

# Core Activities

To provide a solid, common foundation, all trainees in each of the three tracks participate in core activities. In addition to providing important training elements, the Core Activities provide opportunities for both formal and informal interaction between trainees in various disciplines, in the three training tracks, and at various stages in their training.

## There Are Six Core Activities:

Monthly Meetings serve as the unifying activity for all supported trainees throughout the duration of their training. The primary purposes of the monthly meeting are to:

- Allow trainees to give informal updates on their research.
- Facilitate interaction and develop cohesiveness among all trainees.
- Acknowledge accomplishments and address concerns.
- Discuss training grant administrative issues with trainees.
- Provide programs and information on career and grant opportunities.
- Provide supplemental training on responsible conduct of research.
- Allow the program directors to hear directly from the trainees about their progress.

These meetings provide an opportunity for trainees to present to a diverse audience. We believe there is real synergy to be gained by developing a more cohesive group. The students learn from each other, help each other, and by example, establish a common expected rate of progress and career directions. The monthly meetings may also include specific sessions on:

- Publications (who is an author and why; who is not an author).
- Intellectual property (preparing invention disclosures, managing confidential information, working with industry, commercialization of research results, licensing versus start-up company).
- Preparation of manuscripts (when is there enough data for a publication, how do you get started, how do you maintain momentum, referencing and plagiarism, tools such as Photoshop and EndNote).
- Preparation of your first independent grant proposal.

The trainees themselves set the agenda for each monthly meeting.

## Training in Responsible Conduct of Research

Training in responsible conduct of research is covered through institutional training programs, but will be supplemented by additional sessions for all trainees on the training grant.

## Craniofacial and Oral Biology Course

This course is designed to provide students with an understanding of present and future research opportunities and challenges in craniofacial and oral biology. An emphasis is placed on

the underlying mechanisms involved in the pathogenesis of craniofacial and oral disorders, the identification of unsolved questions, and consideration of possible approaches to investigate these questions. Each week various faculty, usually currently funded by NIH/NIDCR, present on selected topics describing the background and current status of the field. Later in the week the class discusses a contemporary research article in the field. During the course trainees prepare two very brief research proposals and receive one-on-one feedback from a faculty expert. The proposals are then reviewed by the class in NIH “study section” format. The course is offered in alternate years.

### Training in Grant Preparation

All trainees are expected to prepare and submit a grant application for their continued support after 1-2 years of research training. We provide specific training sessions for grant preparation. Our faculty have had experience in reviewing training (F), career development (K), small research grants (R03), and traditional R01-type proposals.

### Annual Symposium

All trainees attend and present their work at our [Annual Symposium](#).

The format of the symposium provides participants an opportunity to present their work in a structure and environment similar to most national and international scientific conferences. Career development sessions are usually part of this annual cap-stone event.

### Weekly Journal Club

All trainees participate in at least one weekly journal club appropriate to their area of research training. These journal clubs not only provide education of current scientific activity, but offer valuable experience with analyzing, interpreting and evaluating peer-reviewed publications. Trainees also have opportunities to present their own work and gain feedback from a variety of faculty and other students.