HST 502 - Survival Skills for Researchers Spring 2003

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- I. What is a mentor? Name & concept from Greek mythology
 - A. Broad definition
 - 1. Mentors share their experience & expertise.
 - 2. Mentors are concerned about mentees professional development.
 - B. Obvious mentoring pair: thesis advisor or research supervisor and student or postdoc.
 - 1. But responsibilities of formal advisors are to make sure students fulfill departmetal and institutional requirements for the degree, therefore the terms "mentor" and "thesis advisor" cannot and should not be used interchangeably.
 - 2. Acadia Institute Study
 - a. "Most supportive faculty member" is not necessarily thesis advisor.
 - b. Even "supportive faculty members" are not necessarily mentors.
 - 3. Research advisors should be one of several mentors.
 - a. Being a role model is not the same as a mentor, i.e., setting a good example is necessary but not sufficient.
 - b. Issues need to be addressed explicitly and in an organized way or critical info falls between the cracks.
 - c. Mentoring is a professional responsibility, i.e., obligation of the role to train individuals for the profession that lies ahead.
 - C. Qualities to look for & cultivate*
 - ESSENTIAL: 1. Experienced successful or not; students, too
 - 2. Enthusiastic about science/engineering/research
 - 3. Believe that individuals can do science without regard to ethnicity or gender
 - 4. Willing to expend time and effort
 - 5. Positive outlook re career choice

IMPORTANT: 6. Sense of humor

- 7. Ability to articulate & address sensitive issues
 - a. Good questioner and listener
 - b. Able to help identify & evaluate underlying assumption
 - c. Able to help examine difficult choices
- 8. Uphold a high standards for self, colleagues and trainee/mentee
- 9. Open-minded in several ways
 - a. Success defined & achieved in different ways

- b. Changing world and requirements
- 10. Values diversity in perspective, approach, world view

II. Finding mentors

- A. Find several
 - 1. No one knows it all; nor can do it all
 - 2. This is a personal as well as professional relationship.
- B. But not everyone makes a good mentor.
- C. Mentors are people too so respect their time and space.
- D. Develop or join a mentoring program & make the most of it.
- E. Find co-mentors, esp. mid-career
- F. Take advice of mentors for what it is: a unique perspective based on experience you don't have,
 - i.e., advice based on their view of your situation.
 - 1. Potentially different values, experience, goals
 - 2. Different timeframe, colleagues and probably institution
 - 3. Therefore evaluate advice from your own perspective

III. What to expect

- A. Mentor will not be perfect.
- B. Relationship will be determined by the individuals involved.
- C. Reasonable expectations of advisors/mentors
 - Respond to questions including being able to articulate policies <u>re</u> data retention, recording, project responsibility, authorship
 - 2. Identification of performance expectations and criteria for assessment
 - 3. Identification of expected benchmarks and timing
 - 4. Respond to requests for help
 - 5. Fair & equitable treatment
 - 6. Keep their word
- D. Reasonable expectations of trainees
 - 1. Pay attention
 - 2. Provide feedback
 - 3. Need other mentors
 - 4. NOT necessarily follow advice

IV. As you become a mentor note:

A. Mentoring takes time and effort

- B. Different people have different needs at different times, eg., encouragement vs. prodding
- C. Be careful of exclusionary circumstances for mentoring
 - 1. Don't avoid, do address
 - 2. Seek out informal opportunities for interaction
- D. Evaluate your underlying assumptions, eg., role stereotypes
- E. Under-represented groups may need more mentoring.
- * Derived from Faddis, B., Ruzicka, P., Bernard, B., and Nuppertz, N. (1988) *Hand in Hand: Mentoring Young Women*, Women's Educational Equity Act, Newton, Massachusetts.

Selected Bibliography HST 502 Spring 2001

ADVISORS AND MENTORS

- Association for Women in Science (1993). <u>Mentoring Means Future Scientists</u>. Association for Women in Science, Washington D.C. (To order, call 800-886-2947).
- Bird, Stephanie J. (1994) Overlooked aspects in the education of science professionals:

 Mentoring, ethics, and professional responsibility. *J. Science Education and Technology*3: 49-55.
- Fort, Deborah, Bird, Stephanie J. and Didion, Catherine J., eds. (1993) <u>A Hand Up:Women Mentoring Women in Science</u>. Washington, D.C.: Assoc. for Women in Science.
- Gorovitz, Samuel (1998) Ethical issues in graduate education. *Science and Engineering Ethics* 4: 235-250.
- Hall, R.M. & Sandler, B.R. (1983) <u>Academic mentoring for women students and faculty: A new look at an old way to get ahead</u>. Washington, DC: Association of American Colleges.
- Jacobi, MaryAnn (1991). Mentoring and undergraduate academic success: A literature review.

 Review of Educational Research 61: 505-532.
- Moody, JoAnn (1995). <u>Vital Information for Graduate Students of Color</u>, New England Board of Higher Education, Boston, MA (To order, call 617-357-9620).
- National Academy of Sciences (1997) <u>Advisor, Teacher, Role Model, Friend: On Being a Mentor to Students in Science and Engineering.</u> National Academy Press, Washington, D.C.
- Olmstead, Marjorie A. (1993) Mentoring new faculty: Advice to department chairs. CSWP Gazette (A Newsletter of the Committee on the Status of Women in Physics of The American Physical Society) 13 (1): 1, 8-11.
- Swazey, Judith P. and Anderson, Melissa S. (1996) Mentors, Advisors, and Role Models in Graduate and Professional Education. Association of Academic Health Centers, Washington, D.C.