A Guide to Mentoring in the X-ray Science Division at Argonne

The X-ray Science Division (XSD) at Argonne is engaged in the professional development of postdocs and early career engineers, scientists, and technical support staff. Mentoring is a proven tool for career development, and, according to the Argonne Leadership Institute, "… is an organic, inclusive process designed to build professional relationships and promote talent development by bringing early- and mid-career employees together with more experienced staff." XSD has in place a mentoring program for postdocs. We are now expanding the program to cover all early career staff in the division, regardless of career track. Our expanded mentoring program should ensure that no one "falls through the cracks" and misses getting advice and help as needed.

The interaction between the established and the newer staff is a complex relationship that can benefit both parties significantly. The mentee benefits from the mentor's guidance, experience, feedback, and professional network. The mentor is satisfied with helping the mentee's professional development, improving feedback and interpersonal skills, staying in touch with newer developments, and contributing to the health of XSD. These are some of the benefits for both sides of the mentoring relationship.

Many excellent scientific and technical programs are in place in XSD, and new and exciting avenues are constantly opening. As you start your career with us, questions may arise, such as:

- Is it better to be involved intensely in a single project in a subfield you already know or to widen your horizons by getting involved in several new areas?
- If you have a good idea, how do you get your colleagues involved, some of whom may be more senior?
- What will the senior person you collaborate with most closely think of you getting involved in other projects?
- If you need some new resources, how do you get them?
- What should you do if there are personality conflicts that you cannot resolve or think you are not being treated fairly?

For most early career staff, the existing XSD organization works very well. Most often, new people rapidly start working on a project or projects in their group, and they may get some form of mentoring and advice from group senior staff. Additionally, one of the Group Leader or supervisor roles is ensuring that staff have the resources they need for their work. For early career staff, this includes identifying practical needs, ensuring they get recognition, and advising them on their work and career development. Finally, the Division Director and Associate Division Directors are actively interested in the progress and development of all staff, as this leads to increased opportunities, better work, and higher morale within the division. However, there may be issues that newer employees may feel awkward discussing with their senior coworkers, their supervisor or Group Leader, or the Division Director, and that require personal informal advice. This is one of the intended roles of the mentor.

Mentoring Guidelines for Early Career Staff

Choosing a Mentor
Choosing the right mentor is a subtle issue. It is best to find someone with whom you can talk openly and whom you think can give you sound advice, both on technical and non-technical aspects of your career. It is best to try to find a mentor in the first three months, but there is no time limit. Discussing the mentoring process with your supervisor may be a good starting point. Also, as you get to know XSD personnel and discover what each one does, consider each staff member a possible mentor. When you have found a mentor who has agreed to work with you in this role, you should inform your supervisor and give them the attached form to forward to the division office. You may have one "formal" mentor but many informal ones.

There are several things to balance:
- Choosing somebody with whom you are not working too closely is usually best.
- You are not constrained to pick a mentor in your area of expertise. Depending on your situation, you may get technical career development guidance from your supervisor, while your mentor can help you with non-technical aspects of your career.
- It is best not to have your supervisor, Group Leader, Associate Division Director, or the Division Director as a mentor. These people will always remain available to you as needed.
- If the mentoring is not working out, you can find another mentor.

How often to meet?
The XSD mentoring framework is not formal; you should arrange to meet with your mentor when it is convenient for both of you. We recommend meeting at least every three months. Come to the meeting prepared: think about how things are going, and note down the issues that concern you and things you need to discuss.

Relationship with your Group Leader
Your Group Leader is responsible for the administration and budgets of your group, so if you need resources, your supervisor is the person to start with. This covers travel, help from other groups or APS divisions, computer resources, equipment, and similar requests. In addition, part of the group leader's role is to help early career staff to advance their careers; your mentor does not replace this relationship but complements it with a more independent perspective. Your Group Leader should know about your work activities and results since Group Leaders are responsible for the division's Annual Report, reporting to the DOE, and preparing budgets for the future.

Alec Sandy is the X-ray Science Division Early Career Staff mentoring coordinator. Contact him to schedule an appointment at asandy@anl.gov to discuss the choice of a mentor with you, and suggest possible mentors if desired.

Guidelines for the Mentor

It is not our intention to make hard and fast rules. The purpose of the mentoring framework is to 1) provide a listening channel for early career staff's concerns and 2) sometimes use a bit of weight to make their needs heard in the right places.

It is never too early to think about the next promotion or career move, as early thought and discussion on the "Grand Plan" can make other decisions fall into place. Knowing where people want to go makes it easier to help them get there.

Early career staff should find a project in which they can focus and specialize, perhaps becoming the APS resident expert in this area. One of the roles of the mentor may be to help identify this potential niche.

While specialization is often good, it is also wise for early career staff to broaden their experience by getting involved in several projects, even if at a modest level, so they understand the issues and widen their intellectual horizons. Mentors should discuss this approach with their mentees.

Ideally, newer staff should experience all aspects of projects, from brainstorming new projects to implementation to publishing results, if applicable. Sometimes the timescale and size of projects prevent involvement in the full cycle of a single project. However, exposure to all facets of planning and executing projects is desirable. Mentors can help guide this process.

Early career staff should not have to internalize their problems. They should be encouraged or coached to find their own solutions when possible, but they should feel free to complain to their mentor. They should expect their mentor to take up serious issues and help them find solutions.

Showcasing our early career talent is good for them and XSD, APS, and Argonne. Since mentors are typically outside the line management chain of the mentee, mentors can often identify additional opportunities to highlight a mentee's contributions.

Be forthright with your mentee. Well-timed constructive criticism is good, as is earned praise.