Goal Setting and Time Management For Postdocs

Sandra L. Schmid
slschmid@scripps.edu

Sandra K. Masur
sandra.masur@mssm.edu

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MSSM Postdoctoral Program

Postdoctoral Training is a pivotal stage in your career

- This is the first step of your career as an independent scientist
- It’s a transitional position, not a job
- You are responsible for your success
- Work with your advisor to attain both your research and career goals

Successful Postdoctoral Training

Worth reading:

Schmid’s Cliff Notes #1:

1. Figure out where you want to go (Prioritize, Focus)
2. Plan the best way of getting there (Plan and Organize)
3. Mind your own business (Focus, Stay on track)
4.-6. Get others to help (Engage others)
7. Keep refueling, (Priorities shift)
Where are you going? and How will you get there?

- Define your objectives:
  - short-term (days/weeks) daily experimental plan
  - intermediate term (months) a paper
  - long-term (years) be hirable/get a job

- What career track is best suited to your goals?
  - Do you want to teach?
  - Do you want to work in teams?
  - Are you interested in applied (translational) research?
  - Are you passionate about pursuing a specific research objective?

- Set a path, place steps along the way
  - Don’t get side-tracked

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**Successful Postdoctoral Training**

Four things you must accomplish:

1) Decide what area of science you want to pursue
2) Finish at least one significant project
3) Establish your identity in the research community
4) Learn how to communicate your science (written and verbal)

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**Successful Postdoctoral Training**

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Get ahead of the curve (#1)
Follow your heart (#2)
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- Find what excites you
- "Meld your own interests with an area that has a lot of growth potential."
- BECOME AN EXPERT

"A postdoc offers the chance to form a unique collaborative relationship"
**Successful Postdoctoral Training**

- Become an expert in your field
  - Read
  - Go to seminars
  - Talk to others

- Look for the WHITE spaces
  (open questions, new approaches)

- Know how your area/expertise fits with others
  - Remember the big picture (#3)
    - Go to seminars !!!
    - Set up a journal club

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**You want independence?**

Demonstrate grantsmanship (#6)

Write a proposal, and get it funded; even if your advisor can pay you!!

**PLAN, PRIORITIZE, SET A CLEAR PATH**

http://www.grantsnet.org

extensive, searchable grant database

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**Successful Postdoctoral Training**

2) Finish at least one significant project

‘Finished’ means published!!

“As important as a pedigree is a track record (Attribute #4). A strong list of publications says ‘This person is a closer’!”

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**How many papers is enough?**

2A) Play the numbers game:

Plan your research as a series of focused, complete projects.

Ask important, but well-defined questions

**“Pubs”**

- What is the single important question you’re addressing?
- How does it fit in the context of the field?
- What data is needed to tell a compelling (but short) story?
- “Home-run” are great, but think strategically and take the “base hits”
- Collaborate with and contribute to other projects

(make yourself useful)
Publon

"the elementary quantum of scientific research which justifies publication...

It has long been known that publons are mutually repulsive. The chances of finding more than one publon in a paper are negligible*


How many papers is enough?

2A) Play the numbers game:
   Plan your research as a series of focused, complete projects.
   Ask important, but well-defined questions
   "Publons"
   • What is the single important question you're addressing?
   • How does it fit in the context of the field?
   • What data is needed to tell a compelling (but short) story?
   • "Home-runs" are great, but think strategically and take the "base hits"
   • Collaborate with and contribute to other projects (make yourself useful)
2B) Successfully tackle a very difficult, very important and/or very novel problem
2C) Both: inside every big problem are several smaller problems

The Big Experiment:
Think and Plan Ahead

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Successful Postdoctoral Training
3) Establish your identity in the research community
   • You will need 3-4 letters of recommendation for an academic job
   • Talk to other faculty members about their research and yours (Attributes 3,5,7)
   • Go to seminars and ask questions
   • Present your work, whenever possible
   • Learn what others around you are doing and be helpful (Attribute #8 - Be a team player)

Top 10 Reasons To Attend Seminars
1. To get your mind off your own problems
2. To efficiently and effortlessly expand your knowledge: you get an overview and 3-5 papers worth in 1 hour
3. To see examples of good (and bad) talks: learn from others' mistakes
4. To see and be seen by your colleagues: rec letters!
5. To learn to organize your lab time around other commitments: get used to it!
6. To ask questions: sharpen and display your ability to assimilate new data
7. To learn to engage in meaningful scientific discourse: listen and participate in the discussion
8. To learn the unexpected that could help your research: a new method or approach, a relevant paradigm
9. To meet leading scientists: they'll be hiring!
10. To be a scholar: it's not a bad idea to know a little about a lot
Successful Postdoctoral Training

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Write manuscripts and get funding

Thinking ahead.....

Transitional — funding....cont.

Leukemia and Lymphoma Society - Career Development Award
minimum 1 year postdoc, $36K salary, $4K overhead x 3 yrs
DoD - Era of Hope Postdoctoral Awards Breast Cancer
announced each year, watch for them
Burroughs-Wellcome Fund: Infectious Diseases, Medical Scientists,
Interfaces in Science
(up to 2 years postdoc, 3 years faculty support)

http://www.grantsnet.org
extensive, searchable grant database

Successful Postdoctoral Training

NEXT STEP: TO GET A JOB

To get an interview, you will need:

A compelling cover letter, tuned to the job
A strong CV/resume:
- solid accomplishments at each stage of your career
- Evidence of competitiveness (awards, fellowships)
- Evidence of ambition, self-determination
A statement of research interests: past, present and future (2-3 pages):
- make it linear, self-deterministic
- emphasize significance of your work in the Big Picture
- briefly describe future plans, i.e. an NIH grant summary
A little help from your mentors:
- ask them to make a phone call
- help them by giving them names and phone numbers
- have them read and critique your research statement
To get a job, you will need:

A well-prepared and interesting seminar:
- tell a story
- be authoritative
- make the future directions clear

The ability to interview well and think on your feet

A well thought out plan of research
an NIH grant’s worth of Specific Aims, back-up plans, big picture future directions

To be a good fit:
research and know your prospective colleagues and the institute

Aim to accomplish these four tasks:
1) Decide what area of science you want to pursue
2) Finish at least one significant project
3) Establish your identity in the research community
4) Learn how to communicate your science
within 3 years!!
A Simple Time Management Matrix
(Covey’s Quadrants)

<table>
<thead>
<tr>
<th>Not Important</th>
<th>Important</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not Urgent</td>
<td></td>
</tr>
<tr>
<td>Most email</td>
<td>On-going expts</td>
</tr>
<tr>
<td>Lab trivia</td>
<td>Goal acquisition</td>
</tr>
<tr>
<td>Computer games</td>
<td>Next month’s grant deadline</td>
</tr>
<tr>
<td>Internet browsing</td>
<td>Career objectives</td>
</tr>
</tbody>
</table>

Urgent

- “You’ve got mail” alert
- Ringing telephone
- Inquiring colleague

- A lab fire
- Tomorrow’s grant deadline

Stay in “Important, but not urgent” Space

- Plan ahead, know your deadlines
- Complete the tasks in logical order. Set this order by planning ahead
- Break large tasks down into smaller tasks, make a “To-Do” list
- Set aside blocks of time for specific tasks, match the time with the task
- Plan and organize your day around the tasks at hand

Productivity \( \propto \) time \( \cdot \) efficiency

Time Management = Planning and Organization

Think “tangram”

Think “tangram”

- Chinese: 七巧板; pinyin: qī qiǎo bǎo; literally “seven boards of skill”
- a dissection puzzle consisting of seven flat shapes, called tans,
- put together to form shapes.
- Objective: form a specific shape using all seven pieces, which may not overlap.

Time Management

Time wasters and savers

- Get your email under control
- Turn off the “You’ve got mail” alert
- Correspond with friends from home
- Don’t browse the Internet, use it efficiently and purposefully
- Organize your work place
- Create a quiet place (or time) to work
- Go the library (or come in early)
- Plan your day
- Make a to-do list, set priorities

Tangram Method of Time Management

Subdivide daily goals into well-defined tasks to keep moving forward

Organize & partition your day
• Stay focused
• Use your time effectively
• Plan and think ahead
• Know your peak hours for benchwork, reading, writing, thinking
• Block out your day according to those peaks
• Let your priorities control the consumption of your time

Get organized…

…so you can spend more time at home!

Time Management

Schmid’s Cliff Notes #1:
1. Figure out where you want to go
2. Plan the best way of getting there
3. Mind your own business
4.-6. Get others to help
7. Keep refueling, upgrade your vehicle, increase your power, go more places

Schmid’s Cliff Notes #2:
Get others to help
1. Set out clear goals and make your expectations known. Make these Goals simple ones at first. Listen to ensure that these are understood.
2. Reward achievements and give praise soon after its earned
3. Reprimand and reinstruct: Give constructive feedback soon after its warranted

Do this often and well at the beginning of a working relationship - you won’t have to do it as often later on

Engaging others…
In practical terms

In the lab:
- Train your tech, or student, to be organized
- Run a lab journal club
- Look for opportunities to collaborate/synergize
- Seek advice early when things don’t work

At home:
- Share the work-load with your spouse/partner
- Empower your children to take on responsibility
- Tell your children about your job
- Keep things simple

Balance:

Not every day
Maybe not every week
It’s an overall sense

“A balanced life”

Shifting priorities
Engaging Partners
Long-term Planning
It's really a juggling act
to achieve a balanced life