MDID 7255: Personalized Medicine Capstone

Credit Hours: 0.5 - 2 credits, may be repeated

Contact Information

<table>
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<tr>
<th>Name</th>
<th>Position</th>
<th>Phone/Pager</th>
<th>email</th>
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<tbody>
<tr>
<td>Amy Hawkins, PhD</td>
<td>Course Director</td>
<td>703-728-9151</td>
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Course Information

Brief Description of Course

Note: Prior to beginning the Personalized Medicine Capstone course, students will be expected to have made significant progress on or completed a research project for positive or negative results. The research project may have been assigned as a requirement within other Personalized Medicine coursework (such as the project required by the Genomic Analysis course) or another independent research experience.

The Personalized Medicine Capstone is intended for MS4 students to synthesize and reflect on their prior Personalized Medicine coursework while preparing for residency applications and interviews. The coursework is comprised of a portfolio that includes (1) a written description of the student’s research project, (2) a synthesis/reflection paper, (3) a short oral presentation or “lighting talk” suitable for use in conference and interview settings, and (4) an “exit interview” after Match Day to discuss how personalized medicine came up, or didn’t, during interviews, students’ MS4 clinical rotations, and affected students’ choices.

For biomedical graduate students or Personalized Medicine Certificate students who may enroll in this course, the portfolio may be adapted for materials required for future job opportunities or conferences.

Course Objectives

As a result of successfully completing the Personalized Medicine Capstone Course, students will be able to:

1. Deliver a 3-minute lighting talk that incorporates how their experience in Personalized Medicine elective course work has informed their choice of residency, research focus, or influenced how they will practice patient care.
2. Reflect on ways in which they anticipate patient care and Personalized Medicine consumer-driven behavior will intersect and change in the next 5 – 10 years.
3. Demonstrate interest and passion in interviews regarding their experience in Personalized Medicine elective courses.
4. Articulate all Personalized Medicine-related posters, presentations, or publications and their appropriate category for inclusion on either the student’s Electronic Residency Application Service (ERAS) or CV.

Course Format & Schedule

Timeline

Due to the scheduling demands of MS4 clinical schedules, interviews, and a variety of external deadlines, students will be expected to (1) propose their own assignment due dates in writing to the course director and (2) schedule individual dates with the course director to deliver their 3-minute presentations, review their Capstone Portfolio work, and (3) schedule Exit Interviews after Match Day.
Hours of Work per Week: variable. Depending on the length of their research project description, students should anticipate spending approximately 40 hours on this coursework per semester, or the equivalent of 1 credit hour. Students who may be writing up research projects for conference presentations or publication may wish to invest more time and resources into a longer manuscript.

Educational and Instructional Modalities

<table>
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<tr>
<th>Modality</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Independent Written Work</td>
<td>50%</td>
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<tr>
<td>Short Oral Presentation + “Exit Interview”</td>
<td>50%</td>
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</table>

Role of the Student in this Course

Students will be expected to propose a timeline to complete the Capstone portfolio work that will complement their own scheduling demands. The Capstone assignments will draw on students’ previous coursework and current clinical rotations to promote synthesis and complement the work that medical students will be doing in their interview preparations.

Required Textbook(s)/Readings

<table>
<thead>
<tr>
<th>Book Title + ISBN</th>
<th>Author/Publisher/Edition</th>
<th>Approximate Cost</th>
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</thead>
<tbody>
<tr>
<td>n/a</td>
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Additional Resources

Students are encouraged to seek out resources pertaining to the ‘3-Minute Thesis Challenge’ for guidance in writing and delivering their own 3-minute lightning talk. An example is this ‘Three Minute Thesis Scoring Rubric’ available from Fordham University. [https://www.fordham.edu/download/downloads/id/10153/three_minute_thesis_scoring_rubrics.pdf](https://www.fordham.edu/download/downloads/id/10153/three_minute_thesis_scoring_rubrics.pdf)

Students are also encouraged to seek out additional current resources about the evolving field of personalized medicine and incorporate them into their reflection. Students should look to what their patients may be encountering in the popular press, and the peer reviewed literature from research groups like Genomes to People: [https://www.genomes2people.org/](https://www.genomes2people.org/)

Assessment & Grading

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<tr>
<th>Assessment/Assignment</th>
<th>Must Pass/ Must Complete</th>
<th>Due Date</th>
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<tbody>
<tr>
<td>Assignment Due Dates Proposal</td>
<td>Must Complete</td>
<td></td>
</tr>
<tr>
<td>Lightning Talk Proposal (Written)</td>
<td>Must Complete</td>
<td>Proposed by student</td>
</tr>
<tr>
<td>CV Components: Personalized Medicine-Related Posters, Presentations, or Publications</td>
<td>Must Complete</td>
<td>Proposed by student</td>
</tr>
<tr>
<td>Research Project Description</td>
<td>Must Complete</td>
<td>Proposed by student</td>
</tr>
<tr>
<td>Synthesis/Reflection Paper</td>
<td>Must Complete</td>
<td>Proposed by student</td>
</tr>
<tr>
<td>Lightning Talk Presentation (Oral)</td>
<td>Must Complete</td>
<td>Proposed by student</td>
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Grading System

Students will receive a final letter grade of PASS (P), or FAIL (F) for this course.

- **PASS:** A student who achieves the criteria, will be assigned a grade of PASS for the course.
- **FAIL:** A student who fails to achieve the criteria for PASS, will be assigned a grade of FAIL for the course.

Criteria to Pass include:
- Completion of a written description of the student’s research project or projects including sections on background, methods, results, conclusion, and next steps—all of which can be done for either positive or negative results.
- Completion of a synthesis/reflection paper that discusses (a) what they learned from all components of the Certificate (including the project), (b) how what they learned applies to patient care, particularly for the clinical or research specialty they hope to go into, and (c) ways in which they anticipate patient care will change in the next 5-10 years in light of what they learned, and (d) how they intend to keep up with the latest developments in the
field going forward. Medical students will be encouraged to connect these ideas to different sections of residency applications, such as their Noteworthy Characteristics or Personal Statement.

- Completion of a short oral presentation/elevator speech that includes aspects of both their project and their reflection for use in conferences and interview settings.
- Articulate all Personalized Medicine-related posters, presentations, or publications and (specific to medical students) their appropriate category for inclusion on the student’s Electronic Residency Application Service (ERAS) or biographical sketch or Curriculum Vitae.
Student Feedback

Providing feedback is an important aspect of our professionalism expectations, and helps with curriculum quality improvement. For each Pathways course you must complete an end-of-course survey by the due date to demonstrate reliability for the professionalism competency. Required surveys are administered online through Qualtrics and student responses are anonymous.

Standard Policies

Please refer to the Student Handbook (on the Student Affair’s website) for these policies:

- Accommodations
- Addressing Sexual Misconduct
- Dress Code
- Examination and Grading Policies
- Grade or Score Appeal
- Professionalism, Roles & Responsibilities
- Mistreatment
- Infectious, Environmental and Bloodborne Pathogen Exposures Policy

Alternate Name and/or Personal Pronoun

Class rosters are provided to the instructor with the student’s legal name as well as ‘Preferred’ first name (if previously entered by you in the Student Profile section of your CIS account). While CIS refers to this as merely a preference, we will honor you by referring to you with the name and pronoun that feels best for you in class, on papers, exams, group projects, etc. Please advise us of any name or pronoun changes (and please update CIS) so we can help create a learning environment in which you, your name, and your pronoun will be respected.

Center for Disability & Access

The School of Medicine seeks to provide equal access to its programs, services and activities for all medical students. The Center for Disability and Access (CDA) provides accommodations and support for the educational development of medical students with disabilities. Medical students with a documented disability, and students seeking to establish the existence of a disability, that would like to request accommodations are required to meet with the CDA to establish accommodations. The CDA will work closely with eligible students and the Academic Success Program to make arrangements for approved accommodations. The School of Medicine and CDA maintain a collegial, cooperative, and collaborative relationship to ensure compliance with federal and state regulations for students with disabilities.

Steven Baumann EdD, School of Medicine Senior Director of Academic Success Program, serves as the liaison between the School Of Medicine and the CDA.

Contact Information:
Dr. Steven Baumann, Senior Director of Academic Success Program

Safety Statement

The University of Utah values the safety of all campus community members. To report suspicious activity or to request a courtesy escort, call campus police at 801-585-COPS (801-585-2677). You will receive important emergency alerts and safety messages regarding campus safety via text message. For more information regarding safety and to view available training resources, including helpful videos, visit safeu.utah.edu.