

Biomedical Scientific Knowledge

1. Demonstrate an understanding of biomedical scientific knowledge in the biomedical, translational, and/or clinical sciences. *
2. Critically analyze and evaluate literature in the biomedical sciences to discover and implement new knowledge and skills. #
3. Demonstrate advanced understanding of a range of technical and conceptual approaches used in biomedical sciences research. ^

*Core and advanced courses, oral qualifying exam, annual progress report/meeting

#WIPS, journal club, lab meetings, research proposal, annual progress report/meeting

^Oral qualifying exam, annual progress report/meeting, individual research, independent research, final defense, publications

Communication Skills

1. Demonstrate effective oral and written communication skills. *
2. Articulate the significance and implications of one's own work to scientific and lay audiences. #
3. Demonstrate teaching and mentoring skills. ^

*WIPS, journal club, oral qualifying exam, research proposal, annual progress report/meeting, final defense, presentations, publications

WIPS, lab meetings, research proposal, annual progress report/meeting, presentations, Sci Communication course, recruitment

^ annual progress report/meeting, TA activities, Core Forum, summer undergraduate degree programs (SMART, TABS, JAMP, etc.), mentoring lab mates, journal club, community service (e.g., FW Science Museum, Vision Screening), IPE activities

Professionalism, Ethics and Collegiality

1. Exemplify established professional codes of conduct, including following through on tasks, accepting responsibility for one's actions, and accurately representing actions and events. *
2. Establish rapport with others that encourages a team-based, goal-oriented environment. #
3. Demonstrate ethical behavior and comply with institutional policies, protocols, and procedures. ^

*annual progress report/meeting, Nonprofessional conduct & sanctions, attendance at required school activities

#annual progress report/meeting, TBLs, IPE, lab collaborative behavior

^annual progress report/meeting, IACUC, IRB, CITI, HIPAA, Biosafety

Research and Analytic Skills

1. Demonstrate ability to develop and clearly state hypotheses and design aims and experimental approaches to test proposed hypotheses. *
2. Demonstrate mastery of technical and conceptual approaches. #
3. Demonstrate scientific rigor and reproducibility through accurate data analysis leading to sound scientific conclusions. ^

*Oral qualifying exam, research proposal, annual progress report/meeting, final defense

lab rotations, annual progress report/meeting, research proposal, final defense, publications, presentations

^ lab notebooks, research proposal, annual progress report/meeting, final defense, publications, grant applications, presentations

Career Development and Collaboration

1. Engage in independent learning and networking. *

2. Critically examine and synthesize ideas, methods, and practices of others. #
3. Develop and implement an Individual Development Plan and respond to constructive feedback. ^

*scientific meetings, workshops, research proposal, annual progress report/meeting, final defense, seminar speakers, IPEs

#Oral qualifying exam, annual progress report/meeting, research proposal, final defense, WIPS, journal club,

^IDP, annual progress report/meeting, publications, grant applications

Approved by Graduate Council 10/3/2019