# **Recommended Curriculum**

In addition to the BSGP core curriculum, 10 Immunology credit hours (a to c) and a seminar presentation (d) are required to receive an Immunology transcript designation.

## a-Students must complete the following course:

MEDMCIM 7010 Molecular and Cellular Immunology (3 credits/SPR). Instructors: William Perry Lafuse (<u>Lafuse.1@osu.edu</u>), Purnima Dubey (<u>Purnima.Dubey@osumc.edu</u>), Abhay Satoskar. Cellular and molecular mechanisms of immune response, cell recognition and communication, molecular biology of cell recognition structures, cytokines, and effector mechanisms.

## b-Students must complete one elective course from the following list:

- PATHOL 7847 Cellular Mechanisms and Pathogenesis of Inflammation (2 credits/every other SPR). Instructors: Traci Wilgus (Wilgus.3@osu.edu), AU 2020/2022/2024. Inflammatory processes in the human host due to interaction with viruses, bacteria, parasites, foreign antigens, or physical trauma and new immunological therapeutic strategies being developed. Prereq: MEDMCIM 7010, or permission of instructor.
- MEDMCIM 8010 Selected Topics in Advanced Immunology (3 credits/each AU). Instructor:
   Dr. Stephanie Seveau (<u>Stephanie.Seveau@osumc.edu</u>), AU 2018/2020/2022. Students will gain significant insight into immunological concepts of infectious diseases, transplant, cancer, mucosal immunity, allergy and autoimmunity. Prereq: 7010.

Courses below may be used towards Immuno Emphasis but may no longer be offered.

• CBG 8845 The History of Immunology (3 credits/every other AU). Instructor: Dr. Jianhua Yu, AU 2017/2019/2021. Understand immunology and pertinent research, students must understand its history so to appreciate where the field of immunology started, the progress and discoveries made. MVIMG 7010 is recommended but not required.

c-Students must complete a total of 4 credit hours, or 5 credit hours if PATHOL7847 was selected in (b), of Immunology Seminars and Journal Clubs including at least one immunology seminar and one immunology journal club. The courses from which to choose are:

### **Seminars**

- PATHOL 8850 Seminars in Pathology. (1 credit/AU, SPR). Instructor: Rolf Barth (rolf.barth@osumc.edu) and Wael Jarjour (Wael.Jarjour@osumc.edu). Prominent external and Ohio State faculty seminars in immunopathology on Tuesdays from 12-1 p.m. at Prior Health Sciences Library 400. The seminar covers a broad range of topics in Immunology research, including cancer, autoimmunity, infectious diseases and molecular Immunology. Repeatable to a maximum of 14 credit hours. This course is graded S/U.
- BSGP 7950 Host-Pathogen Interactions: Research Seminar. Instructor: Matthew Anderson (Matthew.Anderson@osumc.edu), AU, SPR. Faculty, students and outside speakers will give research presentations on microbial-host interactions.
- HTHRHSC 7595 Translational Neuroimmunology (1 credit/AU, SPR). Instructor: Mireia Guerau (Mireia.Guerau@osumc.edu). Faculty, students and outside speakers will give research

presentations in Neuroimmunology; Students develop skills in teaching, analyzing, discussing, synthesizing and presenting research in NeuroImmunology). Please contact if interested in summer offering.

#### **Journal Clubs**

- BSGP 7880 Vaccine Immunology (1 credit/AU, SPR). Instructor: Dr. Mark Peeples. Trainees will prepare and give presentations on current research on immunological mechanisms of pediatric diseases. Prereq: Enrollment in BSGP, and permission of instructor. Repeatable to a maximum of 2 credit hours.
- BSGP 7900 Cancer Immunology: Critical Journal Readings (1 credit/AU). Instructor: Dr. Thomas Mace (<a href="mailto:Thomas.Mace@osumc.edu">Thomas.Mace@osumc.edu</a>). Faculty, students and postdoctoral fellows will give critical interpretations of research and journal readings on cancer immunology.

Courses below may be used towards Immuno Emphasis but have not been recently offered.

• INTMED 8891.01 Seminar Allergy/Immunology (1 credit). (Administrative Contact: <a href="mailto:Lindsey.Ruff@osumc.edu">Lindsey.Ruff@osumc.edu</a>) Discussion of pertinent literature and research projects in various subspecialty areas with emphasis on basic science concepts. Check contact for offering semester. Repeatable.

d-Students must present the findings of their original research during their last year in one of the following courses designed for student presentations (registration is not required):

- BSGP 7972 Cancer Immunology: Research Seminar Presentation. Instructors: Chris Oakes and Hua Zhu, AU/SP/SUM). Faculty, students and postdoctoral fellows will give research presentations on cancer immunology.
- HTHRHSC 7595 Translational Neuroimmunology (1 credit/ AU, SPR). Instructor: Mireia Guerau (Mireia.Guerau@osumc.edu) Students develop skills in teaching, analyzing, discussing, synthesizing and presenting research in NeuroImmunology.
- BSGP 7950 Host-Pathogen Interactions: Research Seminar. Instructor: Dr. Matthew Anderson, AU/SPR) Faculty, students and outside speakers will give research presentations on microbial-host interactions.

# How to check if course is being offered on a particular semester

To check, click on <u>Schedule of Classes</u> on the University Registrar website. Then fill in the semester, the location, the subject (BSGP: Biomedical Sciences Graduate Program, CBG: Cellular Biology and Genetics, PATHOL: Pathology, HTHRHSC: Health and Rehabilitation Sciences,...) and the course number. We have also included the instructor's name so that you can contact them ahead of time to express interest in a course and ask when it will be offered.