

Immersion Phase
Class of 2020
Careers in Medicine Fair

What we'll cover tonight:

- Immersion Phase requirement reminders
- Student representative tips on Immersion Phase
- Integrated Science Course (ISC) introductions
- Students meet with College Mentors (15 min)
(4th floor rooms)
 - MSTP Students will meet with Dean Fleming
- Students meet with subspecialty advisors (30 min)
(4th floor rooms)

Curriculum 2.0: Immersion Phase

A highly individualized post-clerkship phase that uses clinical context to build upon prior learning

Advanced Clinical Experiences ●
rigorous clinical rotations

Integrated Science Courses ●
mixed didactic and clinical experiences

Acting Internships ●
supervised intern-level responsibilities

Research ●
mentored research project



IMMERSION PHASE GOALS

- Deepen **FOUNDATIONAL SCIENCE KNOWLEDGE** during meaningful clinical engagement
- Solidify **CLINICAL SKILLS**
- Enhance **PRACTICE-BASED LEARNING SKILLS**
- Ensure readiness for **INTERN ROLE/RESIDENCY**
- Expand knowledge and skills regarding **SCHOLARSHIP**
- Further grow knowledge and skills regarding **LEADERSHIP**
- Encourage **PROFESSIONAL DEVELOPMENT**

C 2.0 Immersion Phase Requirements

Minimum C2.0 Requirements (in Months)		
On-Campus	4	Integrated Science Courses (ISCs)
	1	Acting Internship (AI)
	4	Advanced Clinical Electives (ACEs)
On-Campus or Away (away with approval)	3	Research Immersion
	3	Competency and Interest-Driven Rotations* (can be ISCs, ACEs, AIs or Electives)
15 required months		Must include: 1 Primary Care course (either ACE or ISC) 1 Acute Care course (EM or ICU-based course)
4+2+1 (7 total)		<i>Flex months (4 + 2 month for Step 1 + 1 month for interviews)</i>

ISC, ACE and AI grading = H/HP/P/F

Students can register for up to 19 months

**At least one must be clinical rotation.*

Approach for your IP Planning

- Plan for a minimum of 2 (ideally 3) ISCs in year 3
- Acting Internships (AI) will be taken between March of Y3 and September of Y4 by most students
 - students will work with IP team to register
- Have several schedules planned and recognize that you will make many changes to your schedule
- Be mindful of your peers as you plan
- Discuss with your Mentors:
 - 3rd year should be approached as exploratory and to attain required competencies
 - Balance general medical education vs specialization



Learning Communities

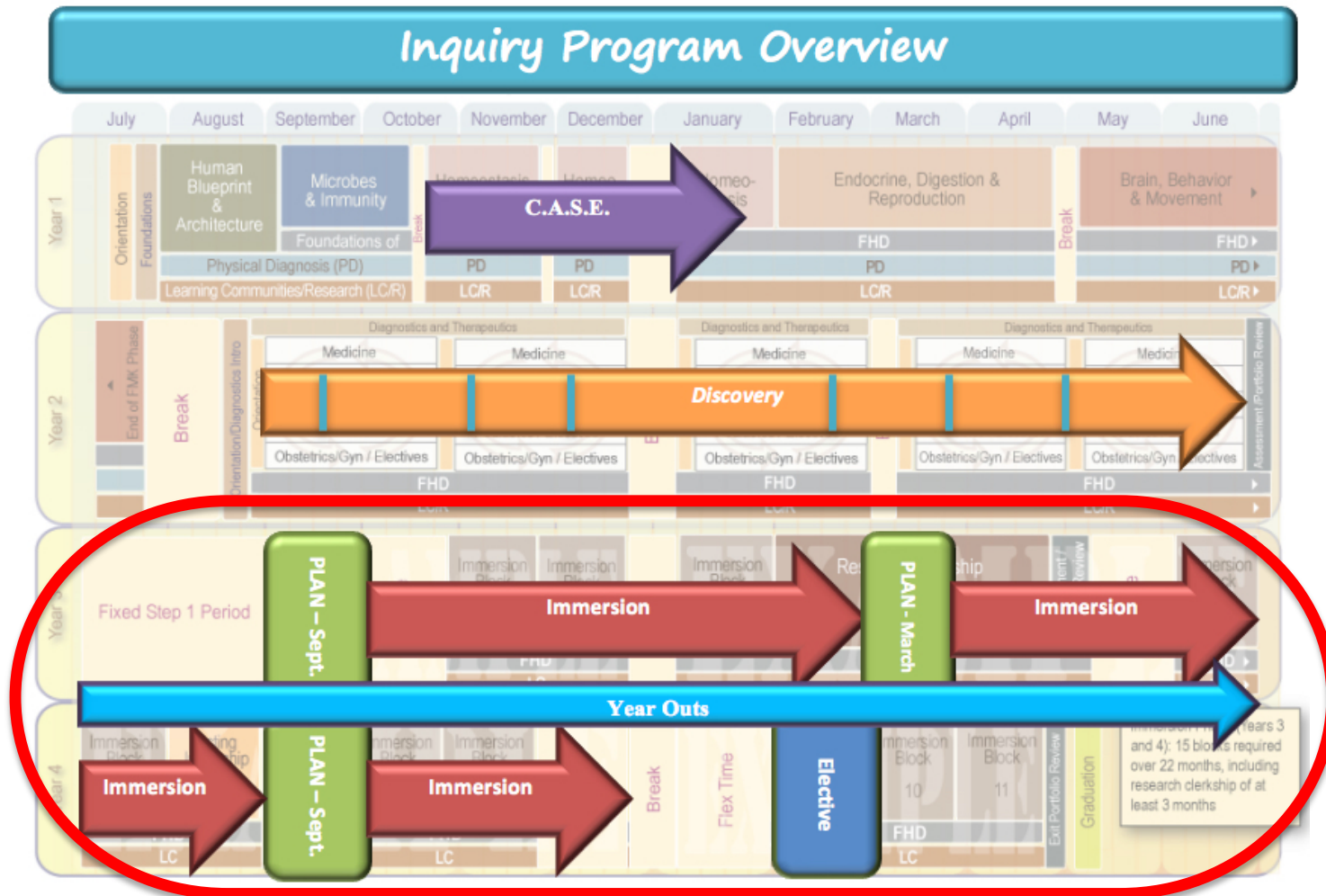
Registration needed in YES for all 8 LC units over your Immersion Phase

- 8 units
 - Mondays from 1-3 (odd units) and 3-5 pm (even units)
 - 6 – 8 hours effort per unit
 - (2 of those hours in face-to-face session)
- Months offered:
 - Sept & Jan: Units 1 & 2
 - Oct & Feb: Units 3 & 4
 - Nov & March: Units 5 & 6
 - Dec & April: Units 7 & 8
- Pass/fail

Face-to-face meeting, typically on 3rd Monday of rotation

Inquiry Program: Courses During the Immersion Phase

- PLAN
- Research Immersion



FHD Immersion Course Information

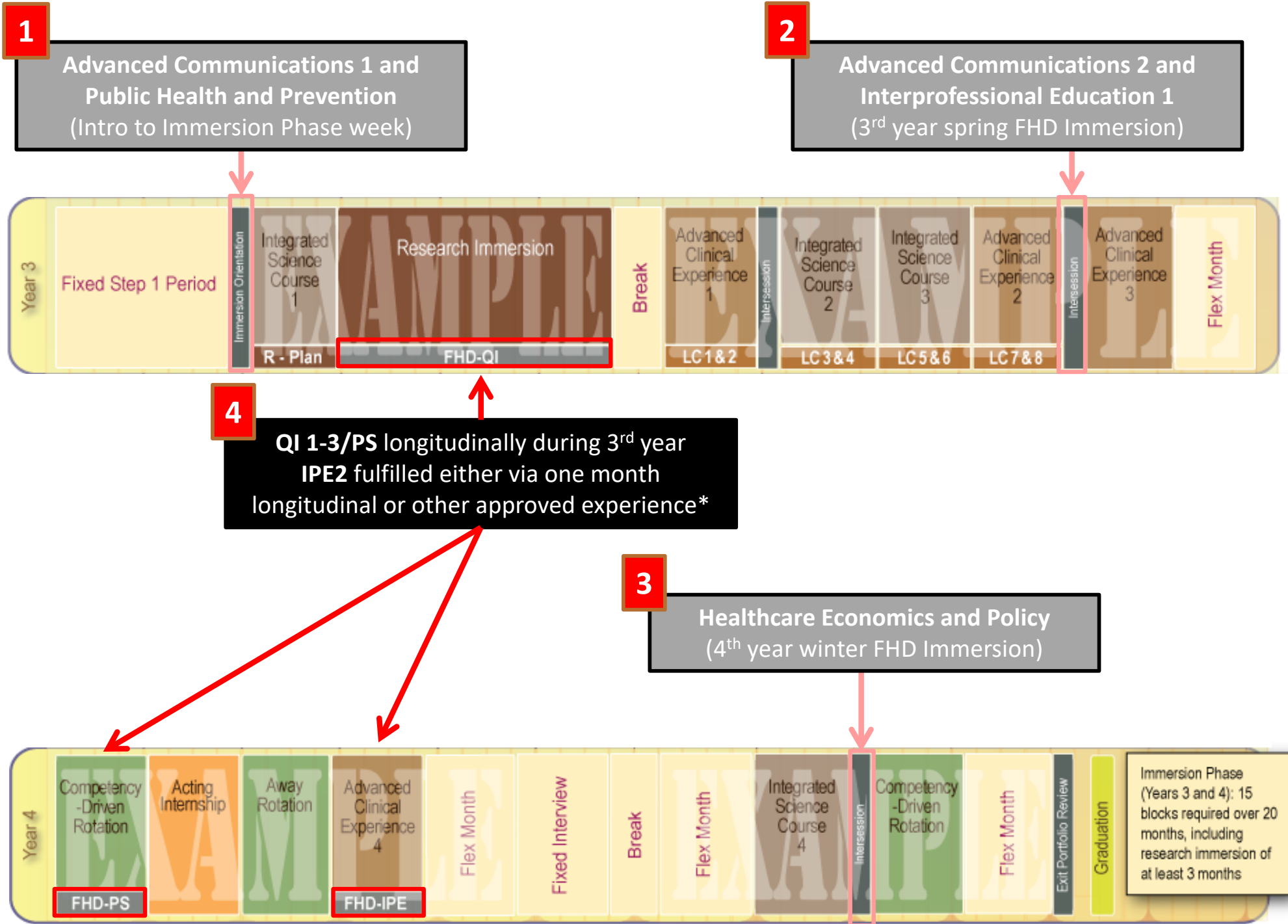
- 5 units as a class during three one-week Immersion Weeks
 - You don't register for these
 - Attendance is mandatory

Advanced Communications 1
Advanced Communications 2
Public Health and Prevention
Interprofessional Education 1
Healthcare Economics and Policy

- 5 units longitudinally, mostly during 3rd year
 - Paired with a primary rotation
 - Cannot take FHD when you take PLAN
 - Tuesdays from 1-5 pm
 - 20 hours effort per unit
 - Primarily self-directed, asynchronous learning
 - **One or two face-to-face meetings (varies by course)**

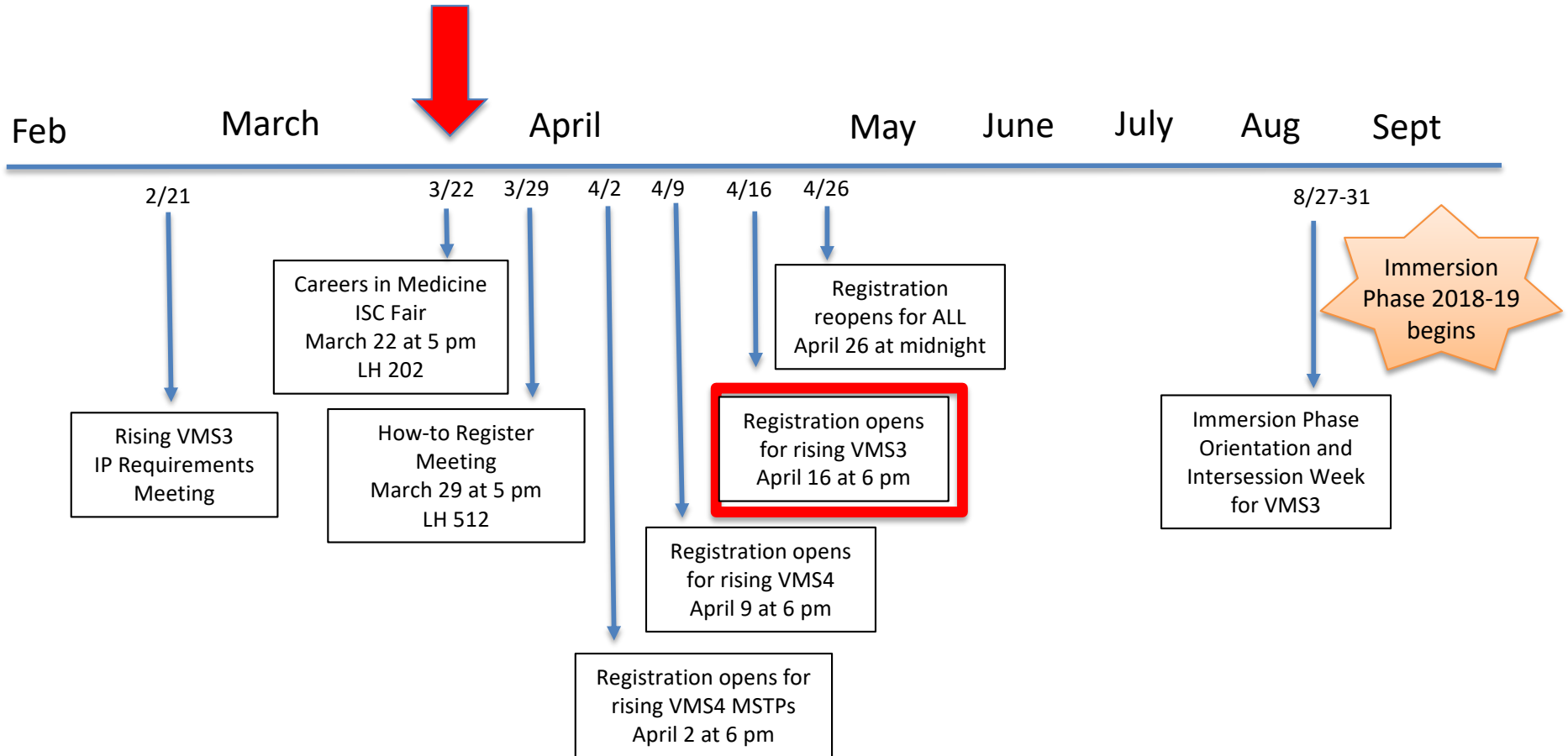
Quality Improvement 1, 2, 3
Interprofessional Education 2
Patient Safety

<https://medschool.vanderbilt.edu/fhd/fhd-immersion-phase-courses>



*Such as Nicaragua, Shade Tree, VPIL, or other approved interprofessional experience

VMS2 Registration Timeline



Resources

- Class of 2020
 - <https://medschool.vanderbilt.edu/ume/class-2020-requirements>
- MD PhD Pre-C2.0
 - <https://medschool.vanderbilt.edu/ume/md-phd-prec2o>
- Make sure to pick up the appropriate printed packet at the back of the room

Certificate Programs

The School of Medicine offers graduate certificate programs to its students who wish to gain focused expertise in a specific area.

- Each program has its own admission and completion requirements.
- Students must submit an “Intent to Enroll” form to document their intention to pursue a certificate, as well as other documentation as needed.
- Permission of the degree program director and the certificate program director are required to pursue a certificate.

Certificate Programs

- **Biomedical Ethics**
- **Global Health**
- **Lesbian, Gay, Bisexual, and Transgender (LGBT) Health**
- **Neurodevelopmental Disabilities**

Careers in Medicine

<https://medschool.vanderbilt.edu/cim/pathway-match>

*Your guide to succeeding in the residency
application process with info such as*

Cost of Applying

Fourth-Year Scheduling

Away Rotations

Calendar to Match

Faculty Advisor Lists

Checklist for Match

Workshops

Application Process

Letters of Recommendation

Integrated Science Course Presentations

(please hold all questions until the end)

Cardiovascular Disease

David Meoli, MD, Steven Eskind, MD, Lisa Mendes, MD, Julie Damp, MD,
Ash Shah, MD, Robert Deegan, MD

Science

Cardiovascular anatomy and physiology, Etiology and pathophysiology of atherosclerosis, Hemodynamics of cardiovascular system in health and disease, Pharmacology, Pathophysiology, diagnosis and treatment of acute coronary syndromes, acute myocardial infarction, congestive heart failure, aortic stenosis, atrial fibrillation and wide complex tachycardia, Pathophysiology, diagnosis and treatment of common forms of carotid and peripheral vascular disease, and aortic disease

Clinical Settings

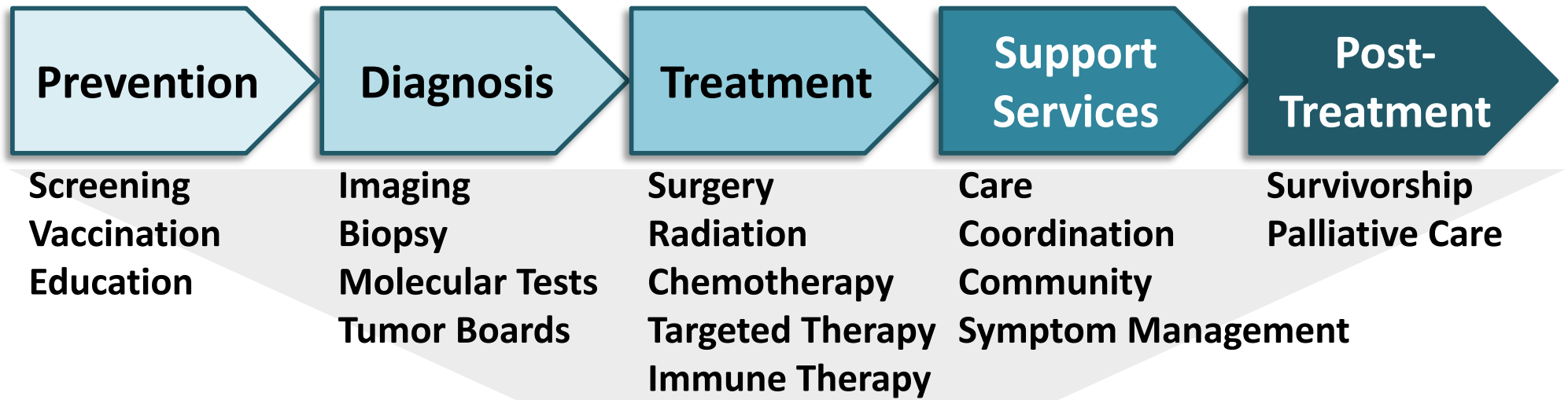
Four, one week clinical experiences in the following areas: CT surgery, Vascular Surgery, CT Anesthesia, General Cardiology/Interventional, General Cardiology/Imaging, Electrophysiology, Heart Failure

Specialty Interests

Internal Medicine, Cardiology, Critical Care, Vascular Surgery, Cardiothoracic Surgery, Anesthesia, Emergency Medicine

Clinical Cancer Medicine

Kim Dahlman, PhD, Mary Hooks, MD, MBA & Vicki Keedy, MD, MSCI



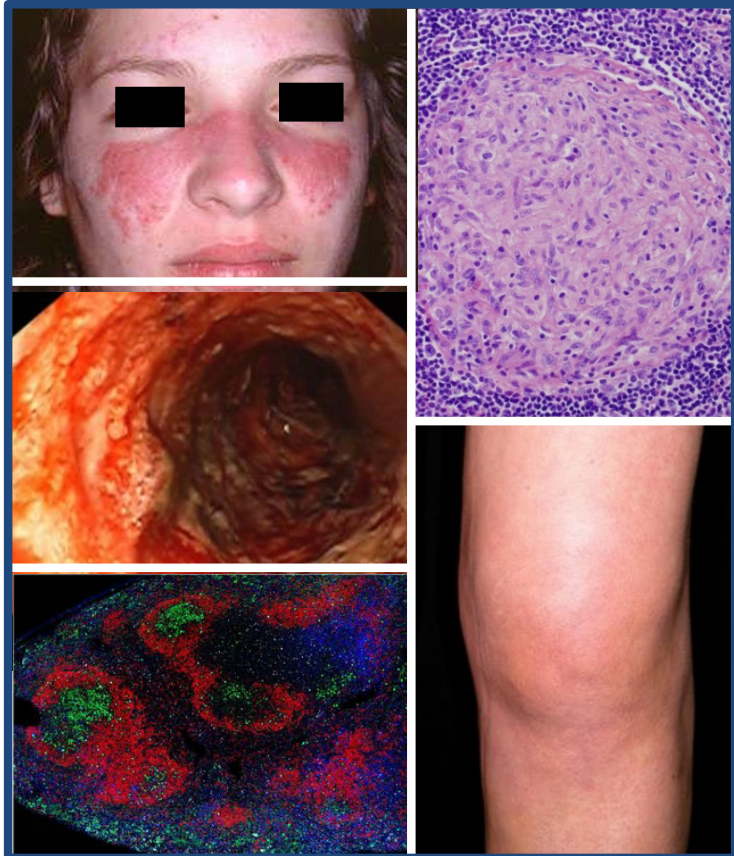
Clinically Applied Immunology

Daniel Dulek, MD

Course Goal: To reinforce and extend students' ability to apply immunologic concepts in a clinically-relevant manner using a range of medical subspecialties

What's New for 2018-2019?

- Clinical settings tailored to your interests
- Broader clinical application



Clinical Settings

Rheumatology; GI/Inflammatory Bowel Disease; Allergy/Immunology; Infectious Diseases; Dermatology; Solid Organ Transplantation; Hematopoietic Cell Transplantation; Pathology

Clinical Science

Clinical Problem Solving, Immunology, Clinical Flow Cytometry and Immunologic Diagnosis, Pathologic Inflammation, Microbiology, Sepsis, Opportunistic Infections, Monoclonal Antibody Therapy, CAR T cells; Cancer Immunotherapy; Immunosuppressive Medications

Community Healthcare

Jule West, MD and Tiffany Israel, MSSW

Science

Population health, health policy, health determinants, community engagement, systems engineering, public health, organizational management, health ethics, resource utilization, implementation science, behavioral science, communication science, stress biology, vaccine immunology and policy implementation

Clinical Settings

Students participate in clinical care in a safety net primary care setting including the Neighborhood Health Clinics, Matthew Walker Comprehensive Health Center, or Siloam Health

Specialty Interests

Community and Population/Public Health Medicine, Combined Internal Medicine-Pediatrics, Emergency Medicine, Family Medicine, General Surgery, Internal Medicine and subspecialties, Neurology, Obstetrics & Gynecology, Orthopedic Surgery, Pediatrics, Plastic Surgery, Psychiatry

Critical Illness

Tracy McGrane, MD & Meredith Pugh, MD

Science

Physiology, pathophysiology, pharmacology, anatomy, microbiology, immunology, neuroscience, nutrition science, imaging, ethics and behavioral medicine

Clinical Settings

Critical Care Skills Week (CELA); one week 'on service' in either the medical, surgical, burn, neurologic, cardiovascular, or pediatric ICUs

Specialty Interests

Anesthesiology, Critical Care Medicine, Internal Medicine and its Subspecialties, General Surgery and its Subspecialties, Emergency Medicine, Pediatrics

Diabetes

Michael Fowler, MD

Science

lipid biology and pharmacology, cardiovascular physiology, molecular biology, genetic medicine, cell biology, and neuroendocrinology

Clinical Settings

Diabetes Bootcamp followed by “sub-fellowship” in the glucose management service and endocrine consult service

Specialty Interests

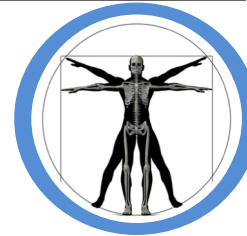
Internal Medicine and subspecialties, Family Medicine, Emergency Medicine, Surgical Subspecialties, Anesthesia, Radiology

Emergency Care: Cell to System Science

Kendra Parekh, MD & Saralyn Williams, MD



Toxicology



Anatomy



Ultrasound



Teamwork

Core
Concepts

Deeper
Dive

Concepts
in Action

Summary

Designed for students with interests in: anesthesia, critical care, EM, family medicine, IM, neurology, orthopedics, pediatrics, psychiatry, radiology, surgery and surgical subspecialties

Getting Hooked: Immersion in Addiction

Meg Benningfield, MD and Christine Konradi, PhD

Science

Biological and clinical principles of brain function and behavior: What determines who gets hooked?
How do drugs affect the brain?
How can physicians help patients to quit?

Clinical Settings

Pain clinic, partial hospital program, inpatient addiction treatment

Specialty Interests

Primary Care * Surgery * Pain Management
Adolescent Medicine * Psychiatry * Neurology

Global Health

Doug Heimburger, MD, MS



Science

health systems, population health, pathology & pathophysiology (IDs, NCDs), epidemiology, nutrition, social sciences, and/or public health

Clinical Settings & Specialty Interests



Central America

Primary Care, Public Health, IDs, Peds, NCDs, Cancer, Cardiology, Nutrition, Pathology, Psychiatry, Microbiology

Teaching Hospital, District Hospital, Rural Clinic, University Laboratory

Jordan

Cancer, Genetic Diseases, NCDs, Pathology, Pediatrics, QI

Teaching Hospital, Gov't Hospital, Refugee Camp, Cancer Center

Kenya

IDs, HIV/AIDS, MCH, Nutrition, Prevention & Treatment, Primary Care, Public Health, Water & Sanitation

Rural Clinic, Community Outreach

Alternative Site

Student chooses among a variety of GH topics or develops their own modules

Student arranges site and supervisor

Healthy Aging & Quality Dying

Mariu Duggan, MD, MPH & Andy Wooldridge, MD



Science

Physiology, biochemistry, immunology, pharmacology, neuroscience, psychology, epidemiology, preventive health, public health, social sciences, philosophy, ethics, science of healthcare systems

Clinical Settings

Skills week

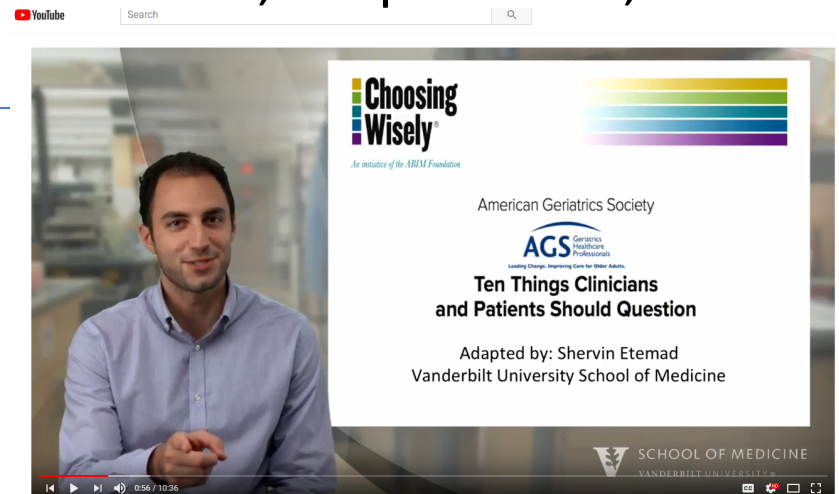
1 week inpatient (geriatrics wards/consults, geri-psych, nursing home)

1 week outpatient (primary care, specialty clinics)

Home, assisted living, nursing home, palliative care, hospice visits, V3

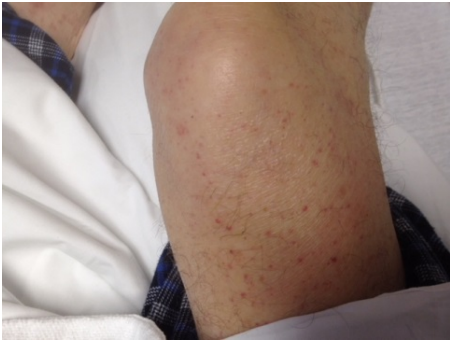
Specialty Interests

Internal Medicine and subspecialties,
Surgery, Family Medicine, Neurology,
Psychiatry, Emergency Medicine



Infectious Diseases

Holly Algood, PhD and Christina Fiske, MD



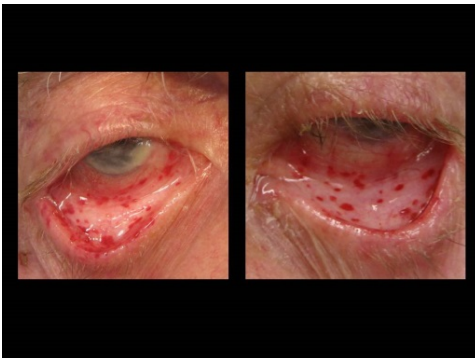
Science

Virology, microbiology, molecular biology, immunology, pathophysiology, pathology, antimicrobial stewardship, infection prevention



Clinical Settings

Inpatient consult service (Pediatric or Adult), outpatient clinics (Pediatric, General Adult, HIV), microbiology and virology lab



Specialty Interests

Internal Medicine and Pediatrics, (esp. Allergy/Immunology, Rheumatology, Hematology/Oncology, Infectious Diseases, and Transplant subspecialties), Dermatology, Pathology

Injury, Repair, and Rehabilitation (IRR)

Shannon Eastham, MD

Science

Anatomy, Cell and Developmental Biology, Epidemiology, Ethics, Immunology, Implementation Science, Neuroscience, Nutrition sciences, Pathology, Pathophysiology, Pharmacology, Radiology, Social Sciences, Speech Sciences, and System Sciences

Clinical Settings

Trauma (ICU/Admits): 2 Nights and 2 Days

Wound Team: 0.5 Day

Medical Examiner's (Coroner's) Office: 2 Days

Stallworth Rehabilitation Hospital: 0.5 Day

Specialty Interests

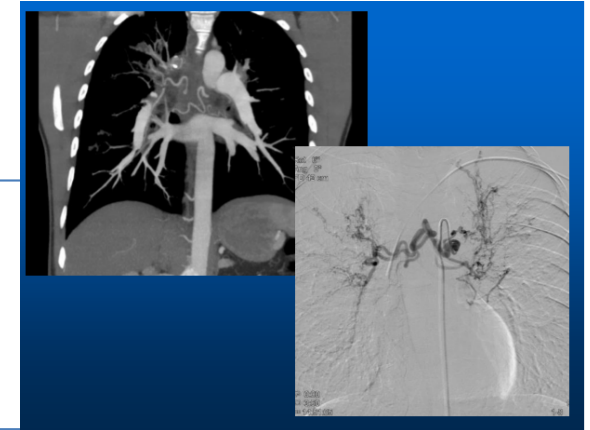
Surgery & Subspecialties, Emergency Medicine, Anesthesiology, and Aspiring MDs

Medical Imaging and Anatomy

Cari Motuzas, MD and Scott Pearson, MD

Science

Anatomy labs*, radiation basics, contrast use, appropriate ordering



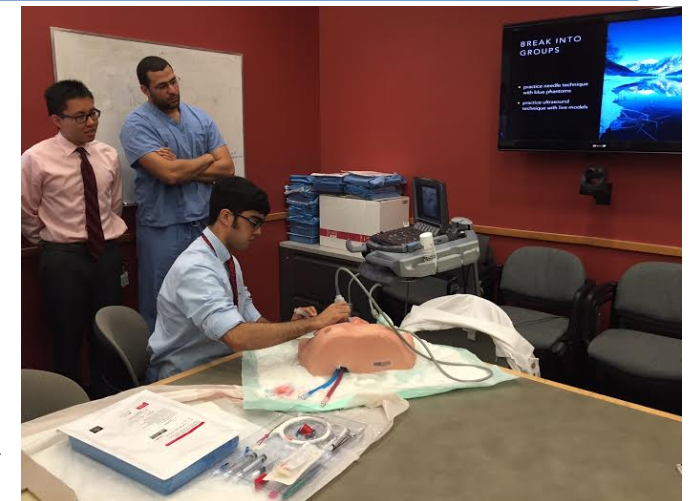
Clinical Settings

See MRI in action & procedures in fluoroscopy;
Hands-on Ultrasound in CELA: SP & image-guided CVC placement;
Practice being a Radiology resident; Radiology reading room experience*

Specialty Interests

*** Individualized based on your interest:**

Internal Medicine, General Surgery, Emergency Medicine,
Orthopedic Surgery,
Pediatrics, Neurology,
Neurosurgery, Ophthalmology,
Ob-Gyn, ENT,
Radiology, Radiation Oncology



Sexual Health and Medicine

Doug Milam, MD and Mary Romano, MD

Science

Embryology and development, Anatomy, Neurophysiology, Sexual function and response, Sexual orientation, Intimacy and behavior, Treatment of sexual dysfunction, Sexually transmitted infections, Infertility

Special emphasis is placed on interviewing techniques and skills for both adolescents and adults with a simulated patient encounter at CELA at the conclusion of the course..

Clinical Settings

Students will have hands on experience in outpatient clinics including Adolescent medicine, Urologic surgery, Planned Parenthood, Comprehensive Care Clinic, Obstetrics/Gynecology

Specialty Interests

Adolescent Medicine, Family Medicine, Internal Medicine, Obstetrics/Gynecology, Pediatrics, Psychiatry, Urology

The Skinny on Obesity

Gisella Carranza Leon, MD and C. Robb Flynn, PhD

What is new?

- Obesity boot camp
- Food analysis project
- Shade tree weight loss camp
- *New course co-director*

Science:

- Adipose tissue physiology
- Gut regulation of metabolism
- Nutrition
- Pathophysiology, pharmacology, diagnosis and treatment of obesity and its complications.

Clinical Settings

- Medical Weight Loss Clinic
- Surgical Weight Loss
- Vanderbilt Lipid Clinic
- Diabetes Eskind Clinic
- Shade Tree Clinic
- Physicians
- Nurse practitioners
- Dietitians
- Exercise physiologists

Specialty Interests

All specialties must deal with patients with obesity, but critical for Internal Medicine and subspecialties, Pediatrics and subspecialties, Surgery (all types), Neurology, Ob/Gyn

Working-Learning Health System

Tyler Reimschisel, MD, MHPE & Interprofessional Clinical Faculty

Science

Health systems science, clinical & behavioral medicine, population & public health, health policy, socio-ecologic determinants of health, communication science, leadership & organizational management, implementation science

Clinical Settings

- Immersive experience in which interprofessional group of students and faculty provide **comprehensive clinical care & care navigation** to **panel of patients**
- Professions include Medicine, Nursing, Social Work, Pharmacy, Physician Assistant
- Can choose to do one-, two- or three-month experience:
 - Month 1: ISC in health systems science
 - Month 2: ACE in population health
 - Month 3: ACE in panel-based care
- Students who complete 3-month experience eligible for QI Advanced Track credit
- Meets primary care requirement

Specialty Interests

Primary Care, Internal Medicine, Family Medicine,
Population/Public Health Medicine

