attend the yearly retreat off campus

more focus on genetics, genetics, genetics

the oral exam

Rigor of student training

more formal preparation for grantwriting

Strengthen course requirements

I would like to see more financial support for the students.

Formation of focused subgroups

Improved interactions among faculty (they're already pretty good, but I think there is some room for improvement too).

I have some concerns about whether BBSP is cutting away at the camaraderie among GMB students before their intellectual circle gets circumscribed by the lab they join.

not much needs improving, I think it is a very solid curriculum

More thought about what we are preparing students for. More career-oriented counseling. Perhaps student mentoring groups?

Sometimes (rarely) studnets do not have committee meetings in a timely fashion. Annual meetings need to be inforced. It would also help if meetings are scattered throughout the year and not all in April-May.

Students need more feedback on how they're doing.

Nothing

becoming distant from classic genetics training

I am new to the program.

It seems that the group has become so diverse scientifically that it risks being diffuse.

Funding for the students.

Again, I STRONGLY disagree with the present arrangement of allowing a student to defend without a first author paper inhand. The present policy of letting the student defend and then hold their degree unti laccceptance I feel is a grave mistake.

Nothing.

I am looking forward to the reoranization of the genetics course, since I think that this will be of significant benefit to the students.

Perhaps alternate the location of the social gatherings each time so that some of them occur in the new genome sciences building.

nothing.

oral exam rigor

overall i have no complaints

Training of students in statistical analysis of large data sets, GWAS information, and handling of deep sequencing data should be a priority. This may not be trivial, and perhaps not necessary for some students depending on their interests, and it would probably be helpful to educate PIs clearly on the types of things that may be learned by students who take such courses, their value, and what to expect regarding how much time it will take to become well educated on such topics.

Provide a more defined Genetics track

the didactic type of prelim should be revised to a more creative format

Quality of students and professional development courses/classes

More opportunities for computational/bioinformatic/statistics training.

I believe in self education with requirements to demonstrate competency so I would like to see the course changed to all literature/seminar courses. If one cannot educate one self you have poor prospects for the future.

Is it getting too large? It certainly is too large for the relatively small number of training grant slots. With the rapid growth of genetics/genomics it might be better to have a separate program (track or degree) that emphasized molecular biology since otherwise the students may not get a deep enough training.

More slots for funding students.

Focus on the pathogenesis of disease

The Advanced Molecular Biology courses have changed very little in the last decade and may need some re-invention or move toward less of a didactic and more discussion based format?

I already mentioned most things - oral exam could be better, written cover slightly broader areas, course load high given BBSP but not sure how to fix since think the material is useful, monthly social more central to campus.

Increased emphasis in genetics.

17. Please provide any additional comments you have about the GMB degree requirements

Text Response

I think the degree requirements are too inflexible given the emergence of the BBSP program as the entry portal. Too many students are either having to take additional courses or select different thesis departments or currciula not because of student interests/expertise but because of the course requirements.

teaching assistant assignments can vary a lot with respect to workload. would be helpful to divide TA responsibilities a little more for the high work load assignments (undergrad courses)?

Hold firm on the 1st author publication rule

A comprehensive final oral exam (which covers all their courses) would improve the quality of our graduates.

Grant writing training seems to be an unmet need for GMB students.

I disagree with loosening of the requirements for taking additional Genetics course.

Highly variable capabilities regarding computing and analytic skills. Situation improving. Students need to be strongly encouraged to build these skills to improve quality of their own research and to make them more competitive in future careers. Students/mentors need to be better aware of courses outside GMB that can build these and other skills and students shouldn't be reluctant to take additional coursework beyond requirements if necessary.

There needs to be a clear transparent statement and about the publication requirements. Is it 'submitted'to or accepted?

Not enough rigorous genetics

Need to firm up what are acceptable options from other programs for GMB degree requirements. e.g. super cell? micro or pathology classes? Flexibility is needed in the BBSP model.

The student seminars are important, but would like for GMB students to have a bit more focus on presentation and writing after their BBSP year, and outside of the student seminars.

Degree requirements are too limited. More coursework should be required

I am satisfied with the degree requirements and overall flexibility provided to students in general. I am yet to assess the transition process since my first GMB students will join the lab this summer.

Paper requirement is essential.

I am new to the program

I believe the degree requirements are fair and reasonable. While students should be encouraged to achieve above the standards, I think that more strict requirements are not in order at this time.

Oral exam process has not seemed that stringent to me.

The Tuesday student seminar series is an important training mechanism for the students; more formal than a lab meeting, yet among peers. Excellent informal opportunities to practice and receive feedback on presentation skills.

Need to establish a genetics curriculum

My own research and, therefore, the training needs of my students lie a bit outside the mainstream of GMB. In that case, the standard course requirements are not always the best use of my student's time and I've been very happy that we can petition for slight alterations of the coursework requirements.

I think the requirements are fine. Getting the students to have their first committee meeting in the beginning of their second year would be great since now it often occurs just before the thesis proposal. Need tp pressure them to get thesis proposal done early in the third year and stick to that requirement (if it is one).

Combination of course and TA requirements mean students often spend much of their second year in classes and/or TAing. Not sure how to alleviate this situation.

NIH reviewers may like to see additional faculty participation and student activity in ethics training beyond the first year.

18. Please provide any additional comments you have about these aspects of the program

Text Response

The annual retreat should be moved back to campus, so that more people can participate.

What are the monthly social hours?

Retreat is a key part of community building

I agree with having required attendance for students at seminars but there have been very few in recent years that are of direct interest to me.

I believe this is an important strength of the program. Students should be interacting with other students from other labs to expose them to alternative research strategies and presentation skills. Also faciliates collaboration between students, which should help some students learn new material not covered by mentor.

We need to be more rigorous in enforcing committee meetings, although this is improving.

Some structural changes needed in committee mtgs. Outside faculty included more often, no thesis advisor in exams

Social hours are a great idea; I just can't go myself. The Retreat is a very, very, very important part of the program!

Satisfactory overall. Due to the large number of labs included in the GMB program, the annual retreat and seminar series tend to be extremely diverse. This appears to have its merits and disadvantages with regard to continued participation by students, particularly AFTER they complete their oral exams.

If it hasn't been changed already, I think we need to change the rule that says the thesis advisor is also the thesis committee chair. This presents unecessary potential conflicts of interest.

Prelim exams should come earlier; within 6 months of choosing a lab.

Seems like Annual Retreat is primarily oriented to faculty and studnets of Genetics Department and students of MCB. Not so great for non-Genetics Dept. faculty.

Retreats are fantastic. New requirements for committee meetings (feedback and goals) are very useful.

I disagree with current practice of having the PI present in the room during oral examination for advancement to candidacy for the PhD.

I am new to the program.

The retreat is becoming a significant expense for the lab - any way to bring that down a bit? The students tend to cluster in the same few courses with not a lot of other options it seems.

I think the thesis committee meetings should: a) recommend more frequently to remove marginal or failing students. b) I STRONGLY disagree with the present arrangement of allowing a student to defend without a first author paper inhand. The present policy of letting the student defend and then hold their degree unti laccceptance I feel is a grave mistake.

The retreat is important as it helps to sharpen student perspectives on their own work and potentially to forge friendships and collaborations that would not otherwise occur.

I haven't attended the tudent seminars since I have a standing conflict on Tuesday mornings. However, the concept is a terrific one and I have heard it works well. I made a comment about committee meetings above; the committee currently generally has no input into the students formal coursework (elective courses) and an earlier initial meeting would help with that.

Retreat is awesome! Most aspects of curriculum are fine. The monthly social hour would benefit from being in a more central location on campus.

I do support an increased emphasis on genetics as part of the GMB. This is starting to be addressed by changing GNET 622 and may lead to Genetics and Molecular Biology subdivisions. However, I probably do not feel as strongly about this as other since my own interests fit better under molecular biology than quantitative genetics.

19. Please provide any additional comments you have about the content and format of the written exam

Text Response

Some aspects are good, but I favor requiring that the students know some things (i.e., the entire exam shouldn't be open-book).

Have not participated.

It has devolved into 6 topics because there are 6 committee members. Better if only 2 or 3 topics are developed, or even a menu of topics.

The intent is good, in the sense that researchers need to be able to learn and synthesize unfamiliar information and then explain their understanding to others. How well it works in practice depends on successfully matching the scientific areas, which should be core to all GM&B students, and the questions, to the level of the students taking the exam. Their very varied backgrounds makes this a non-trivial task.

The exam could include more complex concepts and papers if the students took a more uniform set of required courses

I think giving them the papers ahead of time is a mixed blessing. I think they should get the paper list at most a few days ahead of time. Some of them went completely overboard "studying" by reading the papers VERY carefully and knowing every last detail. That's not really the point - they're supposed to be critically thinking about the science, and it shouldn't take that long. Efforts to refocus the exam on that would be a good thing (and one way is by not giving them weeks to pore over every last detail).

Is this a useful exercise ? I don't know the answer, I just wonder. Is it a good test/indicator of future success? It seems that the oral exam, and/or an oral exam on a topic that is NOT their thesis topic would be more useful.

They should be graded much more quickly (a few weeks at most) and students should get feedback rather than just a grade.

I think that having a relatively short time for the students to prepare for this exam is appropriate.

I am new to the program.

They are graded to softly and feel this should be a means to reinforce weakenss and deficiencies.

I have not had participated in this part of the curriculum yet, but I am more than willing to do so.

It is a challenging exam, broad in scope. In principle this is great training for how to prepare for paper presentations in journal clubs, but my impression is that students are often less rigorous in this context. Perhaps more emphasis should be given to the rationale for such an exam if it is not there already.

I haven't participated in recent years. I served on this committee once in the past

I served as the written exam chair a number of years ago. It may have changed some since then, but at that time I felt that the choice of topics was surprisingly narrow and the exam committee was surprisingly unwilling to fail students who really needed a wakeup call. During the year I was chair, we did institute some grading policies that made it easier to fail these students. I thought that was a positive change.

A short proposal may help them.

I have not seen the actual exam. I am very satisfied with the way the topics are selected and the overall strategy and timing.

It seems that the content is often extremely focused on the faculty research interest - I think this exam format is good, but for the student experience (and time commitment) a somewhat broader theme presented by the faculty would likely be more useful. (For example, I've heard (could be rumor) that some faculty assign most papers from their own lab - if true, this does not seem to fit the "spirit" of the exam).

Seems efficient

20. Please provide any additional comments you have about the content and format of the oral exam

Text Response

I think the formal presentations are not the best way to do the oral exam. I've found it extrodinarily difficult to pull students to discuss the big picture, or diverge from their presentation in any manner rather they try to find the slide they think I'm asking about. Students have plenty of time to do formal presentation, the oral exam should be just that a student, a chalkboard and lots of questions. This being said, I know this is the standard exam format in many departments and programs at UNC, but I would like GMB to spearhead a change.

biochemistry has a course hooked up with this - you're taught how to write in grant format. i think most students don't need this....but some do. they are really intimidated.... might be good to be a little more specific about the format as well.

We need to really take this seriously, and not pass on students who then will have difficulty getting a degree in a timely fashion.

A standard progression that is appropriately applied in GMB.

The oral exam often doesn't achieve it's goals; i.e. testing whether a student is ready for PhD candidacy. I think the research advisor should not be present for the exam to allow a more unbiased assessment of the student's preparedness.

We don't fail enough and thesis advisors should not be there

Have not had the opportunity to participate to date. Format appears satisfactory based on comparison with other similar programs.

I don't think the GMB students receive adequate grant writing training as a part of the GMB curriculum. This has the effect of producing poorly written dissertation proposals at a unacceptable frequency. I suggest that a grant writing class be required by GMB prior to thesis proposal. A single semester should be sufficient, and there are plenty of grant writing workbooks that could be used a templates for the course.

Some sort of enforcement of the "during the third year" rule would be welcomed.

Students can potentially pas their exams without demonstrating their ability to synthesize the literature relevant to their research and define research topics within it. This gap arises from there being a uniform written exam in which students are provided with the papers to study, and an oral exam based upon a document that may have only a superficial literature review, depending on the guidance they receive from their advisor. In my experience, this lack of emphasis on scholarship during the exams can aggravate the difficulties students ordinarily face once they progress to the stage where they actually need to write papers and thesis chapters. It is not a critical failing, but may be one worth addressing by refining the guidelines for the written dissertation that forms the basis of the oral exam.

The exam should come much earlier- within 6 months of choosing a lab. Many occur too late. Sometimes, the committee does not use the exam as a true opportunity to decide if a PhD is the right course for the student. That should probably happen more often.

Committee members need to give students feedback on their written proposals.

As mentioned in response to a previous question, I disagree with current practice of having the PI present in the room during oral examination for advancement to candidacy for the PhD. Presence of the PI disturbs the proceedings, does not allow for proper dialogue between the candidate and the committee.

I am new to the program.

The level of difficulty in the oral defense is quite variable. Some faculty don't treat it like an exam but more like a regular meeting where the science is fun to chat about.

Same comments as written exam (see above)

In comparison to exams in other graduate programs, I think that this one gets it just about right.

The exams I have been involved in have not been all that rigorous--hardly different than a regular committee meeting. This could be improved by providing the student and committee with aeas that the student should have mastered.

This exam can be too focused on having extensive preliminary results. This has improved but some mentors put the exam off too long and expect too much in terms of preliminary data.

The format is in principle fine. But, there is wide variation in proposal content and presentation style.

The timing of this exam is not well enforced. Students seem to let it slide.

I don't think there is a firm guideline as to how to write the proposal (page limits, etc; required sections, etc.). If there isn't I think there needs to be more detailed guidelines; quality and content of that seem very variable

Students who put this off too long have trouble with the format of writing a proposal for work they have already done. Would require students to complete this sooner, or have options to write on a topic distinct from their project.

Overall this is a good exam. Although theoretically the chair of the committee is not the thesis advisor, this has not been enforced until recently, and even now spottily. Thus the exam is often more of the PI than the student - it is hard to sit and not say much when your student is defending a project that is likely your idea, but we should try to separate the student from the PI a little more somehow. Also, it more often than not is more like a committee meeting - there is really little to no "testing" of most students. One good thing is that the proposal can be used for fellowships and vice versa.