

WOMEN in Cell Biology/ MINORITIES Affairs

A Shared Vision of Mentoring from Different Perspectives



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Most scientists have benefited from mentoring or have served as a mentor. Here we offer our perspectives on these processes. Although we are at different places in our careers and experiences, we agree on some core components of mentoring: the importance of recognizing individual needs and experiences, the possibility of building long-lasting relationships through mentoring, and the need to recognize that mentoring is a two-way relationship.

Through our experiences as “outsiders,” either as a member of an underrepresented minority (Hines) or as a woman (Wandinger-Ness), we have gained insights as both mentees and mentors.

Acknowledging Individuality and Personal Experiences

There is no blank slate; each of us is a composite of our personal and professional life experiences. It is therefore important for both mentors and mentees to acknowledge individual strengths and weaknesses and to draw on metacognition. We have found it helpful to articulate individual needs both orally and in writing to ensure that there is agreement on what each partner in the mentoring relationship needs and can provide. This is crucial to get past the danger of stereotyping and projecting goals onto the partners.

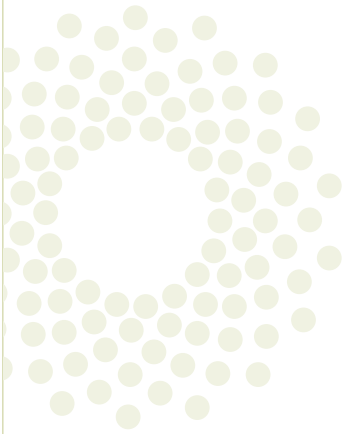
Formal individualized career development plans are helpful for both partners to reach agreement and get what they need. There are a number of online resources for getting started (e.g., the plans for graduate students provided

by University of Minnesota¹ and the Medical College of Wisconsin,² for postdoctoral fellows by the Federation of American Societies for Experimental Biology,³ and for junior faculty by the University of California, San Francisco, Division of General Internal Medicine⁴).

For mentors, such a process is a great way to attend to the individuality of trainees and their specific needs and goals. For mentees it enables the articulation of specific priorities the achievement of which is measurable and visible. Developing an honest, mutually agreed to plan is central to achieving goals and for success that is satisfying for both the mentor and the mentee.

Frequent evaluation of progress toward goals through self-assessment and mentor feedback helps ensure that individual needs are met. It can identify problems that need attention early before a crisis develops. Sometimes success depends on seeking and recommending counsel from others. Widening the mentoring net may be important to match mentee needs with individual mentor strengths. There may be difficult issues to be broached with which other potential mentors have more experience. For example, for women and minorities, the

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“imposter syndrome” and being “iconic” or “a poster child” are lived experiences that can create a sense of isolation. Receiving wisdom from women and minorities who have worked through these challenges is very meaningful and especially helps mentees who feel “different” or isolated to move forward.

Finding suitable role models is often the key to helping mentees develop a sense of inclusion. Both of us have identified role models throughout our careers: peers, teachers, and people in leadership positions who served as mentors or advisors and were essential for visualizing the successes of women and minorities and overcoming low points or self-doubt. Relationships founded on mutual trust and honesty enable mentor and mentee to have a dialog about their individual needs.

Building Long-Lasting Relationships: Mentoring as Family

Mentoring relationships often begin with family members and expand to include particular lab members, lab directors, colleagues, and peers. These relationships grow and mature over time and often continue long after mentees have left the home, lab, institution, or job and gone on to independent careers.

Like family relationships, mentoring relationships can be complex. Mentors may have to serve different roles. Sometimes they provide nurturing and support when mentees are in need of encouragement and perspective. At other times mentoring, like being a parent, requires pushing and urging the mentee, which may initially be resented by mentee. Later the mentee may realize that the mentor had his or her best interests at heart.

As with family, retaining contact, sharing goals and aspirations, celebrating success, and having honest, two-way dialogue about difficult issues are all central to vibrant, long-lasting mentoring relationships. Mentors often enjoy hearing from former trainees and can offer continued support in the form of letters of recommendation, advice, and counsel long after mentees have moved on. And of course mentees

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can benefit from reaching back to past mentors, providing updates on their own progress and receiving advice.

The extended lab and scientific family when nurtured and supported brings a special reward: being part of a vibrant network through which new connections are made, information and experiences are exchanged, and transitions to the next career phase are facilitated.

Reciprocity through Mentoring Platforms and Reverse Socialization

Most of us have occupied several “rungs” on the mentoring ladder during the course of our careers. Indeed, it is common to be simultaneously both a mentor and a mentee. In the more standard view of mentoring, the mentor of some higher status or level of knowledge gives assistance or guidance to the mentee, who has less experience. In other words, individuals on higher rungs provide information and opportunities for those at lower levels, while they themselves receive advice from superiors. In this view, the mentoring ladder is a uni-directional progression. This perspective on mentoring excludes the idea of reciprocity between mentee and mentor and

the opportunity for the mentor to learn from the mentee.

However, we can expand the value and benefit of the mentoring relationship by acknowledging the deeper interactions between mentor and mentee. In this alternative view, the mentoring ladder is seen as a two-way progression with each ladder rung as a platform that allows individuals to meet on the same level and gain and learn from those traditionally considered above or below on the ladder. Common platforms are where mentor and mentee gain mutual experience from each other, and this model recognizes the reciprocal reward for the mentor and mentee. Reciprocity is a key feature of this version of the mentoring ladder. The process whereby traditional teaching roles are reversed and, for example, a child teaches the parent or a mentee teaches the mentor is called reverse socialization.

In summary, through our diverse experiences, we find that mentoring entails acknowledging individuality and personal experiences, building

long-lasting relationships (mentoring as family), and reciprocity through mentoring platforms. These core foundations have enhanced our mentoring relationships and contributed to our success and satisfaction. ■

—Christopher M. Himes, Massachusetts College of Liberal Arts, and Angela Wandinger-Ness, University of New Mexico

Notes

¹ www.grad.umn.edu/career/IDPgrad.pdf.

² www.mcw.edu/VirtualCareerCenter/IndividualDevelopmentPlan.htm.

³ www.faseb.org/portals/0/pdfs/opa/idp.pdf.

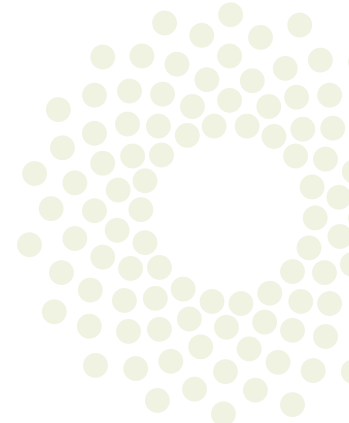
⁴ http://dgim.ucsf.edu/facultydevelopment; see “Individual Development Plan Form.”

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Christopher M. Himes has the perspective of a mentee who recently began serving in a mentoring role. He has benefited from mentoring and research opportunities gained through programs for students from groups traditionally underrepresented in graduate education. He has recently contributed

back to such programs, mentoring women and other students from underrepresented backgrounds. He was an Institutional Research and Career Development Award (IRACDA) Fellow of the Academic Science Education and Research Training (ASERT) Program at the University of New Mexico. He is now STEM Outreach Manager for the Massachusetts College of Liberal Arts. As a student, Himes received support from the Ronald E. McNair Post-Baccalaureate Program. The McNair program commemorates the achievements of African American physicist and astronaut McNair and supports the training and mentoring of first-generation college students with financial need and students from groups traditionally underrepresented in graduate education and with strong academic potential. Himes has recently served as a mentor through the Undergraduate Opportunities Program at the University of New Mexico.

Angela Wandinger-Ness is Director of the IRACDA ASERT program at the University of New Mexico. She draws on cultural heritage and a love of science instilled by parents, inspired teachers, and key role models. As the longstanding PI of a federally funded research program and director of a training program with a focus on increasing diversity in science, she has advised, nurtured, and mentored more than 100 undergraduate, graduate, and medical students, postdoctoral fellows, and junior faculty toward successful and independent careers. The majority were women and trainees from various cultural, ethnic, and socioeconomic backgrounds.



A New Look for ASCB's Journals

Molecular Biology of the Cell and *CBE—Life Sciences Education* have unveiled updated and redesigned websites. Readers will enjoy the new, more contemporary design, better and more flexible use of screen real estate, and enhanced functionality.

New features include:

- Links to selected articles on the homepage
- Lists of most-read and most-cited articles
- Links to other ASCB resources
- The ability to view abstracts from the table of contents by mousing over links
- An expandable reading frame for HTML versions of articles
- RSS feeds

More enhancements are coming soon. Check out the redesigned websites: www.molbiolcell.org and www.lifescied.org. ■

—W. Mark Leader

