The Individual Development Plan

Applicant Background & Goals

Letters of Recommendation

March 22, 2021
IDP leads to Applicant Background & Goals

For all Fellowship (F) Applications

<table>
<thead>
<tr>
<th>Section of Application</th>
<th>Page Limits * (if different from FOA, FOA supersedes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Summary/Abstract</td>
<td>30 lines of text</td>
</tr>
<tr>
<td>Project Narrative</td>
<td>Three sentences</td>
</tr>
<tr>
<td>Introduction to Resubmission or Revision Application (when applicable)</td>
<td>1</td>
</tr>
<tr>
<td>Applicant’s Background and Goals for Fellowship Training</td>
<td>6</td>
</tr>
<tr>
<td>Specific Aims</td>
<td>1</td>
</tr>
<tr>
<td>Research Strategy</td>
<td>6</td>
</tr>
<tr>
<td>Respective Contributions</td>
<td>1</td>
</tr>
<tr>
<td>Selection of Sponsor and Institution</td>
<td>1</td>
</tr>
<tr>
<td>Training in the Responsible Conduct of Research</td>
<td>1</td>
</tr>
<tr>
<td>Sponsor and Co-Sponsor Statements</td>
<td>6</td>
</tr>
<tr>
<td>Letters of Support from Collaborators, Contributors, and Consultants</td>
<td>6</td>
</tr>
<tr>
<td>Description of Institutional Environment and Commitment to Training</td>
<td>2</td>
</tr>
<tr>
<td>Note: This page limit includes the Additional Educational Information required for F30 and F31 applications.</td>
<td></td>
</tr>
<tr>
<td>Applications for Concurrent Support (when applicable)</td>
<td>1</td>
</tr>
<tr>
<td>Biographical Sketch</td>
<td>5</td>
</tr>
</tbody>
</table>
Applicant Background and Goals (6 pages)
mention the IDP

Three sections:
• Doctoral Dissertation and Research Experience
  (similar but longer than NIH biosketch)
• Training Goals and Objectives
  (organize around NPA competencies)
• Activities Planned Under this Award
  (including timetable for each year)

Shares similarities with sponsor’s training plan
Organize around Research Competencies

- **Discipline-specific conceptual knowledge and critical thinking**
  
  *Ex. coursework, qualifier exam, journal club, clinical experience*

- **Research skill development including computational skills and data management**
  
  *Ex. Core facility workshops, lab experience, biostatistics*

- **Communication skills, oral, written and lay public**
  
  *Ex. career courses, journal club, meetings*

- **Professionalism, respect, reflect values of workplace and profession**
  
  *Ex. Outreach, service, promote discipline, journal club, authorship*

- **Leadership, management and team science skills, including collaboration**
  
  *Ex. Collaborations, overseeing students*

- **Ethics and responsible conduct of research**
  
  *Ex. Coursework, lab interactions, IACUC, IRB, manage conflict of interest*
What strengths and weaknesses do you have right now? 
What do you need to learn to do the research? 
What do you need to learn for your career goals? 
Who will teach you those things, and how? 
What is your timeline for your research career development?
What are your professional goals?

How are your activities related to your goals?

Do you need more information to achieve your goals?
The work in graduate school is not intrinsically difficult. You are smart enough to do this.

What IS difficult is often the lack of structure, supervision, and help, both emotional and practical.

There may not be much direct guidance, and most of the structure (and timing) is up to you.

Some trainees flounder, waiting in vain for someone to tell them what to do.

You need to take charge. You need a plan.
Model IDP developed by Federation of American Societies for Exp. Biology
An Individual Development Plan: My IDP

1. Self-assessment
   Consider your skills, values, and interests.

2. Career exploration
   Learn about career options for PhD-level scientists, and compare your skills, interests, and values to each option.

3. Set goals
   Make a concrete plan for how you will improve your skills, build your network, and get the experience you need to prepare for your future career.

From My IDP
Solid career decisions depend on understanding you—the skills you possess, what interests excite you, and what values add meaning to your life.

• GW Center for Career Services
  https://careerservices.gwu.edu/career-exploration-assessment offers self assessment tools and services

• Myers Briggs Type Indicator (MBTI) will help you to understand your preferences
• Excellent way to look at career/professional development
• Skills employers and/or educational institutions seek

Use NPA competencies to organize training

National Postdoc Association Core Competency Checklist
## NPA Research Competencies

<table>
<thead>
<tr>
<th>Research Competency Skill Assessment</th>
<th>Completed Workshop or Training</th>
<th>Watched Another Perform</th>
<th>Performed with Supervision</th>
<th>Performed Independently</th>
<th>Taught the Skill</th>
<th>Published with Skill</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Discipline-Specific Conceptual Knowledge</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Defining scientific questions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Design testable hypothesis</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Broad knowledge acquisition</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Critical interpretation and analysis of data</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Research Skill Development</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Literature Search Strategy and Interpretation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experimental Design</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Statistical Analysis</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Identifying Sources of Error and Bias</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Data Analysis and Interpretation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Laboratory Techniques and Safety</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Principles of Peer Review Process</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Communication Skills</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Writing (Abstract/Paper/Grant)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oral (Journal Club/ Oral Talk)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teaching Others</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public Outreach</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 Professionalism</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Workplace</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cultural Diversity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skills as Mentor and Mentee</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Team Work/ Collaboration</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 Leadership and Management Skills</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
2. Career Exploration

- Professional Development & Career Resources
  - FASEB’s professional development and career resources are designed to facilitate employment connections in the life sciences community. These resources embody new concepts, technologies, and services aimed at giving you access and mobility within your desired career field. Our main focus is to help develop your career in the life sciences, whether an undergraduate, postgraduate, postdoctoral, seasoned scientist, or an employer seeking to hire top-notch scientists and professionals, the resources and tools found here are designed to help.

  - Career Centers
    - Career Centers are an on-site meeting-related career center that provides job-seekers and employers with an informal environment to meet, exchange electronic messages, and schedule/conduct interviews. Job-seekers and employers also have the opportunity to post resumes or recent job opportunities.

  - Society Resources for Trainees
    - FASEB member societies offer a wealth of professional development opportunities to their trainee members. From travel awards, to networking at annual meetings, to leadership experience on committees, learn about the many benefits your society provides via this interactive spreadsheet.

  - Life Sciences Job Center
    - Reference this online resource to post and view job-seeker profiles and employment opportunities within the life sciences.

- Explore current openings at Novartis based on your skills & interest. Notice to all applicants for US job openings (PDF 66 KB).

- USAJOBS
  - An official website of the United States government

- AAAS
  - Shaping a career in science need not be a solitary challenge. Helping scientists and engineers forge successful career paths is one way that AAAS "advances science and serves society."
What activities/experience make you a good candidate?

What do you need to strengthen? How?
How will you use your IDP?

Discuss with career advisors/counselors/mentors/coaches
print out self assessment summaries, career path matches

Ask research advisors to get involved
includes research goal-setting

Clarify expectations
Improve communications

Form peer mentoring groups

Connect with alumni, professional society resources
After completing the initial parts of the IDP,
You likely have some goals in mind, or gaps to be filled
You need a plan and a roadmap—Goals & Tasks
Break long-term goals
• into several short-term goals
• assign a deadline
• come up with related tasks
Ask yourself: Are they SMART goals?
**SMART Goals**

- **Specific**: Do I know what has to happen?
- **Measurable**: Will I know if I’ve completed the task?
- **Achievable**: Is it realistic or do-able?
- **Result-oriented**: Will it move me toward my goal?
- **Time-limited**: Does it have a due date?
It is expected that the mentored research training experience will provide:

• A strong foundation in research design, methods, and analytic techniques appropriate to the proposed dissertation research;
• The enhancement of the applicant's ability to conceptualize and think through research problems with increasing independence;
• Experience conducting research using appropriate, state-of-the-art methods, as well as presenting and publishing the research findings as first author;
• The opportunity to interact with members of the scientific community at appropriate scientific meetings and workshops;
• Skills needed to transition to the next stage of the applicant's research career;
• The opportunity to enhance the applicant's understanding of the health-related sciences and relationship of the proposed research to health and disease.
3 sections:
Doctoral Dissertation and Research Experience
Training Goals and Objectives
Activities Planned Under this Award

• Interest in research, research career & how this application will assist in your goals
• IDP and goal setting
• Address any personal factors that affected advancement
• NRSAs are not designed to make better teachers
• Include a training timeline
• Sponsor also describes a training plan in detail; “training goals” and “activities” should be similar.
Tips for Training Plan

- individual development plan, plan to address gaps
- Candidacy date, any remaining coursework in PhD program
- Specific skills needed for your career
  - short course or workshop (CSHL, MBL)
  - advanced statistics, imaging, clinical populations
- New research skills, perhaps with a collaborator or core
- Skill-building in manuscript and grant-writing, speaking
- Presentations at national meetings, name target societies
- Goals for publications, name target journals
- Describe lab meetings, research in progress explicitly--meeting content and frequency
- Name thesis committee members and why
Selecting a Referee
• At least three, but no more than five, reference letters are required.
• The letters should be from individuals not directly involved in the application, but who are familiar with the applicant’s qualifications, training, and interests.
• The sponsor/co-sponsor(s) of the application cannot be counted toward the three. Make sure you include a list of referees (including name, departmental affiliation, and institution) in the cover letter of the application so that the NIH staff will be aware of planned reference letter submissions.

Who will you ask? What do they need to know?
Approach referees early

Who might be your referee?
Previous research advisors (UG honors, IRTA or postbac, employ)
Course directors or qualifier committee members

Provide:
Up to date curriculum vitae
Your specific aims page
Draft letter/ bullets to emphasize
• Referees must submit reference letters through the eRA Commons by the application due date. Referees DO NOT need to login to eRA Commons to submit their letters.
• Referees will need to provide the following information with their reference letter:
  • PI’s (fellow/candidate’s) eRA Commons user name
  • PI’s first and last name as in eRA Commons account
  • FOA Number to which you are applying
• Upon submission of the reference letters, the eRA Commons will send confirmation e-mails to both the referee and the fellow/candidate.