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<th><strong>Graduate School Goals</strong></th>
<th><strong>BMS Program Outcomes</strong></th>
<th><strong>Assessment Procedures and Criteria</strong></th>
<th><strong>Assessment Results</strong></th>
<th><strong>Use of Assessment Results/Change</strong></th>
<th><strong>Changes Implemented in Current year</strong></th>
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| Graduates will demonstrate the disciplinary competence and/or professional proficiency with a global perspective in service to others. | - Graduates will demonstrate advanced knowledge in molecular and cellular biology and in their field of specialization.  
- Graduates will demonstrate competence in the laboratory, including application of the scientific method and appropriate use of basic and state of the art laboratory tools and techniques.  
- Graduates will effectively analyze, synthesize, and interpret biological data, including their own, and critically evaluate scientific information.  
- Graduates will demonstrate independent critical and analytical thinking, both within their field of study and beyond, for use in the service to others. | - Students will successfully complete the required fundamental core course work in molecular and cellular biology and in their specialized field of study.  
- Comprehensive exam to assess knowledge base.  
- Evaluate independent execution of the thesis research project, literature review, experimental design, proper inclusion of controls, critical analysis of data, and troubleshooting by the student.  
- Semi-annual progress reports to the student’s advisory committee before the student is allowed to register for the following term. Faculty evaluation/reports will be provided to the student.  
- Student course evaluations.  
- Conduct alumni surveys regarding educational experience and if they felt prepared to serve others in their career. | - Average GPA & GRE scores to enter program and maintain a 3.0 throughout program.  
- Pass or fail comprehensive exam.  
- Progress and potential problems (either conceptual or technically) revealed through regular committee meetings.  
- Clarify and facilitate communication between the student and advisory committee.  
- Scores and feedback from student course evaluations.  
- Exit survey results for satisfaction with the program and if it prepared them to serve others. | - Use progress reports and comprehensive exams to re-evaluate entrance requirements, basic course requirements, content, and electives provided students.  
- Use student course evaluations to improve the quality of courses.  
- Revise courses or develop workshops addressing weaknesses and trends identified regarding the progress of our students.  
- Potential problems of individual students are discussed and advice given by the committee.  
- Re-evaluate composition of graduate student advisory committees.  
- Assess ways the graduate program can be modified to improved student desired career outcome. | - Developed new curriculum, with core course requirements and core electives.  
- Curriculum began in fall.  
- Instituted required comprehensive exam for doctoral students.  
- Instituted lab rotations for incoming doctoral students to choose their major advisor and research area.  
- Developed evaluation mechanism for grading lab rotations of incoming students taking BMS 797 (integrated with criteria used for course once a major advisor is identified).  
- Developed BMS Graduate Student Handbook outlining curriculum, requirements, forms, and course listing.  
- Began graduate student orientation within the department for incoming fall students.  
- Implemented application deadline of January 15 for following fall term to enhance recruitment of best students.  
- Revised BMS 601 Human Physiology course.  
- Implemented standard written progress reports for students; copies provided to students.  
- Began collecting exit survey data to assess academic environment and career preparation. |
| Graduates will demonstrate an ability to combine critical thinking, disciplined research, and effective problem solving in their field of study. | - Graduates will be able to effectively analyze, synthesize, and interpret biological data, including their own, and critically evaluate scientific information.  
- Graduates will be able to conduct research addressing specific scientific problems and | - Semi-annual progress reports to the student’s advisory committee before the student is allowed to register for the following term. Faculty evaluation/reports will be provided to the student.  
- Students will write a research proposal using their knowledge base to justify the rationale of the plan and | - Successful completion of the qualifying exams.  
- Number and quality (# of citations, impact factor) of publications.  
- Monitor length of time to obtain the degree.  
- Monitor number of pre-doctoral fellowship | - Recommendations for addressing deficiencies are provided to the student based on the progress reports and performance in qualifying exam.  
- Reassess content and goals of qualifying exam.  
- Use results of the progress | - Re-evaluated entrance requirements. Based on background and performance outcome of current students in core courses.  
- Developed assessment and grading criteria for BMS 795 and BMS 797.  
- Program Officer provides |
Graduates will demonstrate ethical decision-making, service, and civic responsibility in accordance with the Judeo-Christian tradition and Ignatian values.

- Graduates will identify and suggest possible solutions to ethical dilemmas that occur in their work and field of study, and understand the importance of professional ethics in all aspects of scientific communication and laboratory work.
- Graduates will accept and respect cultural differences and beliefs of colleagues and within the scientific community.
- Graduates will execute responsible conduct in research.

Students will be trained in proper use, recordkeeping, and handling of biohazards, laboratory safety, and animal welfare.

- Students will undergo compliance training.
- Students working in human research must be IRB certified and trained.
- Students must enroll in the IDC course entitled "Responsible Conduct of Research".
- Discussion of moral and ethical issues arising in topics revealed in publications, covered in journal clubs, seminars, presentations, and formal coursework.

Performance in IDC course.

- Success in completing coursework and educational workshops regarding IRB, animal welfare and lab safety.
- Exit interviews assessing if graduates feel the environment was respectful of cultural differences, values, and beliefs.

Use survey results and progress reports to develop workshops or revise training to address identified weaknesses and to improve professional and responsible behavior.

- Use exit interviews to monitor the academic environment and address any weaknesses identified.

Began collecting exit survey data to monitor academic environment and service to others. Will require several terms to acquire sufficient sample number.

Graduates will effectively communicate information through all modes of expression.

- Graduates will demonstrate written and oral skills necessary for communication of research, knowledge, and ideas to scientists and non-scientists.
- Graduates will write effective research papers, reports and grant applications and be able to communicate their results through oral presentations and written publications.
- Graduates will be involved in organizing meetings and participating in social and professional activities.

Demonstrate skill in written scientific communication including manuscript preparation, grant preparation, and abstract/poster/oral presentation for scientific meetings.

- Exhibit the oral communication skills necessary for active participation in scientific gatherings, both as a presenter and a discriminating member of the audience.
- Monitor, document, and evaluate student presentations given at local, regional, and national meetings and conferences.

Determine the number of publications produced by our students.

- List the number of awards, invitations, seminars, and posters given by our students.
- Grade in the seminar course will be based on presentation and active engagement in the discussion.
- Review written evaluations of student presentations.

Determine if there are sufficient opportunities for students to gain experience for presenting their work locally, regionally, and nationally.

- Alter program design to include more opportunities and/or create education and/or remedial writing classes if there is evidence of deficiency.
- Design faculty workshop and educational programs enabling them to better address deficiencies.

Began collecting list of publications, intramural and extramural awards, invited presentations, and posters presented by students.

- Implemented teaching practicum courses and opportunities for students.
- Began collecting peer evaluations of student seminars.
Graduates will demonstrate deliberative reflection for personal and professional formation.

- Graduates will comprehend the importance of professional ethics in all aspects of scientific communication and laboratory work.
- Graduates will gain employment in the area of their interest.
- Graduates will be able to advance in their career.
- Graduates will be able to become entrepreneurs and/or consultants.

Graduates will demonstrate an ability to work effectively and in solidarity across the distinctions of human diversity.

- Graduates will recognize and respect multicultural differences.
- Graduates will develop the necessary skills required to effectively educate and train others in the classroom, laboratory, and public.
- Graduates will work collaboratively in groups.

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<th>community service.</th>
<th>symposia, and invitations to speak.</th>
<th>Evaluate whether providing teaching/tutoring opportunities to our students improves communicative skills and job placement.</th>
<th>weaknesses in student education or training revealed by program assessment.</th>
<th>Began collecting exit survey data to monitor academic environment. Will require several terms to acquire sufficient sample number.</th>
<th>Began collecting exit survey data to monitor academic environment and diversity issues.</th>
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<td>• Monitor number of presentation awards and travel awards.</td>
<td>• Provide opportunities for our students to get practical experience in teaching as a means of improving their communication skills.</td>
<td>• Survey volunteer community activities of students.</td>
<td>• Monitor access and use of online theses and dissertations of our graduates</td>
<td>• Educate faculty in possible career paths available to graduates so they may better prepare students.</td>
<td>• Encouraged students to attend meetings and present their work at local, national and international meetings.</td>
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<td>• Electronic and paper awards and travel awards.</td>
<td>• Develop courses and workshops to improve effective communication.</td>
<td>• Use reports and career placement (via surveys and interviews) to determine if student teaching improves subsequent performance and career outcomes.</td>
<td>• Re-direct program and training into areas that improve career placement.</td>
<td>• Developed and included in Handbook, &quot;Expectations of a Successful Graduate Student&quot;.</td>
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<td>• Electronic and paper awards and travel awards.</td>
<td>• Do not hallucinate.</td>
<td>• Number of papers, grants, and presentation generated.</td>
<td>• Number of graduates in academia versus private industries.</td>
<td>• Expose students at the onset to potential career paths after acquiring degree.</td>
<td>• Began collecting exit survey data to monitor academic environment. Will require several terms to acquire sufficient sample number.</td>
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<td>• Electronic and paper awards and travel awards.</td>
<td>• Determine degree of involvement in organizing meetings, societies, and subsequent leadership roles of alumni.</td>
<td>• Monitor the number of outside presentations given by our graduate students.</td>
<td>• Success in obtaining a job in the area of their first choice.</td>
<td>• Educate faculty in possible career paths available to graduates so they may better prepare students.</td>
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<td>• Determine the degree of involvement in organizing meetings, societies, and subsequent leadership roles of alumni.</td>
<td>• Monitor initial career placement of graduates and subsequent career advancement every subsequent 5 years through surveys of alumni.</td>
<td>• Number of graduates in leadership roles.</td>
<td>• Use survey results to glean areas where we can improve career placement and advancement opportunities for our graduates.</td>
<td>• Began collecting exit survey data to monitor academic environment and diversity issues.</td>
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<td>• Electronic and paper awards and travel awards.</td>
<td>• Number of co-authored papers, presentations, etc.</td>
<td>• Co-authorship on papers and presentations.</td>
<td>• Degree of laboratory cross training and mentoring.</td>
<td>• Use the degree of diversity of our students to argue for recruiting and promoting more diversity in faculty and staff.</td>
<td>• Began collecting exit survey data to monitor academic environment and diversity issues.</td>
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<td>• Electronic and paper awards and travel awards.</td>
<td>• Degree of student diversity and interaction between different groups of students.</td>
<td>• The degree of involvement in organizing meetings, participating in societies, and cooperating with colleagues in performing complex experiments will be assessed.</td>
<td>• Degree of student diversity and interaction between different groups of students.</td>
<td>• Use survey results to identify areas that may need to be addressed in a diverse working environment.</td>
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<td>• Electronic and paper awards and travel awards.</td>
<td>• Diversity profile of our faculty and staff.</td>
<td>• Topic of diversity and sensitivity will be examined, not just race, but also sexual orientation, financial status, social status, etc.</td>
<td>• Survey results on collective environment of the program.</td>
<td>• Develop more opportunities for participating in professional organizations, their meetings, and leadership roles.</td>
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<td>• Record of career advancement.</td>
<td>• Monitor the number of papers and grants submitted while in the graduate program.</td>
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