Considerations for the Research Training Plan

MSTP Grant Basics
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Sections of the F30 that are critical in evaluating plans for your training

Our recommendations

Tips from an MSTP mentor
Relevant sections of the F30 *

- There is some variation in emphasis by:
  - Study section (study section culture)
  - Individual reviewer
- However, it’s safe to say that:
  - The *proposed research* is important
  - The *training potential* is important
  - It is *not* a good idea to leave sections relevant to the training plan to the last minute
- Key sections for judging training potential
  - Applicant’s Background and Goals
  - Sponsor/Co-Sponsor statements
  - Biosketch – especially personal statement!

...based on previous panel discussions

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Section Requirements for Applicant, Sponsor & Co-Sponsor

From Iowa-F30 Handbook copy (by Ashley and available on Dropbox)
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NIH Instructions, for Applicant

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Handbook, for Applicant

![Diagram of the Handbook, for Applicant]

SERCC Template

![Diagram of the SERCC Template]

From medicine.uiowa.edu/sercc/resources/writing-grants
NIH Instructions, for Sponsor & Co-Sponsor

1. Sponsor and Co-Sponsor Statements
   a. Purpose of the “Sponsor and Co-Sponsor” Statements
   b. The purpose of the “Sponsor and Co-Sponsor” Statements is to verify the sponsor and co-sponsor's qualification to conduct the research project. The statements also provide information on the research project's significance and its potential impact on public health.

2. Number of Fellowship/Trials to be Supplied During the Fellowship
   a. The purpose of the “Number of Fellowship/Trials to be Supplied During the Fellowship” section is to ensure that the sponsor and co-sponsor have the necessary resources to conduct the research project.

3. Applicant's Qualifications and Potential for a Research Career
   a. The purpose of the “Applicant's Qualifications and Potential for a Research Career” section is to verify the applicant's qualifications and potential for a research career.

Handbook, for Sponsor & Co-Sponsor

From Iowa-F30 Handbook copy (by Ashley and available on Dropbox)
Page limits:

Scored Review Criteria for Fellowship Applications:

- Fellowship Applicant
- Sponsors, Collaborators, and Consultants
- Research Training Plan
- Training Potential
- Institutional Environment & Commitment to Training

=> Add up to OVERALL IMPACT SCORE

Applicant and sponsor sections are relevant to evaluation of:
- Applicant
- Training portion of Research Training Plan
- Training potential
Scored Review Criteria for Fellowship Applications:

- **Fellowship Applicant**
  - Are the applicant’s … of high quality?
    - academic record
    - research experience
  - Are the applicant’s interests consistent with a career as a:
    - physician-scientist?
    - other clinician-scientist?
  - Does the applicant have the potential to develop into an independent, productive contributor to biomedical, behavioral or clinical science as a:
    - physician-scientist?
    - other clinician-scientist?
  - Does the applicant demonstrate commitment to a career as a:
    - physician-scientist?
    - other clinician-scientist?

Scored Review Criteria for Fellowship Applications:

- **Research Training Plan**
  - Is the proposed research plan of high scientific quality, and
    - well integrated with the proposed research training plan?
  - Based on the sponsor’s description of his/her active research program, is the applicant’s proposed research project
    - sufficiently distinct from the sponsor’s funded research for the applicant’s career stage?
  - Is the proposed time frame
    - feasible to accomplish the proposed research and clinical training?
  - Is the research project consistent with the
    - applicant’s stage of research development?
  - Is the training plan
    - well-reasoned?
    - likely to provide an effective, integrated research and clinical training experience?
    - ease the transitions between the phases of the dual-degree program?
  - If proposed, will the clinical trial experience contribute to the
    - proposed project?
    - applicant’s research training?
Scored Review Criteria for Fellowship Applications:

- **Training Potential**
  - Are the proposed research project and research and clinical training plan likely to provide the applicant with
    - an integrated perspective?
    - appropriate skills for a physician-scientist or other clinician-scientist?
  - **Does the training plan**
    - take advantage of the applicant’s strength?
    - address gaps in needed skills?
    - document a clear need for, and value of, the proposed training?
  - **Does the proposed training have the potential to serve as a**
    - sound foundation that will clearly enhance the applicant’s ability to develop into a productive researcher?
  - If applicable to the dual-degree program, are appropriate opportunities for … available to applicant?
    - electives?
    - early and longitudinal clinical experiences?
    - other enhanced clinical training?
  - Are appropriate opportunities available to
    - ease the transition to clinical clerkships?
    - for research electives during clinical training?

Handbook: what works and what does not

From Iowa-F30 Handbook copy (by Ashley and available on Dropbox)
Handbook: what works and what does not

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Topics

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Tips from an MSTP mentor

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Our Recommendations...

What general things do you need to know about writing these critical sections of your grant?

• You and mentor need to identify:
  — where you are now
  — where you need to be when you have completed your fellowship

• This section should must be individualized to meet your needs.
  — Suppose you need to be able to use a certain methodology but only got a C in the relevant course.
    • What do you propose to do to attain the necessary competence level?
    • When in your training do you need to have completed this?
  — Do you have other weaknesses?
    • How will you and your sponsor address them?

And be consistent in describing...

Recommendations...

An individualized training plan allows reviewers to assess whether you will be able to meet your stated goals, so:

• Honestly identify potential problems
• Give potential solutions
• Set a standard of performance
• Devise a means to assess performance
• Describe a process for monitoring performance (e.g. benchmarks)
Recommendations…

Address logistics:
• How often will you meet with your sponsor?
• How often will you meet individually with your sponsor?
• What will you and your sponsor plan to do at these meetings?
• How will the sponsor offer you direction?
  — It is up to the sponsor to make sure you will have sufficient consultation time to obtain necessary direction.
  — Your sponsor should detail logistics of how s/he will do that.

Topics

Sections of the F30 that are critical in evaluating plans for your training

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Tips from an MSTP mentor…

Key goals of your training that should be apparent in Training Plan:

1. Develop the ability to formulate a testable hypothesis
2. Develop the ability to design appropriate experiments
3. Develop skills in critical thinking (interpreting data)
4. Develop strong skills in conceptualization (literature ➔ experiments)
5. Develop writing skills
6. Develop presentation skills (ability to answer questions on feet)
7. Develop networks (team science)
8. Develop technical skills (find your strengths and build on them)
9. Model established scientist physicians and/or clinical scientists

Donna Hammond

Key goals of your training

- Develop the ability to formulate a testable hypothesis
  — Know where ideas in proposal came from
  — Give regular presentations to peers
  — List proposal writing as part of training

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Key goals of your training

- Develop skills in critical thinking (interpreting data)
  and
- Develop strong skills in conceptualization (going from literature to experiments)
  - Participate in journal clubs and/or discussion with mentor
  - Learn to judge strengths and weaknesses of a paper
  - Learn to judge why a paper was published in a particular journal
  - Learn to judge what was added because of reviewer request

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Key goals of your training

- Model established scientist physicians and/or clinical scientists, i.e., if your mentor has no clinical background:
  - Include one or more on your thesis committee
  - Establish a rapport with one in the “lab next door”
  - Meet with ones who are guest speakers

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Double check that training plan touches on:
- Quality of applicant
- Training plan
- The science

Other tips:
- Send SA page in ahead of time to program officer — *Would they consider the F30?*
- Within the grant, after each set of experiments — *State how they will fulfill the training goals*

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