

**Surgical Foundations Lecture Curriculum
2020-2021 Academic Year
G. Paloschi Conference Room Burr 2**



Date	Time	Topics	EPA	Facilitator
Wednesday, Sept 9 th Paloschi Rm	1:00-2:30pm	PALLIATIVE CARE / END OF LIFE <ul style="list-style-type: none"> • Palliative care principles <ul style="list-style-type: none"> ○ Drugs and dosing • Options for in hospital / home care • Physician-assisted suicide <ul style="list-style-type: none"> ○ Legal and ethical issues 		Dr. Borschneck
	2:30-4:00pm	FLUIDS IN THE SURGICAL PATIENT <ul style="list-style-type: none"> • Fluid compartments • Body water compartments • Osmotic and volume regulation • Regulation of acid / base 		Dr. Winthrop
Wednesday, Sept. 23 rd	1:00 – 2:30pm	Skills Lab <ul style="list-style-type: none"> • Vascular Anastomosis 		Dr. Yacob
SL206A	2:30 – 4:00pm	Skills Lab <ul style="list-style-type: none"> • Bowel Anastomosis 		Dr. Patel
Wednesday, Oct. 14 th Paloschi Rm	1:00 – 3:00pm	INITIAL MANAGEMENT OF THE CRITICALLY ILL PATIENT <ul style="list-style-type: none"> • Basic approach to the critically ill patient <ul style="list-style-type: none"> ○ ABCs ○ clinical assessment ○ seeking assistance ○ functioning within a team ○ triaging importance of tests/procedures ○ Developing and narrowing down your differential diagnosis • Common labs to order and their interpretation • Imaging to order and interpretation • Patient scenarios 	F1	Dr. Bridge

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Wednesday, Oct. 21 st Zoom	1:00 – 2:30pm	ELECTROLYTES IN THE SURGICAL PATIENT <ul style="list-style-type: none"> • Basic metabolism • Na, K, Mg, PO4, Ca • Complications of too high / low • Replacement • Considerations (amount / rate of replacement) 		Dr. Winthrop
Wednesday, Nov. 4 th Paloschi Rm	1:00 – 3:30pm	FOUNDATIONAL ASPECT OF SURGICAL PROCEDURES <ul style="list-style-type: none"> • lecture content <ul style="list-style-type: none"> ○ patient positioning - common complications • breaks in sterility <ul style="list-style-type: none"> ○ protocols when sterility breached • exposures <ul style="list-style-type: none"> ○ needle sticks ○ mucosal exposures ○ prophylaxis - antibiotic, antithrombotic, immunizations ○ blood borne pathogens <ul style="list-style-type: none"> ▪ HIV, HCV, HBV • management of surgical specimens <ul style="list-style-type: none"> ○ for malignancy, infection • fresh vs. frozen, solutions for storage and transport 	F5	Dr. Harvey
Wednesday, Nov. 11 th SL206A	1:00 – 4:00pm	TRAUMA OSCE	F2	Drs. Yach and Kassam
Wednesday, Nov. 18 th	1:00 - 2:30pm	ASSESSING AND PERFORMING RISK OPTIMIZATION IN PRE-OP PATIENTS Session 1 <ul style="list-style-type: none"> • Elements of clinical assessment for all surgical procedures <ul style="list-style-type: none"> ○ History and physical • Pre-op labs and imaging • Recognizing need for pre-operative consults <ul style="list-style-type: none"> ○ Medicine, anesthesia 	F3	Dr. Harrison

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Paloschi Rm		<ul style="list-style-type: none"> • Post-op care considerations <ul style="list-style-type: none"> ○ need for ICU, step-down • Antibiotic prophylaxis <ul style="list-style-type: none"> ○ standard for specific procedures ○ alternatives (ex for allergy) 		
	2:30 – 4:00pm	<p>ASSESSING AND PERFORMING RISK OPTIMIZATION IN PRE-OP PATIENTS Session 2</p> <ul style="list-style-type: none"> • Concerns with specific populations <ul style="list-style-type: none"> ○ Pregnancy - physiologic changes ○ Elderly ○ Immunocompromised – ○ Morbid obesity ○ DM ○ Pediatrics ○ Smokers - smoking cessation, post-op nicotine withdraws ○ Alcoholics - recognizing at risk for withdrawal and measures for post-op care • Delirium - Importance of problem, pre-op at risk populations <ul style="list-style-type: none"> ○ measures for post-op care • Patient scenarios 	F3	Dr. Harrison
Wednesday, Dec. 2 nd Paloschi Rm	1:00 – 2:30pm	<p>INFECTION - BASICS / REVIEW</p> <ul style="list-style-type: none"> • Review host defences • SIRS, septic shock • common bacterial types • MRSA, VRE, C diff • community vs. hospital acquired • antibiotic coverage 		Dr. Perez Patrigeon
Wednesday, Dec. 16 th Paloschi Rm	1:00 -3:00pm	<p>MANAGING UNCOMPLICATED POST-OP PATIENTS Discharging the patient</p> <ul style="list-style-type: none"> • organizing and implementing a post-op care plan • communication to patient and family <ul style="list-style-type: none"> ○ anticipated course, post-op restrictions, things for concern, follow-up plans, etc 		Dr. Agrawal

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		<ul style="list-style-type: none"> • contents and distribution of discharge summary • transfer to other facilities <ul style="list-style-type: none"> ○ ex. SMOL, other hospitals • follow-up imaging and labs • discharge resources <ul style="list-style-type: none"> ○ home care ○ educational resources for patients and families • allied health care <ul style="list-style-type: none"> ○ physio, OT, dietary, their scope and role in the health care team 		
<p>Wednesday, Jan. 6th</p> <p>Paloschi Rm</p>	1:00 – 3:00pm	<p>PATIENT EDUCATION AND INFORMED CONSENT</p> <ul style="list-style-type: none"> • Elements required for informed consent • Assessing decision making capacity <ul style="list-style-type: none"> ○ surrogate decision makers • legal implications • proper documentation • emergency consent / implied consent • cultural awareness / implications • Language barriers <ul style="list-style-type: none"> ○ Strategies and potential concerns with using translators, family members, etc. • managing conflict of interest <ul style="list-style-type: none"> ○ between physician and patient ○ between family and patient • patient scenarios <ul style="list-style-type: none"> ○ Dealing with difficult cases such as language barriers, JW patient, Conflict of interest, cultural differences. 	F4	Dr. Mann

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	3:00- 4:00pm	<p>POST-OPERATIVE SURGICAL INFECTIONS</p> <ul style="list-style-type: none"> • Review common (respiratory, UTI, etc.) • vascular / hematogenous surgical site (superficial and deep) necrotizing fasciitis 		Dr. Borschneck
Wednesday, Jan. 20 th	1:00 – 2:30pm	<p>NUTRITIONAL MANAGEMENT</p> <ul style="list-style-type: none"> • Basal metabolic requirements (protein, CHO, lipid) • Starvation • Refeeding • Starvation • Enteric and parenteral feeding <ul style="list-style-type: none"> ○ Risks/complications TPN 		Dr. Winthrop
Wednesday, February 3 rd	1:00 – 2:30pm	<p>WOUND HEALING</p> <ul style="list-style-type: none"> • Phases of normal/abnormal/delayed wound healing • Healing in specific tissues • Factors that alter/impair wound healing <ul style="list-style-type: none"> ○ Patient factors (obesity, DM, immunosuppressive,...) ○ Management strategies • Pressure sores (risk factors, prevention, management) 		Dr. Martou
	2:30 – 4:00pm	<p>BURNS</p> <ul style="list-style-type: none"> • Burn resuscitation fluids • Parkland formula (rule of 9s) • Burn depth • % BSA burns <ul style="list-style-type: none"> ○ Risk/prognosis • Nutritional requirements • Infection risks/management • Inhalation injury 		Dr. Winthrop
Wednesday February?	1:00 – 4:00pm	Surgical Foundations National Practice Exam		

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Wednesday, March 3 rd Paloschi Rm	1:00 – 2:30pm	Renal disease and the surgical patient <ul style="list-style-type: none"> • Basics of renal physiology • Pathophysiology, diagnosis, treatment of <ul style="list-style-type: none"> ○ Renal failure (pre/renal/post) ○ SIADH ○ DI 		Dr. Holland
	2:30-3:30pm	LAWSUITS <ul style="list-style-type: none"> • Common Causes 		Dr. Martou
Tuesday, March 16th Paloschi Rm	1:00 – 2:30pm	PULMONARY PHYSIOLOGY AND THE SURGICAL PATIENT <ul style="list-style-type: none"> • Basics of pulmonary physiology • Pathophysiology / diagnosis/treatment of common pulmonary complications <ul style="list-style-type: none"> ○ COPD ○ PE / fat embolism ○ Pneumonia (hospital and community acquired) ○ Pneumothorax ○ Effusion 		Dr. Heffernan
	2:30 – 4:00pm	NEUROLOGY / NEUROSURGERY <ul style="list-style-type: none"> • TIA / CVA • Aneurysms Brian death 		Dr. Haji
Wednesday, March 31 st Paloschi Rm	1:00 – 2:30pm	HEMOSTASIS <ul style="list-style-type: none"> • intrinsic / extrinsic pathways • hyper / hypocoaguable states • platelet function • screening for bleeding diathesis • anticoagulants <ul style="list-style-type: none"> ○ plavix, ticegrelor ○ heparin, warfarin, NOACs 		Dr. Borschneck
	2:30 – 4:00pm	Transfusion <ul style="list-style-type: none"> • Products (PRBC, FFP, platelets, cryo, albumen...) <ul style="list-style-type: none"> ○ Storage, how they're produced, costs... • Indications 		Dr. Borschneck

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		<ul style="list-style-type: none"> Risks / complications 		
Wednesday, April 14 th	1:00-3:00pm	GI DISEASE AND THE SURGICAL PATIENT <ul style="list-style-type: none"> Pathophysiology, diagnosis, treatment of: <ul style="list-style-type: none"> Stress gastritis. GI bleeding, Ileus Screening practices Malignancy 		Dr. Rieder
Paloschi Rm	3:00 – 4:00pm	Vascular Disease (pathophysiology and management) <ul style="list-style-type: none"> Compartment syndrome DVT, Arterial insufficiency/ischemia. AAA, aortic dissection 		Dr. Zelt
Wednesday April 28 th	1:00 – 2:30pm	PANCREAS <ul style="list-style-type: none"> Anatomy / physiology review Acute and chronic pancreatitis Benign and malignant lesions 		Dr. Jalink
Paloschi Rm	2:30 – 4:00pm	TRANSPLANT <ul style="list-style-type: none"> autograft, allograft, xenograft graft rejection (hyperacute, acute, chronic) principles of compatibility and screening 		Dr. McGregor
Wednesday, May 12 th	1:00 – 2:30pm	The Endocrine system and the Surgical patient <ul style="list-style-type: none"> Stress response DM Thyroid, parathyroid Other (pheo, stress steroid dosing) 		Dr. Walker
Paloschi Rm	2:30 – 4:00pm	Radiology <ul style="list-style-type: none"> Chest (Cxr, CT) <ul style="list-style-type: none"> Basics Case Scenarios Abdo (Axr, CT) <ul style="list-style-type: none"> Basics and Case Scenarios 		Dr. Petsikas
Wednesday, May 26 th	1:00 – 2:30pm	SHOCK <ul style="list-style-type: none"> SIRS Types of shock <ul style="list-style-type: none"> Circulatory Distributive 		

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Paloschi Rm		<ul style="list-style-type: none"> ○ Cardiogenic ○ Hypovolemia ○ Obstructive ● Rivers Trial Algorithm ● Multiple organ dysfunction 		
	2:30- 4:00pm	<p>Cardiac Physiology and the surgical patient</p> <ul style="list-style-type: none"> ● Basics of cardiac physiology ● Pathophysiology, diagnosis, treatment of <ul style="list-style-type: none"> ○ CAD, CHF ○ Valvular heart disease ○ Cardiomyopathy ○ Cardiac arrhythmias ○ Cardiac tamponade ● ECMO 		Dr. Ribeiro
Wednesday June 9 th Paloschi Rm	1:00pm – 3:00pm	<p>Oncology</p> <ul style="list-style-type: none"> ● Purpose and basis of staging ● Basic principles of neoplastic transformation including tumor growth and spread ● Pathology requirements for appropriate assessments ● Definition of common pathological terms such as but not limited to neoplasia, malignancy, dysplasia, metaplasia and atypia ● Genetics of neoplasia ● Genetics of families at risk ● Role of environmental carcinogens ● Paraneoplastic syndromes ● Principles of multi-modality therapy 		Dr. Caycedo
Wednesday, June 16 th Paloschi Rm	1:00 – 2:30pm	<p>LIVER</p> <ul style="list-style-type: none"> ● Review anatomy / function ● Acute liver failure ● Chronic liver failure <ul style="list-style-type: none"> ○ Cirrhosis ○ Ascites, varices ● Benign lesions ● HCC 		Drs. Nanji/Jalink

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		<ul style="list-style-type: none"> Metastatic disease 		
	2:30 – 4:00pm	<p>GALLBLADDER AND EXTRA-HEPATIC BILIARY SYSTEM</p> <ul style="list-style-type: none"> Anatomy / physiology review Gallstones, cholecystitis, choledocholithiasis, cholangitis, biliary pancreatitis Malignancy 		Drs. Nanji/Jalink