Lessons for new P.I.s:
Time Management,
Grantsmanship, and
Leading Your Group

Credits/Sources: Kathy Barker, David Guzick, Susan Johnson, Pamela Raymond, Gary Gallick, Dan Lebovic

U of M RSP
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Academic management skills

- Time management
- Grantsmanship and choosing a research problem
- Group management (hiring, establishing policies, communication, morale, evaluation, common disputes, collaboration, and research burnout)
- Balancing career and life

Psychology of time management

Productivity

<table>
<thead>
<tr>
<th>Stress Level</th>
<th>Productivity Level</th>
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<tbody>
<tr>
<td>Unproductive</td>
<td>Not stressed</td>
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Susan Johnson

Critical path and yield loss

Objectives

Critical Path

Now

Now + 5 yrs

Time management basics

Step one: Collect everything new in an inbox system
Step two: Process each item in the inbox system out of or into your life
Step three: Set up a storage system
Step four: Learn to take action

Susan Johnson
Step one: collect everything new in an “inbox system”
All unprocessed items from others and from yourself
Only items you have not looked at – you don’t have time to do things twice!

Step two: Process each item in the inbox system out of or into your life

Don’t Delay!
It takes only a few minutes of your time to keep your issues coming to you!

Break down larger projects into steps
We often under-estimate how long multiple step projects will take
We often under-estimate time traps like the phone, email, and the web!

Don’t Delay!
It takes only a few weeks of your time to write a review article for this journal!

Grocery list analogy for your to-do list
Butter
Eggs
Learn Italian cooking
Milk
Coffee
Lettuce
Pears
Mom’s birthday party
Ginger
Lasagna noodles
Cheerios
Bread
Yogurt
Thanksgiving dinner
String cheese
Ham
Fish
Lasagna
Peas
Consider macrobiotic diet

Grocery List:
2 additional refinements
Aisle 1:
- Butter - 1 lb
- Eggs - 2 dozen
- Milk - skim, 1 gallon
- Yogurt - plain nonfat 8 oz
- String cheese - 1 lb
Aisle 2:
- Coffee - decaf, 1 lb
- Lasagna noodles - 16 oz
Aisle 3:
- Cheerios - 1 box
- Bread - wheat, 1 loaf
Aisle 4:
- Ham - smoked, 6 lb
- Fish - 8 oz, perch
Aisle 5:
- Peas - 10 oz
- Lettuce - 2 heads
- Pears - 4 lb
- Ginger - fresh
Step three: set up a storage system - on paper and computer

Week of Sept 7
- Call Jim Henderson
- RSVP to May reception
- complete first draft of manuscript
- call Dr. Smith re: appointment
- climb Mt Everest
- buy Mercedes SUV
- order flowers for secretary
- draft new personnel procedures
- send a poll to the advisory committee
- prepare Affirmative Action Office report

Step four: learn to take action

- Learn ways to get started
- Kitchen timer method
- Planning cascade
- Beware of common cognitive errors

Common Cognitive Errors:
- Thinking you need a long unbroken stretch of time to accomplish something
- Believing you cannot begin until a perfect plan is developed
- Forgetting Murphy’s law (things will go wrong)

Learn ways to get started

“if you are going to eat a live frog, don’t spend too much time looking at it first”

---Mark Twain

Kitchen timer method

- Set the timer for 5/10/15 minutes
- Get started with a mechanical task:
  - Sort
  - Read
  - Copy
  - Free write
**Perfectionism**

- **The good:**
  - Awareness
  - Attention to detail
  - Beautiful grants
  - Meticulous papers

- **The not-so-good:**
  - Expectations never met
  - Obsessive
  - Inability to delegate

“Pursue excellence without insisting on absolute perfection”

*William Droegemueller*

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**The planning cascade**

- Lifelong: Mission and priorities
  - This phase of your life: goals

- This year: objectives & projects
  - **This week**
  - **Today**

Susan Johnson

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**Grantsmanship: There are many sources to help you**

Don’t use reviewers to teach you how to write grants: that takes too long!

*Grant Application Writer's Handbook*  
*Liam Fow-Coleby*

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**Dr. Guzick’s ten commandments for choosing a research problem**

- Pick an area on the basis of scientific and/or public health interest
- Look for an under occupied niche that has potential
- Choose the right mentor

David Guzick

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**Dr. Guzick’s ten commandments for choosing a research problem**

- Find a balance between high interest and doability
- Find a balance between high interest and fundability
- Anticipate the results before doing the first study
- Be vigilant and committed to completing the project

David Guzick
Dr. Guzick’s ten commandments for choosing a research problem

- Build on a theme
- Read outside your area for creative opportunities for collaboration
- Find a balance between low- and high-risk projects, but include at least one high-risk, high-interest project in your portfolio

Congressional debate during the founding of NIH

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<tbody>
<tr>
<td>No</td>
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<td>No</td>
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Clinically relevant?

More examples that help develop your skills

Generic proposal outline

- Opening sentence (an attention grabber)
- Key knowns, then unknowns
- Frame the problem of what is next needed to advance the field
- Long term goal (10-20 years of research)
- Objective for this proposal

Generic proposal outline (con’t)

- Your central hypothesis
- Rationale
- Why your group is well positioned (environment)
- Specific aims (2 to 5)
- Importance
- Innovation

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What is a good research group? ...Every student can tell you!

- The science is solid
- The head of the group is successful, or promises to be
- The people in the group are happy
- The group has a recognizable personality and an identifiable culture

Be a leader - You are well trained for what you are doing!

- Medical know-how
- Resilience
- Honesty and integrity
- Communication skills
- Organizational ability

Success of your research program requires...

Organizational success:
- A quality or unique product
- Proper timing
- Adequate start-up
- People resources
- Effective management

Success in research:
- Good science
- Political savvy
- Grants
- Smart and enthusiastic lab members
- A leader (you!)

Work with your style and your strengths

- Will you be more effective in hands on data collection or the desk?
- What are you motivated by in science?
- How do you make decisions?
- Do you want to manage details, or deal only with the big picture?
- Do you work better with peers, bosses, or subordinates?

Policies

- Attendance, vacations, time expectations
- Chores to be rotated
- Rules for common areas
- Safety
- Journal club and research meeting attendance
- Data notebooks - usage, requirements, and sample page
- Phone and computer use rules
- Evaluations
- Authorship

Evaluating member's performance towards goals

- Day-to-day feedback
- Periodic seminars
- Informal evaluations
- Formal evaluations
- Self-evaluations

DOCUMENT
BE CONSTRUCTIVE
BE HONEST
Maintaining morale

- Make the group feel part of the bigger world of science, especially through down times
- Help each person feel they belong
- Encourage social interactions

Teach collaboration

- Put new people to work with more experienced ones
- Facilitate collaborations outside your group
- Maintain collaborations with former trainees who have left

Prevent research burnout

- Misalignment with the area or institutional culture
- Feeling of lack of control and effectiveness
- Emotional exhaustion and depersonalization
- Low sense of personal achievement

- Make peace with the bureaucracy (division, dept, IRB, university, NIH)
- Do not compromise your values (find a way to work in what you believe in)
- Keep your skills updated
- Invest in your personal life

Leaders ....

- Get the most from each individual
- Lead
- Inspire
- Work with weaknesses
- Stay honest and moral
- Are versatile

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You have many roles

- partner
- scholar
- clinician
- administrator
- volunteer
- Parent
- You, Inc
Finding balance is essential

Work
Life
Loved ones
Self
Renewal
Giving
Community

http://www.pbs.org/workfamily/index.html
http://www.centerforworkandfamily.com

U of M Resources

- UMHS Employee Assistance Program (EAP)
  http://www.med.umich.edu/mworks/eap/
- U of M Faculty and Staff Assistance Program (FASAP)
  http://www.umich.edu/~fasap/
- Work/Life Resource Center (WLRC)
  http://www.umich.edu/~hraa/worklife/

Dream and take risks: “If we aren’t careful, we are likely to go in the direction we are going”

Yogi Berra

“It is your attitude, not your aptitude, that determines your altitude”

Steve Goldstein

“Persevere!”

Lawrence Longo