

JINA Horizons Junior Workshop chat

Question: What are the goals of the Scientific Justification portion of a proposal?

- 11:23:44 From Hood, Ashley : Prove you are capable of what you propose to do.
- 11:23:51 From Justin Warren : Clearly explain what you want to accomplish with the research
- 11:24:02 From SHIVA AGARWAL : explain the research to committee and its usefulness
- 11:24:04 From anastasiou2 : Why it is important
- 11:24:09 From Hannah Brinkman : Make clear it is something exciting and new
- 11:24:09 From Umberto Battino : What you want to do deserves the funding
- 11:24:09 From Mike Pajkos : Show why my work will uniquely impact the field
- 11:24:10 From Devarshi Choudhury : That the results will benefit the scientific domain
- 11:24:10 From Fanurs Teh : Why the research is relevant to the field.
- 11:24:10 From Kapoor Kushal : Motivation
- 11:24:14 From Rob Farmer : You are the best person to be funded and that your research is the best thing they should fund
- 11:24:15 From Sanjana Curtis : Why the research is timely, important and useful for the funding agency
- 11:24:36 From Dr. Dipayan Chattopadhyay : Why it is important for the society?
- 11:25:47 From Kelsey Lund : Put work into context

Q&A about writing

- 11:29:33 From Kelsey Lund : Does that mean that a proposal should have more details, or fewer (maybe some specifics are not actually necessary)?
- 11:31:26 From Anna Frebel : yes, it needs a good amount of details but those need to be described such that a person with no background knowledge can understand it. that's what make proposal magic :)
- 11:44:55 From Benoit Cote : Could you comment on how different a conference abstract should be compared to a journal article abstract?
- 11:46:56 From Anna Frebel : @benoit consider a conference abstract that you submit to be a mini proposal. you want to highlight what the bottleneck is and then provide a solution (=the work you'll present). a journal abstract is much more boring :)
- 11:45:01 From Vanessa López-Barquero : What do you recommend for the format of the conclusions in a journal article? And also, should they be addressed to a broader audience?

Figure captions: lengthy or concise?

- 11:45:13 From Simon Guichandut : I always wonder about figure captions. Should they be extensive or refer to the text, considering most people will only glance at figures.
- 11:50:57 From Anna Frebel : @simon, I think a brief description of the figure content plus 1-2 sentences on the essence of the figure. if more needs to be said, say "see text for discussion."

How to give strong feedback in a courteous fashion

11:46:34 From Jonas Klevas : Maybe from the other side, as a referee, I had to tell authors to completely rework their article as, while I got the scientific idea behind the article, and it was fine, the wording was horrific. Neither of us were native English speakers.

How can I be as courteous as possible suggesting that writing on its own on unacceptable level?

11:49:51 From Anna Frebel : @jonas, i think highlighting that you get the idea but the manuscript isn't up to journal standards is a good way to start that conversation. if an author wants to get published they have to meet journal standards. you can then guide them from there. but it will be a lot of work. question is if it's worth your time. you can also discuss with the editor about what todo

On front-loading proposals

11:47:09 From Mike Pajkos : re: writing a proposal. Is there any value in saving big points of a long proposal for the end or should main research ideas be 'front loaded', so they're remembered by the panel?

11:51:23 From Anna Frebel : @mike, def front load stuff. proposal fatigue is real!

On proposals for experiments

11:49:06 From Hendrik Schatz : On Irin's question on proposals for experiments and how to convince the committee on the importance of the measurement: having been on experimental program advisory committees, the best way to convince the committee is by explaining how the experiment will solve a very specific clearly defined problem or controversy - for example an observational puzzle. Of course this is hard and not always possible, and proposals that do not do that also get beam time, but proposals that can do that do very well usually.

11:50:10 From Irin Sultana : Thank you Hendrik

11:50:37 From Jonas Klevas : Thank you!

11:52:08 From Michael Ross : yes!

11:52:20 From Mohammad Mardini : yes

12:05:31 From Nicole Vassh : ? for Liz: how much personalization is expected on a cover letter? is it ok to focus personalization in the research statement in order to keep the cover letter short? what is a recommended cover letter length?

12:06:26 From Ana Becerril (she/her) : We encourage everyone to continue conversations at our gather.town space during the breaks!

12:06:33 From Ana Becerril (she/her) : Also feel free to submit questions and comments on Twitter using the hashtag #JINAHorizons

12:07:18 From Anna Frebel : yes, I think the cover letter has to be the most 'personal' piece of the application

Job search panel - questions and answers are at the bottom in an easier-to-read format!

12:40:59 From Wei Jia Ong : I have a question about interviewing for staff or faculty positions- is there a separate job talk where you pitch your research program, or is it one and the same as the seminar/colloquium where you talk about your current work? Thanks!

12:42:59 From Wei Jia Ong : And (if it's ok to add on to the previous question) what level should the seminar be pitched at?

12:44:25 From Melissa Mendes (she/her) : any comforting words for someone who's freaking out thinking they're not good enough for a post-doc while watching this panel? (hello impostor syndrome!)

12:44:39 From Wei Jia Ong : Yes. Thank you Filomena!

12:44:48 From SHIVA AGARWAL : As there was a suggestion to ask questions as a candidate to know if the place you are applying is a good fit. Will asking questions during the interview put the interview committee off or offend them?

12:48:30 From Wei Jia Ong : I didn't know that we were allowed to ask questions of the hiring committee, so this is great advice. Thank you!

12:48:55 From Thanassis Psaltis : A common theme from the hiring survey responses for faculty was the amount of publications the applicant has produced. For experimental physics, it is more difficult to get many 1st/2nd author publications (probably less than 10), but easier to get Nth. What other factors are taken into account (e.g. approved experimental proposals)? Thank you!

12:50:16 From Kshitij Agarwal : How should one tailor the application while applying for a postdoc position which isn't directly related to one's PhD work but is interesting and fascinating for the applicant?

12:51:22 From Sabrina Huth (she/her) : About networking: I often find it hard to address senior people at conferences because they usually stick together. Do you have some advise for that?

12:54:49 From Irin Sultana : How do you weigh the candidate depending on if they are focused only on one area or if they have branched out a bit in their career?

12:55:12 From Brian W. O'Shea (he/him) : Sabrina - I think the important thing to appreciate is that senior people are often just as uncomfortable as you are at conferences, and we're sticking with our friends (or people we know from previous conferences). It's shyness, not elitism. So it's totally cool - and really flattering - if somebody walks up to us and says "Hi, I'd like to introduce myself" and then talks a bit about their work and asks about ours

12:55:30 From Jennifer Sanchez Rojo : Networking: now in "covid times" we have lost our opportunity to get to know senior researchers from different institutions. What kind of advice would you give us to position ourselves "out there" with less conference visibility?

12:57:12 From Sabrina Huth (she/her) : Thanks, Brian! That's a nice way of thinking about it.

12:59:17 From Edward Brown : @sabrina— for me, the reason I am usually sticking with other senior persons is simply because I am catching up with old friends. But I really enjoy meeting new people and hearing about new research, and I certainly feel like I am paying back (now very) senior people that made time for me long ago. So I'm always happy when someone approaches me and wants to chat about their work.

13:03:12 From Sabrina Huth (she/her) : Thanks a lot to everyone!

13:03:46 From Brian W. O'Shea (he/him) : @Jennifer - that's a real issue right now. One thing that you might want to consider is emailing people and inviting yourself to their group meeting to give a talk and meet people.

13:03:54 From Melissa Mendes (she/her) : Thank you all very much!

13:04:01 From Brian W. O'Shea (he/him) : also sending copies of your papers, etc.

13:04:52 From Serena Vinciguerra : I find very hard to understand where to look in the career of a person for comparisons, given the differences in years and approaches for PhDs and PDs in the international picture we are immersed in... is there any suggestions?

13:05:22 From Jennifer Sanchez Rojo : Thanks a lot!

13:05:40 From Sanjana Curtis (she/her) : Very helpful advice, thank you!

Q&A from job search panel

Q: From Wei Jia Ong : I have a question about interviewing for staff or faculty positions- is there a separate job talk where you pitch your research program, or is it one and the same as the seminar/colloquium where you talk about your current work? Thanks! And (if it's ok to add on to the previous question) what level should the seminar be pitched at?

- Brian O'Shea: This was largely addressed in the panel discussion, but this varies from place to place. The most common forms is job talk + "chalk talk", where the former is mostly what you've done and a little bit about what you want to do in the future, and the latter is more of a detailed explication of your future plans. This sometimes is a job talk + a meeting with the search committee, and the committee typically has a specific set of questions they ask of all applicants. In terms of the seminar, my advice is to remember that most of your audience is not going to be in your area of expertise, so make sure that you have a very broad introduction that gives the big picture, but also make sure to have technical details.

Q: From Melissa Mendes (she/her) : any comforting words for someone who's freaking out thinking they're not good enough for a post-doc while watching this panel? (hello impostor syndrome!)

- Brian O'Shea: I think this was discussed quite a bit in the panel. We all suffer from impostor syndrome to some degree! Search committees generally can calibrate to the appropriate level of expertise for the job (and certainly we can compare within the pool of applicants), and just remember - you're not looking for all the jobs, you're just looking for one. So you just have to be a good fit for the one job out there that's right for you!

Q: From SHIVA AGARWAL : As there was a suggestion to ask questions as a candidate to know if the place you are applying is a good fit. Will asking questions during the interview put the interview committee off or offend them?

- Brian O'Shea: not at all! We expect people to ask questions, and you'll be asked a lot of questions in turn. There are lots of web resources for this, but it's a good idea to make lists of questions for all the different types of people you're going to meet - junior and senior faculty, department chairs, the dean, students and postdocs, etc. You can

ask questions about the personality of the department, peoples' favorite and least favorite things about working at that institution (both of those are really useful to learn about!), what they're excited about in terms of their research, teaching, etc. Asking PhD students about the department often gives a very different perspective than asking faculty. It's a good idea to ask the search committee and department chair about professional development - how do they support junior faculty in order to help them be successful? (And as somebody applying for a postdoc, what does the PI do to help ensure their success? What are the programs/workshops/postdoc office that are there to help with success, and what do they actually do?)

Q: From Thanassis Psaltis : A common theme from the hiring survey responses for faculty was the amount of publications the applicant has produced. For experimental physics, it is more difficult to get many 1st/2nd author publications (probably less than 10), but easier to get Nth. What other factors are taken into account (e.g. approved experimental proposals)? Thank you!

- Brian O'Shea: from my perspective (theoretical astrophysics) I'm much more interested in quality than quantity, although there is some expectation that you can finish things (and writing papers is evidence that you can finish things... if it's not written up in some way, you're just messing around). The main point is that you have to be able to explain what YOU have done to advance science. That's easy to do if you're writing theory papers with just your advisor, but as an experimentalist if you can say "For my PhD I designed, built, and tested X instrument that is now being used for Y,Z,..." and point to the things it's contributed to, that's going to be very important. Basically, if you're Nth author on a lot of paper, is it because you're just involved in a big collaboration, or did you make a specific contribution to the success of that paper? Being able to articulate that is very helpful.

Q: From Kshitij Agarwal : How should one tailor the application while applying for a postdoc position which isn't directly related to one's PhD work but is interesting and fascinating for the applicant?

- Brian O'Shea: This is where the cover letter becomes even more important - that's where you frame your application, and it lets you articulate that you're interested in moving from your current PhD work to something else. That's actually a pretty typical thing for people to do, although it's more typical for somebody to jump from one area within a sub-field to another (i.e., one type of experimental nuclear physics to another), rather than making a big jump from, say, experimental nuclear physics to theoretical astrophysics. Doing the former (relatively small jump) is mostly a matter of being able to articulate how your current work has prepared you for success in the new field, and also conveying your interest. Doing the latter (big jump) is really tough - there's a lot of work that you do outside of your graduate coursework to learn to be an experimentalist or theorist, and jumping to something totally dissimilar means that there's that much more to learn. Still, you can probably get away with it if you can explain how that's a good idea. You can also address it in your research statement, and should do so. Finally, if you are particularly excited for a position but worried about qualifications, contact the

person doing the hiring (presumably the PI on the project) to set up a short meeting/zoom call to talk about it - that gives you the chance to pitch it face-to-face, let them get to know you, etc.

Q: From Sabrina Huth (she/her) : About networking: I often find it hard to address senior people at conferences because they usually stick together. Do you have some advise for that?

- From Brian W. O'Shea (he/him) : Sabrina - I think the important thing to appreciate is that senior people are often just as uncomfortable as you are at conferences, and we're sticking with our friends (or people we know from previous conferences). It's shyness, not elitism. So it's totally cool - and really flattering - if somebody walks up to us and says "Hi, I'd like to introduce myself" and then talks a bit about their work and asks about ours
- From Edward Brown : @sabrina— for me, the reason I am usually sticking with other senior persons is simply because I am catching up with old friends. But I really enjoy meeting new people and hearing about new research, and I certainly feel like I am paying back (now very) senior people that made time for me long ago. So I'm always happy when someone approaches me and wants to chat about their work.

Q: From Irin Sultana : How do you weigh the candidate depending on if they are focused only on one area or if they have branched out a bit in their career?

- Brian O'Shea: When hiring both postdocs and faculty members, we expect to see some discernible theme in the applicant's work. In other words, we want to know what you are an expert in! It's pretty typical for a postdoc applicant to have a paper or two from early grad school that have very little to do with their PhD dissertation and the papers that accompany that, because people often switch research groups and areas. People who are postdocs applying for faculty jobs often have more breadth - they work in a few different (but related) areas, and that's a good thing. Only doing one very narrow thing through grad school and postdoc is actually of some concern to me - is that person going to be interested in moving on to something else (and able to do so) when the problem they're working on is solved? The biggest worry for me is when an applicant (postdoc or faculty) has N papers in N different unrelated subjects - that tells me that they're not an expert in anything and that's a problem, because how are they going to be able to identify the problems in that field and then solve them? Big picture, the best way to deal with your trajectory and your publications is to be able to explain your body of work in terms of themes - what are the big questions you're trying to answer? How do the things you've done lead towards answering those big questions?

Q: From Jennifer Sanchez Rojo : Networking: now in "covid times" we have lost our opportunity to get to know senior researchers from different institutions. What kind of advice would you give us to position ourselves "out there" with less conference visibility?

- From Brian W. O'Shea (he/him) : @Jennifer - that's a real issue right now. One thing that you might want to consider is emailing people and inviting yourself to their group meeting to give a talk and meet people. also sending copies of your papers, etc.

Q: From Serena Vinciguerra : I find it very hard to understand where to look in the career of a person for comparisons, given the differences in years and approaches for PhDs and PDs in the international picture we are immersed in... is there any suggestions?

- Brian O'Shea: I don't have a great answer for this. I think that you really want to try to find a few people with similar experiences to you, but who are further in their career, and calibrate based on that.
 - Serena: Thank you!