

Understanding and Dealing with Grant Review Panel Comments

Randy R. Brutkiewicz, Ph.D.
Assistant Dean for Faculty Affairs and Professional Development

April 9 , 2009



SCHOOL OF MEDICINE

INDIANA UNIVERSITY

Randy Brutkiewicz
Assistant Dean for Faculty Affairs and
Professional Development
IUSM

**Professor, Dept. of Microbiology &
Immunology**

rbrutkie@iupui.edu

OFAPD Home Page: <http://faculty.medicine.iu.edu/default.cfm?id=1>

For Research Faculty: <http://faculty.medicine.iu.edu/body.cfm?id=158&oTopID=118>

Developing a Research Proposal

- Ask one of your colleagues if you can read their successful applications
- What strategies have they used to convey complex ideas?
 - e.g., use figures instead of text
- Find a faculty member who serves on Study Sections – ask them to read your grant and provide criticism
- Your grant should be understood by non-specialists in your field – keep it simple while still clearly communicating your ideas

Choosing a Study Section

- Look at their purview
 - what areas of research do they cover?
 - is this a good (or bad) fit for you?
- Who is on the panel—do you know them?
- Speak to the SRO (runs NIH panels)
- Do you know others who have submitted their grants to this study section?
- What have you heard? How tough are they?

Submitting an NIH grant

- Target application to a specific study section
 - this can help you (or sometimes hurt you)
- Letter to “Referral Officer” (example at end)
- You don’t always get your first choice
- Multiple institutes to potentially fund (“dual assignment”)
- Paylines can be different
- Additional preliminary data before the review—
check with the SRO about ability, timeline to do this (usually you can)

Study section comments

- “Summary Statement”
- What are these comments all about?
- What do they mean?
- How do you respond to them?
- What does this do to your revised application?
 - how is it changed?
- Do I need to respond to them?

Layout of NIH Study Sections (aka “Scientific Review Groups”)

- SRO
- Chairperson
- Primary Reviewer
- Secondary Reviewer
- Tertiary Reviewer
- Program Officer

SRO: Scientific Review Officer

- The “government representative” on the panel
- Reviews the applications referred to the study section by the referral officer to ensure they fit within the purview of the study section
- Chooses reviewers who have the appropriate expertise to review the applications assigned to them

SRO: Scientific Review Officer (con't)

- Selection criteria of reviewers/panel members include:
 - Scientific excellence (funding and pubs)
 - Respect in scientific community
 - Breadth of expertise
 - Fairness in reviewing
 - Diversity in panel (i.e., ethnicity, gender and geographic diversity)
- Writes Summary Statement

Summary Statement

- Gives summary of the reviews (and hopefully, of the discussion)
- Contains all of the reviewers' comments on the application (i.e., good, bad and ugly)
- Often provides suggestions for applications either unscored or those that scored above the payline (i.e., not funded)
- What you will need to refer to in order to submit an amended application
- Read and speak to your Program Officer about it

Chairperson

- Runs the review meeting
- Asks for preliminary scores from reviewers assigned to application being discussed
- Keeps discussion on track
- Ensures each application is discussed in sufficient detail to warrant the score given
- Steps in to prevent discussion going into the wrong direction (e.g., comparing previous applications discussed for which other reviewers had conflicts)
- Summarizes the discussion before vote

Primary Reviewer

- Main discussant of application (at least at first)
- Summarizes grant
- Provides his or her review
- Points out strengths and weaknesses

Secondary Reviewer

- Second discussant of application
- Provides his or her review
- Points out strengths and weaknesses
- Comments should be those that either differ from (or that are in addition to) those from the primary reviewer

Tertiary Reviewer

- The “Reader”
- Usually just offers comments that are different from (or in addition to) the other two reviews
- Comments can be very important for the ultimate score given to an application
- This can be good or bad
 - e.g., can support one or both reviewers, or have his/her own view

Program Officer

- Institute staff member who oversees a scientific program and the progress of grants in his or her portfolio
- Works closely with grants management specialists to administer and resolve issues with an institute's grants
- Speak with them before you respond to a particular RFA or RA for suitability
- Ask them about potential enthusiasm for your grant ideas—before writing the application
- Whom you deal with once you receive your Summary Statement on an unfunded application

Positive Comments...

- We all love these...
- Sometimes you simply do not receive particularly negative comments
 - it makes it difficult to rebut these if your application does not obtain a fundable score
- Getting your application scored
- “Two strikes and your out”

“Negative” Comments

- It is very easy to become angry
 - Did they even read the grant?
 - Are they stupid?
 - Does someone have a vendetta against me?
- How are the comments targeted?
 - the overall question?
 - the experimental approach?
 - the preliminary data?
 - your experience in the field?
 - your publication record?
- “Petty” comments

Dealing with negative comments

- Cool off...
- Don't try to respond/call your Program Officer right away; put the review away for a few days
- Read the reviews slowly and carefully
- List the comments (positive and negative)
- See what they want you to do in a revised application—and do it
- Start writing a point-by-point response for your amended application

What are some common study section “negative” comments?

- “Overambitious”
- “Descriptive”
- “Limited in scope”
- “Lacks innovation”
- “Limited expertise in this field”
- “Did not follow the funding agency’s application directions”

“Overambitious”

- Trying to accomplish EVERYTHING
- Too much is proposed for the timeframe of the grant application
- Too much is proposed considering the budget
- Unrealistic expectations
- You need to have an idea as to how reasonable your experiments are
--mentoring

“Descriptive”

- Not hypothesis-driven
- Simply what you will do; not why you will do it
- Cataloguing
- Not relating this to the “big picture”
- It is important to remind the reviewers what hypothesis you are testing and what those answers will tell you

“Limited in scope”

- The breadth of the research question is not particularly broad
- Advances made will be a minor increment over current knowledge
- Is there an understanding of the “big picture”?
- The hypothesis addresses a minimal question
- Won't get so much “bang for the buck”

“Lacks innovation”

- Experiments proposed are not all that new
 - very common experiments for fundamentally limited questions
- Unclear how this project will take our knowledge base to the next level

“Limited expertise in the field”

- Yes, this is a direct “slam” on your experience
- But, it might very well be true...
- Need peer-reviewed publications in the area
- Unpublished preliminary data not sufficient
- What you lack in experience/expertise can be made up for by collaborators
 - letters of support (example at end)

Letters from Collaborators/Co-investigators

These should state:

1. their experience / expertise that they will bring to your study
2. their commitment to helping you throughout the funding period, and enthusiasm for the proposed research
 - Often you will have to draft this letter for them
 - Ask to see an example of a letter of collaboration if you have not generated one before

*These are **very important** and read by reviewers, and often commented upon in study section discussions*

“Did not follow agency’s application instructions”

- No excuse for this
- Know very well what they want
- You may be sending the same proposal to different granting agencies
- If you do not follow the instructions for ALL of the agencies, those applications that look like they are for others will make you appear to be careless
- “Are they careless at the bench, too?”

Responding to criticisms

- Be specific
 - point-by-point
- Be clear
- Be respectful of the reviewers comments
 - whether you agree or not
 - they spend a lot of time reviewing grants; they don't need an applicant to be unappreciative
- Rebut if you have the data
- Give them what they want

Read between the lines...

- You need to do just a few experiments to strengthen the application
- Define the hypotheses to be tested
- There is substantial revision necessary
- Rework it into a new grant
- Do not submit the application again
 - if you do, you are wasting your time better spent on another grant with a more reasonable chance for funding

Additional questions?

**Please fill out the evaluations
and hand in as you leave**

Thank you for attending...

Randy Brutkiewicz
Assistant Dean for Faculty Affairs and
Professional Development
IUSM

**Professor, Dept. of Microbiology &
Immunology**

rbrutkie@iupui.edu

OFAPD Home Page: <http://faculty.medicine.iu.edu/default.cfm?id=1>

For Research Faculty: <http://faculty.medicine.iu.edu/body.cfm?id=158&oTopID=118>

Example of Letter to Referral Officer

January 19, 1999

Referral Officer
Center for Scientific Review
National Institutes of Health
Suite 1040
6701 Rockledge Dr. MSC 7710
Bethesda, MD 20892-7710

Dear Referral Officer:

I am a New Investigator and have enclosed my PHS 398 application entitled, "CD1 Molecules and NK T Cells in Host Defense", that is being submitted for the February 1, 1999 deadline. As this proposal concerns the presentation of antigens by CD1 molecules to T cells, I believe that the most appropriate study section for review would be **Immunobiology**. Therefore, please consider my request to send my application to that study section. Thank you.

Sincerely,

Randy R. Brutkiewicz, Ph.D.
Assistant Professor
Department of Microbiology and Immunology
Indiana University School of Medicine

Example of Collaborator Letter

INDIANA UNIVERSITY



October 5, 2005

Anne M. VanBuskirk, Ph.D.
Assistant Professor
Department of Surgery
Division of Surgical Oncology
Ohio State University
1017 Wiseman Hall
400 West 12th Avenue
Columbus, OH 43210

SCHOOL OF MEDICINE

Dear Anne,

I am very happy to write this letter confirming our continuing collaboration regarding your studies on the CD4⁺ T cells infiltrating the skin of UVB-exposed mice and their potential to link the innate and adaptive immune systems. Your preliminary data are certainly very consistent with these cells being invariant NKT cells. As you know, we have been studying NKT cell recognition of glycolipid antigens presented by murine CD1d molecules in both tumor and viral model systems for the past several years (*Science* 268:863-869, 1995; *J. Exp. Med.* 182:1913-1919, 1995; *Science* 279:1541-1544, 1998; *J. Virol.* 75:10746-10754, 2001; *Proc. Natl. Acad. Sci. U.S.A.* 99:8197-8202, 2002; *Proc. Natl. Acad. Sci. U.S.A.* 100:1849-1854, 2003; *J. Immunol.* 172:3454-3461, 2004). I believe that your mouse model will be very important in understanding mechanisms by which some transplant recipients develop skin cancer, and the identification of targets for the treatment or prevention of disease in these patients. We will be happy to assist you in the molecular identification of NKT cells infiltrating the skin, as well as in measuring their ability to produce cytokines (IL-13 in particular). As you know, we also have identified NKT cells by flow cytometry using murine CD1d1 dimers loaded with α -glucuronosylceramide (*Eur. J. Immunol.* 35:1692-1701, 2005), and can help you with these analyses as well. We will also continue to provide you with I α 18- (invariant NKT cell)-deficient mice for your studies.

I am very much looking forward to a highly fruitful collaboration in these very exciting studies on the role of CD4⁺ NKT cells in UVB-exposed skin, as they relate to post-transplant skin cancer development. It is clear that your proposed experiments will be a great help in increasing our overall understanding of the role of NKT cells, and CD4⁺ T cells in particular, in regulating immune responses.

Best of luck on your grant!!

WANTHER ONCOLOGY CENTER

R2 302
950 West Walnut Street
Indianapolis, Indiana
46202-5181

317-274-7501
317-274-7502
Fax: 317-274-7592

With best regards,

Randy R. Brutkiewicz, Ph.D.
Associate Professor
Department of Microbiology and Immunology
Indiana University School of Medicine