

INFECTIOUS DISEASES AREA OF CONCENTRATION

The overall objective of the Area of Concentration in Infectious Diseases (IDAOC aka “The Bug Club”) is to expose medical students to a broad range of topics in infectious diseases including molecular, cellular, and translational pathogenesis research, clinical diagnostics and management, genomic epidemiology studies, infection prevention and public health policy. The IDAOC will provide students with a longitudinal para-curriculum that will form a strong background in the field of infectious diseases through various conferences and meetings, mentorship, and clinical and research activities.

GOALS & LEARNING OBJECTIVES

The goal of the IDAOC is to promote interest in infectious diseases through engaging medical students in various activities throughout the University of Pittsburgh School of Medicine and at UPMC. Since the study of infectious diseases encompasses multiple specialties in the health sciences, students will have multiple options for conferences and meetings to attend in various departments, including Medicine, Pediatrics, and OB/Gyne.

1. Understand the myriad of career pathways available to an ID specialist and different training requirements for each.
2. Understand the role of infectious diseases as a modern paradigm for meeting social, scientific, and geopolitical challenges.
3. Understand the unprecedented challenge of antimicrobial resistance, infectious disease prevention, and the unmet need for more ID specialists.
4. Learn and apply a set of research tools to a pressing question in ID.
5. Understand the landscape of STIs in the US.

ACTIVITIES

Weekly ID Grand Rounds and Case Conferences. The ID Division in the Department of Medicine holds weekly grand rounds every Thursday. Presentations include case discussions with review of literature, research in progress of both infectious diseases fellowship trainees and faculty, and state of the art presentations by invited guests. The ID Division in the Department of Pediatrics also holds similar conferences every Friday while the Reproductive ID Division holds monthly conferences.

Weekly HIV Conference and ID Journal Club. HIV conferences discuss core principles in HIV management and diagnostics accompanied by multidisciplinary discussions involving social, psychological, and sexual/reproductive health of people living with HIV. Management of co-infections with Hepatitis B and C, and sexually transmitted diseases together with pre-exposure prophylaxis (PrEP) are also discussed. In addition, “Genotype Conferences” are held to help HIV care providers manage patients with multiple resistance mutations. At ID Journal Club, fellows present recently published high-impact papers on various areas of infectious diseases.

Other Clinical Case Conferences. In the Transplant ID teleconference, interesting cases in solid organ and bone marrow transplant from major transplant centers (UPMC, Cleveland Clinic, UNC, University of Sao Paulo, Mayo Clinic) are presented and discussed. The Tropical

Medicine teleconference presents highly interesting cases in the Philippine General Hospital/University of the Philippines. The Pediatric Infectious Disease division also has weekly fellows teaching conferences on Tuesday mornings that cover a broad range of topics related to Pediatric Infectious Disease. There are also monthly Journal Club presentations which are interspersed with Research in Progress seminars, both presented by Pediatric Infectious Disease fellows and faculty.

Seminar Series. The Department of Infectious Diseases and Microbiology (IDM) at the Graduate School of Public Health and the Center for Vaccine Research both hold regular seminar series where faculty and invited guests present the latest updates on ongoing research and cutting edge science related to infection biology.

Clinical Rotations. Students will be able to do rotations with the different infectious diseases clinical services. These include: general adult and pediatric ID, surgical ID, transplant ID, endocarditis service, VA ID, Reproductive ID Integrated Life Sciences, and outpatient ID at the Center for Care of Infectious Diseases which has the general, transplant, and travel ID clinics, the HIV/PrEP clinic, the Cdiff/Fecal Microbiota Transplant clinic, and the Tele-ID clinic. In addition, students may be able to rotate with Infection Control and Prevention team at either Presbyterian/Montefiore Hospitals or the VA, and with the Antibiotic Management Program.

Research Opportunities. Students will have the opportunity to join research projects in basic, translational, clinical, and public health research in adult, pediatric, surgical, and OB/Gyne infectious diseases. They can participate in ongoing studies at research laboratories in the different ID Research Centers including, Center for AIDS Elimination, Center for Antibody Therapeutics, Center for Innovative Antimicrobial Therapy, Center for Management of Fungal Infections, and Center for Genomic Epidemiology. In addition, they could also join laboratories in the Department of Pediatrics and OB/Gyne, Center for Vaccine Research and the Graduate School of Public Health IDM if their chosen ID Research Mentor's belongs to these departments or centers. Students participating in the AOC are highly encouraged to do their Longitudinal Research Projects in the field of infectious diseases.

Mentorship. Students will be assigned a faculty mentor with similar interests that can guide them as they go through their clinical rotations and research studies. The ID Division in the Departments of Medicine and Pediatrics and the OB/Gyne Reproductive ID Division have over 70 faculty members that can serve as mentors. Future goal: To develop a "buddy-system" between the first year and more senior medical students.

REQUIREMENTS

- Sign up/apply by start of the 2nd year (students are also welcome to join in their 1st year)
- Attend at least 1 ID-related conference/meeting per month (choose from the list above)
- Attend quarterly IDAOC meetings
- Do a ID-related clinical rotation (Medicine, Pediatric, or OB/Gyne)
- Work on a ID-related research project (preferably as part of their Longitudinal Research Project)

CERTIFICATE & AWARDS

Students will receive a certificate at the end of their 4th year if they have fulfilled the requirements of the AOC. The **Matthew Eric Piraino Award for Excellence** in Infectious Diseases was established in 2010 and is given to the Pitt School of Medicine seniors (not necessarily AOC members) who have shown exemplary performance in their ID-related clinical rotations and/or research activities.

AOC Director

Bernard Macatangay, MD

