1. Mission statement. P. 19

2. 5 year plan---science and personal. P.20

3. Things to take care of before I arrive. P. 23

4. Lead based on your strongest traits. P. 33-35

5. Micromanaging v. hands-off. "In the beginning, you must make sure that everything is done the way you want." P. 36

6. "New PIs yearn for a colleague. Science is communication…" Don't make those you hire your scientific equal. You are the leader and they are there to learn from you. P. 37

7. "I think that a balance can be achieved by making priorities - Most scientists are notorious for being unable to say "No" and are very poor managers of their (limited) time." P. 39

8. "Time is a resource you must work with and manipulate to achieve your goals. It is an expensive & precious reagent which you use to do more of the things you want to do, and less of the things you do not want to do." P. 41

9. Prioritize everything! Creativity will end up at the bottom fo the list unless you take control and make your own decisions about spending time. P. 41

10. Every time you add an item to your "to do" list, consider delegating the task. If you can't delegate the whole task, delegate part of it. Don't miss the chance to lighten your load and add to the positive feelings in the lab. P. 49

11. Learn to read faster, *The Evelyn Wood seven-day speed reading and learning program*. P. 49

12. Avoid interruptions: don't answer the phone if you are working (listen to the message), close your door sometimes, stop being a good listener to everyone's personal issues, say "no". p. 50

13. Do not waste unexpected free time. Keep a list of items that can be done in 10 minutes (a phone call, read one paper, organize websites), and 30 minutes (web search on one topic, clean a drawer, coffee with colleague). P. 53

14. Of all the choices you make, the most important are the people who will work with you. Don't hire bad people just to have bodies. P. 73

15. How to find people to hire. Having someone that knows the system is good, but vet well to make sure you don't inherit problems. P. 77

16. Develop a relationship with people in HR. They can be very useful. P. 81

17. Design a hiring protocol. A structured system objectifies the selection process. **Sequence of the process**: determine your needs, solicit applicants, read resumes, call references, interview candidates, evaluate candidates, choose candidate, offer job, tighten negotiations, hire or offer second choice the job. **Example on p. 83.**
      a. screen applications
      b. pre-interview applicants via phone
      c. check with references

d. interview applicants

18. Look for good overall structure in the application, watch for gaps and find out why, judge academic/work qualifications.

19. Interpreting recommendations. See pgs. 84-86

20. Call every reference. Good questions to ask on page 87.

21. The only interview that is consistently successful is one in which all applicants are asked the same questions are rated according to a predetermined system. P. 90

22. Purpose of interview: determine capability to perform, evaluate personality, will we get along. P. 90

23. **Sample questionnaire** on page 91.

24. Review pg 93-101 on how to conduct the interview.

25. The first day of work will set the scene for the rest of the person's tenure. You gain nothing by turning someone loose. p. 117
        p. 118 outline for day one

26. The boundary between the professional and the personal will be created from day 1. This is a very special relationship, for you and the lab member, and from day 1, you should keep in mind where you want it to go. P. 121

27. PI does the teaching until around one year when others might be ready to teach. P. 125

28. What to teach:
        technical training-how to perform & interrupt an experiment
        background knowledge
        judgment skills-analyzing one's own data and the field
        communication
        political skills-when to publish and with whom to discuss data

29. Remember that there are different types of learners (visual, auditory, tactile). Not everyone learns like you. **P. 125-131. Re-visit this before training.**

30. Not all people want to become what I am, thus not all need the same type/level of mentoring. The best results come when the PI is able to help people achieve what they want. P. 136

31. A good mentor helps individuals find their personal strengths and weaknesses, rather than having the same agenda for each person. P. 137

32. A PIs past mentors hugely impact their style of mentoring.

Setting the course
33. Two choices: 1) Stay on the same project, start small, and focus on doable projects and get papers out. 2) Focus on a new topic, but it should be doable.

34. Small grants are too much hassle (ARDF). Too much work, too little return. P. 146

35. Try something new after 1-1.5 years. P. 147

36. You must be one step ahead in order to guide your lab's projects. P. 147.
      The lab needs data for motivation and survival.
      The PI needs data for grants, progress reports, and publications.
      The members need data for publications, enthusiasm, and training.

37. The most important part of any lab is generating good data. Give people choices of projects if possible. P. 148

38. One of the finest skills a PI can hone is the ability to put together and maintain a group of people who can successfully work together. However, hostilities are intensified, rivalries are concentrated, and insecurities are magnified, and the PI must be vigilant and ready to adjust the working situation. P. 149-150

39. It's ok to feel a bit like a host at a party, but you can't feel responsible for what lab members do with their careers if you are generous and honest with the opportunities you present. P. 151

40. All collaborations, even within the lab, must be vetted by the PI. The best collaborations are when each group brings something to the table. P. 155

Keeping Up
41. To keep up with the labs short- and long-term interests, you must be able to gauge the lab's position in the field and always be nudging in the right direction. P. 157

42. A PI must decide if s/he will "reward" people with hot projects with more time or help those more with projects that are struggling? P. 159-160

43. Most problems are motivation problems, and such are addressed here. P. 162-3

44. You must be able to tell when a person is not suited for independent research. P. 165

45. Motivate first by example. JED says he set the tone in his lab by showing up on the weekend. P. 165-6

Writing papers
46. One of the toughest questions is when to publish.

47. Having a paper published is the best way to establish to your lab that they are in the game. P. 167

48. Start a project with a backbone of a manuscript. P. 167

49. Generating data is the easy part, and not necessarily the most important part. P. 167

50. Try to include the student in writing the paper. Let them do the first draft if possible, or at least the M&M and results. Teach them how to write. P. 169

51. Guidelines for authorship and author's duties. P. 170-171. They suggest including techs.

52. If a person leaves the lab before a paper is in publication, the person that takes over the paper and gets it published is now first author. P. 174

53. Science doesn't select or mold honest people, it simply expels cheaters. P. 175

54. Ethical considerations for papers. P. 175
    Authorship should represent authentic contributions.
    Data should be reproduced an appropriate # of times.
    The proper statistics should be performed.
    References should be complete.
    Competition is not a reason to cut corners.

Building a lab culture
55. Keep you mission statement in front of you.

56. Your subordinates will have more to say about your future than your superiors, communicate well with them. P. 181

57. Be a role model p. 181-185
    -always do what you say you'll do
    -be respectful and considerate toward lab members
    -roll up your sleeves and help people in the lab
    -be careful…choose words and actions carefully
    -don't ridicule the science of others in the lab
    -your hours set the speed
    -keep everyone goal oriented
    -avoid creating a party lab
    -be careful with money
    -maintain a fair and nonbiased atmosphere

Lab Policies
58. Make it clear that safety is important. P. 187-188
    -radiation
    -pathogens
    -sharps
    -children in the lab
    -chemical storage, use, and disposal

59. Hours and vacation: be as flexible as you can. The hours are a perk and it is each person's career.
    -vacations should be announced…yours and theirs

60. **Everyone must keep a notebook and it must be up-to-date.**
    -don't get too far from the raw data too soon

61. Everyone has a lab job. P. 197

62. Consider a lab manual….the fewer rules the better. P. 198-199
    TYPE ONE OF THESE UP…..SAMPLE P. 199

Meetings & Seminars
63. Meetings help lab members and you take the work seriously and organizer properly.

64. A meeting needs a **leader**.
    -have an agenda
    -make sure the room is ready

-keep the ball rolling
-encourage group participation
-set a time limit
-tolerate conflict but don't let it get out of hand
-**summarize, keep a record, follow up**
-attendance and participation are mandatory

65. Journal club….some say yes, some say no. p. 207-208
-great way to learn critical thinking and what makes a good paper

66. One-on-one meetings p. 210-211….scheduled and unscheduled

Lab organization
67. This section seems out of date. There are more up-to-date computer programs for this is one wishes.

Communication with your lab
68. You aren't "one of the gang", your words mean more.
-listen well
-small talk is not so small--it makes people know you care
-match posture and movements

69.