ZSFG JOINT CONFERENCE COMMITTEE MEETING

January 24, 2023

MEDICAL STAFF Report

Contents:

ZSFG CHIEF OF STAFF REPORT
Presented to the JCC-ZSFG on January 24, 2023
December 2022 and January 2023 MEC Meetings

CLINICAL SERVICE REPORTS:

A. Radiology Service – Mark Wilson, MD, Chief

The highlights of the report are as follows:

1. Scope of Clinical Service
   a. Scope of Service
      - Comprehensive provision of diagnostic imaging and interventional services 24/7 to the hospital
      - Inpatient IR admitting service
      - Outpatient IR service and spine clinics
      - Support Stroke Care, Trauma, Oncology, Women's Health, OR functions, Inpatient, and Outpatient services

   b. Services Provided - These include the following: (1) abdominal imaging, (2) thoracic imaging, (3) neuroimaging, (4) general and OB ultrasound, (5) breast imaging and tomosynthesis, (6) musculoskeletal emergency imaging, (7) interventional radiology, (8) neurointerventional radiology and stroke support, and (9) after-hours emergency radiology service

   c. Imaging Modalities- The Service offers all the necessary imaging modalities which are distributed between Building 5 and 25.
      - Building 5 - The current configuration includes the 1.5T MRI scanner and 1 CT scanner which will both be due for update soon. In addition, there is an IR Suite with an incorporated CT scanner and where outpatient interventional radiology procedures are performed. Also, there are outpatient ultrasound, general X-ray rooms, and portable X-ray.
      - Avon Center - At the Center, the Service provides general mammography, digital breast tomosynthesis, breast US, breast biopsy and needle, localization (for lumpectomy), and DEXA bone densitometry unit. Moreover, there is a mammography van that recently resumed operating and is able to provide greater access for women throughout the city.
      - Building 25 - The use of Building 25 has been extremely helpful in providing various services to the Department's patients, staff, faculty, learners. At Building 25, there are 2 MRI scanners (with 1 innovative intra-operative scanner used often for stroke intervention, neuroimaging, and trauma neuroimaging in a very safe environment), 4 CT scanners (2 in ED, 2 in basement level), IR Suite (with a CT scanner that is helpful for non-vascular interventions), 2 Biplane IR Suites (1 is Cath Lab and 1 for neurointerventional stroke treatments), hybrid OR/IR Suite (OR 8 - a potential site for treatment of trauma patients), and inpatient ultrasound (3 bays and 1 portable). In addition, there are general X-ray rooms, fluoroscopy, and portable X-ray.

   d. Structure of the Service
      - Leadership Structure - The Service is led by Dr. Christopher Hess as UCSF Chair; Dr. Wilson as the Chief; Ms. Lorel Hiramoto as Site Director; and Ms. Loretta Johnson as the Interim Director of Imaging, Avon, and Interventional Services.
      - Additional Leadership Structure- It was developed and created additional directorship roles to not only help with operations but also to provide leadership opportunities for several faculty members. A list of the directors was provided.

2. Faculty and Residents
   a. Faculty - There are 17 active faculty who cover various modalities/specialties. Several of them cover 3 services which extensively help in treating patients and teaching learners. Also, there are courtesy faculty with most rotating from Parnassus or Mission Bay. They work part-time anywhere from 10 to 20% effort, and there is courtesy coverage in most radiology subspecialty areas. Two new faculty who joined this academic year were noted, along with new courtesy faculty.

   b. Training Program - The Residency Program Director is Dr. Soonmee Cha, and the Associate Program Director is Dr. Jason Talbott. The program has been ranked the top Diagnostic Radiology Residency Program for several years; this has been attributed to ZSFG's role as a vital educational hub for the Program.
      - Resident Training
        - 13 residents each rotation block: 5 PGY 2 level, 5 PGY 3 level, and 3 PGY 4-5 level
        - 4-week rotation blocks in all radiology specialties
        - Direct attending-to-resident teaching daily in each specialty
        - Residents begin night-float call in PGY 3, working with ER attendings up to midnight and with remote attending back-up after 12 am - 8 am
      - Resident Education Activities and Resources
        - Detailed core curriculum of lectures (American Board of Radiology requirement)
        - Teaching conference twice daily
        - Learning and IT resources in all reading rooms
        - Minagi Library (video conference and new AV equipment)
        - Various resources for training and procedures
        - Monthly meetings with the Program Director and Department Chair

        There has been a >99% pass rate on American Board of Radiology examination over last 10 years.
      - Fellowship Training
        - Abdominal Imaging Fellowship- This is a combined fellowship with 10 FTEs. Three of whom rotate at ZSFG, while another 3 at the VA and 4 at UC Health sites.
        - Breast Imaging Fellowship – There are 2 FTEs rotating.
        - Neuroradiology Fellowship – There is 20% FTE effort.

c. Clinical and Teaching Conferences – There is a host of clinical and teaching conferences within the Department with some in lobbying learners and some in lobbying faculty members from other departments. These include aforementioned resident conferences, Med-Surg conference, Gyn. Tumor Board, OB/GYN conference, and others.

3. Performance Improvement and Patient Safety Initiatives
   a. PIPS Projects- The following are the projects that the Department has been working on for the past 1 – 2 years:
      - Contrast Extravasation Workflow – Contrast extravasation has always been a problem with power injection of contrasts mainly for CT scans. EPIC reporting has been used to develop way for tracking these extravasations; the Service is ensuring that everything that happens is tracked, along with following up with patients and obtaining additional consultation if necessary. The goal is to prevent these extravasations.
      - Peer Learning- This project is funded by UC-wide RM grant to help improve delivery of patient care. A tool for radiologists was developed to give feedback to other radiologists on errors in interpretation. There can be direct conversations; many cases can subsequently be tracked and reviewed during the monthly QA forum with faculty and learners. The goal is to track and avoid common diagnostic errors that impact patient safety.
      - Emergency Radiology (ER) Service – This is a major and most recent project.
        - Background - This is based on the fact that the Radiology Service is a resident-run Department after hours for the most part. There is an attending backup, but there is still a problem with patients being discharged from the ED. There could be a misdiagnosis based on resident's prelim interpretation. In some cases, the Department might not be able to reach these patients to call them back the next day that creates an operational problem and problems for the patient (i.e., the need to go back to the hospital). Sometimes, especially for the undomiciled patients, it can be difficult to track them down the following day. Before implementing the ER Service, one to two discharged patients per day were being called back.
        - Multi-Disciplinary Project - Thus, the need to do better was realized from preventing these incidents; this new service was developed to address the issue. It is a multi-disciplinary effort that involves Radiology, ED, Trauma Surgery, and RM. A few years ago, Dr. Wilson and Ms. Turner created an ED Radiology Council which is the perfect form for discussions to develop this service, as well as to address other issues that affect the 2 departments of ED and Radiology.
        - Goals - It is notable that medical imaging has grown over time, and the types of studies have become more complex and numerous. The Service felt that to provide the best patient safety, it needed to have an attending presence after hours to help interpret exams. The target was to have attending coverage during times of the day where there is the largest volume of exams. Also, the Service wanted to reduce discrepant overread rate by 40-50%.
        - Distribution of Exams – In a day, the largest volume occurs during daytime hours from 8 am – 5 pm. The second largest volume is evening hours from 5 pm – midnight. There has been attending coverage during daytime hours. However, the Service felt that it would be very helpful to cover the evening hours which led to having an in-house or active attending radiology service coverage. For the night hours from midnight to 8 am the following day, the volume is much less as compared to daytime and evening hours.
        - Development of ER Section and Staffing– This service was developed with the City's support. Dr. Ehrlich, Ms. Turner, and Ms. Boffi extensively worked to support the patients and the Department. Through the Affiliation Agreement, the Dean's Office helped obtain funding for the newly formed service.
          Three faculty members comprise the service which started in July 2022. In November, the ER service was completely staffed. In the interim, there is faculty providing per-diem coverage of the service during the transitional phase. The current turnaround time is < 60 minutes from the study being done to an attending read being rendered.
        - Total Overread Comparison – In analysis of data for July-Oct in 2021 vs July-Oct 2022, there is a 60%+ reduction in overreads from discharged patients. A monthly graph of change in volume of overreads was presented and highlighted the reduction. Some of the overreads are still happening during the night hours; this matter will constantly be analyzed for improvement.
   b. Patient Satisfaction- Surveys focused on patient wait times, clarity of communication, and explanation of what to expect when patients come for imaging study or procedure. All modalities were surveyed: US, CT, MRI, Mammography, and IR. These were assessed by using an NPS (Net Promoter Score) paradigm over a monthly NPS over the year. The NPS hovered around 70% which is good but indicative of further work needed to attain the 80% target.
   c. Faculty Committee Participation – A list of the faculty's involvement in committees was presented. Many faculty members participate in numerous committees within the Department and throughout the hospital, as well as in the UC-system wide. Some notable committees are the ED Radiology Council, PIPS, and Equity Council.
4. Faculty Research – It is a large Department with many interests and research topics.
   a. Research Projects- These include collaborative research pertaining to trauma, TBI, and spine injury with Dr. Geoff Manley's team. Also, there is a host of research opportunities in Diagnostic and interventional radiology.
   b. Funding – The talented faculty members have obtained funding from various sources to support the projects. Funding has been provided by NIH, DOE, RSNA research awards, SIR research awards, AMFAR, and various industry grants from Siemens, CircuitRx, and Penumbra.
5. Financial Report- For FY22, the total revenue is $17.8M, and total expenses amount to $15.9M. The surplus is actually prior to the addition of new faculty hires. Thus, some of the surplus will be used to fund the new hires. Other investment of surplus funds include the following: (1) hiring coding and billing support, (2) adding to teaching mission, (3) clinical support through NPs, (4) hiring IT expertise, and (5) support research mission.
6. Summary
   a. Strengths – These include skilled faculty in all areas of radiology; exceptional equipment and program opportunities with Bldg. 25; and strong collaboration between UCSF and DPH.

b. Challenges – These include maintaining teaching and research opportunities with increasing clinical demands, along with maintaining a safe, caring, working, and learning environment during the pandemic.
c. Goals – These include further collaboration to improve operational efficiency and continuing to regain ground loss during the pandemic. Another goal is maintaining a safe, caring, working, and learning environment within the Department and hospital.

Dr. Winston acknowledged Dr. Wilson's outstanding report. Along with other MEC members, Dr. Winston also commended Dr. Wilson's exceptional leadership and expressed gratitude for the Department's various initiatives and projects, particularly the Peer Review and ER Service, which are focused on patient safety and families' concerns. Many appreciated the extensive collaboration with Dr. Wilson and the Department, along with the Service's dedication to patient care.

B. Dermatology Service – Erin Amerson, MD, Chief

The highlights of the report are as follows:

1. Scope of Clinical Service
   a. Scope of Service – The scope of service is broad with the following: Adult Medical Dermatology, Pediatric Dermatology, Surgical Dermatology, HIV Dermatology, Dermapathology, Inpatient Consultation Service, Teledermatology e-consult service, Specialty Clinics (i.e., Rheumatology/Dermatology, Hidradenitis, Hair, Pigmentary Disorders), and Phototherapy.
   b. Structure of the Clinical Service and Leadership
      - Leadership - The Service is led by Dr. Erin Amerson as the Chief; Dr. Kieron Leslie as Assistant Chief; Dr. Aileen Chang as Inpatient Service Director; Dr. Dan Klufas as Derm Surgery Director; and Dr. Sarah Coates as Pediatric Dermatology Director. All, except for Dr. Coates, hold other directorship positions to support the Service.
      - Dermatology Faculty – There are 5 part-time faculty members providing care in Adult Medical Dermatology, along with 1 part-time faculty member each for Pediatric Dermatology, Dermatopathology, Hidradenitis, Pigmentary, and Hair.
      - Administrative Staff and Support Staff – The Administrative Staff is headed by Ms. Mounira Kenaani as the Department Manager, and the Support Staff is led by Charles Bellah, RN as the Nurse Manager.
   c. Service Volume
      - Outpatient Adult Dermatology Clinic - The annual average number of patients is 4,500 with about 90% seen in person and 10% by telephone/video. The pandemic allowed the Service to be more flexible in seeing patients virtually when convenient and feasible for them. For instance, patients taking Accutane for acne had to have a monthly clinic visit to receive the drug but opted to have video visits during the pandemic.
      - E-Consults – The e-consult volume has surpassed live clinic volume with over 5K consults annually sine EPIC implementation. Prior to EPIC transition, the Service was already doing teledermatology e-consult process. Since the EPIC transition, e-consults have integrated into medical record which has been beneficial with same source of information. With ease in submitting e-consults, volume has increased by 10% since implementation of EPIC 2 years ago and by 30% from pre-EPIC numbers.
        Moreover, the Service became interested on its impact to clinical efficiency, access, and cost of patient care with the Medweb extension. Additional details are as follows:
        - ≈60% virtual co-management – The Service gives advice based on photos to the PCP who is expected to implement the recommended treatment plan. The other 40% needs to be seen in clinic due to need for biopsy or presence of complications.
        - 20% increase in total patients managed or co-managed by Dermatology since teledermatology implementation (increase in access) – This volume is pre-EPIC, and volume is certainly higher post-EPIC.
        - Same number of providers (increased efficiency)
        - Cost analysis – savings of $140 per new patient referral (reduced cost of patient care)
      - Other Services (Monthly Volume): Surgeries - 35; Pediatric Derm - 45; Hospital Consults – 25; LHH – 16; Dermatopathology – 60; and Phototherapy – 110
2. Faculty and Residents
   a. Number of Residents - There are 22 residents. Generally, there are 4 residents rotating at a time.
   b. Training Program Elements – These include all areas aforementioned in the Service's scope of service (The HIV Dermatology Clinic was noted as a unique learning opportunity for residents). In addition, the social determinants of health curriculum (SDOH) has been integrated into the residency teaching program. Every 2 years, the program cycles lectures that focus on items such as health access and health policy (i.e., Medicare and Medicaid) which are typically not taught but vital to understand for patient care. Other SDOH issues covered are refugee/migrant health, LGBTQ, and more. Other trainees include medical students (45/yr); Family Medicine, Pediatrics, and Internal Medicine residents (90/yr); HIV/Global Health Fellowship; and medical student fellows.
   c. Faculty's Roles – A list of the roles by various faculty in the Department, University, and the nation was presented.
3. PIPS Initiatives
   a. PIPS projects – There are 15 projects this year, and the following 2 projects were presented:
      - BLSI: High-quality biopsy site photographs to prevent wrong-site surgery in Dermatology - The Service is gathering baseline data this year with the goal of 75% of photographs meeting the high-quality photography criterion. The current baseline is 54%.
      - Appropriate HBV monitoring for patients on immunosuppressive medications – These patients tend to be the sickest ones in the Service with many on immunosuppressants. It was noted that the hospital's patient population includes many patients born in East Asia where HBV is very prevalent.
        The project aims to standardize the process of monitoring patients with screening everyone and ensuring appropriate monitoring. The challenge is developing a workbench report as the Data Management Team encounters difficulty in

building a workbench report that retrieves patients who are on specific medication. It is fairly easy to pull out data by diagnosis but not all of the patients diagnosed with the same disease take medications that are being analyzed for HBV. Currently, there is a student fellow who is manually going through patient charts to obtain needed data. Data collection is truly a challenge, and there are ongoing efforts to build a workbench report in an automated way for patient monitoring.

b. Patient Satisfaction Scores- The scores have been fairly stable at average of 72%. However, the scores decreased slightly by a couple of months at the end of 2021; the lower scores were most likely due to appointment delays and cancellations that had been caused by the surge. A thematic analysis of negative (17%) and positive (69%) comments was performed. The results indicated that only 4% of the negative comments pertained to negative experience with provider. Other factors (appointment delays, facilities, front desk staff) were out of the Service's control. The positive comments included "attentive, professional, and kind."

4. Research
   a. Scope of Research - The Service has always been strong on research related to HIV and Infectious Diseases, as well as Global Health and Migrant Health. With renewed focus on health equity in the nation, there is much work done by the Service in health equity/disparities, SDOH, and health care services/policy/informatics. There are also ongoing efforts on workforce diversity, medical dermatology linked with SDOH, and others.
   b. Key Projects – These include research on the following: (1) diversity and equity in Dermatology workforce; (2) HIV/STIs/Kaposi sarcoma/MPox; (3) skin infections (SSTI, ectoparasites); (4) telemedicine/teledermatology; (5) skin reactions to COVID-19 vaccines; and (6) SDOH, homelessness.
   c. Publications – In the last 2 years, six publications from the Service were included in its premier journal, *JAMA Dermatology*. A list of other publications was presented. These included the Service's work on DEI, along with study of skin diseases among patients using methamphetamine (that did not have any prior dermatology literature), and more. Though the Service is primarily a clinical group, it is fairly an active publishing group.
   d. Clinical Trials – There are few active clinical trials. These include therapeutic trial for intralesional nonavalent HPV for genital condyloma, along with many studies on hidradenitis, mpox, and others. In addition, there are closed trials for patients with Cryopyrin-Associated Periodic Syndrome (CAPS).
5. Financial Report
   a. Revenues - The Profee revenues average a little over $300K/year with the vast majority arising from the managed care distribution, amongst others. The Service is located at Ward 92 which is an FQHC (Federally Qualified Health Centers) space. Thus, most of revenues are channeled to the city rather than recognized as Profees. The current plans include moving the Department's Surgical Service to a profee environment in July 2023. The 5R surgery space has been designated primarily for general and plastic surgery for wound care and oasis; the space will be shared with the Service once it opens. A financial analysis indicated increased revenues for the hospital with the planned move.
   b. Expenditures – Most expenditures relate to faculty and staff salaries, along with operating expenses.
6. Summary
   a. Strengths – These include the following: (1) engaged and mission-driven faculty; (2) stellar support staff and nurse manager; (3) talented residents; (4) diverse patient population; (5) commitment to DEI; (6) collaborative relationships with other specialties; (7) strong departmental and university representation; (8) national leadership in global health, telemedicine and HIV research; (9) collaboration with ZSFG Specialty Pharmacy, and (10) solid financial position.
   b. Challenges – These include the following: (1) clinic space on Ward 92; (2) heavy reliance on Affiliation Agreement instead of Profees (restricted funding); (3) PIPS – data collection; (4) work compression, declining trainee evals, no dedicated resident for consult service; (5) drug formulary limitations, and (6) research funding.
   c. Opportunities – These include the following: (1) national focus on research areas where hospital excels and has patient access (skin color, homelessness, equity, telemedicine, and health services); (2) move to 4B, 5R; (3) building Quality and Safety Program; (4) opportunities for data-driven research; (5) incorporating social care into special care – patient navigator; and (6) develop philanthropic funding for research mission.
   d. Goals
      - Short-Term – These include the following : (1) increasing philanthropic and research grant funding; (2) improve Profee collections (5R, Mohls expansion opportunity); (3) expand clinical services to match patient population demands; and (4) build QI/PIPS program.
      - Long-Term – These include the following: (1) lead field in clinical expertise and research involving vulnerable populations; (2) continue to be the model program for dermatology in the safety net; and (3) secure endowment for research program.

Dr. Winston, along with other MEC members, expressed gratitude and appreciation for the amazing report and Service's efforts, especially its teledermatology program and PIPS projects. Moreover, Primary Care is particularly appreciative of the opportunities from teledermatology.

ZSFG CHIEF OF STAFF ACTION ITEMS
Presented to the JCC-ZSFG on Jan 24, 2023
Dec 2022 and Jan 2023 MEC Meetings

Appointment – ZSFG Surgery Service Chief

MEC unanimously approved the appointment of Dr. Joseph Cuschieri as the new ZSFG Surgery Service Chief. Dr. Cuschieri has been the Interim Chief of ZSFG Surgery Service since September 2021 and ZSFG Trauma Medical Director since March 2021.
(Copy of CV to Commissioners).

Clinical Service Rules and Regulations

- Radiology R&R (Copies sent to Commissioners)
- Radiology R&R Summary of Changes (attached)
- Dermatology R&R (Copies sent to Commissioners)
- Dermatology R&R Summary of Changes (attached)

Credentials Committee –

A. Standardized Procedures – (attached)
-Medicine SP Revision
-Medicine SP Summary of Changes

B. Privileges Lists – None

Prepared: December 14, 2022

University of California, San Francisco

CURRICULUM VITAE

Name: Joseph Cuschieri, MD

Position: Professor In Residence, Step 4
Surgery
School of Medicine

Adjunct Professor in Residence, Laboratory Medicine
Interim Chief of Surgery and Trauma Medical Director

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Voice: 628-206-4631
Fax: 628-206-5484
Email: joseph.cuschieri@ucsf.edu

EDUCATION

1986 - 1990	University of Michigan	BS	BioChemistry	
1990 - 1994	Wayne State University School of Medicine	MD	Medicine	
1994 - 1997	Henry Ford Hospital and Medical Center		Resident in Surgery	
1997 - 1998	Henry Ford Hospital and Medical Center		Surgical Critical Care	
1998 - 1999	Henry Ford Hospital and Medical Center		Resident in Surgery	
1999 - 2000	Henry Ford Hospital and Medical Center		Chief Resident in Surgery	
2000 - 2002	University of Washington School of Medicine		NIH T32 Fellow	Dr. Ronald V. Maier

LICENSES, CERTIFICATION

1995	National Board of Medical Examiners
1999	State of Michigan #4301063280 - Inactive
2000	State of Washington #MD00039268 - Active
2001	American Board of Surgery: Surgery
2002	State of Ohio #81266 - Inactive

2002	American Board of Surgery: Surgical Critical Care
2003	Advanced Trauma Life Support Instructor
2004	Advanced Trauma Life Support Course Director
2008	Advanced Trauma Life Support Instructor Course Director
2009	Advanced Surgical Skills for Exposure in Trauma Instructor
2010	American Board of Surgery: Surgery Recertified
2011	American Board of Surgery: Surgical Critical Care Recertified
2020	State of California #C170815-Active
2021	American Board of Surgery: Surgery Recertified

PRINCIPAL POSITIONS HELD

2002 - 2004	Division of Trauma and Critical Care, University of Cincinnati, Cincinnati, Ohio	Assistant Professor of Surgery	Surgery
2004 - 2006	Division of Trauma and Critical Care, University of Washington SOM, Seattle, Washington	Assistant Professor of Surgery	Surgery
2006 - 2011	Division of Trauma and Critical Care, University of Washington SOM, Seattle, Washington	Associate Professor of Surgery	Surgery
2007 - 2011	Department of Neurosurgery, University of Washington SOM Seattle, Washington	Associate Adjunct Professor	Neurosurgery
2011 - 2021	Division of Trauma and Critical Care, University of Washington SOM, Seattle, Washington	Professor of Surgery	Surgery
2011 - 2021	Department of Neurosurgery, University of Washington SOM, Seattle, Washington	Adjunct Professor	Neurosurgery
2017 - 2021	Department of Orthopedics, University of Washington SOM Seattle, Washington	Adjunct Professor	Orthopedics
2021 - present	Department of Surgery, University of California San Francisco	Professor	Surgery

OTHER POSITIONS HELD CONCURRENTLY

2002 - 2004	University Hospital, Cincinnati, Ohio	Attending Surgeon Trauma/Critical Care	Surgery

2002 - 2004	Drake Hospital, Cincinnati, Ohio	Attending General Surgeon	Surgery
2004 - 2021	University of Washington Medical Center Seattle, Washington	Active Staff	Surgery
2004 - 2021	Seattle Cancer Care Alliance Seattle, Washington	Active Staff	Surgery
2004 - 2021	Harborview Medical Center, Seattle, Washington	Attending Surgeon Trauma/Critical Care	Surgery
2006 - 2013	Division of Trauma and Critical Care, University of Washington, SOM, Seattle, Washington	Associate Program Director Surgical Critical Care	Surgery
2006 - 2020	Harborview Medical Center, Seattle, Washington	Medical Director Surgical Critical Care	Surgery
2011 - 2016	Harborview Medical Center, Seattle, Washington	Acting Associate Medical Director-Critical Care	Surgery
2013 - 2020	Division of Trauma and Critical Care, University of Washington, SOM, Seattle, Washington	Program Director Surgical Critical Care	Surgery
2019 - 2021	Harborview Medical Center, Seattle, Washington	Associate Medical Director Surgical Services	Surgery
2021 - present	Zuckerberg San Francisco General Hospital, San Francisco, California	Trauma Medical Director	Surgery
2021 - present	Zuckerberg San Francisco General Hospital, San Francisco, California	Attending Surgeon Trauma/Critical Care	Surgery
2021 - present	Zuckerberg San Francisco General Hospital, San Francisco, California	Interim Chief of Surgery	Surgery

HONORS AND AWARDS

1986	Michigan Competitive Scholarship Award	University of Michigan
1989	Outstanding College Student of America Award	University of Michigan
1990	Phi Beta Kappa	Univeristy of Michigan
1990	American Chemical Society Student Award in Biochemistry	American Chemical Society

1990	O.B. Weed Scholarship Award	Wayne State University School of Medicine
2000	Outstanding Surgical Resident Award	Hernry Ford Hospital, Detroit, Michigan
2000	Michael S. Benninger, MD Outstanding Resident Award	Hernry Ford Hospital, Detroit, Michigan
2000	1st Place Award: Basic Science Paper Committee on Trauma:	American College of Surgeons Committee of Trauma: Washington Chapter
2001	Shock Society Travel Award	Shock Society
2001	1st Place Award: Basic Science Paper Committee on Trauma:	American College of Surgeons Committee of Trauma: Washington Chapter
2001	2nd Place Award: Basic Science Paper Region X COT	American College of Surgeons Committee of Trauma: Region X
2002	3rd Place Award: Basic Science Paper Seattle Surgical Society	Seattle Surgical Society
2002	1st Place Award: Overall Paper 8th Annual Schilling Research Symposium	University of Washington School of Medicine
2002	Shock Society Travel Award	Shock Society
2006	Joseph Sussman Memorial Award	Surgical Infection Society
2006	Castle Connelly Top Doctors	
2015	UW Cares Award	Univeristy of Washington Medical System
2015	CDC HA-VTE Prevention Challenge Champion	Centers of Disease Control
2016	Best paper Award American Geriatrics Society Annual Meeting	American Geriatric Society
2018	Harborview Medical Center Employee of the Month (March)	Harborview Medical Center, Seattle, Washington
2019	John K. Stevenson Faculty Teaching Award in Surgery	University of Washington School of Medicine
2020	Castle Connelly Top Doctors	
2020	Seattle Magazine Top Docs, Surgery	Seattle Magazine
2020	Seattle Metropolitan Top Physicians, General Surgery	Seattle Metropolitan Magazine
2021	Castle Connelly Top Doctors	

2021	Seattle Magazine Top Docs, Surgery/Critical Care	Seattle Magazine
2022	Castle Connelly Top Doctors	
2022	Castle Connelly Top Doctors 10 Years Consecutive Recognition	
2022	Seattle Magazine Top Docs, Surgery	Seattle Magazine

CLINICAL ACTIVITIES

CLINICAL ACTIVITIES SUMMARY

I have a strong clinical interest in trauma and surgical critical care, but I have not limited by clinical interest to only these surgical conditions. Among the areas of continued growth is working to improve resuscitation and early stabilization of patients in hemorrhagic shock, operative rib and sternal fixation, and management/treatment of acute intra-abdominal infections.

Two programs I have actively worked to improve and develop is the colorectal and spine care at Zuckerberg San Francisco General Hospital.

- I have worked collaboratively with the gastroenterologists and colorectal surgeons to develop a multidisciplinary colorectal practice that provides comprehensive care for the spectrum of colorectal diseases. As a result of this program development, we have improved patient access to evaluation and management that has directly improved patient satisfaction. An improvement in our time to next available appointment has been reduced for 77 days to 19 days. Furthermore and more importantly, we have reduced emergent admissions while improving overall outcome.
- I have worked collaboratively with the orthopedic spine surgeons to improve access of patients to anterior spine fixation by providing anterior operative exposure. This has led to improved patient satisfaction, and the ability to do single approaches to spine fixation. Not only has this collaboration improved patient care, but has given an opportunity for surgical residents to be exposed to the techniques of anterior exposures to the thoracic and lumbar spine.

I have been integrally involved in the improvement overall of care provided at Zuckerberg San Francisco General Hospital and Trauma Center. I have been highly involved in the development and implementation of a number of protocols and guidelines for injured patients within our trauma program, and I am a member of the Surgical Executive Committee dedicated to improving OR efficiency and outcome. I have been integrally involved in the critical care and trauma care provided at Zuckerberg San Francisco General Hospital as the Medical Director of our Trauma Surgical Services, and Interim Chief of Surgery.

The work done at as a faculty member at University of California San Francisco and Zuckerberg San Francisco General Hospital follows a nearly 20 year career dedicated to similar clinical service and patient care at the University of Washington School of Medicine, where my clinic work was recognized by numerous honors and awards. This included receiving local, regional and national recognition for patient satisfaction and outcome.

CLINICAL SERVICES

2002 - 2004	Trauma Surgery Service, University of Cincinnati Medical Center/Attending Surgeon	3 months/year
2002 - 2004	General Surgery Service, University of Cincinnati Medical Center/Attending Surgeon	3 months/year
2002 - 2004	Surgical Critical Care Service, Univeristy of Cincinnati Medical Center/Attending Surgeon	3 months/year
2004 - 2021	Trauma Surgery Service, Harborview Medical Center/Attending Surgeon	1 week/month
2004 - 2021	General Surgery Service, Harborview Medical Center/Attending Surgeon	1 week/month
2004 - 2021	Surgical Critical Care Service, Harborview Medical Center/Attending Surgeon	1 week/month
2016 - 2021	EMCO Service, Harborview Medical Center/Attending Surgeon	1.5 months/year
2021 - present	Trauma Surgery Service, Zuckerberg San Francisco General Hospital/Attending Surgeon	3 months/year
2021 - present	Surgical Critical Care Service, Zuckerberg San Francisco General Hospital/Attending Surgeon	2 months/year
2021 - present	General Surgery, Zuckerberg San Francisco General Hospital/Attending Surgeon	2 months/year

PROFESSIONAL ACTIVITIES

MEMBERSHIPS

1994 - present	American Medical Association
1998 - 2016	Society of Critical Care Medicine
2000 - present	The Roy D. McClure Surgical Alumni Society of Henry Ford Hospital
2000 - present	Harkins Medical Society
2000 - present	Seattle Surgical Society
2002 - 2004	American College of Surgeons Associate Fellow
2002 - present	American Association of Immunologists
2002 - present	Federation of American Societies for Experimental Biology
2002 - present	Shock Society
2003 - 2004	American College of Surgeons Committee of Trauma: Ohio Chapter
2003 - present	Surgical Infection Society
2003 - 2013	Association of Academic Surgeons

2003 - 2020	American College of Surgeons Committee of Trauma
2004 - 2021	American College of Surgeons Committee of Trauma: Washington Chapter
2004 - 2020	American College of Surgeons Committee of Trauma: Region X
2004 - present	American College of Surgeons Fellow
2005 - present	American Association for the Surgery of Trauma Fellow
2006 - 2014	Society of University Surgeons
2008 - present	Society of Surgical Critical Care Program Directors
2019 - present	American Surgical Association
2021 - present	San Francisco Surgical Association
2021 - present	American College of Surgeons Surgical Biology Club

SERVICE TO PROFESSIONAL ORGANIZATIONS

2003 - 2005	Association of Academic Surgeons: Informatics and Technology Committee	Committee Member
2005 - 2007	Association of Academic Surgeons: Program Committee	Committee Member
2005 - 2012	American College of Surgeons Committee of Trauma	Washington State Chair
2006 - 2007	Surgical Infection Society: Informatics and Technology Committee	Committee Member
2006 - 2008	Shock Society: Mebership Committee	Committee Member
2006 - 2012	American College of Surgeons Committee of Trauma: Surgical Skills	Committee Member
2006 - 2012	American College of Surgeons Committee of Trauma:National Trauma Data Committee	Committee Member
2007 - 2008	Shock Society: Mebership Committee	Chair
2008 - 2010	Surgical Infection Society: Ad Hoc Acute Care Surgery Committee	Committee Member
2008 - 2011	American Association for the Surgery of Trauma: Critical Care Committee	Committee Member
2009 - 2011	Association of Academic Surgeons	Councilor
2009 - present	American Board of Surgery	Assoicate Examiner
2011 - 2013	Surgical Infection Society: Scholarship Committee	Committee Member

2012 - 2019	American Board of Surgery: General Surgery SCORE Curriculum	Module Creator
2013 - 2016	Surgical Infection Society: Scientific Studies Committee	Committee Member
2014 - 2020	American College of Surgeons Committee of Trauma	National Committee Member
2014 - 2020	American College of Surgeons Committee of Trauma:Trauma Quality Improvement Project	Committee Member
2014 - 2020	American College of Surgeons Committee of Trauma:Verification Review Committee	Committee Member
2016 - 2020	American College of Surgeons Committee of Trauma: Washington Chapter	Board Member
2016 - 2021	American Association for the Surgery of Trauma: Critical Care Committee	Committee Member
2017 - 2019	American Board of Surgery: Surgical Critical Care SCORE Curriculum	Module Creator
2018 - 2019	National Quailty Forum: Trauma Outcomes	Committee Member
2018 - 2020	American College of Surgeons Committee of Trauma:Research Committee	Committee Member
2021 - present	Society of Critical Care Program Directors: Mentoring Committee	Vice Chair
2021 - present	Society of Critical Care Program Directors: Awards Committee	Committee Member
2021 - present	Society of Critical Care Task Force of Surgical Critical Care Education	Committee Member
2022 - present	Surgical Infection Society Scientific Studies Committee	Committee Member
2022 - present	American Association for the Surgery of Trauma Scholarship Committee	Committee Member
2022 - present	American Association for the Surgery of Trauma Program Committee	Committee Member
2022 - present	American Association for the Surgery of Trauma Membership Committee	Committee Member
2022 - present	American Association for the Surgery of Trauma Critical Care Committee	Chair

2022 - present	American Association for the Surgery of Trauma Board of Managers	Board Member

SERVICE TO PROFESSIONAL PUBLICATIONS

2007 - 2014 Editorial Board, Journal of Sugical Reseach

2011 - present Editorial Board, Journal of Trauma and Acute Care Surgery (Review 15 articles/year)

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2003 - present Ad Hoc Reviewer, British Medical Journal (Review 1-2 articles/year)

2004 - present Ad Hoc Reviewer, Journal of Antioxidant and Redox Potential (Review 2 articles/year)

2004 - present Ad Hoc Reviewer, Journal of Bilogical Chemistry (Review 1 article/year)

2004 - present Ad Hoc Reviewer, Journal of Immunology (Review 1 article/year)

2004 - present Ad Hoc Reviewer, Journal of Leukocyte Biology (Review 1 article/year)

2005 - present Ad Hoc Reviewer, Journal of Surgical Infection (Review 5 articles/year)

2005 - present Ad Hoc Reviewer, Journal of Surgical Research (Review 1-2 articles/year)

2006 - present Ad Hoc Reviewer, Critical Care Medicine (Review 1 article/year)

2006 - present Ad Hoc Reviewer, Pharmacological Research (Review 1 article/year)

2007 - 2013 Ad Hoc Reviewer, Journal of Trauma

2008 - present Ad Hoc Reviewer, Journal of the American College of Surgeons (Review 5 articles/year)

2008 - present Ad Hoc Reviewer, Journal of Postrgraduate Medicine (Review 1 article/year)

2010 - present Ad Hoc Reviewer, Plos-One (Review 1 article/year)

2011 - present Ad Hoc Reviewer, American Surgical (Review 1 article/year)

2012 - present Ad Hoc Reviewer, Annals of Surgery (Review 2 articles/year)

2014 - present Ad Hoc Reviewer, JAMA Surgery (Review 4 articles/year)

2015 - present Ad Hoc Reviewer, JAMA (Review 1 article/year)

INVITED PRESENTATIONS - INTERNATIONAL

1998	"Microlaparoscopy in the Intensive Care Unit", 6th World Congress of Endoscopic Surgery and 6th International Congress of European Association for Endoscopic Surgery, Rome, Italy, May 31-June 6 1998	Poster

2002	"Modulation of Sepsis Induced Endothelial Function by Calcium/Calmodulin-Dependent Protein Kinase Inhibition", 22nd Annual Surgical Infection Society/1st Joint Meeting with European Surgical Infection Society, Madrid, Spain, May 2-4, 2002	Podium
2002	"Platelet Activating Factor Acetylhydrolase Inhibits Alveolar Macrophage Activation In Vivo", 22nd Annual Surgical Infection Society/1st Joint Meeting with European Surgical Infection Society, Madrid, Spain, May 2-4, 2002	Podium
2002	"Phosphatase Upregulation Controls Monocyte Proinflammatory Response", 22nd Annual Surgical Infection Society/1st Joint Meeting with European Surgical Infection Society, Madrid, Spain, May 2-4, 2002	Poster
2004	"CaMK Control of Inflammation Gene Regulation", 6th World Congress on Trauma, Shock, Inflammation and Sepsis, Munich, Germany, March 2-6, 2004.	Podium
2004	Oxidant Induced Macrophage Priming Requires Intracellular Calcium Release , 27th Annual Conference on Shock, Halifax, Nova Scotia, June 5-8, 2004.	Poster
2007	Lipid rafts an initiation of inflammatory cell signaling. 7th World Congress on Trauma, Shock, Inflammation and Sepsis, Munich, Germany, March 13-17, 2007	Podium
2007	Strict Glycemic control following injury: How strict do we really need to be? 27th Annual Meeting of the Surgical Infection Society, Toronto, Ontario, April 18-20, 2007.	Podium
2007	Translational control of cytokines modulates the inflammatory response. 27th Annual Meeting of the Surgical Infection Society, Toronto, Ontario, April 18-20, 2007.	Podium
2007	Endotoxin exposure in the macrophage: analysis of lipid raft proteomics. 27th Annual Meeting of the Surgical Infection Society, Toronto, Ontario, April 18-20, 2007.	Podium
2008	HSP70 is critical to regulated IL-8 production by LPS: The role of mRNA stabilization 31st Annual Conference on Shock. Cologne, Germany, June 28-July 2, 2008.	Poster
2022	"Rewarming of hypothermia following injury: Rapid is better" 45th Annual Meeting of the Shock Society, Toronto, Ontario, June 4-7, 2022	Podium
2022	"Colorectal Cancer Emergencies: Obstruction, Perforation, Bleeding" Colorectal Cancer Seminar in Tanzania: An Update on Clinical Practice, Tanzania October 3, 2023	Podium

INVITED PRESENTATIONS - NATIONAL

1998	"A Comparison of Transesophageal Doppler, Thermodilution and Fick Cardiac Output Measurements in Critically Ill Patients", 27th Annual Society of Critical Care Medicine Symposium, San Antonio, Texas, February 4-8, 1998	Poster
1998	"Arterial-Venous Carbon Dioxide Gradients as an Indicator of Cardiac Index: A Comparison between the Mixed and Central Venous Circulation", 27th Annual Society of Critical Care Medicine Symposium, San Antonio, Texas, February 4-8, 1998	Poster
1998	"Fasciotomy Wound Management: Less is Better", American Association for the Surgery of Trauma, Baltimore, Maryland, September 24-26, 1998	Poster
1998	"Anterior Mediastinal Abscesses Complicating Closed Sternal Fracture", 34th Annual American College of Surgeons Clinical Congress, Orlando, Florida, October 25-30, 1998	Poster
1999	"Increased Arterial-Venous Carbon Dioxide Gradient During Septic and Hypovolemic Shock", 28th Annual Society of Critical Care Medicine Symposium, San Francisco, California, January 23-27, 1999	Poster
1999	"Bronchoalveolar Lavage: Complication Rate does not Warrant Post-Procedural Radiological Examination", 28th Annual Society of Critical Care Medicine Symposium, San Francisco, California, January 23-27, 1999	Poster
1999	"Clearing the Cervical Spine in Victims of Blunt Assault to the Head and Neck: What is Necessary", 42nd Annual Meeting Midwestern Surgical Association, Galena, Illinois, August 15-18, 1999	Podium
1999	"Arterial-Central Venous Carbon Dioxide Difference as an Indicator of Cardiac Output and Cardiac Index in the Emergency Department", Society of Academic Emergency Medicine, New York, New York, September 19-23, 1999	Poster
2000	"Repair of Low Grade Bladder Injuries: Few Adjuncts Required", 30th Annual Meeting of the Western Trauma Association, Tahoe City, California, February 27 March 3, 2000	Podium

2000	"Complex Stab Injuries to the Neck: Need for Operative Exploration and Repair", 47th Annual Meeting Michigan Chapter, American College of Surgeons and Annual Resident Competition, Traverse City, Michigan, May 4-5, 2000	Podium
2000	"Complex Stab Injuries to the Neck: Need for Operative Exploration and Repair", 50th Annual Keyport-Gaylord Trauma Symposium, Gaylord, Michigan, May 11-13, 2000	Podium
2000	"Renal Perfusion Dopamine: A Meta-analysis of Outcome", 36th Annual American College of Surgeons Clinical Congress, Chicago, Illinois, October 19-24, 2000	Poster
2001	"Monocyte Adherence Leads to IRAK Phosphorylation and Subsequent Degradation", 62nd Annual Meeting of the Society of University Surgeons, Chicago, Illinois, February 5-9, 2001	Podium
2001	"GM-CSF Reverses Endotoxin Tolerance in Endothelial Cells", 62nd Annual Meeting of the Society of University Surgeons, Chicago, Illinois, February 5-9, 2001	Podium
2001	"Endotoxin Tolerant Endothelial Cells as a Result of MAPK Inhibition", 21st Annual Meeting of the Surgical Infectious Society. Snowbird, Utah, May 3-5, 2001	Poster
2001	"Actin Cytoskeleton and Endotoxin Induced Activation", 21st Annual Meeting of the Surgical Infectious Society, Snowbird, Utah, May 3-5, 2001	Poster
2001	"Monocyte Adherence Leads to IRAK Phosphorylation and Subsequent Degradation", 24th Annual Conference on Shock, Marco Island, Florida, June 9-12, 2001	Poster
2001	"Hypertonic Preconditioning Results in Reduced Macrophage Responsiveness", 24th Annual Conference on Shock, Marco Island, Florida, June 9-12, 2001	Podium
2001	"Endotoxin Tolerance is Reversed in Monocytes by Phosphatase Inhibition", 24th Annual Conference on Shock, Marco Island, Florida, June 9-12, 2001	Podium
2001	"Hypertonic Preconditioning Prevents Endotoxin Induced Pro-Inflammatory Mediator Production in Endothelial Cells", 87th Clinical Congress of the American College of Surgeons/Surgical Forum, New Orleans, LA, October 7-12, 2001	Podium
2001	"Endotoxin Tolerance in Endothelial Cells is Reversed by Phosphatase Inhibition", 87th Clinical Congress of the American College of Surgeons/Surgical Forum, New Orleans, LA, October 7-12, 2001	Podium

2001	"Modulation of the Macrophage", Grand Rounds-Henry Ford Hospital, Detroit, Michigan, October 19, 2001	Podium
2001	"Stress Fiber Polymerization is Necessary for Endothelial Cell Production of NF-□B Dependent ICAM-1 Production During Sepsis", 35th Annual Meeting of the Association for Academic Surgery, Milwaukee, Wisconsin, November 15-17, 2001	Poster
2001	""Cross Tolerance Between LPS and IL-1□ in Mononuclear Cells", 35th Annual Meeting of the Association for Academic Surgery, Milwaukee, Wisconsin, November 15-17, 2001	Poster
2001	"Immunomodulation of the Macrophage", Research Conference-University of Cincinnati, Cincinnati, Ohio, December 5, 2001	Podium
2002	"Platelet Activating Factor (PAF) Priming of Endotoxin Induced Inflammatory Cell Activity Requires Cellular Adherence", 63rd Annual Meeting of the Society of University Surgeons, Honolulu, Hawaii, February 14-16, 2002	Podium
2002	"Calcium/Calmodulin-Dependent Kinase II is Required for Platelet Activating Factor (PAF) Priming of Inflammatory Cells", 25th Annual Conference on Shock, Big Sky, Montana, June 8-11, 2002	Podium
2002	"Androgens Inhibit Monocyte Cell Signalling", 25th Annual Conference on Shock, Big Sky, Montana, June 8-11, 2002	Podium
2002	"PTFE Porosity Modulates Monocyte Responsiveness", 25th Annual Conference on Shock, Big Sky, Montana, June 8-11, 2002	Poster
2002	"Modulation of Endotoxin-Induced Endothelial Activity by Microtuble Depolymerization", 62nd Annual Meeting for The American Association for the Surgery of Trauma, Orlando, Florida, September 26-28, 2002	Podium
2002	"Inflammatory States Following Trauma", University of Cincinnati Grand Round, November 3, 2002	Podium
2002	"Implications of Proteasome Inhibition: Enhanced Anti-inflammatory Macrophage Activity", 36th Annual Meeting of The Association for Academic Surgery, Boston, Massachusetts, November 7-9, 2002	Podium
2002	"GM-CSF and IFN□ Prime Monocyte Inflammatory Signaling Pathways", 36th Annual Meeting of The Association for Academic Surgery, Boston, Massachusetts, November 7-9, 2002	Poster

2002	University of Cincinnati Basic Science Forum: "Immunomodulation of the Macrophage"	Podium
2003	Novel Treatments in Sepsis , Annual University of Cincinnati Infection Conference: Novel Treatments in Sepsis, University of Cincinnati, Cincinnati, Ohio, January 12, 2003	Podium
2003	"Modulation of Macrophage Responsiveness to LPS by Manipulation of IRAK-1", 64th Annual Meeting of the Society of University Surgeons, Houston, Texas, February 12-14, 2003	Podium
2003	"B1-Integrin Ligation Mediates NADPH Oxidase Activation in Human Neutrophils", 64th Annual Meeting of the Society of University Surgeons, Houston, Texas, February 12-14, 2003	Podium
2003	"PKC-Zeta is Essential Toward Endotoxin-Induced Macrophage Activation", 37th Annual Meeting of The Association for Academic Surgery, Sacramento, California, November 13-15, 2003	Poster
2004	"Implications of Lipid Raft Disintegration: Enhance Anti-Inflammatory Macrophage Activation", 65th Annual Meeting of the Society of University Surgeons, St. Louis, Missouri, February 11-14, 2004.	Poster
2004	"The Role of Repeat Angiography in the Management of Pelvic Fractures", 34th Annual Meeting of the Western Trauma Association, Steamboat Springs, Colorado, February 22-27, 2004	Podium
2004	"Endotoxin Tolerance Attenuates LPS-Induced TLR4 Mobilization to Lipid Rafts: A Condition Reversed by PKC Activation", 24th Annual Meeting of the Surgical Infection Society, Indianapolis, Indiana, April 29-May1, 2004.	Podium
2004	"Phosphatidylcholine (PC)-Specific Phospho-Lipase C (PC-PLC) is required for LPS-Mediated macrophage Activation", 38th Annual Meeting of The Association for Academic Surgery, Houston, Texas, November11-13, 2004.	Podium
2005	"Oxidative induced calcium mobilization is dependent on annexin VI release from lipid rafts", 65th Annual Meeting of the Society of University Surgeons, Nashville, Tennessee, February 10-12, 2005.	Podium
2005	Vitamin E inhibits endotoxin mediated transport of phosphatases to lipid rafts , 25th Annual Meeting of the Surgical Infection Society, Miami, Florida, May 5-7, 2005.	Poster

2005	"Insulin regulates macrophage activity through SHIP production", 28th Annual Conference on Shock, Marco Island, Florida, June 4-7, 2005	Podium
2006	LPS-mediated TLR4 clustering is not dependent on LPS biding to TLR4, 1st Annual Meeting of the Academic Surgical Congress, San Diego, California, February 2-5, 2006.	Podium
2006	Hypertonic resuscitation modulates the inflammatory response in patients with traumatic hemorrhagic shock, 26th Annual Meeting of the Surgical Infection Society, La Jolla, California, April 27-29, 2006.	Podium
2006	The priming effect of C5a on LPS-induced IL-6 production by monocytes is predominantly mediated by the LPS MAPK pathway, 26th Annual Meeting of the Surgical Infection Society, La Jolla, California, April 27-29, 2006.	Poster
2006	Acid sphingomyelinase is required for macrophage activation, 26th Annual Meeting of the Surgical Infection Society, La Jolla, California, April 27-29, 2006.	Podium
2006	The C5a priming effect enhances TNF translation through the PI3K/AKT/MTOR pathway, 29th Annual Conference on Shock, Broomfield, Colorado, June 3-6, 2006.	Podium
2006	MODS development: The role of CaMK II, 29th Annual Conference on Shock, Broomfield, Colorado, June 3-6, 2006.	Poster
2006	Impact of delayed initiation of venous thromboembolism prophylaxis in the trauma ICU, 65th Annual Meeting of the American Association for the Surgery of Trauma, New Orleans, Louisiana, September 28-30, 2006.	Podium
2006	Targeted prehospital ventilation is associated with improved outcome following sever traumatic brain injury, 65th Annual Meeting of the American Association for the Surgery of Trauma, New Orleans, Louisiana, September 28-30, 2006	Podium
2007	Altered phenotypes in the pathogenesis of ARDS, 2nd Annual Meeting of the Academic Surgical Congress, Phoenix, Arizona, February 6-9, 2007.	Poster
2007	Emergency department ventilation effects outcome in severe brain injury, 37th Annual Meeting of the Western Trauma Association, Steamboat Springs, Colorado, February 25-March 2, 2007.	Podium

2007	Early elevation in serum IL-6 is predictive of poor outcome. 30th Annual Conference on Shock, Baltimore, Maryland, June 9-12, 2007.	Podium
2007	Differential leukocyte gene expression after hypertonic resuscitation. 30th Annual Conference on Shock, Baltimore, Maryland, June 9-12, 2007.	Poster
2007	Differential regulation of cytokine translation by the PI3K/AKT/MTOR pathway. 30th Annual Conference on Shock, Baltimore, Maryland, June 9-12, 2007.	Podium
2007	Oxidant alterations in CD16 expression are cytoskeletal induced. 30th Annual Conference on Shock, Baltimore, Maryland, June 9-12, 2007.	Podium
2007	Male gender is associated with excessive IL-6 expression following injury. 66th Annual Meeting of the American Association for the Surgery of Trauma, Las Vegas, Nevada, September 27-29, 2007.	Podium
2007	Critical Care Nursing Annual Conference: Acute Abdominal compartment syndrome: Diagnosis, Management and Follow Up, Seattle, Washington	Podium
2008	Omega-3 fatty acid supplementation modulates the inflammatory response in patients with traumatic shock. 3rd Annual Meeting of the Academic Surgical Congress, Huntington Beach, California, February 13-15, 2008.	Podium
2008	Impact of 2% chlorhexidine whole body washing on nosocomial infections among trauma patients. 28th Annual Meeting of the Surgical Infection Society, Hilton Head Island, South Carolina, May 7-9, 2008.	Podium
2009	The value of prior endotracheal aspirates in guiding empiric antibiotic therapy for ventilator associated pneumonia in trauma. 3rd Combine Meeting of the Surgical Infections Societies of North America and Europe, Chicago, Illinois, May 6-9, 2009.	Podium
2009	Timing of intubation, aspiration and ventilator associated pneumonia in trauma patients. 3rd Combine Meeting of the Surgical Infections Societies of North America and Europe, Chicago, Illinois, May 6-9, 2009.	Poster
2009	"Early Identification and Management of Hemorrhagic Shock", Department of Surgery Grand Rounds, University of Washington, June 21, 2009	Podium

2009	Goal Oriented Shock Resuscitation is Associated with Improved Outcomes following Severe Blunt Injury. 68th Meeting of the American Association for the Surgery of Trauma, Pittsburgh, Pennsylvania, October 1-3, 2009.	Podium
2009	End-Tidal Capnography Predicts Compensated Shock and need for Emergent Blood Transfusion. 68th Meeting of the American Association for the Surgery of Trauma, Pittsburgh, Pennsylvania, October 1-3, 2009.	Podium
2009	Statins American Heart Association Resuscitation Science Symposium. Orlando, Florida, November 14-15, 2009.	Podium
2010	Plasma levels of non-esterified fatty acids (NEFA) predicts the development of multiple organ failure in trauma patients. 33rd Annual Conference on Shock, Portland, Oregon, June 12-15, 2010.	Podium
2010	Hypertonic resuscitation modulates monocyte subset activation and cytokine production. 33rd Annual Conference on Shock, Portland, Oregon, June 12-15, 2010.	Podium
2010	Hypertonic resuscitation differentially modulates soluble adhesion molecules in shock patients. 33rd Annual Conference on Shock, Portland, Oregon, June 12-15, 2010.	Poster
2010	Hypertonic resuscitation of shock patients downregulates neutrophil activation. 33rd Annual Conference on Shock, Portland, Oregon, June 12-15, 2010.	Poster
2010	The effect of statin withdrawal on cytokine production in human peripheral blood mononuclear cells. 33rd Annual Conference on Shock, Portland, Oregon, June 12-15, 2010.	Poster
2010	Recovery from severe injury 2nd Annual Obeid Memorial Lecture, Grand Rounds Henry Ford Hospital, Detroit, Michigan, August 9, 2010.	Podium
2011	Increased neutrophil adenosine A3 receptor expression is associated with hemorrhagic shock and injury severity in trauma patients. 34th Annual Conference on Shock, Norfolk, Virginia, June 11-14, 2011.	Podium
2012	Prehospital hypertonic resuscitation is associated with hypo-cogulation, hyper-fibrinolysis and anti-inflammatory responses. 71st Annual Meeting of the American Association for the Surgery of Trauma, Kauii, Hawaii, September 12-15, 2012.	Podium

2012	Arrival hyperoxemia does not effect mortality in intubated patients with traumatic brain injury. 71st Annual Meeting of the American Association for the Surgery of Trauma, Kauii, Hawaii, September 12-15, 2012.	Poster
2012	Comparing clinical predictors of deep venous thrombosis versus pulmonary embolus after severe injury: a new paradigm for posttraumatic venous thromboembolism? 71st Annual Meeting of the American Association for the Surgery of Trauma, Kauii, Hawaii, September 12-15, 2012.	Podium
2012	Goal-directed resuscitation in the prehospital setting: a propensity-adjusted analysis. 71st Annual Meeting of the American Association for the Surgery of Trauma, Kauii, Hawaii, September 12-15, 2012.	Podium
2013	Clostiridium Difficilli infections: The role of colectomy. 33rd Annual Meeting of the Surgical Infection Society, Las Vegas, Nevada, April 12-15, 2013.	Podium
2013	The early bird gets the worm: Pre trauma center blood transfusions is associated with reduced mortality and coagulopathy in severely injured blunt trauma patients. 72nd Annual Meeting of the American Assocation for the Surgery of Trauma. San Francisco, California, September 21-24, 2013.	Podium
2013	The role of LPS structure in monocyte activation and cytokine secretion. 72nd Annual meeting of the American Association for the Surgery of Trauma, San Francisco, California, September 2013.	Poster
2013	American College of Surgeons Annual Meeting, Update on Neurological Trauma, Washington DC	Podium
2014	Wound Infection after Attenuating a Key Inflammatory Signaling Pathway. 34th Annual Meeting of the Surgical Infection Society, Baltimore, Maryland, May 1-3, 2014.	Podium
2014	Use of Computed Tomography to Diagnose Aspiration in Trauma Patients. 34th Annual Meeting of the Surgical Infection Society, Baltimore, Maryland, May 1-3, 2014.	Podium
2015	Trauma Acute or Chronic . 62nd Annual Meeting and 64th Annual Resident Surgeons Competition of the Michigan Chapter of the American College of Surgeons, Grand Rapids, Michigan, May13-15, 2015.	Podium

2015	Multicenter external validation of the geriatric trauma outcome score: The prognostic assessment of life and limiations after trauma in the elderly [PALLIATE] study. American Association for the Surgery of Trauma, Las Vegas, Nevada, September 2015.	Podium
2015	Inflammatory Response to Trauma. 100th Anniversary Henry Ford Hospital: McClure Forum. Detroit, Michigan, October 10, 2015.	Podium
2016	Venous thromboembolism after hospitalization in trauma patients: Does prophylaxis matter. 2016 Annual Meeting of the Society of Hospital Medicine, San Diego, California, March 6-9, 2016.	Podium
2016	Multicenter Validation of a Prognosis Calculator Annual meeting of the American Geriatrics Society, Long Beach, California, May 19-21, 2016.	Podium
2017	Blunt Cerebrovascular Injury Screening in Children: Are they just little adults? 47th Annual Meeting of the Western Trauma Association, Snowbird, Utah, March 5-10, 2017.	Podium
2017	Creating and Managing an ECMO Program Without a Perfusionist Team The RN/RT Model 28th Annual ELSO Conference, Baltimore, Maryland, September 24-27, 2017.	Poster
2017	Statewide protocol rapidly reverses oral anticoagulant induced coagulopathy in patients with isolated traumatic brain injury. 76th Annual Meeting of the American Association for the Surgery of Trauma Baltimore, Maryland, September 2017.	Poster
2017	Obesity facilitates distinct genomic changes and immune dysregulation in severe traumatic injury. 76th Annual Meeting of the American Association for the Surgery of Trauma Baltimore, Maryland, September 2017	Poster
2017	Department of Surgery Grand Rounds, Ischemia/Reperfusion, University of Washington	Podium
2018	Decreased Risk of Delirium With Use of Regional Analgesia in Geriatric Trauma Patients With Multiple Rib Fractures. 138th Annual Meeting of the American Surgical Association, Phoenix, Arizona, April 19-20, 2018	Podium
2018	Hypothermia Following Injury Results in Sustained Organ Dysfunction. 42nd Annual Meeting of the Shock Society, Coronado, CA, June 8 - 11, 2018.	Poster

2018	Ventilator-Associated Events not Ventilator Pneumonia is Associated with Higher Mortality in Trauma Patients. 77th Annual Meeting of the American Association for the Surgery of Trauma, San Diego, California, September 26-29, 2018.	Podium
2018	Splenic Artery Angioembolization for High-Grade Splenic Injury: Stop Wasting Time and Money. 77th Annual Meeting of the American Association for the Surgery of Trauma, San Diego, California, September 26-29, 2018.	Poster
2020	Lifting the Burden: State Medicaid Expansion Reduces Financial Risk for the Injured. 78th Annual Meeting of the American Association for the Surgery of Trauma, Dallas, Texas, September 18-21, 2020.	Podium
2020	Distinct Immunologic Endotypes are Associated with Clinical Trajectory After Blunt Trauma and hemorrhagic Shock. 79th Annual Meeting of the American Association for the Surgery of Trauma, Virtual-meeting, September 8-18, 2019.	Podium
2020	Prolonged Metabolic Alterations Characterize Persistent Inflammation, Immunosupression, and Catabolism Syndrome After Severe Trauma. 79th Annual Meeting of the American Association for the Surgery of Trauma, Virtual-meeting, September 8-18, 2020.	Podium
2020	Persistent inflammatory catabolic syndrome after hypothermia in trauma patients. 79th Annual Meeting of the American Association for the Surgery of Trauma, Virtual-meeting, September 8-18, 2020.	Podium
2020	Multicenter validation of the bowel injury prediction score (BIPS) for identifying patients requiring surgery. 79th Annual Meeting of the American Association for the Surgery of Trauma, Virtual-meeting, September 8-18, 2020.	Podium
2021	"Restoring Homeostasis Following Injury: A Personalized Approach", UCSF Grand Rounds, May 24, 2021	
2021	"Respiratory events after intensive care unit discharge in trauma patients: Epidemiology, outcomes, and risk factors." 80th Annual Meeting of the American Association for the Surgery of Trauma, Atlanta, Georgia, Sept 29-Oct 2, 2021	Podium
2021	"Endotypes, Phenotypes, and Outcomes in Critical Illness", Shock Society, October 14, 2021	Podium
2021	"Surgical Infections", American College of Surgeons, October 25, 2021	Podium

2022	"Sustained Alterations in Homeostasis: The Impact on Recovery," Inaugural David A. Spain Lecture for Acute Care Surgery, Stanford University School of Medicine, March 30, 2022.	Lecture
2022	"(Aspirin Versus Low-Molecular Weight Heparin for Thromboprophylaxis): A Randomized Clinical Trial of Over 12,000 Orthopedic Trauma Patients" , OTA 38th Annual Meeting, Tampa Florida, October 12-15, 2022.	Podium
2022	"Chronicity of Trauma: Sustained Immune Dysregulation" Surgical Biology Club II, San Diego, California, October 16, 2022	

INVITED PRESENTATIONS - REGIONAL AND OTHER INVITED PRESENTATIONS

1998	Detroit Surgical Assocation, "Arterial-Venous Carbon Dioxide Gradients as an Indicator of Cardiac Index: A Comparison between the Mixed and Central Venous Circulation"	Podium
1998	45th Annual Meeting Michigan Chapter, American College of Surgeons and Annual Resident Competition, "Fasciotomy Wound Management: Less is More",	Podium
2000	"Hypertonic Preconditioning Results in Reduced ERK 1/2 Activity and TNF Production in Mononuclear Cells", Oregon/Washington Resident/Fellow Committee on Trauma Competition, Olympia, Washington, November 9, 2000	Podium
2000	"Endotoxin Tolerant Endothelial Cells Result in Reduced MAPK Activity", Oregon/Washington Resident/Fellow Committee on Trauma Competition, Olympia, Washington, November 9, 2000	Podium
2001	"Hypertonic Preconditioning Results in Reduced MAPK Activity and TNF Production in Mononuclear Cells", Seattle Surgical Society, Seattle, Washington, January 19-20, 2001	Podium
2001	"Phosphatase Inhibition Reverses Endotoxin Tolerance in Endothelial Cells", Seattle Surgical Society, Seattle, Washington, January 19-20, 2001	Podium
2001	"Hypertonic Preconditioning Results in Reduced Macrophage Responsiveness", Washington Chapter of the American College of Surgeons, Skamania, Washington, June 22-23, 2001	Podium
2001	"Endotoxin Tolerance is Reversed by Granulocycyte Macrophage-Colony Stimulating Factor (GM-CSF)", Washington Chapter of the American College of Surgeons, Skamania, Washington, June 22-23, 2001	Podium

2001	"Stress Fiber Polymerization is Necessary for Endothelial Cell Production of NF-kB Dependent ICAM-1 Production During Sepsis", Oregon/Washington Resident/Fellow Committee on Trauma Competition, Olympia, Washington, December 8, 2001	Podium
2001	"Cell Biology After Severe Traumatic Injury: The Association Between Monocyte Cell Signaling and ARDS", Oregon/Washington Resident/Fellow Committee on Trauma Competition, Olympia, Washington, December 8, 2001	Podium
2002	"Slow Channel Calcium Inhibition Blocks Pro-Inflammatory Gene Signaling and Reduces Macrophage Responsiveness", Seattle Surgical Society, Seattle, Washington, January 11-12, 2002	Podium
2202	"Phosphatase Upregulation Controls Monocyte Proinflammatory Response", Seattle Surgical Society, Seattle, Washington, January 11-12, 2002	Podium
2002	"Platelet Activating Factor (PAF) Priming of Endotoxin Induced Inflammatory Cell Activity Requires Cellular Adherence", 8th Annual Resident Research Symposium of the University of Washington, Seattle, Washington, February 1, 2002	Podium
2002	"Phosphatase Upregulation Controls Monocyte Proinflammatory Response", 8th Annual Resident Research Symposium of the University of Washington, Seattle, Washington, February 1, 2002	Podium
2002	University of Cincinnati Resident Rounds: "Current Management of Sepsis"	Podium
2003	Basic Science Forum: Macrophage Priming and Activation, University of Cincinnati	Podium
2007	Trauma/Critical Care Retreat: Blood is it still the right stuff, University of Washington	Podium
2008	Seattle Resuscitation Rounds: Current Management of Hemorrhagic Shock	Podium
2009	TSICU Retreat: Trauma Resuscitation, University of Washington	Podium
2011	Recovery for severe injury: The effect of pre-injury statins 109th Meeting of the Seattle Surgical Society, Seattle, Washington, March 28, 2011.	Podium
2012	Improving Survival Following Severe Injury , WAMI Conference, Seattle, Washington, June 10, 2012	Podium

2012	Intra-abdominal Infections , 1st Annual UW Sepsis Conference, Seattle, Washington, November 7, 2012.	Podium
2016	WAMI Conference, My most challenging surgical cases, Seattle, Washington	Podium
2018	University of Washington Paramedic Training, Shock Recognition and Resuscitation, Seattle, Washington	Podium
2018	WAMI Conference, Transfusion Adjuncts, Seattle, Washington	Podium
2019	WAMI Conference, What is new in VTE Prophylaxis and management, Seattle, Washington	Podium
2021	UCSF Department of Surgery Grand Rounds, San Francisco, California "Trauma Morbidity & Mortality: Complex Duodenal Trauma"	Podium

CONTINUING EDUCATION AND PROFESSIONAL DEVELOPMENT ACTIVITIES

2021	American Association for the Surgery of Trauma Emergency General Surgery Course
2021	Update on Surgical Critical Care, Surgical Infections, American College of Surgeons Annual Meeting
2021	Surgical Critical Care, Case Presentations, American College of Surgeons

GOVERNMENT AND OTHER PROFESSIONAL SERVICE

2008 - 2009	Austrian Science Fund	Reviewer
2010 - 2012	Italian Science Fund	Reviewer
2010 - present	NIH Study Section on Surgery, Anesthesia, and Sepsis	Ad Hoc Reviewer
2015 - present	NIH Special Emphasis Panel/Scientific Review Group	Study Section Member
2018 - present	NIH Study Section on Surgery, Anesthesia, and Sepsis: Prima Air Study	DSMB Member
2019 - present	Faraday Pharmaceuticals, ICUWA Study	Steering Committee Member

UNIVERSITY AND PUBLIC SERVICE

SERVICE ACTIVITIES SUMMARY

Providing service to the University and Medical Center is essential in a leadership position to provide guidance, education, research structure, and finical viability.

During my time at the University of Washington I was extremely involved in a number of University processes, and institutional processes at Harborview Medical Center. Upon joining

the faculty at the University of Washington/Harborview Medical Center I was named the medical director of our acute care trauma floor. This allowed me to provide guidance to the management of injured patients, and to put several processes in place for discharge and post discharge care.

As the years progressed, I was recognized for my strong leadership within critical care and I was named the medical director of our Trauma Surgical ICU and Associate Program Director for the Surgical Critical Care fellowship at the University of Washington. This allowed me to work closely with the Chief of Surgery to further expand and grow our fellowship form 2 fellows per year to 7 fellows per year. During this time, I developed a multidisciplinary ICU journal club that was a multidisciplinary conference including medical, anesthesia, and surgical ICU providers. This allowed us to collaborate to improve overall care within Harborview Medical Center. As a result, when our Associate Medical Director left our institution I was named the interim Associate Medical Director for Critical Care services. During this time I lead to update our brain death criteria, developed a response to extubation and assessment of difficult airways, helped to develop and implement our mobility protocol, improve care in geriatric ICU patients, and ICU sign-out processes. This continued until I was tasked with helping to improve our OR efficiency and finical stability. This led to the creation of a new position which I was appointed to as Associate Medical Director for Surgical Services. In this role, I have helped to improve anesthesia and surgical collaboration, OR turn-over and first case starts, and minimize waste. Although these processes where in place prior to the COVID-19 pandemic, modification and further improvements were required regarding communication, PPE, and testing all of which I helped to direct.

In addition to these critical roles, I have been involved in a number of committees that have crossed over our entire medical system. Among these, was the UWMC Critical Care Council that oversaw critical care services across the entire medical system. As chair of this committee, I helped to develop and implement two critical care services at the University of Washington Medical Center at Mountlake which included both a Cardiothoracic ICU service, and Surgical Critical Care Service. These high intensity models have improved overall care and outcomes over the last decade. In addition, I have co-chaired not only our institutional VTE committee at Harborview Medical Center, but also our UWMC system wide VTE committee responsible for formalization of anticoagulation therapy and assessment of outcomes. Finally, I was involved in the initial overall response to the COVID-19 pandemic to restore operative efficiency system wide, and surgical COVID-19 processes for testing and safety as part of an oversight UW committee.

Upon transitioning to UCSF, I began at Trauma Medical Director for Zuckerberg San Francisco General Hospital and Trauma Center. Critical to this position is maintaining a collaborative relationship, and to careful assess trauma outcomes. As a verified American College of Surgeons Level 1 trauma center, critical benchmarks and processes must be maintained. Several aspects of care haver required refocus, and intensive efforts to maintain quality improvements. Shortly after arrival I was additionally named Interim Chief of Surgery. As a result, I have focused on not only advancing our trauma program but have been responsible for the administration of the Division of Surgery at Zuckerberg San Francisco General Hospital and Trauma Center. I have been actively involved in numerous committees within UCSF and ZSFG to ensure that both the Division of Surgery and the Trauma program are represented. This has allowed me to further evaluate, and put efforts into improving our education, research, and patient care.

Throughout my career I have been highly involved in multiple aspects of care, and have served to drive improvements overall in patient care, research, and education.

UCSF CAMPUSWIDE

2021 - present	CPG Compliance Committee	Committee member
2021 - present	Zuckerberg San Francisco General Hospital Medical Executive Board Committee	Committee member
2021 - present	Zuckerberg San Francisco General Hospital Trauma PEER Review Committee	Chair
2021 - present	Zuckerberg San Francisco General Hospital Trauma Process Improvement Committee	Chair
2021 - present	Zuckerberg San Francisco General Hospital Executive OR Committee	Committee member
2021 - present	Zuckerberg San Francisco General Hospital OR Block Committee	Committee member
2021 - present	UCSF/Zuckerberg San Francisco General Hospital Vice Dean FTE Committee	Committee member
2021 - present	Zuckerberg San Francisco General Hospital PEMT Committee	Committee member
2021 - present	UCSF/Zuckerberg San Francisco General Hospital Executive Committee RAB	Committee member
2021 - present	UCSF/Zuckerberg San Francisco General Hospital Space Advisory Committee RAB	Committee member
2021 - present	Zuckerberg San Francisco General Hospital Critical Care Committee	Committee member
2021 - present	Zuckerberg San Francisco General Hospital Transfusion Committee	Committee member
2021 - present	Vice Dean, Research Zuckerberg San Francisco General Hospital, Search Committee	Committee member
2021 - present	Attending Surgeon, UCSF East Bay Surgery, Search Committee	Committee member
2021 - present	FAST-Car WIP	Faculty member
2021 - present	Zuckerberg San Francisco General Hospital Disaster Committee	Committee member
2022 - 2022	Medical Director Perioperative Medicine, ZSFG, Search Committee	Committee member
2022 - 2022	Section Chief Acute Care Surgery and Surgical Critical Care Medical Director, UCSF, Selection Committee	Committee member

2022 - present	Anesthesia Trauma and Emergency Medical Director, ZSFG/UCSF, Search Committee	Committee member
2022 - present	UCSF Senate Emergency Management and Resilience Committee	Committee member
2022 - present	Chair Orthopedic Surgery, UCSF, Search Committee	Committee member
2022 - present	Chief Plastic Surgery, Department of Surgery, UCSF Search Committee	Committee member

SCHOOL OF MEDICINE

2021 - present	School of Medicine FTE Work Group, Dean's Office	Committee member

DEPARTMENTAL SERVICE

2021 - present	Zuckerberg San Francisco General Hospital	Trauma Medical Director
2021 - present	Zuckerberg San Francisco General Hospital	Interim Chief of Surgery
2021 - present	Surgical Education Committee	Committee member
2022 - present	Surgery Program Evaluation Committee	Committee member
2022 - present	Department of Surgery Merits and Promotion Committee	Committee member

SERVICE AT OTHER UNIVERSITIES

2002 - 2004	Surgical Resident Review Committee	University of Cincinnati
2004 - 2006	Medical Director 7East Hospital (Trauma Acute Care Floor)	Harborview Medical Center
2006 - 2020	Surgical Critical Care Curriculum	University of Washington
2006 - 2020	Medical Director Trauma Surgical ICU	Harborview Medical Center
2006 - present	Surgical Council	Harborview Medical Center
2006 - present	Trauma Council	Harborview Medical Center
2006 - present	Critical Care Council (Chair 2011-2016)	Harborview Medical Center

2007 - 2011	UWMC Critical Care Committee (Chair 2008-2009)	University of Washington
2007 - present	UW Medicine Tumor Board	Harborview Medical Center
2008 - present	VTE Committee (Co-chair 2009-present)	Harborview Medical Center
2009 - 2009	H1N1 Response Committee	Harborview Medical Center
2011 - 2016	Acting Associate Medical Director Critical Care	Harborview Medical Center
2014 - 2014	EBOLA Response Committee	Harborview Medical Center
2014 - 2020	Department of Surgery Education Committee	University of Washington
2014 - present	Department of Surgery Research Committee	University of Washington
2014 - present	Code Blue Committee	Harborview Medical Center
2015 - present	Geriatric Trauma Committee	Harborview Medical Center
2015 - 2016	Associate Medical Director (Critical Care) Search Committee	Harborview Medical Center
2018 - 2021	UWMC VTE Committee (Co-chair)	University of Washington
2018 - 2021	Surgical Core Group	University of Washington
2019 - 2021	Surgical Executive Committee	Harborview Medical Center
2019 - 2021	OR Operational Committee	Harborview Medical Center
2019 - 2021	Operative Turn Around Team	Harborview Medical Center
2019 - 2021	Operative Block Scheduling Committee	Harborview Medical Center
2020 - 2021	UW Medicine Operative Efficiency Committee	UW Medicine
2020 - 2021	UW Medicine COVID OR Response Committee	UW Medicine

COMMUNITY AND PUBLIC SERVICE

2008 - 2012	Hospital Trauma Outcome Committee, King County, Washington	Committee member
2011 - 2017	Disaster Response Committee, King County, Washington	Committee member
2021 - present	Emergency Medical System Advisory Committee, San Francisco	Committee member
2021 - present	Bay Area RTCC	Committee member
2021 - present	San Francisco County Trauma Systems Advisory Committee	Vice Chair
2021 - present	San Francisco County Department of Health Disaster Committee	Committee member
2021 - present	EMS Children Advocacy Committee	Committee member

CONTRIBUTIONS TO DIVERSITY

CONTRIBUTIONS TO DIVERSITY Contributions to Diversity, Equity & Inclusion Guidance

Diversity and equity are essential to providing health care. Specifically, this is important to providing optimal medical education, research, and clinical care. Without appropriate diversity and the ability to provide exceptional care without exception a disservice is delivered. In simple terms, all individuals deserve equal education and treatment. However, we are governed by bias, both explicit and implicit, and a culture that does not consistently support diversity. Despite this, diversity and equity which is essential must be central to the delivery of patient care, education, and research. This core value is critical to bringing together various points of views that will allow us to excel in each of these areas.

As stated, the concept of diversity and equity must be considered a central tenant in education and training, research, and health care. This requires awareness of inequities among underrepresented and economically disadvantaged groups. Although I grew up in a diverse area of Michigan, I was aware of economic inequities but unaware of the extent of inequities based on race and sexual orientation that existed beyond my community. It was during my first faculty position when I was alarming struck hearing that treatment should vary based on socioeconomic status. Obviously, my understanding of equality was naïve as I could never have imagined that professionals in the health care field actually thought and openly spoke this way. This led to me focus on furthering my education on inequities that exist, and to truly self-reflect on my own personal bias. But this injustice is not simply limited to socioeconomic status, it additionally includes race and sexual orientation. As a healthcare leader and educator, I personally have strived to improving equity. As part of my training as a program director at the University of Washington, I had been fortunate to have received further training in implicit bias and inequities.

This education and sustained commitment has enforced my personal commitment to making that fellowship in Surgical Critical Care diverse. I had made sure that equity and diversity was

part of the training program with selective didactics and education to all fellows. Furthermore, working in a county hospital providing care to all individuals regardless of age, gender, race, or sexual orientation allowed our fellowship to further explore and focus on diversity.

The simple motto of my previous institution at Harborview Medical Center clearly demonstrates this importance, Exceptional Care without Exception. This is the same focus I have for each and every patient encounter. There is no selective VIP, rather all patients treated are VIPs.

It has remained my focus to model this important concept, and as a full professor it is not only the expectation professionally but personally. This important to model for students, trainees, and staff taking care of these vulnerable patients. As a result, upon transitioning to the University of California San Francisco I have committed to fundamental aspects of diversity, equity and inclusion and became a DEI champion. It is a critical area that I have focused on in my leadership positions as both Trauma Medical Director, and Interim Chief of Surgery at Zuckerberg San Francisco General Hospital.
Although my research focus has been strongly associated with inflammatory changes following injury, I have focused continued research efforts on further exploring the role of palliative care in our elderly population, the financial effects on the uninsured, and the equitable delivery of health care and outcomes.

My future goals and objectives are to maintain integrally involvement through education and mentorship to improve diversity, and growth within established programs by securing diversity, equity and inclusion as cornerstones towards recruitment. My experiences and training has allowed me to perform these roles in a variety of leadership positions, and my goal is to further this through integration of research to sustain changes.

TEACHING AND MENTORING

TEACHING SUMMARY

Medical education is the cornerstone to providing and improving care to future generations. Through education of learners at all levels, we provide the tools required for these bright individuals to continue to advance care and provide optimal care to every patient. Education, however, is not limited to housestaff and medical students. It is as important to help provide education to prehospital and hospital providers overall. This is especially true in taking care of patients following traumatic injury. The management and treatment of this critical patient population requires coordinated care beginning in the field and throughout their hospitalization and discharge. Without appropriate education to each member of this team, optimal and equitable care cannot be provided. I have been involved throughout my career in the education of housestaff and medical students. In fact, I weekly preformed dedicated protected teaching rounds with the housestaff and medical students at Harborview Medical Center prior to joining the faculty at UCSF. The focus of these teaching rounds was through direct patient scenarios that provided insight into the pathophysiology, diagnosis and treatment of critical ill surgical patients. Important in my role at the University of Washington as a Trauma Critical Care Surgeon and Director of Surgical Critical Care was to assure standard and evidence based practice. As a result, I additionally provided education to the prehospital providers of King County and nurses at Harborview Medical Center. Currently, as Trauma Medical Director at Zuckerberg San Francisco General Hospital and Trauma Center I have helped to establish a weekly education session, and rework previous teaching sessions including our morbidity and morality conference, and our surgical journal club. It is not only essential to have dedicate

education time, but to provide timely beside teaching and supplemental literature to support clinical practice.

Delivering medical education requires ongoing refinement of teaching skills. Teaching adult learners requires a multi-domain approach that I have focused on. I have been fortunate to direct ATLS instructor courses that focuses on adult education along with Dr. Adnan Alseidi a dedicated surgical educator. Every time I direct this course, I learn new tools to further my ability to teach. I think it is imperative that we take each opportunity to learn to educate, and to provide education. The deliver cannot be confrontational, and must be given in a format that allows the learner to further expand their current knowledge by using their individual established foundation. Teaching is not limited to lectures; it includes all aspects of the medical care we provide.
Important and critical to teaching effectively is the ability to receive and provide feedback. This is essential to improving knowledge and clinical care. Although at times difficult, as an educator it is an area that must be performed and requires continued refinement and individuality. This is potentially one of the most critical aspects required for growth as a medical provider.

Finally, I have had the opportunity to serve as Program Director for the Surgical Critical Care Fellowship at the University of Washington School of Medicine, and Trauma Medical Director at Zuckerberg San Francisco General Hospital. Without any doubt, one of the proudest accomplishments I have for my career in these various roles is training an outstanding group of leaders in trauma and critical care surgery.

As a result of these fundamental educational beliefs, I was awarded the John K. Stevenson Faculty Teaching Award in Surgery at the University of Washington School of Medicine. Providing and refinement of teaching is what we responsible for as faculty, and it is truly one of, if not, the most rewarding parts of our career.

FORMAL TEACHING

Not UCSF	Academic Yr	Course No. & Title	Teaching Contribution	School	Class Size
X	2002 - 2004	Trauma: Resuscitation, University of Cincinnati	Moderator, Presentor	Medicine	15
X	2002 - 2004	Endocrine disorders: Surgical Thyroid Disease, Unviversity of Cincinnati	Moderator, Presentor	Medicine	20
X	2002 - 2004	Medical Student Oral Board Exams, University of Cincinnati	Examiner	Medicine	

Not UCSF	Academic Yr	Course No. & Title	Teaching Contribution	School	Class Size
X	2006 - 2014	Trauma: Resuscitation and Endpoints, University of Washington	Moderator, Presentor	Medicine	15
	-				
X	2002 - 2004	Trauma Conference, University of Cincinnati	Moderator, Presentor	Medicine	
X	2002 - 2004	Department of Surgery Morbidity and Mortality Conference, University of Cincinnati	Moderator, participant	Medicine	
X	2004 - present	Department of Surgery Morbidity and Morality Conference, Harborview Medical Center	Moderator	Medicine	
X	2004 - present	Critical Care Conference, Harborview Medical Center	Moderator, Presentor	Medicine	
X	2005 - present	Trauma Conference, Harborview Medical Center	Moderator, Presentor	Medicine	
X	2005 - 2012	Junior Resident Trauma Chalk Talks	Organizer, Moderator, Presentor	Medicine	
X	2005 - 2006	Critical Care Procedures, University of Washington	Moderator, Presentor	Medicine	
X	2006 - present	Multidisciplinary Critical Care Journal Club, Harborview Medical Center	Organizer, Moderator	Medicine	

Not UCSF	Academic Yr	Course No. & Title	Teaching Contribution	School	Class Size
X	2006 - present	Acute Resuscitation and Critical Care Rounds (Maier Rounds), Harborview Medical Center	Organizer, Moderator, Presentor,	Medicine	
X	2006 - 2010	Ultrasound FAST, University of Washington	Organizer, Moderator		10
X	2008 - present	Shock and Resuscitation	Moderator, Presentor	Medicine	
X	2008 - present	Critical Care Billing	Moderator, Presentor		
X	2008 - present	VTE management and prophylaxis	Moderator, Presentor	Medicine	
X	2008 - present	Management of Solid Organ Injury	Moderator, Presentor	Medicine	
	-				
X	2004 - 2004	Advance Trauma Life Support, University of Cincinnati	Instructor	Medicine	16
X	2004 - present	Advance Trauma Life Support, University of Washington	Course Director, Instructor	Medicine	16
X	2007 - present	Rural Trauma Course, University of Washington	Instructor	Medicine	20
X	2007 - 2007	Advance Trauma Life Support, Sitka, Alaska	Instructor	Medicine	16
X	2007 - present	Advance Trauma Life Support Refresher Course, University of Washington	Course Director, Instructor	Medicine	16
X	2007 - present	Advance Trauma Life Support Instructor Course	Course Director, Instuctor	Medicine	8
X	2008 - 2008	Advance Trauma Life Support, Juneau, Alaska	Course Director, Instructor	Medicine	16

Not UCSF	Academic Yr	Course No. & Title	Teaching Contribution	School	Class Size
X	2009 - 2009	Advance Trauma Life Support, Providence Everett Medical Center	Course Director, Instructor	Medicine	16
X	2011 - 2011	Advance Trauma Life Support, Sitka, Alaska	Instructor	Medicine	16
X	2012 - present	Medic One Paramedic Training Program	Instructor		12
X	2012 - 2012	Advance Trauma Life Support, Fairbanks, Alaska	Course Director, Instructor	Medicine	16
X	2016 - 2016	Advance Trauma Life Support, Sitka, Alaska	Course Director, Instructor	Medicine	16
X	2018 - present	Paraedic Cadaver Course, Seattle, Washington	Instructor		10
X	2018 - 2018	Advance Trauma Life Support, Fairbanks, Alaska	Instructor	Medicine	16
X	2018 - present	Advanced Surgical Skills in Exposure for Trauma, Tacoma, Washington	Instructor	Medicine	8
X	2019 - 2019	Advance Trauma Life Support, Fairbanks, Alaska	Course Director, Instructor	Medicine	16
X	2020 - 2020	Advance Trauma Life Support Instructor Course, University of Washington	Course Director, Instructor	Medicine	6
	-			Medicine	
	2021 - 2021	Neck Trauma	Instructor	Medicine	16
	2021 - 2021	Early Management and Resuscitation in Trauma	Instructor	Medicine	4

Not UCSF	Academic Yr	Course No. & Title	Teaching Contribution	School	Class Size
X	2021 - 2021	American Association for the Surgery of Trauma Emergency General Surgery Course	Instructor		32
	2021 - 2021	Advance Trauma Life Support, San Francisco, California	Co-Course Director, Instructor	Medicine	16
	2021 - present	IDS 115 - Coda	Instructor	Medicine	16
	2021 - 2021	Midyear Surgical Skills Assessment	Faculty	Medicine	40
	2021 - 2021	General Surgery Mock Orals	Faculty	Medicine	8
	2022 - 2022	Trauma Review	Instructor	Medicine	42
	2022 - 2022	Exposure to surgical trauma (neck, chest and abdomen)	Faculty	Medicine	9
	2022 - 2022	Great Vessel Injury	Faculty	Medicine	12
	2022 - 2022	Resuscitative thoracotomy emergency resident cadaver lab (R1)	Faculty	Medicine	20
	2022 - 2022	Resuscitative thoracotomy emergency resident cadaver lab (R3-R4)	Faculty	Medicine	16
	2022 - 2022	Organ dysfunction: Neurologic dysfunction, pain & delirium, and hepatic failure	Faculty	Medicine	36
	2022 - 2022	ATLS	Course Director	Medicine	16
	2022 - 2022	Thermal Injury: Surgical management and inhalation injury	Faculty	Medicine	12

INFORMAL TEACHING

2002 - 2004 Clinical Supervision Trauma Service, University of Cincinnati (3 months/year)

2002 - 2004 Clinical Supervision General Surgery Service, University of Cincinnati (3 months/year)

2002 - 2004 Clinical Supervision Surgical Critical Care, University of Cincinnati (3 months/year)

2004 - 2021 Clinical Supervision Trauma Service, Harborview Medical Center, University of Washington (3 months/year)

2004 - 2021 Clinical Supervision General Surgery Service, Harborview Medical Center, University of Washington (3 months/year)

2004 - 2021 Clinical Supervision Surgical Critical Care, Harborview Medical Center, University of Washington (2 months/year)

2015 - 2021 Clinical Supervision ECMO Service, Harborview Medical Center, University of Washington (1 month/year)

2021 - present Clinical Supervision Trauma Service, Zuckerberg San Francisco General Hospital, University of California San Francisco (3 months/year)

2021 - present Clinical Supervision Surgical Critical Care, Zuckerberg San Francisco General Hospital, University of California San Francisco (2 months/year)

2022 - 2022 Resuscitative thoracotomy for UCSF Emergency Department Faculty

MENTORING SUMMARY

Mentoring is the legacy created. It is truly one of the most essential components of academic surgery. Providing guidance to help develop the next group of surgeons. However, academic mentoring has not been limited to helping to guide and develop the next group of surgeon scientists, but also to develop the next group of clinical surgeons that can provide outstanding care without exception.

For nearly two decades prior to arriving at UCSF in 2021, I was fortunate to serve as Associate Program Director or Program Director of Surgical Critical at the University of Washington School of Medicine. This was an honor, and has allowed me to work closely with outstanding fellows. Upon arriving at UCSF, I have been able to continue this mentoring role working closely with the surgical ciritcal care fellows and acute care surgery fellows as Trauma Medical Director and Interim Chief of Surgery. I am humbled to have played a critical but small role in each of their careers, and have been humbled by their career development. Many of them have become leaders regionally, nationally and internationally in the fields of trauma, critical care and burns. As a mentor, I take great pride in their outstanding achievements.

PREDOCTORAL STUDENTS SUPERVISED OR MENTORED

Dates	Name	Program or School	Mentor Type	Role	Current Position

Dates	Name	Program or School	Mentor Type	Role	Current Position
2021 - 2022	Camille Rogine, MD	UCSF School of Medicine	Career Mentor	Career Mentor	Preliminary General Surgery Resident, UCSF
2021 - 2022	Jordan Spatz, MD	UCSF School of Medicine	Career Mentor	Career Mentor	
2022 - present	Michelle Leung	UCSF School of Medicine	Career Mentor	Career Mentor	Medical Student
2022 - present	willow Fry	UCSF School of Medicine	Career Mentor	Career Mentor	Medical Student
2022 - present	Natalie Esscobar	NYU School of Medicine	Career Mentor	Career Mentor	Medical Student

POSTDOCTORAL FELLOWS AND RESIDENTS MENTORED

Dates	Name	Fellow	Mentor Role	Faculty Role	Current Position
2006 - 2007	Tam Pham, MD	Surgical Critical Care	Career Mentor,Co-Mentor/Clinical Mentor	Associate Program Director	Professor of Surgery University of Washington, Chief of Burns
2006 - 2007	Sharmila Dissanike, MD	Surgical Critical Care	Career Mentor,Co-Mentor/Clinical Mentor	Associate Program Director	Professor of Surgery Texas Tech, Chair Department of Surgery
2006 - 2007	Fred Endorff, MD	Surgical Critical Care	Career Mentor,Co-Mentor/Clinical Mentor	Associate Program Director	Attending Surgeon Hennepin Healthcare, Assistant Program Director Surgical Residence

Dates	Name	Fellow	Mentor Role	Faculty Role	Current Position
2007 - 2008	Darwin Ang, MD PhD MPH	Surgical Critical Care	Career Mentor,Co-Mentor/Clinical Mentor	Associate Program Director	Professor of Surgery Florida State, Chief of Surgery Ocala Medical Center
2007 - 2008	Zara Cooper, MD MPH	Surgical Critical Care and Trauma	Career Mentor,Co-Mentor/Clinical Mentor	Associate Program Director	Professor of Surgery Brigham and Woman's Hospital
2007 - 2008	Heather Evans, MD MS	Surgical Critical Care	Research/Scholarly Mentor,Career Mentor,Co-Mentor/Clinical Mentor	Associate Program Director	Professor of Surgery University of South Carolina, Vice Chair of Research
2007 - 2008	Edgar Figurero, MD	Surgical Critical Care	Career Mentor,Co-Mentor/Clinical Mentor	Associate Program Director	Professor of Surgery University of Washington
2008 - 2010	Sana Sakr, PhD	T32 NIH Fellowship	Research/Scholarly Mentor,Project Mentor,Career Mentor	Research mentor	Research Scientist, University of Washington
2008 - 2009	David Zoonies, MD MPH	Surgical Critical Care	Research/Scholarly Mentor,Career Mentor,Co-Mentor/Clinical Mentor	Associate Program Director	Professor of Surgery OHSU, Medical Director Surgical Critical Care
2008 - 2009	Michael Mosier, MD	Surgical Critical Care	Career Mentor,Co-Mentor/Clinical Mentor	Associate Program Director	Attending Surgeon, The Oregon Burn Clinic

Dates	Name	Fellow	Mentor Role	Faculty Role	Current Position
2008 - 2009	Eric VanEaton, MD	Surgical Critical Care	Career Mentor,Co-Mentor/Clinical Mentor	Associate Program Director	Associate Professor of Surgery University of Washington
2009 - 2010	Jose Sterling, MD	Surgical Critical Care	Career Mentor,Co-Mentor/Clinical Mentor	Associate Program Director	Attending Surgeon, CHRISTUS St. Vincent Regional Medical Center
2009 - 2010	Kathleen Mandell, MD MPH	Surgical Critical Care	Career Mentor,Co-Mentor/Clinical Mentor	Associate Program Director	Attending Surgeon Swedish Medical Center
2009 - 2010	Aaron Cheng, MD	Surgical Critical Care	Career Mentor,Co-Mentor/Clinical Mentor	Associate Program Director	Associate Professor of Surgery University of Washington, Medical Director Cardiothoracic Critical Care
2010 - 2011	Jeremy Hsu, MD	Surgical Critical Care	Career Mentor,Co-Mentor/Clinical Mentor	Associate Program Director	Associate Professor of Surgery, The University of Sydney
2010 - 2011	Beth Ann Riehmal, MD	Surgical Critical Care	Career Mentor,Co-Mentor/Clinical Mentor	Associate Program Director	Clinical Associate Professor of Surgery University of Washington

Dates	Name	Fellow	Mentor Role	Faculty Role	Current Position
2010 - 2011	Christian Hamlet, MD MPH	Surgical Critical Care	Career Mentor,Co-Mentor/Clinical Mentor	Associate Program Director	Attending Surgeon, St. Luke's Medical Center
2011 - 2012	Scott Brakenridge, MD MS	Surgical Critical Care	Research/Scholarly Mentor,Career Mentor,Co-Mentor/Clinical Mentor	Associate Program Director	Associate Professor of Surgery, University of Washington
2011 - 2012	Alexis Gage, MD MPH	Surgical Critical Care	Career Mentor,Co-Mentor/Clinical Mentor	Associate Program Director	Associate Professor, Memorial Health University
2011 - 2012	Thomas Wiser, MD MPH	Surgical Critical Care	Career Mentor,Co-Mentor/Clinical Mentor	Associate Program Director	Associate Professor of Surgery Stanford University
2011 - 2013	Deborah Marquardt, MD	Surgical Critical Care	Career Mentor,Co-Mentor/Clinical Mentor	Program Director	Associate Professor of Surgery University of Washington
2012 - 2014	Rebecca Plevin, MD	T32 NIH Fellow	Research/Scholarly Mentor,Career Mentor	Research Mentor	Assistant Professor University of San Francisco
2012 - 2013	Lisa Rea, MD	Surgical Critical Care	Career Mentor,Co-Mentor/Clinical Mentor	Program Director	Associate Professor of Surgery Temple University, Chief of Burns

Dates	Name	Fellow	Mentor Role	Faculty Role	Current Position
2012 - 2013	Matthew Delano, MD PhD	Surgical Critical Care	Research/Scholarly Mentor,Career Mentor,Co-Mentor/Clinical Mentor	Program Director	Associate Professor of Surgery University of Michigan
2012 - 2013	Julie Ottosen, MD	Surgical Critical Care	Career Mentor,Co-Mentor/Clinical Mentor	Program Director	Assistant Professor of Surgery University of Minnesota
2013 - 2014	Courtney Sommer, MD MPH	Surgical Critical Care	Career Mentor,Co-Mentor/Clinical Mentor	Program Director	Attending Surgeon, Mission Health medical Center
2013 - 2014	Samuel Mandell, MD MPH	Surgical Critical Care	Career Mentor,Co-Mentor/Clinical Mentor	Program Director	Associate Professor of Surgery University of Texas Southwestern, Chief of Burn Surgery
2013 - 2014	Samantha Quade, MD	Surgical Critical Care	Career Mentor,Co-Mentor/Clinical Mentor	Program Director	Attending Surgeon Providence Everett Medical Center
2014 - 2015	Deepika Nehra, MD	Surgical Critical Care	Career Mentor,Co-Mentor/Clinical Mentor	Program Director	Assistant Professor of Surgery University of Washington

Dates	Name	Fellow	Mentor Role	Faculty Role	Current Position
2014 - 2015	Darren Bowe, MD	Surgical Critical Care	Career Mentor,Co-Mentor/Clinical Mentor	Program Director	Attending Surgeon Providence Everett Medical Center
2014 - 2015	Damien Carter, MD	Surgical Critical Care	Research/Scholarly Mentor,Career Mentor,Co-Mentor/Clinical Mentor	Program Director	Assistant Professor of Surgery University of Maine, Chief of Burns
2014 - 2015	Lyndsay Olsen, MD	Surgical Critical Care	Career Mentor,Co-Mentor/Clinical Mentor	Program Director	Medical Director Western States Burn Center, North Colorado Medical Center
2015 - 2016	Callie Thompson, MD	Surgical Critical Care	Career Mentor,Co-Mentor/Clinical Mentor	Program Director	Assistant Professor of Surgery University of Vanderbilt
2015 - 2016	Kathleen O'Connell, MD MPH	Surgical Critical Care	Research/Scholarly Mentor,Project Mentor,Career Mentor,Co-Mentor/Clinical Mentor	Program Director	Assistant Professor of Surgery University of Washington
2015 - 2016	Marta McCrum, MD MPH	Surgical Critical Care	Career Mentor,Co-Mentor/Clinical Mentor	Program Director	Assistant Professor of Surgery University of Utah

Dates	Name	Fellow	Mentor Role	Faculty Role	Current Position
2015 - 2016	Brian George, MD MS	Surgical Critical Care	Career Mentor,Co-Mentor/Clinical Mentor	Program Director	Assistant Professor of Surgery University of Michigan
2015 - 2016	Elisha Brownson, MD	Surgical Critical Care	Career Mentor,Co-Mentor/Clinical Mentor	Program Director	Attending Surgeon Alaska Native Medical Center, Chief of Surgery
2016 - 2017	Andrew Riggle, MD	Surgical Critical Care	Research/Scholarly Mentor,Career Mentor,Co-Mentor/Clinical Mentor	Program Director	Attending Surgeon, St. Charles Health
2016 - 2017	Makenzie Cook, MD	Surgical Critical Care	Research/Scholarly Mentor,Career Mentor,Co-Mentor/Clinical Mentor	Program Director	Assistant Professor of Surgery OHSU
2016 - 2017	Thomas Shultz, MD	Surgical Critical Care	Career Mentor,Co-Mentor/Clinical Mentor	Program Director	Assistant Professor of Surgery University of Texas Southwestern
2016 - 2017	Rebecca Maine, MD MPH	Surgical Critical Care	Research/Scholarly Mentor,Career Mentor,Co-Mentor/Clinical Mentor	Program Director	Assistant Professor of Surgery University of Washington
2016 - 2017	Theresa Chin, MD	Surgical Critical Care	Career Mentor,Co-Mentor/Clinical Mentor	Program Director	Assistant Professor of Surgery University of California Irvine

Dates	Name	Fellow	Mentor Role	Faculty Role	Current Position
2016 - 2017	Joshua Wong, MD	Surgical Critical Care	Career Mentor,Co-Mentor/Clinical Mentor	Program Director	Assistant Professor of Surgery University of Alberta
2017 - 2018	Ashley Meagher, MD MPH	Surgical Critical Care	Research/Scholarly Mentor,Career Mentor,Co-Mentor/Clinical Mentor	Program Director	Assistant Professor of Surgery University of Indiana
2017 - 2018	Lara Senekjian, MD MS	Surgical Critical Care	Research/Scholarly Mentor,Career Mentor,Co-Mentor/Clinical Mentor	Program Director	Assistant Professor of Surgery University of California San Francisco Eastbay
2017 - 2018	Ellie Curtis, MD	Surgical Critical Care	Career Mentor,Co-Mentor/Clinical Mentor	Program Director	Assistant Professor of Surgery University of California Davis
2017 - 2018	Joshua Corsa, MD	Surgical Critical Care	Career Mentor,Co-Mentor/Clinical Mentor	Program Director	Attending Surgeon Providence Everett Medical Center
2017 - 2018	Chinenye Iwuchukwu, MD	Surgical Critical Care	Research/Scholarly Mentor,Career Mentor,Co-Mentor/Clinical Mentor	Program Director	Assistant Professor of Surgery University of Mississippi

Dates	Name	Fellow	Mentor Role	Faculty Role	Current Position
2018 - 2019	John Scott, MD	Surgical Critical Care	Research/Scholarly Mentor,Career Mentor,Co-Mentor/Clinical Mentor	Program Director	Assistant Professor of Surgery University of Michigan
2018 - 2019	Greg Lisse, MD	Surgical Critical Care	Research/Scholarly Mentor,Career Mentor,Co-Mentor/Clinical Mentor	Program Director	Attending Surgeon Alaska Native Medical Center
2018 - 2019	Barkley Stewart, MD MS	Surgical Critical Care	Career Mentor,Co-Mentor/Clinical Mentor	Program Director	Assistant Professor of Surgery University of Washington
2018 - 2019	Lacey LeGrone, MD MPH	Surgical Critical Care	Research/Scholarly Mentor,Career Mentor,Co-Mentor/Clinical Mentor	Program Director	Assistant Professor of Surgery University of Colorado Boulder
2018 - 2019	Ashley Hink, MD MPH	Surgical Critical Care	Career Mentor,Co-Mentor/Clinical Mentor	Program Director	Assistant Professor of Surgery University of South Carolina
2019 - 2020	David Miranda, MD	Surgical Critical Care	Research/Scholarly Mentor,Career Mentor,Co-Mentor/Clinical Mentor	Program Director	Surgical Resident University of Washington
2019 - 2020	Abbie Jensen, MD	Surgical Critical Care	Career Mentor,Co-Mentor/Clinical Mentor	Program Director	Attending Surgeon, mercy Medical Center

Dates	Name	Fellow	Mentor Role	Faculty Role	Current Position
2019 - 2020	Jeffrey Anderson, MD	Surgical Critical Care	Career Mentor,Co-Mentor/Clinical Mentor	Program Director	Assistant Professor of Surgery Temple University
2019 - 2020	Racheal Payne, MD	Surgical Critical Care	Research/Scholarly Mentor,Career Mentor,Co-Mentor/Clinical Mentor	Program Director	Attending Surgeon Hennepin Healthcare
2019 - 2020	Stephanie A Mason, MD MPH	Surgical Critical Care	Career Mentor,Co-Mentor/Clinical Mentor	Program Director	Assistant Professor of Surgery University of Toronto
2019 - 2020	Navin Bhatia, MD	Surgical Critical Care	Career Mentor,Co-Mentor/Clinical Mentor	Program Director	Assistant Professor of Surgery, Mount Sinai Medical Center
2019 - 2020	Lela Posey, MD MPH	Surgical Critical Care	Career Mentor,Co-Mentor/Clinical Mentor	Program Director	Attending Surgeon, Locums
2021 - 2021	Woon Cho Kim, MD	Trauma/Acute Care Surgery	Career Mentor,Co-Mentor/Clinical Mentor	Trauma Medical Director	Assistant Professor, Tuft's University
2021 - 2021	Michael Ferrell, MD	Trauma/Acute Care Surgery	Career Mentor,Co-Mentor/Clinical Mentor	Trauma Medical Director	Assistant Professor Lahey Medical Center
2021 - 2022	Ariel Knight, MD	Trauma/Acute Care Surgery/Critical Care	Research/Scholarly Mentor,Co-Mentor/Clinical Mentor	Trauma Medical Director, Chief of Surgery	Assistant Professor Stanford University

FACULTY MENTORING

Dates	Name	Position while Mentored	Mentor Type	Mentoring Role	Current Position
2007 - 2011	Tam Pham, MD	Assistant Professor of Surgery	Research/Scholarly Mentor,Career Mentor,Co-Mentor/Clinical Mentor	Served as a clinic mentor to help and support initial clinical practice. Additionally, worked closely to help develop initial aspect of research.	Professor of Surgery University of Washington, Chief of Burns
2008 - 2013	Heather Evans, MD MS	Assistant Professor of Surgery	Research/Scholarly Mentor,Career Mentor,Co-Mentor/Clinical Mentor	Served as clinical mentor to help and support initial clinical practice. Additionally, worked closely to help develop initial aspects of research in area of surgical infections.	Professor of Surgery University of South Carolina, Vice Chair of Research
2016 - 2020	Bryce Robinson, MD	Associate Professor of Surgery	Research/Scholarly Mentor,Career Mentor,Co-Mentor/Clinical Mentor	Served as a clinical and administrative mentor to develop educational portfolio as Associate Program Director for Surgical Critical Care, and mentor for position as Associate Medical Director for Critical Care	Associate Professor of Surgery University of Washington, Associate Medical Director of Critical Care
2017 - present	Kathleen O'Connell	Assistant Professor of Surgery	Research/Scholarly Mentor,Project Mentor,Career Mentor,Co-Mentor/Clinical Mentor	Served to provide clinical mentorship, and to help support MPH and fellowship in palliative care. Furthermore, I have provided support in research in geriatric trauma.	Assistant Professor of Surgery University of Washington
2019 - present	Deepika Nehra, MD	Assistant Professor of Surgery	Research/Scholarly Mentor,Career Mentor,Co-Mentor/Clinical Mentor	Served to provide clinical mentorship, and to help in career development and research.	Assistant Professor of Surgery University of Washington

Dates	Name	Position while Mentored	Mentor Type	Mentoring Role	Current Position
2019 - present	Rebecca Maine, MD MS	Assistant Professor of Surgery	Research/Scholarly Mentor,Career Mentor,Co-Mentor/Clinical Mentor	Served to provide clinical mentorship, and to help in career development and research.	Assistant Professor of Surgery University of Washington

RESEARCH AND CREATIVE ACTIVITIES

RESEARCH AND CREATIVE ACTIVITIES SUMMARY

Medical research is essential for the improvement in patient care. It requires a multifaceted approach in which the pathophysiology, disease progression, and therapeutic options evaluated and optimized. In order to do this, basic science research is required to provide insight into the pathophysiology. This understanding not only provides insight into the disease to help develop therapeutics, but it also helps direct individual care through precision medicine. I have been involved in research my entire career and have focused on the inflammatory changes following injury leading to the development of organ failure. Through this research, I have helped demonstrate that the inflammatory changes following injury are sustained for long periods, and are associated with long-term complications. In addition, through a number of collaborations I have helped develop a genomic signature that can identify injured patients at risk for complicated outcomes within 24 hours of injury. This genomic signature has been validated, and will hopefully help provide precision care in the future to this select patient population at the greatest risk for complications. Although my research has focused on trauma, research in all areas helps provide the foundation for critical thinking and improvement in patient care. My overall goal is to continue to further evaluate the acute inflammatory changes following injury, and help to determine potential areas of therapeutic intervention to the at risk patient population. This goal, however, is not limited to acute changes but the long term effects both clinical and immunologically due to injury. It is a result of this research that I hope we will be able to better predict and determine the course following multiple inflammatory disease processes, in addition to injury, to better inform patients and help with autonomous patient care decisions. It is imperative that overall we provide a collaborative atmosphere for research, and emphasize the importance and contributions that research provides.

RESEARCH AWARDS - CURRENT

1. NCT02984384	Trauma Site PI	5 % effort	O'Toole (PI)
PICORI		7/1/2016	6/30/2022
PREVENTion of Clot in Orthopaedic Trauma (PREVENT CLOT)			$ 11,198,854 total

There are 6 million fractures treated each year in the United States, and 2.3 million patients are admitted each year after trauma. Injuries that break certain bones, like the hip or thigh bone, are very common and associated with a particularly high risk of blood clots. If a patient does develop a blood clot, it can require the patient to take months of additional medications or can possibly even become fatal. However, medications to prevent blood clots can increase the risk of bleeding or other complications. Despite the frequency of these injuries and the potential devastating impact that blood clots can have on patients' lives, we currently do not know the best clot prevention medication for trauma patients. Current guidelines indicate that patients with certain fractures should be given medication to help prevent blood clots. Low molecular weight heparins (LMWHs) are medicines that have been used to prevent blood clots in the legs (deep vein thrombosis) of trauma patients since the 1990s. Today, despite a lack of good evidence, LMWHs remain in widespread use for patients with fractures. Aspirin is another commonly used clot prevention medicine that may have a similar or even superior ability to prevent blood clots in the legs and potentially fatal clots in the lungs (pulmonary embolism) that can occur after a traumatic injury. However, there have not been any studies to date that compare LMWHs with aspirin in preventing blood clots in fracture patients. This study should answer a question that is important to the millions of people who suffer a traumatic injury every year in the United States and are therefore at high risk for a blood clot. The study will compare the rates of death, blood clots in the lung, complications after surgery, patient satisfaction, out-of-pocket costs, and minor blood clots in patients to determine which medication is more effective in blood clot prevention after fractures. Patients and stakeholders have already taken an active role in developing this research proposal. Our research team comprises trauma survivors, blood clot survivors, caregivers, frontline clinicians, professional organizations, medical insurers, and experts in this field of research. In preparation for this study, we surveyed 232 trauma patients to determine the outcomes related to blood clots that they believed were most important. Our study is designed to respond to the concerns expressed by those patients. Trauma patients have historically been under-represented in research. The time-sensitive nature of traumatic injuries and the complicated medical condition of trauma patients at the time of hospital admission has long been a deterrent to scientific investigation. Our patients and caregiver team members have been crucial to designing this study so that it answers an important research question for patients and physicians while being respectful to the challenging circumstances faced by patients and their caregivers.

Trauma Site PI, and additionally part of protocol and writing group.

2.	5R01HL141094	Co-PI	5 % effort	Piliponsky (PI)
	National Institutes of Health/NIGMS		8/15/2018	6/21/2022
	Critical Role of Basophils in the Enhancement of the Innate Immune Response.		$ 768,772 direct/yr 1	$ 2,225,607 total

There are approximately 850,000 new cases of sepsis each year with mortality rates ranging from 240,000- 375,000. An impaired innate immune response can aggravate the septic condition by compromising the patient s ability to combat an infection. However, the cells and mediators that enhance the innate immune response in sepsis are still unknown. Basophils account for less than 1% of peripheral blood leukocytes, which makes them the rarest known granulocytes. Basophils are evolutionarily conserved in many animal species, suggesting a beneficial rather than deleterious role of basophils. Nevertheless, it is unknown whether basophils play any role in the host s defense against bacteria that can potentially prevent sepsis development. Our preliminary studies support such a role by showing that basophils are one of the very first cells to accumulate at the infection site at early stages of infection, and can improve survival and bacteria clearance in the polymicrobial model of sepsis induced by cecal ligation and puncture (CLP). We think that our findings in the murine system may be translatable to humans because we observed that trauma patients show increased numbers of basophils in circulation when a nosocomial infection was circumscribed to local tissues (early stages of infection) while basophil numbers decreased or remain unchanged when a patient developed a systemic infection (bacteremia) and was therefore at high risk of developing sepsis. Based on these studies, we hypothesize that basophils play a protective role in sepsis by enhancing the innate immune response against infection. Accordingly, we propose a research plan aimed at investigating the contribution of basophils to the innate immune response against bacteria. In Aim 1, we will identify mechanisms involved in basophil activation during an infection. We will use a genetic approach to investigate whether basophil stimulation through the TLR and MyD88 pathways is required to induce basophil activation and to confer protection during an infection; and we will examine whether the epithelial cell-derived cytokine, thymic stromal lymphopoietin (TSLP), can enhance the ability of basophils to respond to an infection. In Aim 2, we will define the mechanisms by which basophils confer protection against bacterial infections. Specifically, we will investigate interactions between basophils, the endothelium, and circulating leukocytes in a microvessel system and we will use mice with basophil-specific TNF deficiency to study these interactions during CLP. In Aim 3, we will establish the relevance of basophils in human infections and sepsis. Specifically, we will use mass cytometry (CyTOF) to assess basophil immune functions in samples collected from patients that develop nosocomial infections, mainly pneumonia, and we will establish whether these immune functions associate with clinical outcomes. We think that the studies proposed will expand our knowledge of sepsis physiopathology. Specifically, our studies will provide, for the first time, evidence for a critical role for basophils in the enhancement of the innate immune response against bacteria, an unexpected role for this rare cell population.

Co-primary investigator that was part of study design, patient recruitment, analysis, and interpretation of results.

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3. NCT03818854 Site PI 5 % effort Matthay (PI)

United States Department of Defense 1/28/2019 1/30/2024

Mesenchymal Stromal Cells For Acute Respiratory Distress Syndrome (STAT)

This clinical study design is a randomized, double-blinded, placebo-controlled Phase 2b clinical trial using a 10 million cell/kg dose of human Mesenchymal Stromal Cells (hMSCs). Subjects will be randomized in a 1:1 randomization scheme to receive hMSCs or cell reconstitution media (1:1 mix of 5% human serum albumin and 10% Dextran 40) as the placebo; the study will enroll 120 patients who achieve a stable clinical baseline and receive study product (either hMSCs or the placebo). The Data and Safety Monitoring Board (DSMB) will review adverse outcomes and protocol compliance. A pre-specified interim review will occur after 60 subjects have been enrolled and received study product; enrollment will continue during the DSMB review. All pre-specified clinically important events and unexpected serious adverse events including death during hospitalization up to 60 days will be reported to the DSMB on an ongoing basis; the study will be stopped for a safety evaluation by the DSMB if they have any concerns or if three subjects have pre-specified clinically important events or unexpected serious adverse events except death since death will be common in this critically ill population due the nature of the underlying illness (e.g., ARDS).

Site PI

4. NCT04430283	Site PI, and steering committee member	5 % effort	Faraday Pharmaceuticals, Inc (PI)
Faraday Pharmaceuticals, Inc		6/12/2020	6/11/2024
Evaluation of FDY-5301 in Major Trauma Patients in ICU			

The purpose of the trial is to evaluate the efficacy, safety, and PK of FDY-5301 compared to placebo in trauma ICU patients at risk of ICUAW. Muscle wasting occurs rapidly after major trauma and is often associated with multi-organ failure lasting from a few weeks to a long term disability. It is believed that FDY-5301 may help prevent or treat muscle weakness and organ dysfunction in major trauma patients. Approximately 252 subjects will be randomized (1:1:1) to receive up to 7 daily bolus IV doses of FDY-5301 at 1 mg/kg or 2 mg/kg, or volume-matched placebo. To ensure equal representation in each group, the randomization will be stratified by the presence or absence of any pelvic or lower limb fractures. All subjects who satisfy the eligibility criteria will be randomly allocated to one of three treatment groups (FDY-5301 low dose, FDY-5301 high dose, or placebo). All subjects will be followed in-hospital until Day 28 or discharge, whichever occurs first, at Day 28 if discharged earlier, and then by telephone visits at Month 3 and Month 6. This study will be conducted at approximately 11 centers in the US and UK

I serve as a site PI, and on the steering committee involved in patient recruitment, protocol development, and analysis.

5.	Site PI	5 % effort	Haut (PI)
PCORI-TSN		9/1/2020	8/31/2022
CLOTT 3 - Implementing Best-Practice, Patient-Centered Venous Thromboembolism (VTE) Prevention in Trauma Centers		$ 40,000 direct/yr 1	

The purpose of this study is to carefully evaluate current VTE practices, and to provide both nursing and patient education to minimize missed doses. The overall goal is to improve patient compliance through providing patients with both written and video educational material.

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6. NCT04893837	Site PI	5 % effort	Jansen (PI)
Department of Defense		5/18/2022	8/30/2023
MOBI-1 (Non-Invasive Monitoring of Traumatic Brain Injury Progression using the Infrascanner 1)		$ 48,000 direct/yr 1	

Evolution of traumatic brain injury is common. Currently progression of neurologic injury is either diagnosed by worsening of neurologic status or repeat scheduled CT imaging. As a result, early intervenable conditions may be diagnosed in a delayed fashion. This study sets out to investigate if the use on Infrascanner evaluating cerebral metabolic activity would be able to predict early onset of progression of traumatic brain injury.

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7. NCT04891861	Site PI	2 % effort	Milling (PI) (PI)
Department of Defense		7/1/2021	7/1/2024
A Prospective Randomized Open Label Blinded Endpoint Response Adaptive Clinical Trial of Timing to Restart Direct Oral Anticoagulants After Traumatic Intracranial Hemorrhage (Restart TICrH)		$ 28,000 direct/yr 1	

Patients who take daily blood-thinning medications are at a higher risk of bleeding. Taking a blood-thinning drug long-term is standard treatment for preventing a stroke or blood clots in the body. However, if a patient is in an accident, bleeding in the brain can cause serious disability and death. After a brain bleed, we need to know the best time to restart the blood thinning medication: starting too soon might increase the risk of recurrent bleeding, whereas waiting too long could result in a stroke or blood clot in the heart or lungs. The Restart trial has been designed to determine the best time to restart blood-thinning medication in participants like you. The type of blood thinner will be decided by the study doctor and could be any of the so-called direct oral anticoagulants listed above, but not warfarin. All the times we are studying, 1, 2 and 4 weeks, are within the standard of care. There are no other changes to your care other than randomizing the timing. The purpose of this study is to determine the optimal time to start medication in participants that have had bleeding in the brain from trauma.

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8. BE1116-3006	Site PI	5 % effort	CSL Behring (PI) (PI)
CSL Behring		7/1/2022	6/30/2024
TAP Trial		$ 48,000 direct/yr 1	

BE1116 is a human plasma-derived, highly purified, lyophilized, 4F-PCC product, containing FII, FVII, FIX, and FX, as well as Protein C and Protein S. Factor IX is the lead factor for the potency of the preparation as stated on the label. Antithrombin III, heparin, human albumin, hydrochloric acid, sodium chloride, sodium hydroxide, and sodium citrate are excipients. The preparation of BE1116 is sterile and pyrogen-free, and it does not contain antimicrobial preservatives. The production process of BE1116 contains various steps to inactivate / remove viruses. BE1116 is currently licensed under the brand names Kcentra®, Beriplex® P/N, Confidex®, or Coaplex® in approximately 50 countries worldwide. In all uncontrolled and controlled clinical studies of BE1116 in acute VKA reversal performed to date (333 total subjects treated with BE1116), BE1116 has been considered efficacious, safe, and well tolerated. Over 20 years of postmarketing experience also supports the favorable efficacy and safety profile of BE1116 established during the clinical studies. These include more than 10 years of clinical experience with the heat-treated predecessor of BE1116 (identified as HS), and since 1996 with the heat-treated and virus-filtered BE1116 product (identified as P/N).Nonclinical and preliminary clinical evidence indicates a possible therapeutic role of 4F-PCC in patients with acute major bleeding associated with traumatic injury. CSL intends to assess the therapeutic role of BE1116 at doses of 25 to 50 IU/kg in subjects with acute major bleeding associated with traumatic injury.

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9. NCT04095663	Site Investigator	2 % effort	Flum (PI)
PCORI		10/1/2019	4/1/2024

Comparison of Surgery and Medicine on the Impact of Diverticulitis (COSMID)

The COSMID (Comparison of Surgery and Medicine on the Impact of Diverticulitis) trial is a pragmatic, patient-level randomized superiority trial of elective colectomy vs. best medical management for patients with quality of life (QoL) limiting diverticular disease. A parallel observational cohort will include those who are disinclined to have their treatment choice randomized, but are willing to contribute information about their outcomes. The goal of the COSMID trial is to answer the question: For patients with QoL-limiting diverticular disease, is elective colectomy more effective than best medical management? Aim 1: Compare patient-reported outcomes (e.g., quality of life, work productivity, decisional regret) in patients with QoL-limiting diverticulitis randomized to elective colectomy vs. best medical management. Exploratory Aim 1a. Compare characteristics of randomized patients to those who selected their treatment. Exploratory Aim 1b. For each treatment, compare patient reported outcomes in randomized patients to those who selected their treatment. Exploratory Aim 1c. Compare patient reported outcomes in the subgroups of patients with recurrent acute uncomplicated diverticulitis (AUD) and those with symptoms after recovery from an episode of AUD randomized to elective colectomy vs. best medical management. Aim 2: Compare clinical outcomes (e.g., rates of serious adverse events, number of subsequent episodes of diverticulitis) between patients with QoL-limiting diverticulitis randomized to elective colectomy vs. best medical management. Aim 3: Compare healthcare utilization between patients with QoL-limiting diverticulitis randomized to elective colectomy vs. best medical management.

RESEARCH AWARDS - SUBMITTED

1. Co-Investigator 5 % effort Stein (PI)

Department of Defense

CRYOprecipitate-For Immediate Resuscitation in Severe Trauma (CRYO-FIRST)

The study is a prospective, cluster-randomized Phase III multicenter clinical trial comparing the early administration of pre-thawed liquid 5PRC to cC-AHF transfused per standard of care MTP in severely injured patients at risk for HS to determine if 5PRC improves outcomes in comparison to cC-AHF transfused per standard of care MTP. Pre-thawed cryoprecipitate will be stored in emergency departments of participating centers, thus allowing immediate use to overcome challenges of prior studies related to prolonged time to administration. The use of a cluster-randomized design will further decrease time to administration since individual patients will not be randomized but rather treated according to center treatment randomization cluster.

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2. Co-Investigator 5 % effort Douglas (PI)

Department of Defense

The Fluid Responsiveness Evaluation in Patients with Undifferentiated Shock (FRESH-FIRST)

The study is planned as a Phase III extension of Dr. Douglas recently reported prospective, randomized proof-of-concept pilot trial Fluid Response Evaluation in Sepsis Hypotension and Shock (FRESH) in adults with septic shock. The FRESH study compared passive leg raise (PLR) -guided stroke volume (SV) responsiveness as a guide for fluid management with usual care. It demonstrated significant reductions in administered fluids, the requirement for renal and respiratory organ failure support with numeric improvement in survival to hospital discharge. In FRESH-FIRST, we plan to expand this work to evaluate the efficacy of precision dynamic-response guided resuscitation in undifferentiated shock and to definitively determine the impact of this approach on patient survival and relevant patient-centered outcomes. This has direct applications to civilian and military medicine including patient resuscitation in far-forward military situations and managing common post-trauma and non-trauma conditions such as sepsis, hypovolemic shock, blunt trauma and burn-injured patients. Study participant identification, enrollment and intervention will start in the emergency department/trauma bay and continue when the patient is admitted to an intensive care unit.

RESEARCH AWARDS - PAST

1. 2T32GM007037 T32 Fellow 100 % effort Maier (PI)

National Institutes of Health/NIGMS 7/1/1975 6/30/2005

Postdoctoral Training $ 179,283 direct/yr 1

Postdoctoral training grant to develop independent researchers in area of inflammatory changes involved in trauma and burn care. Fellows will be taught critical thinking and experimental design to provide novel insights into the inflammatory cascade following traumatic injury. As a result of this basic understanding, and education in experimental design, experimental conduct, and critical analysis fellows will have the foundation to obtain independent funding.

T32 Fellow that through this support was able to gain skills in immunology to obtain independent national funding.

2.	K08GM068816	Primary Investigator	75 % effort	Cuschieri (PI)
	National Institutes of Health/NIGMS		9/1/2003	8/31/2008
	Cellular Signaling Mechanisms Involved in Macrophage Priming and Activation.		$ 129,330 direct/yr 1	$ 646,650 total

Sepsis, following trauma/hemorrhage and ischemia/reperfusion, is a common etiology for subsequent Acute Respiratory Distress Syndrome (ARDS) and multiple organ dysfunction syndrome (MODS) and remains a leading cause of subsequent morbidity and mortality. A number of different inflammatory cells are responsible for this condition; however, it appears that the macrophage is the common central orchestrating cell underlying these conditions. It is becoming evident that this inflammatory driven signaling cascade is affected by a number of different "priming" agents, such as platelet activating factor (PAF) and oxidant stress. "Priming" does not lead to pro-inflammatory mediator production; rather it causes enhanced responsiveness by the macrophage to secondary inflammatory stimuli, such as endotoxin. The mechanism in which these "priming" agents cause this enhanced response is unknown. Therefore, the purpose of this grant is to better delineate the intracellular signaling mechanisms which are responsible for this affect. This proposal will focus on the potential role that the secondary messenger, calcium, plays during initial "priming". Although calcium flux occurs during "priming", it is unknown if and how calcium could modulate endotoxin-mediated signaling. We, therefore, hypothesis that the increase in intracellular calcium results in the activation of regulatory kinases, such as calcium/calmodulin-dependent protein kinases (CaMK), leads to enhanced endotoxin-mediated signaling. Furthermore, we hypothesis that CaMK activation leads to modulation of actin polymerization and stress fiber polymerization induced by endotoxin resulting in enhanced intracellular spatial relationships and optimal endotoxin signaling. The role of calcium and CaMK during "priming" will be investigated through the use of specific inhibitors and activators on the ability of PAF and oxidant stress to induce "priming" of endotoxin-mediated activation within the macrophage. The overall aim of this proposal is to provide further insight into potential mechanisms that serve in the activation and "priming" of the macrophage. Through an enhanced understanding of these mechanisms it is our goal that potential therapeutic targets may be discovered to regulate the inflammatory response following trauma/hemorrhage and ischemia/reperfusion.

Primary Investigator

3.	U54 GM62119-01A1	Co-investigator	5 % effort	Tompkins (PI)
	National Institutes of Health, Large Scale Collaborative		8/30/2001	8/31/2013
	Inflammation and the Host Response to Injury		$ 7,859,924 direct/yr 1	$ 83,689,924 total

The Program seeks to improve our systems-level understanding of the key regulatory elements that direct the host response to serious injury. A greater understanding of the innate inflammatory response to serious injury will lead to the development of novel genomic and proteomic markers that can predict outcome, and will identify potential new avenues for further basic and clinical research, as well as targets for immunomodulatory interventions. The Program is organized to employ multiple high-throughput analytical tools including microarray and comparative, quantitative proteomics coupled with novel macroscale and microfluidics cell separation methodologies and bioinformatics approaches (including knowledge-based pathway analysis). The specific aims in Years 6-10 are as follows. (1) Determine genome-wide expression and the cellular proteome from well-defined cellular subpopulations of circulating leukocytes from hospitalized patients following severe trauma and burn injuries. (2) In these cell populations, identify patterns of gene expression and proteomic responses to the innate inflammatory response associated with different clinical trajectories and outcomes. (3) Using a systems biology approach, discover new biological knowledge based upon total cellular proteomics and genomics obtained from the cellular subpopulations. New knowledge will be obtained by fostering and supporting groups of investigators in vastly disparate disciplines, including clinicians, biochemists, immunologists, statisticians, and computational and systems biologists. These interactions will lead to the development of new paradigms for our biological understanding of the injury response. The project tasks and activities include the following: (1) enrollment of 580 severely traumatized or burned patients with stringent entry criteria and standardized guidelines for patient care; (2) high-throughput quantitative, comparative proteomic and functional proteomic analyses of enriched blood leukocyte populations; (3) genome-wide expression analysis of these same leukocyte populations using state-of-the-art high throughput formats; (4) implementation of a web-enabled trauma-related database containing clinical, physiologic, proteomic, and genomic expression data; (5) computational analysis of the complex data by data interpretation groups, comprised of biostatisticians, critical care physicians and basic scientists with the ultimate goal being an integrated systems view of the injury response.

I was involved as a co-investigator, and part of the protocol, analysis, and writing groups.

4.	R01GM078054	Primary investigator	10 % effort	Cuschieri (PI)
	National Institutes of Health/NIGMS		7/01/2008	6/30/2012
	Trauma and Sepsis Induced Changes in Immune-cell Membrane Receptor Trafficking		$ 270,480 direct/yr 1	$ 1,081,920 total

Mononuclear cells are critical to the eradication of invading organisms. The mechanism in which these innate immune cells respond to these invaders is through the activation of a series of pattern recognition receptors or Toll-like receptors (TLRs). Activation of these receptors, on specialized plasma membrane microdomains is complex and poorly elucidated. Based on previous work by us, we hypothesize that formation of these complexes requires breakdown of plasma membrane sphingolipids into ceramide leading to the formation of lipid raft macrodomains and the formation of TLR complexes. As a result, specific infectious factors are presented to these pattern recognition receptors leading to cellular activation. Although these responses may be life saving, severe trauma is know to result in reprogramming and alterations in innate immunity. These altered phenotypes, rather than leading to host protection, are responsible for increased susceptibility to invading organisms leading to the development of sepsis and organ failure. This state has been recreated in vitro by subjecting mononuclear cells to factors induced by trauma, including platelet activating factor, oxidant stress and complement 5a. Although the mechanism(s) responsible for this reprogramming remain unknown, previous work has demonstrated that this process is associated with alterations in the lipid and protein content within the plasma membrane. These alterations are hypothesized to occur on lipid rafts. Following injury, we hypothesize that factors induced by trauma result in the production of ceramide, but to a lesser degree than that seen during activation. Ceramide once produced fuses within rafts leading to the formation of macrodomains similar to that which occurs with activation. Additionally, ceramide leads to the mobilization of calcium leading to the activation of CaMK II. Activation of these cellular messengers is associated with the formation of focal adhesion-like complexes that contain some but not all of the TLR components. We hypothesize that assembly of these complexes and changes in lipid raft ceramide content are responsible for subsequent reprogramming that induces enhanced activation in response to subsequent infection. Thus, this proposal sets out to determine more fully the molecular mechanisms responsible for reprogramming and activation following trauma by exploring the effects of ceramide, calcium and CaMK II in vitro, and in severely injured trauma patients.

Primary investigator

5.	P41RR018522	Primary investigator	5 % effort	Cuschieri (PI)
	NATIONAL CENTER FOR RESEARCH RESOURCES		7/1/2006	6/30/2007
	TRAUMA-INDUCED REPROGRAMMING: CHANGES IN LIPID RAFT PROTEIN CONTENT		$ 21,015 direct/yr 1	$ 21,015 total

This subproject is one of many research subprojects utilizing the resources provided by a Center grant funded by NIH/NCRR. The subproject and investigator (PI) may have received primary funding from another NIH source, and thus could be represented in other CRISP entries. The institution listed is for the Center, which is not necessarily the institution for the investigator. Following severe trauma mononuclear cells are reprogrammed leading to alterations in innate immunity. These phenotypes are responsible for increased susceptibility to invading organisms leading to the development of organ failure. This state has been recreated in vitro by subjecting mononuclear cells to factors induced by trauma, including platelet activating factor (PAF), oxidant stress and complement 5a (C5a). Although the mechanism(s) responsible for this reprogramming remain unknown, previous work has demonstrated that this process may be associated with alterations in the protein content within specific plasma membrane microdomains that are rich in cholesterol and sphingolipids termed lipid rafts. Following injury, we hypothesize that factors induced by trauma result in the production of the lipid mediator ceramide from lipid rafts. Ceramide once produced fuses within rafts leading to the formation of macrodomains resulting in changes in membrane fluidity. Due to these changes, various proteins are recruited to the lipid raft resulting in the formation of focal adhesion-like complexes that contain some but not all of the Toll-like receptor (TLR) components. The following experimental approach will be followed: Differentiated THP-1 cells will be subjected to lipopolysaccharide (LPS) stimulation for various periods of time up to 60 min. Selected cells will be pre-treated with PAF, hydrogen peroxide or C5a for periods of time up to 30-60 min. Lipid raft protein extraction will be performed using sucrose gradient centrifugation. Harvested proteins will then be used for analysis using the LC-ESI-MS system. It is our hypothesis that assembly of these complexes and changes in lipid raft content are responsible for subsequent reprogramming that induces enhanced activation in response to subsequent infection. Based on these in vitro observations, it is our hope to then explore potential changes that occur in severely injured trauma patients in order to determine potential prognostic and therapeutic targets.

Primary investigator

6.	R01GM076101	Co-Investigator	5 % effort	Bulger (PI)
	National Institutes of Health/NIGMS		7/11/2007	5/31/2011
	Hypertonic Modulation of Inflammatory Signaling Following Injury.		$ 395,929 direct/yr 1	$ 1,446,044 total

This is a proposal to determine the effect of prehospital hypertonic resuscitation vs. conventional resuscitation with crystalloid on the inflammatory response early after injury. The leading cause of late mortality following injury is multiple organ dysfunction syndrome, which results from dysfunctional inflammatory response of the patient early after injury. Previous studies, suggest that hypertonic saline may be beneficial in modulating this initial response and thus decrease the subsequent organ injury. These effects, which have been well described in the laboratory, have yet to be proven in humans, particularly in the setting of severe injury. This proposal takes advantage of a unique opportunity to obtain blood samples from patients enrolled in a NIH supported multi-center trial of hypertonic resuscitation and analyze their inflammatory responses early after injury. The proposed trial is to be conducted by the Resuscitation Outcomes Consortium (ROC), which consists often clinical centers in the US and Canada. This study is a three arm, blinded, randomized trial comparing 7.5% saline, 7.5% saline/6% dextran-70 and normal saline (0.9%) as the initial resuscitation fluid administered to patients in hypovelemic shock or with signs of sever traumatic brain injury. Three of the ROC clinical sites will collaborate to study then inflammation response of patients enrolled at theses sites. The specific aims include: Aim 1: To profile and characterize the phenotype of the innate and cellular immune systems in response to hypertonic resuscitation following injury. Aim 2: To define, in humans, the cellular mechanisms responsible for hypertonic modulation of the inflammatory response. Aim 3: To determine whether immunologic changes observed following hypertonic resuscitation associated with differences in clinical outcome as manifested by the development of organ dysfunction, and nosocomial infection. The results of these studies will provide valuable information to determine the ultimate therapeutic use of the resuscitation strategy.

Co-investigator that was involved in concept, protocol, patient recruitment, and analysis.

7.	R01GM081510	Site PI	5 % effort	Sawyer (PI)
	National Institutes of Health, Large Scale Collaborative		8/11/2007	8/31/2014
	SIS multicenter study of duration of antibiotics for intra-abdominal infection.		$ 580,231 direct/yr 1	$ 2,725,894 total

The optimum duration of antibiotic therapy for intraabdominal infection remains unknown and has been identified by the Surgical Infection Society as a high priority for clinical research. The ultimate objective of our research is to optimize (and reduce) the duration of antibiotic therapy for intraabdominal infection throughout the world. The hypothesis to be tested is that four days of therapy for intraabdominal infection will lead to similar outcomes and a shorter duration of therapy when compared to a course based on the resolution of physiologic parameters in the setting of adequate operative or percutaneous intervention. This proposal is for a multicenter, randomized, double-blind (until the fourth day of therapy), non-inferiority clinical trial comparing a predetermined four days of antibiotic therapy to antibiotic therapy terminated one day after normalization of white blood cell count (= 11,000/ul) and normalization of systemic temperature (< 38.0¿ C) for one whole calendar day (and a maximum of 10 days of antibiotic therapy) in the setting of complicated intraabdominal infection treated with adequate source control. Inclusion criteria include age = 16 years, ability to obtain informed consent from the patient or surrogate, presence of an intraabdominal infection requiring any duration of hospitalization and managed with open, laparoscopic, or percutaneous intervention, and, adequate source control in the opinion of the local investigator and Principal Investigator. 1,120 patients will be enrolled to ensure adequate power to assess equivalence of the two arms. The primary endpoint will be percentage failure conditioned by assigned duration of antibiotic therapy (intent to treat analysis). Failure will be defined as need for reintervention (surgical or percutaneous), surgical site infection, or death within 30 days of the original intervention for intraabdominal infection. In addition, multiple secondary endpoints will be assessed, including duration of antibiotic therapy and the incidence of infection at non-abdominal and non-surgical wound sites, particularly with antibiotic-resistant pathogens. The ultimate objective of our research is to change practice throughout the world, specifically by shortening the duration of antibiotic therapy for intraabdominal infections and thus decreasing resource utilization and decreasing the selection of antibiotic-resistant pathogens.

Site PI with responsibility for patient enrollment and safety monitoring

8.	5T32GM007037	Co-investigator	5 % effort	O'Keefe (PI)
	National Institutes of Health/NIGMS		7/1/1975	6/30/2015
	Institutional Postdoctoral Research Grant		$ 243,393 direct/yr 1	

The program trains physician-scientists and post-doctoral PhD scientists in aspects of the pathophysiological processes that occur after traumatic injury and critical illness. Over the past 4 years we have successfully recruited to fill our positions and have addressed a key concern that was raised in our previous competitive renewal regarding diversity in our program. We have paid particular attention to identifying and recruiting strong under-represented minority candidates. Our previous competitive renewal also focused upon the "key initiatives", defined by the leaders at the National Institutes of Health and termed the "NIH Roadmap". This had direct bearing on the structure and direction of this training program. Briefly, the key initiatives or themes are: (1) New Pathways to Discovery, (2) Research Teams of the Future and (3) Reengineering the Clinical Research Enterprise. We propose to continue to educate trainees in established molecular biology techniques and will expand their training to include cutting edge research and analysis (i.e. biomedical computing) techniques. Through collaborations with basic scientists and integration with the available research education programs at the University of Washington, we will expose trainees to broad-based research teams and programs. Trainee education and experience will continue to include concepts of translational research, whereby basic observations will be evaluated as potential diagnostic and therapeutic benefit for critically ill patients. In summary, we aim to prepare a diverse group of interested scientists for academic careers as independent investigators and educators. Through a multidisciplinary and collaborative effort, trainees learn how to identify important research questions, how to design, conduct and analyze experiments that will address these questions and how to translate their findings into clinically relevant interventions. RELEVANCE: Trauma remains an important public health problem. Injuries are responsible for a high proportion of deaths in people of all ages and medical care for injury victims is costly. Our training program has successfully educated surgeons, physicians and post-doctoral students in aspects of the applied biology of injury and inflammation. Graduates from our program have demonstrated a commitment to understanding the biology of injury and to the care of critically ill injury victims.

I served as a co-investigator and mentored both MD and PhD post-doctoral fellows in research in immunology

9.	1UG3HL147011-01A1	Site PI	5 % effort	Boeckh (PI)
	National Institutes of Health/NIGMS		2/01/2012	8/31/2016
	A Randomized Double-Blind Placebo-Controlled Trial of Ganciclovir/Valganciclovir for Prevention of Cytomegalovirus Reactivation in Acute Injury of the Lung and Respiratory Failure.		$ 723,907 direct/yr 1	$ 2,341,858 total

Sepsis-associated acute respiratory failure is a leading cause of morbidity, mortality and health care expenditure world-wide, and is increasing in incidence. Despite intensive investigation, there are few pharmacologic interventions, and care is largely supportive. Cytomegalovirus (CMV) is a human herpesvirus that infects 50- 80% of healthy adults and establishes lifelong latency in the lung, generally causing overt disease only in severely immunosuppressed patients. CMV reactivation (viral replication) from latency occurs in ~40% of CMV seropositive, otherwise immunocompetent persons during critical illness and is associated with worse clinical outcomes including increased mortality, prolonged mechanical ventilation, and increased ICU length of stay. Compelling evidence implicating CMV reactivation as a causal contributor to morbidity and mortality in sepsis- associated respiratory failure comes from animal models and our recently completed NHLBI-funded phase 2 randomized placebo-controlled trial (RCT) of ganciclovir prophylaxis. In this trial, among CMV seropositive adults with sepsis-associated respiratory failure, ganciclovir effectively suppressed CMV replication, had an acceptable safety profile, and was associated with improved clinical outcomes, including increased ventilator-free days (VFD), shorter duration of mechanical ventilation among survivors, shorter ICU length of stay, and improved PaO2/FiO2 ratio in day-7 survivors. We hypothesize that IV ganciclovir administered early in critical illness will effectively suppress CMV reactivation in CMV seropositive adults with sepsis-associated acute respiratory failure, thereby reducing lung damage, accelerating recovery, and leading to improved clinical outcomes. We propose to conduct a phase 3 RCT to determine whether the antiviral drug ganciclovir given as prophylaxis improves VFDs and other clinically relevant outcomes when administered within 5 days of ICU admission to CMV seropositive immunocompetent adults with sepsis-associated acute respiratory failure. We will measure the effect of the study intervention on the primary trial outcome (VFDs) and secondary outcomes (mortality at 28 days, duration of mechanical ventilation in survivors, oxygenation, static respiratory system compliance, CMV plasma and lung reactivation, and a core set of longer-term outcomes at 6 months). In exploratory analyses, we will assess baseline factors as predictors for CMV reactivation, and characterize the relationship of CMV viral load kinetics with VFDs and other clinical outcomes. Our interdisciplinary team has unique experience in successfully coordinating multi-site multi-PI ICU-based RCTs. We have established a network of 19 clinical sites in the US, all of which have robust infrastructure for ICU clinical trials and proven ability to recruit patients into RCTs. If it is effective, this inexpensive and feasible intervention has the potential to significantly improve care of patients with sepsis-associated respiratory failure, substantially change clinical practice, and offer new insights into the sepsis-CMV reactivation relationship.

Involved as site PI and responsible for patient enrollment, safety monitoring, and analysis

10.	4R01GM104481	Co-investigator	5 % effort	Moldawer (PI)
	National Institutes of Health/NIGMS		6/1/2013	8/31/2018
	Genomic Validation following Severe Injury. The major goal of this project is to elucidate the changes and verify gene changes following severe injury.		$ 449,340 direct/yr 1	$ 1,820,579 total

Injuries continue to be the fifth leading cause of death overall and the leading cause of death for persons less than 45 years of age in the U.S. Multiorgan failure (MOF) and death remain unacceptably common in severely injured patients. In our recent Glue Grant study, 19% of severe trauma patients died, 41% developed MOF and the average time to recovery was 16 days. Despite an improved understanding of the basic pathophysiology of severe trauma and its sequelae, there are essentially no biological response modifiers that have proven successful in prospective, randomized clinical trials. We propose that a significant proportion of patients who would generally meet the inclusion criteria for a study of severely injured patients, are not in need of immunomodulatory therapy and are not only unlikely to benefit but also suffer direct toxicity from such therapies. In contrast, there exists subset of patients who are going to have a protracted clinical course, and would benefit from interventional therapies with biological-response modifiers. The most important challenge today is to identify prospectively the subset of patients who are going to have a protracted clinical course, and would benefit from interventional therapies with biological-response modifiers. We believe that we have developed such a prospective genomic test. Therefore, the overall goal of this proposal is to prospectively validate a rapid genomic test obtained from blood leukocyte subpopulations of severely traumatized patients in the first 24 hrs after admission that can be used to discriminate those patients who will have a complicated clinical trajectory and would, therefore, be good candidates for interventional, immunomodulatory therapies. Based on our preliminary data, we have developed several genomic models based on total leukocyte and enriched blood neutrophils that retrospectively can identify patients who will have a poor clinical outcome and would benefit from interventional immunological therapies. Here, we propose to validate this approach in 200 severely traumatized patients enrolled at two geographically-distinct institutions. These genomic tests will be compared for their precision to standard anatomical and physiological scoring systems, and models based on plasma cytokine concentrations. If successful, these studies would dramatically alter how clinical trials in severely traumatized patients would be conducted in the future. A successful, rapid, prognostic genomic test would reduce the size, cost and time required to evaluate new drugs in this population by identifying individuals at risk of a complicated outcome. Personalized medicine" would be one step closer to reality

Served as a co-investigator and site PI. I was responsible for study design, patient recruitment, data gathering, and analysis.

11.	Primary Investigator	5 % effort	Cuschieri (PI)
	University of Washington	7/1/2014	6/30/2015
	Standardized Verbal Hand-off in the ICU: Decreasing Patient Care Errors through Communication Optimization.	$ 25,000 direct/yr 1	$ 50,000 total

Although medical errors occur for a number of reasons, inadequate communication is one of the top preventable causes of medical errors. In an effort to improve communication in the most critically ill patients, a hand-off tool was developed to provide essential components of individual patient condition and assessment of risk of worsening. Based on this tool, an assigned and constructed hand-off nightly will occur within the ICUs of the University of Washington Medical Center and Harborview Medical Center. Error rates will be looked at before and after implementation. Additionally, provider satisfaction will be determined.

Primary Investigator

12. NCT00045760	Site PI	1 % effort	Eli Lilly and Co. (PI)
Eli Lilly and Co.		8/1/2003	06/30/2004

Efficacy and Safety of Drotecogin Alfa (Activated) in Adult Patients with Early Stage Severe Sepsis.

Drotrecogin alfa (activated), a recombinant form of human activated protein C, is the first therapeutic intervention shown to reduce all-cause mortality in severe sepsis. In the Phase 3 study (F1K-MC-EVAD; PROWESS), 1690 patients were randomly assigned to receive a 96-hour intravenous infusion of drotrecogin alfa (activated) 24 micrograms/kg/h or placebo (850 patients and 840 patients, respectively). Overall, administration of drotrecogin alfa (activated) yielded a clinically significant reduction in 28-day all-cause mortality: 24.7% of drotrecogin alfa (activated) patients died versus 30.8% of placebo patients (19.4% relative risk reduction; p=0.005; Bernard et al. 2001). The only safety concern noted in the Phase 3 trial was an increased risk of serious bleeding among drotrecogin alfa (activated) patients (3.5% versus 2.0% of placebo patients). The difference between the two treatment groups in the number of patients who experienced a serious bleeding event was due to the greater number of drotrecogin alfa (activated) patients who experienced a serious bleeding event that was related to a procedure (for example, bleeding that resulted from the placement of a catheter or nephrostomy tube). The number of patients who experienced spontaneous serious bleeding events was similar between the two treatment groups. The Regulatory authorities have approved the use of drotrecogin alfa (activated) in severe sepsis patients with a high level of disease severity and risk of death. Thus, the regulatory authorities have requested a study evaluating drotrecogin alfa (activated) in a specific subpopulation of patients with severe sepsis and at lower risk of death

Site PI

13. NCT02960854	Site PI	1 % effort	Bristol Meyers Squibb (PI)
Bristol Meyers Squibb		12/07/2017	01/31/2019

Randomized, Double-Blind, Parallel Group Study to Evaluate the Safety, Tolerability, Pharmacokinetics and Pharmacodynamics of BMS 936558 (nivolumab) in Participants with Severe Sepsis or Septic Shock

Phase 1 study to evaluate the safety, tolerability and pharmacokinetics of Nivolumab in participants with severe sepsis or septic shock.

Site PI

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SIGNIFICANT PUBLICATIONS

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   In this paper the first four authors had equal contribution to the design, writing, and analysis of the data. This paper is an important paper that evaluated the genomic response following injury. It provided critical and novel insight into the immune response following injury. The study took part over nearly a 10 year period of time while severely blunt injured patients were prospectively enrolled with standardization of trauma care provided. During this period of time I was a site PI, and was at the primary enrolling center for the study. In addition, I served on the protocol and writing committees for the study. At completion of the enrollment, analysis was performed of all collected samples and genome wide analysis was performed on circulating immune cells. The analysis of this data demonstrated that immune dysfunction that was thought to be initially pro-inflammatory followed by an anti-inflammatory response was not the case. The data demonstrated concurrent pro and anti-inflammatory processes occurring immediately after severe injury, and these findings challenged historical dogma. Working together with all authors, we were able to clearly express these findings that have provided novel insight into the pathogenesis of organ failure and chronic critical illness following injury.

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   In this paper I was the primary author evaluating the effect of a set of standard operating procedures in trauma care among 7 different geographically disperse institutions. In this paper I contributed to concept, data collection, analysis, and writing of the manuscript. This paper demonstrates that by careful assessment standard operating procedures can be incorporated into clinical practice and can lead to overall improvement in care. Additionally, this paper demonstrated that although mortality was improved compared to a number of comparisons, the number of patients still suffering from organ failure remained high. It further demonstrated for the first time the concept in sustained organ failure, as demonstrated by a prolonged period of organ dysfunction or time to recovery from organ failure. This has led to the concept of chronic critical illness following injury.

3. Brakenridge SC, Henley SS, Kashner TM, Golden RM, Paik DH, Phelan HA, Cohen MJ, Sperry JL, Moore EE, Minei JP, Maier RV, Cuschieri J; Inflammation and the Host Response to Injury Investigators. Comparing clinical predictors of deep venous thrombosis versus pulmonary embolus after severe injury: a new paradigm for posttraumatic venous thromboembolism? J Trauma Acute Care Surg. 2013:74(5):1231-7

   In this paper I was the senior author of looking at the pathophysiology of a common complication following severe injury, venous thromboembolism. In this paper I was responsible for the concept, analysis, and writing. This paper demonstrates that this common complication that was thought to occur late, actually occurred frequently early following injury. In fact, based on this observation the pathophysiology for early pulmonary embolism appears to be more closely associate with primary chest injury and as a result primary pulmonary thrombosis.

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   In this paper I was the second author looking at the epidemiology of chronic critical illness following severe trauma. In this paper I was responsible for concept, data collection, analysis, and critical review. I served to help mentor Dr. Mira, and worked closely with the senior author on the final publication. This paper provides further novel insight into the concept of chronic critical illness following severe injury, and that patients suffering from this condition have poor functional outcome following discharge and that this process is associated with a significantly higher risk of mortality up to a year following injury.

5. LaGrone L, McIntyre L, Riggle A, Robinson BRH, Maier RV, Bulger E, Cuschieri J. Changes in Error Patterns in Unanticipated Trauma Deaths Over 20 Years: In Pursuit of Zero Preventable Deaths. J Trauma Acute Care Surg 2020 Aug 6

   In this paper I was the senior author looking critically at areas of improvement to minimize errors. I served to mentor the first author, and was involved in the concept, data organization, analysis, and critical review of the publication. This paper demonstrates an evolution of errors over a 20 year period of time as process improvement is implemented. That as an initially area of concern is addressed, new concerns develop that occur downstream. This important work demonstrates the importance of constant and careful process improvement to continue to optimize patient outcome.

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ACADEMIC LEADERSHIP

Of the major leadership roles I have had over the last several years, several have played critical roles in improving education and clinical care.

The first leadership role was serving as Associate Program Director or Program Director of the Surgical Critical Care Fellowship at the University of Washington School of Medicine. During time in this role, I was responsible for the reorganization of the fellowship and further expansion of the fellowship from 2 fellows per year to 7. Additionally, within the fellowship the creation of three separate tracks focused on trauma, burn and cardiothoracic care. Each track provided an overview of surgical critical care with an emphasis on these specific areas. During the time in this leadership position I have been responsible for the education and training of 60 fellows. Many of whom have continued in academics and have become regional, national and international leaders.

I have served a critical role in the development of critical care services across UW Medicine as medical director of the Trauma Surgical ICU at Harborview Medical Center, Acting Associate Medical Director of Critical Care overseeing 89 ICU beds at Harborview Medical Center, and chairing the UW Medicine Critical Care Committee that was responsible for the development of two high intensity ICU services at the University of Washington. During this time, I helped to lead our responses to the H1N1 and EBOLA pandemic, and still focus on our mission population of the underserved in King County, Washington.

As Associate Medical Director of Surgical Services at the University of Washington I helped to improve overall efficiency, develop collaborations with nursing, anesthesia and surgery to optimize patient care and outcome. Furthermore, this role was instrumental in our responses to the COVID-19 pandemic in developing our OR response as cases increased, and a mechanism to convert OR and PACU space to ICU space as needed. Furthermore, in this role I was critical to the development of our overall testing response to acute emergencies and surgical procedures to optimize patient care and staff safety.

Upon arriving to UCSF, I served as the Trauma Medical Director at Zuckerberg San Francisco General Hospital. I have been fortunate to work with an outstanding group of surgeons, staff, and organization. Importantly in this role was to continue to further optimize the collaborations and care that was provided at ZSFG to injured patients. Through this relationships the care of injured patients has continue to improve, and identification of areas for continued improvement continue to be identified and worked on. Additionally, I have served since September 1, 2021 as the Interim Chief of Surgery at ZSFG. This has been incredibly rewarding as I have been given the opportunity to help develop the surgical program at ZSFG and it's interplay across UC Health. This position has allowed me to carefully work to make sure that the divisional focus is on optimization of patient care, education, and staff/faculty development. The highlight is the opportunity to work with outstanding young faculty and help to provide them with the needed support/mentorship to allow them to have the greatest success. In this role, I have been able to further strategize to further develop the overall program and work with other divisions/departments to improve education, research, and patient care.

Revisions to Imaging Clinical Service Rules and Regulations

Title Page

Changed date to 2022

Page 2

Converted equipment descriptions to present tense and removed outdated background information

Page 4

-Updated number of residents rotating to 13 per month out of program of 42 total
-Updated nurse practitioner number to 4
-Changed e-Referral to diagnostic exam protocoling

Page 6

Cosmetic changes

Page 8

Cosmetic changes

Page 9

Added description of the Emergency Radiology Service

Page 11 Appendix A

Included current Radiology privileges

IMAGING CLINICAL SERVICE
RULES AND REGULATIONS
~~2020~~2022

Zuckerberg San Francisco General Hospital
1001 Potrero Avenue
San Francisco, CA 94110

IMAGING SERVICES CLINICAL SERVICE
RULES AND REGULATIONS
TABLE OF CONTENTS

I. IMAGING CLINICAL SERVICE: ORGANIZATION

A. PREAMBLE

Zuckerberg San Francisco General Hospital is a county hospital and one of the busiest hospitals in the San Francisco Bay Area. ~~With 482 licensed beds, it services approximately 16% of all patients treated in the City and County of San Francisco. Zuckerberg San Francisco General provides extensive ambulatory care services treating approximately 1,000 patients daily.~~ The Emergency Department is the designated trauma center for San Francisco~~, treating approximately 280 patients daily~~. ZSFG also serves the Department of Public Health's neighborhood clinics and Laguna Honda Hospital patients.

B. SCOPE OF SERVICE

Zuckerberg San Francisco General is one of the four main teaching hospitals of the University of California, San Francisco. The University, through a contractual arrangement with the county, provides medical and medical support staff for the hospital. ~~The campus of Zuckerberg San Francisco General currently occupies 1.2 million square feet of space in nine separate buildings. The Main Hospital Building, constructed in 1976, is the main site of inpatient care and also houses many of the outpatient clinics and most of the staff offices. The other buildings are used for outpatient care, library, administration and research. We will be expanding services into a new In-patient tower May of 2016.~~

The Imaging Services at ZSFG is one of busiest radiology departments in the county performing approximately 180,000 exams/year. The current department occupies 25,000 square feet in the main Department, with several satellite units. Current equipment includes two GE 64 slice CT Scanners, and two GE 1.5 T MRI scanners. Five Siemens,, and two Zonare (IR) Ultrasound Scanners. One portable CT scanner. One IR room integrating a C-Arm with a 16 slice CT Scanner. One biplane IR room for Neurological IR and stroke treatment. ~~Four ER/trauma rooms,~~ Tthree general radiography rooms, one fluoroscopy rooms, portable radiographic units, and dedicated chest and orthopedic room are in use. There are Three Hologic DMR Mammography rooms one which is Tomosynthesis. A digital network links CT, US, MRI, IR, General Radiology and Mammography to a digital network and we are fully PACS supported.

In our new Department located in Building 25~~ we will expand ,~~ our services ~~to~~ include in the Emergency Department: 2 CT scanners, two fixed imaging digital x-ray rooms and 4 Digital portable machines.

Our Interventional procedural area ~~will be~~is located within the perioperative procedural area on the ground floor and ~~will~~ include~~s~~ the following: One room a single plane C-arm that is dedicated~~will be dedicated~~ to Cardiology Interventional procedures, One Bi-plane neuro interventional room and one combination suite of CT and Single Plane C-arm. We ~~will~~ also have support space for Technologist work area, Radiologist Reading room and supply storage. In planning we also have additional shell space for future expansion that is currently being developed. As this floor also maintains the operating rooms and procedural areas there are 3 Digital Portable x- ray units and 5 mobile c-arms

The new department also consists of an~~d~~ in-patient imaging suite on the basement level that contains the following: One CT scanner, one PET/CT scanner, 3 x ray rooms (digital) one which is fluoroscopy, One MRI and 3 ultrasound units. The area also has support space and infrastructures including reading rooms for all modalities in place to manage and maintain patient care, supplies and support staff.

C. The Imaging Services Department seeks to provide the highest quality diagnostic imaging services to the citizens of the City and County of San Francisco. We serve a broad range of patients and services, including the Emergency Department, Operating Room, Intensive Care units and other inpatient units, hospital and community-based primary care clinics, specialty clinics. The department provides a vital teaching function as part of the residency programs of the University of California, San Francisco, and is a teaching facility for student radiologic technologists from City College of San Francisco and student sonographers for Foothill College. Medical staff performs clinical research to improve patient care.

D. AVAILABLE SERVICES:

The following Radiology services are available 24-hours a day, 7 days a week* on a scheduled, drop-in or emergent basis. Services are provided to patients of all age groups and cultures, referred by an authorized care provider. Two percent of our patients are age 0-2 years, two percent are 3 –11, two and a half percent are 12-18, eighty percent are 18-64, and 14 percent are 65 and older.

Service	**Most Frequent Procedures**
Plain Film Radiography	Chest, abdomen, spine, Mammography
Fluoroscopy	Upper GI track, Lower GI track
Sonography	Obstetric, Abdomen, Pelvis
Computed Tomography (CT)	Brain, Abdomen, Pelvis
Magnetic Resonance Imaging (MRI)	Brain, Spine, MR Angiography
Interventional, Neuro-interventional, Vascular radiography	Dialysis Fistula maintenance, Central line placement, Percutaneous abscess drainage, stroke treatment

***Mammography** is routinely provided only on a scheduled basis, Monday through Friday

Medical services provided include medical pre- and post-procedural consultation, post-procedural observations, supervision and performance of procedures, moderate sedation, and interpretation of images. Nursing services provided include moderate sedation, patient monitoring, starting intravenous lines and injecting contrast media, general nursing care including patient education. Technical services include acquisition of images by certified and/or licensed staff, pre- and post-procedural patient education, and supervised, limited injection of contrast media. Other services provided are reception of patients and visitors, patient transportation and record/image management.

E. GOALS OF CARE

- Provide safe and efficient performance of procedure.
- Assure the highest level of diagnostic interpretation and therapeutic intervention;
- Provide prompt transmittal of results to clinicians;
- Archive images in a manner which assures prompt retrieval;
- Make recommendations for procuring cost-effective equipment that provides a high-quality of diagnostic information;
- Provide ongoing education that stresses the quality of patient care, medical and technical skill development, health and safety procedures and disaster preparedness.

F. MEMBERSHIP REQUIREMENTS

Membership on the Medical Staff of Zuckerberg San Francisco General Hospital is a privilege, which shall be extended only to those practitioners who are professionally competent and continually meet the qualifications, standards, and requirements set forth in ZSFG Medical Staff Bylaws, Article II. *Medical Staff Membership*, Rules and Regulations and accompanying manuals as well as these Clinical Service Rules and Regulations.

To ensure the highest possible level of patient care, faculty Radiologists will personally review the images and interpretation thereof for all procedures, which are dictated under his or her signature.

In accordance with HCFA Guidelines, all reports dictated under the signature of a faculty physician must contain a statement that he/she has personally reviewed the image and the interpretation thereof and either agrees with it or has edited the findings.

To facilitate this procedure, an "expression code" has been made available on the Radiology Information System and on the digital dictation system which reads as follows:

THE ELECTRONIC SIGNATURE ON THIS RADIOLOGIC REPORT INDICATES MY DIRECT INVOLVEMENT IN THE INTERPRETATION OF THE EXAMINATION AND/OR MY DIRECT SUPERVISION OF THE PROCEDURE AND AGREEMENT WITH THE REPORT.

This expression code will be used by residents when assigning standard (normal) reports to an interpretation or by the transcriber when a resident has dictated the report. It will always be the final statement, even if addenda are added after an initial approval.

G. ORGANIZATION OF IMAGING SERVICES CLINICAL SERVICE

1. ACADEMIC STAFF

Physician staffing consists of 17 active radiologists, including the chief. In order to maintain subspecialty coverage, additional courtesy faculty from UCSF and the VA hospital cover periodically. There are six credentialed imaging fellows who serve as junior faculty and rotate through CT, ultrasound and MR and Chest during their one-year faculty appointment. ~~Twelve~~ Thirteen of the ~~36~~ 42 UCSF radiology residents are rotated to Zuckerberg San Francisco General monthly. A management services agreement with the UCSF Department of Radiology provides administrative and fiscal management for university affairs.

2. ADMINISTRATIVE AND TECHNICAL STAFF

Hospital staff includes a director, 6 supervisors, 68 licensed technologists, 12 registered nurses, and 32 non-technical support staff. We have ~~3NPs~~ 4 NPs who assist with ~~c Referral~~diagnostic exam protocoling and Interventional Radiology. The department's administrative cadre is lean, but efficient, highly skilled and motivated. The department has had a relationship with City College, San Francisco for more than 20 years, providing clinical experience for up to 12 student radiographers per year.

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3. ACCOUNTABILITY

The **Chief of Radiology** is responsible for the supervision of the medical care of patients within Radiology, determines the medical services available, ensures the integration of Radiology services with those of other clinical departments and with the hospital as a whole, and is responsible for the education and research functions of the medical staff. The Chief oversees the credentialing and quality assurance of the medical staff. The Chief reports to the Associate Dean, ZSFG and the Department Chair, UCSF Radiology.
(See **ATTACHMENT C** for Job Description)

The **Director of Radiology** is responsible for the administration and evaluation of the technical and support staff, provides the knowledge, skill and leadership to manage the department's resources, and coordinates the departments' services with other clinical departments. The Director reports to the Chief Operating Officer ZSFG.

All Radiology Technical staff will meet the qualifications as determined by the Medical Staff and approved by the Medical Executive Committee.

Qualifications:

1. Proof of possession of a current license issued by the State of California as a Certified Radiologic Technologist (CRT)
2. Proof of current registration with the American Registry of Radiologic Technologists (ARRT)
3. Possession of a valid Cardiopulmonary Resuscitation (CPR) Certificate issued by the American Heart Association

The attached Job descriptions have also been reviewed and approved by the San Francisco Department of Human Resources.

The Director and Chief jointly evaluate services and the status of capital equipment in the department and make recommendations to hospital administration, review radiation exposures of respective staffs in accordance with hospital policy. The Director, Chief and Radiology Charge nurse jointly review performance data and identify improvement opportunities.

II. CREDENTIALING

A. NEW APPOINTMENTS

The process of application for membership to the Medical Staff of ZSFG through the Radiology Clinical Service is in accordance with ZSFG Bylaws Article II, *Medical Staff Membership*, Rules and Regulations, as well as these Clinical Service Rules and Regulations.

The following additional documentation items, as appropriate, are acceptable verified by hard copy or by explanation of the applicant with no further verification:

1. American Board Certification Status (if not certified)
2. BLS
3. ACLS
4. CPR
5. PALS
6. X-ray Operator/Supervisor's License
7. DEA certification

The Radiology Clinical Service at Zuckerberg San Francisco General Hospital encourages but does not require faculty or fellows to have CPR training or DEA certification.

B. REAPPOINTMENTS

The process of reappointment to the Medical Staff of ZSFG through the Radiology Clinical Service is in accordance with ZSFG Bylaws, Rules and Regulations, as well as these Clinical Service Rules and Regulations.

1. Practitioners Performance Profiles
Profiling documentation: Review number of procedures of various types performed by physician since appointment/last reappointment. Data will be obtained through the Imaging Department's computer system. If data on number of procedures is not available for entire period since appointment/last reappointment, a representative period will be analyzed consisting of at least three months.

2. Modification of Clinical Service
Modification of the Imaging Clinical Service are reviewed and determined by the Chief of Imaging Services.

3. Staff Status Change
The process for Staff Status Change for members of the Imaging Services is in accordance with ZSFG Bylaws, Rules and Regulations.

4. Modification/Changes to Privileges
The process for Modification/Change to Privileges for members of the Imaging Service is in accordance with ZSFG Bylaws, Rules and Regulations.

C. AFFILIATED PROFESSIONAL STAFF

The process of appointment and reappointment to the Affiliated Professional Staff through the Imaging Clinical Service is in accordance with ZSFG Medical Staff Bylaws, Rules and Regulations, as well as these Clinical Service Rules and Regulations.

D. STAFF CATEGORIES

Imaging Clinical Service staff fall into the same staff categories which are described in Article III – *Categories of the Medical Staff* of the ZSFG Bylaws, Rules and Regulations as well as these Clinical Service Rules and Regulations.

III. DELINEATION OF PRIVILEGES

A. DEVELOPMENT OF PRIVILEGE CRITERIA

Imaging Clinical Service privileges are developed in accordance with ZSFG Medical Staff Bylaws, Article V - *Clinical Privileges,* Rules and Regulations.

B. ANNUAL REVIEW OF CLINICAL SERVICE PRIVILEGE REQUEST FORM

The Imaging Clinical Service Privilege Request Form shall be reviewed annually.

C. CLINICAL PRIVILEGES

Imaging Clinical Service privileges shall be authorized in accordance with the ZSFG Medical Staff Bylaws, Article V- *Clinical Privileges,* Rules and Regulations, as well as these Clinical Service Rules and Regulations. All requests for clinical privileges will be evaluated and approved by the Chief of Radiology Clinical Service.

D. TEMPORARY PRIVILEGES

Temporary Privileges shall be authorized in accordance with the ZSFG Medical Staff Bylaws Article V – *Clinical Privileges,* Rules and Regulations.

IV. PROCTORING AND MONITORING

A. REQUIREMENTS

Before any new staff radiologist can independently perform clinical services, he/she will be assigned to a proctor by the chief of the service. Any staff radiologist who already has privileges in areas requested by the new staff radiologist may be asked to be a proctor. The proctoring staff radiologist will review a minimum of 50 examinations or procedures that encompass every area in which privileges were requested by the new staff radiologist. If the new staff radiologist has requested a privilege that is not included in the proctoring radiologists' privileges, a second proctor may be assigned for evaluation of the specific privilege. The proctoring physician(s) will report his/her observations regarding the new radiologist and assess his/her ability to perform in all the areas that privileges were requested.

Each staff radiologist will undergo peer review (proctoring and monitoring) by another staff radiologist once each year. Review material will consist of ten (10) cases chosen by the examining physician to include cases in the primary area of expertise of the radiologist being proctored as well as additional cases that may occasionally be the responsibility of the radiologist (i.e., on call). Both radiologists will dictate each case and the two reports compared by the Radiology Clinical Service QI Medical Director. Records will be kept and reported to the Radiology Clinical Service Department Chief, and the QI Medical Director (see proctoring form, Staff Physician Credentials Section). Both examiner and examinee will report significant

error to the Department QI Chief or QI Committee. Action to be taken may include consulting, remedial study, and/or clinical service in-service work, as appropriate.

B. ADDITIONAL PRIVILEGES

Requests for additional privileges for Imaging Clinical Service shall be in accordance with ZSFG Bylaws, Rules and Regulations.

C. REMOVAL OF PRIVILEGES

Requests for removal of privileges for Imaging Clinical Service shall be in accordance with ZSFG Bylaws, Rules and Regulations.

V. EDUCATION

A. All Imaging Clinical Service faculty are required to obtain ongoing ACCME accredited continuing medical education in the area of diagnostic radiology or nuclear medicine. The minimum standards required are those that the American Medical Association requires for the certificate award.

B. Imaging Services faculty that are full-time are allotted five weeks of meetings per year.

C. Documentation of continuing education is provided on an annual curriculum vita required by all faculty prior to the June performance appraisal performed by the Chief of Service.

VI. IMAGING SERVICES CLINICAL RESIDENT AND FELLOW TRAINING PROGRAM AND SUPERVISION

The Department of Imaging Services considers all physicians participating in ACGME approved training programs to be resident physicians. It is the policy of the department that no residents can provide clinical services without the direct supervision of an attending faculty physician. Non-ACGME are credentialed to render final interpretations but are usually supervised by an attending. The training program currently consists of 13 resident FTEs and 5.2 fellow FTEs.

All diagnostic imaging examinations performed by the Department of Imaging Services are interpreted and reported by one of the following procedures:

1. The examination is personally reviewed, interpreted and dictated by an attending faculty physician.

2. A resident physician performs a review contemporaneous with an attending physician and then dictates a preliminary report of the results. The report is then reviewed by the attending faculty physician who signs a statement in the medical record confirming that he or she has personally reviewed both the examination and the resident's preliminary report and either agrees with the resident's description of the attending physician’s interpretation as originally dictated or has edited the resident's report to reflect his or her opinion of the findings on the examination.

3. A resident physician performs a preliminary review of the examination and dictates a preliminary report of the results. The examination and the report are then reviewed by an attending faculty physician who signs a statement in the medical record confirming that he or she has personally reviewed both the examination and the resident's preliminary report and either agrees with the resident's interpretation as originally dictated or has edited the resident's findings.

   If the resident's preliminary interpretation has been transmitted for use in the treatment of the patient (either orally or in writing) prior to the attending faculty physician's review of the examination and

the attending physician significantly disagrees with the resident's findings after personally reviewing the examination, the attending physician notifies the referring physician of his/her own opinion in addition to editing the resident's findings in the medical record. Attending faculty physicians must make every effort to review the examination in a timely manner after the resident's preliminary interpretation.

In July 2022, an Emergency Radiology Service was instituted. This has resulted in improved on-call resident supervision, expeidited attending readings of emergency after hours exams, and improved patient throughput in the ZSFG Emergency department.

All invasive imaging procedures and therapeutic interventions are performed by attending radiologists or residents with direct personal supervision of an attending faculty radiologist. Some invasive therapeutic interventions performed in the Radiology Department (such as thoracentesis) are also performed at the bedside by non-radiologists without the need for imaging guidance. Since only those patients with the most complex pathologic anatomy are referred for image-guided procedures, direct attending radiologist supervision is always required when radiology residents perform these procedures.

In accordance with HCFA regulations, for procedures performed by residents, the attending radiologist is in the procedure room directly supervising during the key portions of the procedure and in the immediate vicinity during the remainder of the procedure. To document the attending radiologist's involvement in the procedure he or she must sign a personal note on the radiology report describing his or her participation.

The list of Major and Minor procedures performed in the department are in Appendix B. For all major procedures, the key components are described.

VII. IMAGING SERVICES CLINICAL SERVICE CONSULTATION CRITERIA

A. The Imaging Service provides informal consultation on a daily basis to all CHN healthcare providers upon demand.

B. The Imaging Services does not provide formal consultation other than its written radiologic reports and discussions at clinical conferences such as Tumor Board, Radiology OB/GYN Conference, Radiology Neurology- Neurosurgery Conference, GI Medicine Surgery Conference, Radiology Gastroenterology General Surgery Conference, Pulmonary Medicine Conference, Pulmonary Medicine Surgery Imaging Services Conference, and occasional other conferences as needed.

VIII. DISCIPLINARY ACTION

The Zuckerberg San Francisco General Hospital Medical Staff Bylaws, Rules and Regulations and accompanying manuals as well as these Clinical Service Rules and Regulations will govern all disciplinary action involving members of the ZSFG Imaging Clinical Service.

IX. PERFORMANCE IMPROVEMENT AND PATIENT SAFETY

A. GOALS AND OBJECTIVES

The Department of Imaging Services has established a standing Performance Improvement (PI) committee that will meet monthly. This committee is responsible for identifying PI opportunities,

determining metrics to measure the success of PI initiatives, and monitoring, evaluating, and reporting on those initiatives to the Performance Improvement/Patient Safety Committee, or the appropriate administrative committee or organization.

B. CLINICAL INDICATORS

A faculty member meets monthly with residents to review quality assurance and patient safety issues. This information is compiled and presented to the Department of Imaging Services Performance Improvement Committee.

Regular faculty quality assurance and patient safety issues meetings occur in additional to annual peer-to-peer review to evaluate discrepancies.

The Department of Imaging Services audits critical results reporting bi-annually, and that information is compiled and presented to the Performance Improvement and Patient Safety (PIPS) Committee

C. CLINICAL SERVICE PRACTITIONERS PERFORMANCE PROFILE

Refer to Section III Proctoring and Monitoring above

D. MONITORING & EVALUATION OF PROFESSIONAL PERFORMANCE OF IMAGING SERVICE MEMBERS

Refer to Section IV, Proctoring and Monitoring

X. MEETING REQUIREMENTS

In accordance with ZSFG Medical Staff Bylaws, all Active Members are expected to show good faith participation in the governance and quality evaluation process of the Medical Staff by attending a minimum of 50% of all committee meetings assigned, clinical service meetings and the annual Medical Staff Meeting.

Imaging Clinical Services Department shall meet as frequently as necessary, but at least quarterly to consider findings from ongoing monitoring and evaluation of the quality and appropriateness of the care and treatment provided to patients.

As defined in the ZSFG Medical Staff Bylaws, a quorum is constituted by at least three (3) voting members of the Active Staff for the purpose of conducting business.

XI. ADOPTION AND AMENDMENT

The Imaging Clinical Service Rules and Regulations will be adopted and revised by a majority vote of all Active members of the Radiology Service annually at a quarterly Imaging Clinical Service Committee meeting.

Zuckerberg San Francisco General Hospital
1001 Potrero Avenue
San Francisco, CA 94110

APPENDIX A – RADIOLOGY PRIVILEGE REQUEST FORM
PRIVILEGES FOR ZUCKERBERG SAN FRANCISCO GENERAL HOSPITAL

Rad RADIOLOGY AND NUCLEAR MEDICINE 2022
(02/2022 MEC)

FOR ALL PRIVILEGES
All complication rates, including problem transfusions, deaths, unusual occurrence reports, patient complaints, and sentinel events, as well as Department quality indicators, will be monitored semiannually.

CORE PRIVILEGES ___

36.10 GENERAL DIAGNOSTIC RADIOLOGY ___

36.10A PLAIN FILM INTERPRETATION ___

PREREQUISITES: Currently Board Admissible, Board Certified, or Re-Certified by the American Board of Radiology.

PROCTORING: Double reading of 3 studies by a credentialed radiologist in the department.
Trainees of the graduates of the UCSF Radiology Training Program hired onto the faculty require supervision of a single procedure.

REAPPOINTMENT: Performance of at least 100 general diagnostic procedures in two years.

36.10B FLUOROSCOPIC PROCEDURES ___
Performance of fluoroscopic procedures, including contrast studies of the GI and GU tract.

PREREQUISITES: Currently Board Admissible, Board Certified, or Re-Certified by the American Board of Radiology and a current fluoroscopy license.

PROCTORING: Double reading of 2 studies by a credentialed radiologist in the department.
Trainees of the graduates of the UCSF Radiology Training Program hired onto the faculty require supervision of a single procedure.

REAPPOINTMENT: Performance of at least 4 general fluoroscopy procedures in two years.

SPECIAL PRIVILEGES ___

36.20 COMPUTED TOMOGRAPHY ___
Interpretation of computed tomographic procedures of any or all organ systems.

PREREQUISITES: Currently Board Admissible, Board Certified, or Re-Certified by the American Board of Radiology.

PROCTORING: Double reading of 3 studies by a credentialed radiologist in the department.
Trainees of the graduates of the UCSF Radiology Training Program hired onto the faculty require supervision of a single procedure.

REAPPOINTMENT: Performance of at least 100 computed tomography procedures in the past two (2) years

36.30 MAGNETIC RESONANCE IMAGING ___
Interpretation of magnetic resonance imaging procedures of any or all organ systems.

PREREQUISITES: Currently Board Admissible, Board Certified, or Re-Certified by the American Board of Radiology.

PROCTORING: Double reading of 3 studies by a credentialed radiologist in the department.
Trainees of the graduates of the UCSF Radiology Training Program hired onto the faculty require supervision of a single procedure.

REAPPOINTMENT: Performance of at least 50 magnetic resonance imaging procedures in the past two years.

36.40 GENERAL SONOGRAPHY (EXCLUDES OBSTETRIC AND GYNECOLOGY) ___
Interpretation of non-OB/GYN ultrasound imaging procedures of any or all organ systems.

PREREQUISITES: Currently Board Admissible, Board Certified, or Re-Certified by the American Board of Radiology.

PROCTORING: Double reading of 3 studies by a credentialed radiologist in the department.
Trainees of the graduates of the UCSF Radiology Training Program hired onto the faculty require supervision of a single procedure.

REAPPOINTMENT: performance of at least 100 sonography procedures in the past two (2) years.

36.41 OBSTETRIC AND GYNECOLOGICAL SONOGRAPHY ___

36.41A Obstetric And Gynecological Sonography ___

PREREQUISITES: Currently Board Admissible, Board Certified, or Re-Certified by the American Board of Radiology; AND
1) formal obstetrical ultrasound training in Radiology Residency program; OR
2) 3 month's post residency experience to include:
a) 1 month: basic physics, technique, performance and interpretation
b) 2 months of practical experience with at least 200 examinations

PROCTORING: Double reading of 3 studies by a credentialed radiologist in the department.
Trainees of the graduates of the UCSF Radiology Training Program hired onto the faculty require supervision of a single procedure.

REAPPOINTMENT: performance of at least 100 sonography procedures in the past two (2) years.

36.41B Obstetric And Gynecological Sonography ___

PREREQUISITES: Currently Board Admissible, Board Certified, or Re-Certified by the American Board of Obstetrics and Gynecology.
1) Completion of Maternal Fetal Medicine subspecialty training or Perinatal Genetics subspecialty training with a minimum of 6 months of training in ultrasound.
2) Joint appointment in the Department of Radiology.

PROCTORING: Total studies satisfactorily proctored: 500** abnormal studies satisfactorily proctored: 25** (**subspecialty training included.)

REAPPOINTMENT: performance of at least 100 sonography procedures in the past two (2) years.

36.50 ANGIOGRAPHY/VASCULAR INTERVENTIONAL PROCEDURES ___
Admission, work up, diagnosis, provision of endovascular and non endovascular care to patients of all adults presenting with illnesses, injuries and disorders who have or will undergo interventional radiologic procedures. Admission pertains only to patients undergoing elective procedures. Performance and interpretation of diagnostic and therapeutic vascular interventional procedures.

PREREQUISITES: Currently Board Admissible, Board Certified, or Re-Certified by the American Board of Radiology in Diagnostic Radiology and currently meets the training requirements for board eligibility by the American Board of Vascular and Interventional Radiology.

PROCTORING: Supervision of 3 procedures by a credentialed radiologist in the department.
Trainees of the graduates of the UCSF Radiology Training Program hired onto the faculty require supervision of a single procedure.

REAPPOINTMENT: Performance of at least 25 angiography/vascular interventional procedures in the past two (2) years.

36.60 NON-VASCULAR INTERVENTIONAL PROCEDURES ___
Performance and interpretation of diagnostic and therapeutic non-vascular interventional procedures

PREREQUISITES: Currently Board Admissible, Board Certified, or Re-Certified by the American Board of Radiology.

PROCTORING: Supervision of 3 procedures by a credentialed radiologist in the department.
Trainees of the graduates of the UCSF Radiology Training Program hired onto the faculty require supervision of a single procedure.

REAPPOINTMENT: Performance of at least 20 non-vascular interventional procedures in the past two (2) years.

36.65 IMAGE-GUIDED TUMOR ABLATION ___
Performance of radiofrequency, microwave, or cryoablation of solid organ, lung and soft tissue tumors.

PREREQUISITES: Currently Board Admissible or Board Certified by the American Board of Radiology and completion of an accredited Interventional Radiology Fellowship training program.

PROCTORING: Supervision of 2 procedures by a credentialed radiologist in the department. Trainees of the graduates of the UCSF Radiology Training Program hired onto the faculty require supervision of a single procedure.

REAPPOINTMENT: Performance of at least 2 procedures in the past two (2) years.

36.70 MAMMOGRAPHY ___
Performance and interpretation of diagnostic and interventional mammographic procedures.

PREREQUISITES: Currently Board Admissible, Board Certified, or Re-Certified by the American Board of Radiology.

PROCTORING: Double reading of 3 studies by a credentialed radiologist in the department. Trainees of the graduates of the UCSF Radiology Training Program hired onto the faculty require supervision of a single procedure.

REAPPOINTMENT: Performance of at least 240 mammography procedures in the last six months or at least 960 performed in the last two (2) years.

36.80 NUCLEAR MEDICINE BASIC PRIVILEGES ___
Performance and interpretation of diagnostic and therapeutic radionuclide procedures in any and all organ systems.

PREREQUISITES: Currently Board Admissible, Board Certified, or Re-Certified by the American Board of Nuclear Medicine and must attain Board Certification in Nuclear Medicine within two (2) years of completion of residency.

PROCTORING: Double reading of 3 studies by a credentialed radiologist in the department. Trainees of the graduates of the UCSF Radiology Training Program hired onto the faculty require supervision of a single procedure.

REAPPOINTMENT: Performance of at least 20 nuclear medicine procedures in the last 2 years.

36.90 PROCEDURAL SEDATION ___

PREREQUISITES: The physician must possess the appropriate residency or clinical experience (read Hospital Policy 19.8 SEDATION) and have completed the procedural sedation test as evidenced by a satisfactory score on the examination. Currently Board Admissible, Board Certified, or Re-Certified by the American Board of Radiology and has completed at least one of the following:

- Currently Board Admissible, Board Certified, or Re-Certified by the American Board of Emergency Medicine or Anesthesia or,
- Management of 10 airways via BVM or ETT per year in the preceding 2 years or,
- Current Basic Life Support (BLS) certification (age appropriate) by the American Heart Association

PROCTORING: Review of 5 cases (completed training within the last 5 years)

REAPPOINTMENT: Completion of the procedural sedation test as evidenced by a satisfactory score on the examination, and has completed at least one of the following:

- Currently Board Admissible, Board Certified, or Re-Certified by the American Board of Emergency Medicine or Anesthesia or,
- Management of 10 airways via BVM or ETT per year for the preceding 2 years or,
- Current Basic Life Support (BLS) certification (age appropriate) by the American Heart Association

37.00 INVASIVE NEURORADIOLOGY ___
Performance and interpretation of diagnostic and therapeutic invasive neuroradiology procedures.

PREREQUISITES: Currently Board Admissible, Board Certified, or Re-Certified by the American Board of Radiology in Diagnostic Radiology and currently meets the training requirements for board eligibility by the American Board of Neuroradiology.

PROCTORING: Supervision of 3 procedures by a credentialed radiologist in the department. Trainees of the graduates of the UCSF Radiology Training Program hired onto the faculty require supervision of a single procedure.

REAPPOINTMENT: Performance of at least 20 invasive neuroradiology procedures in the past two (2) years.

37.10 CAROTID ARTERY STENTING ___
Performance and interpretation of therapeutic carotid artery stenting procedures.

PREREQUISITES: Currently Board Admissible, Board Certified, or Re-Certified by the American Board of Radiology in Diagnostic Radiology and Neuroradiology or Interventional Radiology, and performance of 25 carotid stenting procedures.

PROCTORING: Supervision of 1 procedure by a credentialed radiologist in the department.

REAPPOINTMENT: Performance of at least 2 carotid stenting procedures in the past two (2) years.

37.20 CTSI (CLINICAL AND TRANSLATIONAL SCIENCE INSTITUTE) - CLINICAL RESEARCH ___
Admit and follow adult patients for the purposes of clinical investigation in the inpatient and ambulatory CTSI Clinical Research Center settings.

PREREQUISITES: Currently Board Admissible, Certified, or Re-Certified by one of the boards of the American Board of Medical Specialties. Approval of the Director of the CTSI (below) is required for all applicants.

PROCTORING: All OPPE metrics acceptable

REAPPOINTMENT: All OPPE metrics acceptable

_____ _____
CTSI Medical Director Date

37.30 EDUCATIONAL INTERPRETATION OF STUDIES ONLY ___
The physician shall interpret studies for teaching purposes for fellows, residents or medical students. The physician will have no involvement in the clinical care of patients.

PREREQUISITES: Currently Board Admissible, Board Certified, or Re-Certified by the American Board of Radiology.

PROCTORING: Observation of 2 teaching sessions.

REAPPOINTMENT: Observation of 2 teaching sessions

I hereby request clinical privileges as indicated above.

_____ _____
Applicant Date

APPROVED BY

_____ _____
Division Chief Date

_____ _____
Service Chief Date

Zuckerberg San Francisco General Hospital
1001 Potrero Avenue
San Francisco, CA 94110

APPENDIX B-MAJOR AND MINOR PROCEDURES REQUIRING STAFF RADIOLOGIST SUPERVISION

	Major Procedures	Key Components	
19000	ASP BREAST CYST	Needle placement	Obtain specimen
19030	GALACTOGRAM	Needle placement	Injection of contrast
19102	PERC CORE BX BREAST	Needle placement	Obtain specimen
19103	PERC CORE BX BREAST ROT/VAC AS	Needle placement	Obtain specimen
19290	BREAST NEEDLE LOC	Needle placement	
19291	BREAST NEEDLE LOC EACH ADD'L	Needle placement	
19295	PLACE METAL CLIP IN BREAST BX	Needle placement	
20000	SOFT TISSUE ABS DRN SUPERFICIAL	Percutaneous entry	Catheter Placement
20205	MUSC BX DEEP	Needle placement	Obtain specimen
20206	SOFT TISSUE/MUSCLE BX	Needle placement	Obtain specimen
20220	SUPERFICIAL BONE BX	Needle placement	Obtain specimen
20225	DEEP BONE BX	Needle placement	Obtain specimen
20605	ASP/INJ SMALL JOINT	Needle placement	Obtain specimen
20610	ASP/INJ LARGE JOINT	Needle placement	Obtain specimen
21116	ASP/INJ SHOULDER JOINT	Needle placement	Obtain specimen
22521	PERC VERTEBOPLASTY UNI/BI THOR	Needle placement	Injection of cement
22521	PERC VERTEBOPLASTY UNI/BI LUMB	Needle placement	Injection of cement
22522	PERC VERTEBROPLASTY EACH ADD'L	Needle placement	Injection of cement
23350	SHOULDER ARTHROGRAM	Needle placement	Injection of contrast
24220	ARTHROGRAM ELBOW	Needle placement	Injection of contrast
25246	ARTHROGRAM WRIST	Needle placement	Injection of contrast
27093	HIP ARTHROGRAM	Needle placement	Injection of contrast
27096	SI JOINT ARTHROGRAM	Needle placement	Injection of contrast
27370	KNEE ARTHROGRAM	Needle placement	Injection of contrast
27648	ARTHROGRAM ANKLE	Needle placement	Injection of contrast
32000	THORACENTESIS	Needle placement	Obtain specimen
32002	THORACENTESIS(PNEUMOTHORAX)	Needle placement	Obtain specimen
32020	THORACOSTSTOMY	Percutaneous entry	Tube insertion
32201	PERC LUNG ABSCESS	Percutaneous entry	Catheter Placement
32400	NEEDLE BX PLEURA	Needle placement	Obtain specimen
32405	LUNG BX	Needle placement	Obtain specimen
35470	PTA TIBIOPERONEAL	Catheter Placement	Balloon Inflation
35471	PTA VISCERAL	Catheter Placement	Balloon Inflation
35472	PTA AORTA	Catheter Placement	Balloon Inflation
35473	PTA ILIAC	Catheter Placement	Balloon Inflation
35474	PTA FEM-POP	Catheter Placement	Balloon Inflation
35476	PTA VENOUS	Catheter Placement	Balloon Inflation
35491	ATHERECTOMY AORTA	Catheter Placement	Atherectomy
35492	ATHERECTOMY ILIAC	Catheter Placement	Atherectomy
35493	ATHERECTOMY FEM-POP	Catheter Placement	Atherectomy
35494	ATHERECTOMY BRACHIAL	Catheter Placement	Atherectomy
35495	ATHERECTOMY TIBIAL	Catheter Placement	Atherectomy
36005	EXT VENOGRAM	Catheter Placement	
36010	IVC/SVC	Catheter Placement	
36011	1ST ORDER VEIN	Catheter Placement	
36012	2ND ORDER VEIN	Catheter Placement	
36014	PULM ART CATH SELECT	Catheter Placement	

36015	PULM ART CATH SUBSELECT	Catheter Placement		
36140	DIRECT STICK ARTERY	Catheter Placement		
36145	DIALYSIS FISTULA CATH	Catheter Placement		
36160	TRANS LUMBAR	Catheter Placement		
36200	CATHETER AORTA	Catheter Placement		
36215	SELECTIVE 1ST ORDER HEAD	Catheter Placement		
36216	SELECTIVE 2ND ORDER HEAD	Catheter Placement		
36217	SELECTIVE 3RD ORDER HEAD	Catheter Placement		
36218	ADTNL 2ND OR 3RD ORD HEAD	Catheter Placement		
36245	1ST ORDER ABD/PELVIS/LEG	Catheter Placement		
36246	2ND ORDER ABD/PELVIS/LEG	Catheter Placement		
36247	3RD ORDER ABD/PELVIS/LEG	Catheter Placement		
36248	ADD'L 2ND OR 3RD	Catheter Placement		
36481	PORTAL VEIN CATH/ANY METHOD	Catheter Placement		
36489	PLACE CENTRAL LINE	Percutaneous entry	Catheter Placement	
36493	REPOSITION CENTRAL LINE	Percutaneous entry	Catheter Placement	
36500	VENOUS SAMPLE	Catheter Placement		
36533	IMPLANT VENOUS PORT	Percutaneous entry	Catheter Placement	
36534	REVISE VENOUS PORT	Percutaneous entry	Catheter Placement	
36870	DECLOT DIALYSIS FIST ANY METHOD	Percutaneous entry	Perform Declot	
37140	TIPS	Portal V catheterization	Stent Placement	Stent Dilation
37200	TRANS CATHETER BIOPSY	Catheter Placement	Needle placement	
37201	FIBRINOLYTIC INFUSION	Catheter Placement		
37202	OTHER RX INFUSION	Catheter Placement		
37203	FOREIGN BODY RETRIEVAL	Catheter Placement	Foreign body retrieval	
37204	EMBOLIZATION	Catheter Placement	Embolization	
37205	VASCULAR STENT INITIAL VESSEL	Catheter Placement	Stent Placement	
37206	STENT-EACH ADD'L VESSEL	Catheter Placement	Stent Placement	
37209	MANIPULATE UK CATH	Catheter Placement		
37620	IVC FILTER	Catheter Placement	Filter placement	
38200	SPLENOPORTOGRAM PUNCT	Needle placement	Injection of contrast	
38505	LYMPH NODE BX	Needle placement	Obtain specimen	
38790	LYMPHANGIOGRAM	Needle placement	Injection of contrast	
42400	BX SALIV GLAND	Needle placement	Obtain specimen	
42550	SIALOGRAM	Needle placement	Injection of contrast	
43456	DILATE ESOPHAGUS	Catheter Placement	Balloon Inflation	
43750	GASTROSTOMY	Percutaneous entry	Catheter Placement	
44300	TUBE ENEROSTOMY/CECOSTOMY	Percutaneous entry	Catheter Placement	
44901	PERC DRN APPENDIX ABSCESS	Percutaneous entry	Catheter Placement	
47000	LIVER BIOPSY	Needle placement	Obtain specimen	
47011	PERC DRAIN LIVER ABSCESS	Percutaneous entry	Catheter Placement	
47490	PERC CHOLECYSTOSTOMY	Percutaneous entry	Catheter Placement	
47500	PTC	Needle placement	Injection of contrast	
47510	PTBD EXTERNAL DRAIN	Percutaneous entry	Catheter Placement	
47511	PTBD INTERNAL OR STENT	Percutaneous entry	Catheter Placement	
47530	REVISE T-TUBE	Catheter Placement		
47555	DILATE BIL STRICT W/O STENT	Catheter Placement	Balloon Inflation	
47556	DILATE BIL STRICT W STENT	Catheter Placement	Balloon Inflation	Stent Placement
47630	STONE EX	Catheter Placement	Stone removal	

48000	PANCREATIC ABSCESS	Percutaneous entry	Catheter Placement
48102	PANCREATIC BIOPSY	Needle placement	Obtain specimen
48511	PERC DRAIN PSEUDOCYST	Percutaneous entry	Catheter Placement
49020	PERITONEAL ABSCESS	Percutaneous entry	Catheter Placement
49041	SUBPHRENIC ABSCESS	Percutaneous entry	Catheter Placement
49061	RETROPERITONEAL ABSCESS	Percutaneous entry	Catheter Placement
49080	PARACENTESIS	Needle placement	Obtain specimen
49180	BIOPSY ABD MASS	Needle placement	Obtain specimen
49420	INSERT PERITONEAL CATHTEMP	Percutaneous entry	Catheter Placement
49427	LEVEEN SHUNTOGRAM	Needle placement	Injection of contrast
50021	RENAL ABSCESS	Percutaneous entry	Catheter Placement
50390	ASP RENAL CYST OR PELVIS	Needle placement	Obtain specimen
50392	ANTEGRADE PYELO/NEPHROSTOMY	Percutaneous entry	Catheter Placement
50393	URETERAL STENT	Stent Placement	
50394	INJECTION FOR ANTEGRADE PYELOGRAM	Needle placement	Injection of contrast
50395	DIL NEPHROST TRACT	Catheter Placement	Balloon Inflation
50593	TUMOR ABLATION	Percutaneous entry	
51080	DRAIN PERIVESICLE ABSCESS	Percutaneous entry	Catheter Placement
51610	CATH BLADDER	Percutaneous entry	Catheter Placement
52007	BRUSH BX URETER OR RENAL PELVIS	Catheter Placement	Brush bx placement
54230	CORPORA CAVERNOSOGRAM	Needle placement	Injection of contrast
55700	PROSTATE BIOPSY	Needle placement	Obtain specimen
58340	US SONOHYSTEROGRAM	Percutaneous entry	Catheter Placement
58823	TRANS VAGINAL DRAIN	Catheter Placement	
60100	BX THRYOID	Needle placement	Obtain specimen
61050	CISTERNAL OR C1-2 PUNCTURE	Needle placement	Injection of contrast
61055	MYELOGR BY C1 PUNC	Needle placement	Injection of contrast
61070	PUNCTURE SHUNT OR RESERVOIR	Needle placement	Injection of contrast
61624	EMBO CNS	Catheter Placement	Injection of emb material
61626	EMBO NON CNS HEAD & NECK	Catheter Placement	Injection of emb material
62268	ASP SPINAL CORD CYST	Needle placement	Obtain specimen
62269	BX SPINAL CORD TUMOR	Needle placement	Obtain specimen
62270	SPINAL PUNCTURE LUMBAR FOR DX	Needle placement	Injection of contrast
62272	SPINAL PUNCTURE LUMBAR FOR RX	Needle placement	Injection of contrast
62273	INJECT EPIDURAL PATCH	Needle placement	Injection of blood
62284	CERVICAL MYELOGRAM	Needle placement	Injection of contrast
62284	THORACIC MYELOGRAM	Needle placement	Injection of contrast
62284	LUMBAR MYELOGRAM	Needle placement	Injection of contrast
62284	COMPLETE MYELOGRAM	Needle placement	Injection of contrast
62284	CERVICAL MYELOGRAM	Needle placement	Injection of contrast
62284	THORACIC MYELOGRAM	Needle placement	Injection of contrast
62284	LUMBAR MYELOGRAM	Needle placement	Injection of contrast
62284	COMPLETE MYELOGRAM	Needle placement	Injection of contrast
62290	DISCOGRAM LUMBAR	Needle placement	Injection of contrast
62291	DISCOGRAM CERVICAL	Needle placement	Injection of contrast
64795	BX NERVE	Needle placement	Obtain specimen
68850	DACROCYSTOGRAM	Needle placement	Injection of contrast

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1001 Potrero Avenue
San Francisco, CA 94110

Minor Procedures

20500	SCLEROSE CYST
20501	FISTULA INJECTION
32005	PLEURODESIS
34808	ILIAC OCCLUS DEVICE W AAA REPA
36410	VENAPUNCTURE/PHYSICIAN SKILL
36470	INJ SCLEROSING SOL VEIN
36535	REMOVE VENOUS PORT
36550	DECLOT VASCULAR DEVICE
43760	GASTROSTOMY CHANGE
43761	NASO-JEJUNAL FEEDING TUBE
43761	FEEDING TUBE
44500	INTRODUCE LONG GI TUBE
47505	CHOLANGIO THRU EXISTING TUBE
47525	CHANGE PERC BIL DRAIN
49423	ABSCESS TUBE CHANGE
49424	ABSCESS TUBE CHECK
50398	CHANGE NEPHROSTOMY TUBE

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APPENDIX C – CHIEF OF IMAGING CLINICAL SERVICES JOB DESCRIPTION

COMMUNITY HEALTH NETWORK OF SAN FRANCISCO
Zuckerberg San Francisco General Hospital Medical Center

Working Title: CHIEF, RADIOLOGY SERVICE

Position Summary:

The Chief of the Radiology Service directs and coordinates the Service's clinical, educational and research functions in keeping with the values, mission, and strategic plan of Zuckerberg San Francisco General Hospital (ZSFG) and the Department of Public Health (DPH). The Chief also ensures that the Service's functions are integrated with those of other clinical departments and with the hospital as a whole.

Reporting Relationships:

The Chief of the Radiology Service reports directly to the Associate Dean and the University of California, San Francisco (UCSF) Department Chair. A committee appointed by the Chief of Staff reviews the Chief not less than every five~~four~~ years. Reappointment of the Chief occurs upon recommendation by the Chief of Staff, in consultation with the Associated Dean, the UCSF Department Chair, and the ZSFG Executive Administrator, upon approval of the Medical Executive Committee and the Governing Body. The Chief maintains working relationships with these persons and groups and with other clinical departments.

Position Qualifications:

The Chief of the Radiology Service is board certified, has a University faculty appointment, and is a member of the Active Medical Staff at ZSFG.

Major Responsibilities:

- Provides the necessary vision and leadership to effectively motivate and direct the Service in developing and achieving goals and objectives that are congruous with the values, mission and strategic plan of Zuckerberg San Francisco General Hospital and the Department of Public Health.

- In collaboration with the Executive Administrator and other ZSFG leaders, develops and implements policies and procedures that support the provision of services by reviewing and approving the Service's scope of service statement; reviews and approves Service policies and procedures; identifies new clinical services that need to be implemented; and supports clinical services provided by the Department.

- In collaboration with the Executive Administrator and other ZSFG leaders, participates in the operational processes that affect the Service by participating in the budgeting process; recommends the number of qualified and competent staff to provide care; evaluates space and equipment needs; selects outside sources for needed services; and supervises the selection, orientation, in-service education, and continuing education of all Service staff.

- Serves as a leader for the Department's quality/performance improvement, occupational and patient safety programs by setting performance improvement priorities, determining the qualifications and competencies of Service personnel who are or are not licensed independent practitioners, and maintaining appropriate quality control programs.

- Performs all other duties and functions spelled out in the ZSFG Medical Staff Bylaws.

Service Population: Patients, families and significant others of all age groups who are clients of Zuckerberg San Francisco General Hospital.

Zuckerberg San Francisco General Hospital
1001 Potrero Avenue
San Francisco, CA 94110

COMMUNITY HEALTH NETWORK OF SAN FRANCISCO
Zuckerberg San Francisco General Hospital Medical Center

Working Title: DIRECTOR, RADIOLOGY

Position Summary:

The Director, Radiology directs and coordinates Radiology's technical, nursing and support staff in keeping with the values, mission and strategic plan of Zuckerberg San Francisco General Hospital (ZSFG) and the Department of Public Health (DPH); and integrates diagnostic imaging services into the hospital's care delivery plan.

Reporting Relationships:

- Reports directly to, and is evaluated by, the Associate Administrator, Specialty and Diagnostic Services
- Works collaboratively with the Chief, Radiology, and managers of other clinical services.

Position Qualifications:

- Current certification as a Radiologic Technologist with State of California (CRT), current registration with the American Registry of Radiologic Technologists (ARRT) with five years supervisory experience in Radiology; **OR**
- Master's degree in Hospital, Health, Public or Business Administration with four years supervisory experience in Radiology; **OR**
- Baccalaureate Degree with major course work in Health or Business Administration and six years supervisory experience in Radiology.

Major Responsibilities:

- Provides the necessary vision and leadership to effectively motivate and direct the Department of Radiology in developing and achieving goals and objectives that are congruous with the values, mission and strategic plan of Zuckerberg San Francisco General Hospital and the Department of Public Health.

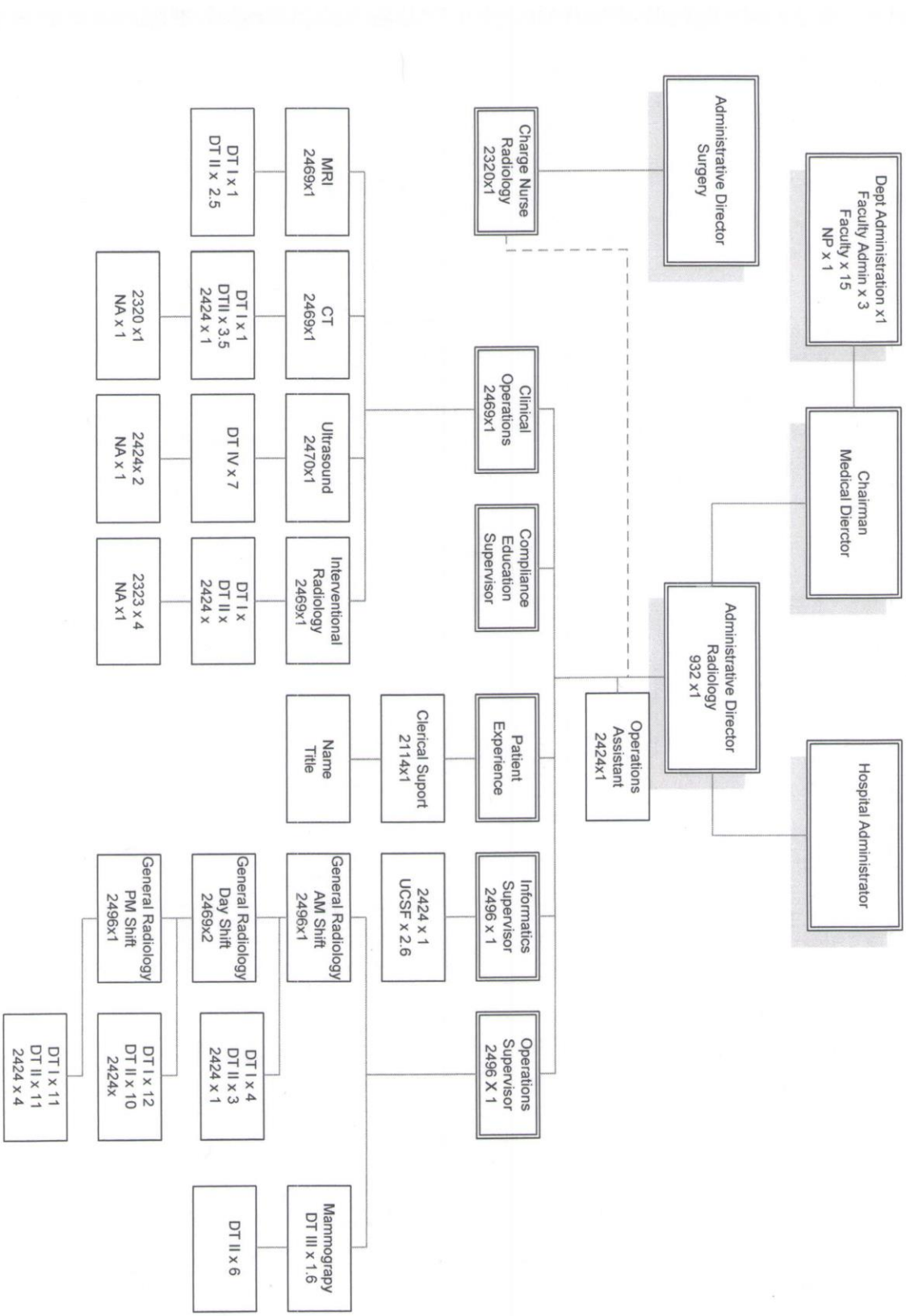
- Develops, reviews, approves and implements policies and procedures that guide and support the provision of services.

- Responsible for the department's financial operations including budgets, contracts, and expenditures. In collaboration with the department's medical staff, recommends the procurement and evaluation of services, equipment, supplies and the identification of space and capital project needs to hospital administration.

- Develops staffing plans for non-medical staff to effectively provide the services identified by the Chief, Radiology and hospital Administration; Determines the qualifications and necessary competency requirements of staff; Selects and/or approves the selection of qualified staff; Develops orientation plans and provides for the orientation of staff; Identifies educational, training and developmental needs of staff and provides the necessary in-service and/or continuing education; Evaluates subordinate staff and reviews subordinate evaluation of staff.

- Serves as a leader for the Department's quality/performance improvement, occupational and patient safety programs; In collaboration with the medical staff, uses performance measurement tools to identify opportunities to improve services and staff/patient safety; participates in and/or provides for resources to appropriately analyze data pertinent to the improvement opportunity; implements recommendations.

Service Population: Patients, families and significant others of all age groups who are clients of Zuckerberg San Francisco General Hospital.


Dept Administration x1
Faculty Admin x 3
Faculty x 15
NP x 1
Chairman
Medical Dierctor
Hospital Administrator
Administrative Director
Surgery
Charge Nurse
Radiology
2320x1
Administrative Director
Radiology
932 x1
Operations
Assistant
2424x1
Clinical
Operations
2469x1
Compliance
Education
Supervisor
Patient
Experience
Informatics
Supervisor
2496 x 1
Operations
Supervisor
2496 X 1
MRI
2469x1
CT
2469x1
Ultrasound
2470x1
Interventional
Radiology
2469x1
DT I x 1
DT II x 2.5
DT I x 1
DTII x 3.5
2424 x 1
DT IV x 7
DT I x
DT II x
2424 x
2320 x1
NA x 1
2424x 2
NA x 1
2323 x 4
NA x1
Name
Title
Clerical Suport
2114x1
2424 x 1
UCSF x 2.6
General Radiology
AM Shift
2496x1
General Radiology
Day Shift
2469x2
General Radiology
PM Shift
2496x1
Mammograpy
DT III x 1.6
DT I x 4
DT II x 3
2424 x 1
DT I x 12
DT II x 10
2424x
DT I x 11
DT II x 11
2424 x 4
DT II x 6

Dermatology R&R Summary of Changes

For 1/9/2023 Leadership MEC

Minor changes to the R&R:

1. PIPS projects (page 7)
2. Some of the language in the scope of service (page 3)
3. Few other very minor changes (names of committees/members that have changed since the last draft).
4. Most recent Dermatology privileges included
5. Updated location of housestaff competencies
6. Formatting changes

DERMATOLOGY CLINICAL SERVICE
RULES AND REGULATIONS

~~2021~~
2023

Zuckerberg San Francisco General Hospital & Trauma Center
1001 Potrero Ave
San Francisco, CA 94110

DERMATOLOGY CLINICAL SERVICE
RULES AND REGULATIONS
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DERMATOLOGY CLINICAL SERVICE
RULES AND REGULATIONS
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I. DERMATOLOGY CLINICAL SERVICE ORGANIZATION

A. SCOPE OF SERVICE

The ZSFG Dermatology Clinical Service serves a pediatric and adult population, with acute or chronic episodic dermatologic disease. The Dermatology Clinical Services provides diagnostic evaluation including skin biopsies, therapeutic regimens, ranging from pharmaceutical to phototherapy to ambulatory surgery, and patient education. The primary diagnoses relate to skin cancer, acute conditions such as infectious diseases of the skin and allergic contact dermatitis, and chronic conditions such as acne, psoriasis and atopic and nummular dermatitis. Care is provided by attending physicians and resident physicians in dermatology.

Important aspects of care for the Dermatology Clinical Services are:

1. Diagnosis and ~~definitive~~ treatment of acute and chronic skin ~~cancer~~diseases
2. Phototherapy and photochemotherapy
3. ~~Chemotherapy~~
4. ~~Isotretinoin~~Definitive procedural treatment of ~~acne~~benign and malignant skin lesions
5. Telemedicine co-management of simple dermatologic conditions
6. Hospital consultation for inpatients with skin diseases

B. MEMBERSHIP REQUIREMENTS

Membership on the Medical Staff of Zuckerberg San Francisco General Hospital is a privilege which shall be extended only to those practitioners who are professionally competent and continually meet the qualifications, standards, and requirements set forth in ZSFG Medical Staff Bylaws, Rules and Regulations and accompanying manuals as well as these Clinical Service Rules and Regulations.

C. ORGANIZATION OF DERMATOLOGY CLINICAL SERVICE

The Chief of Dermatology Clinical Services at ZSFG has overall responsibility for assuring quality of care through ongoing monitoring and evaluation of activities. This responsibility, however, is shared with the department representative of Performance Improvement and Patient Safety (PIPS) Committee. The PIPS Committee department representative prepares the minutes of the Departmental PIPS Plan, and also communicates directly with residents and staff regarding Performance Improvement and Patient Safety activities. This representative is appointed annually by the Chief of Dermatology.

II. CREDENTIALING

The ZSFG Dermatology Clinical Services is a small department with a high degree of interaction and consultation. Difficult cases and routine consults are often seen by several attending physicians. Thus, the skills of the various physicians are well known among the staff. The attendings are also able to evaluate the skills of each other through cross-coverage of clinics and through patients who return to other clinic days and attendings, although to promote attending continuity is not the rule. The staff physicians are evaluated yearly by the Chief of Dermatology for clinical competence, educational competence, personal qualities, and administrative skills.

Where patient care falls below standard levels, the Chief will be responsible for counseling involved faculty and for taking whatever action is necessary to assure that appropriate corrections are made.

A. NEW APPOINTMENTS

The process of application for membership to the Medical Staff of ZSFG through the Dermatology Clinical Service is in accordance with ZSFG Bylaws, and Rules and Regulations, as well as these Clinical Service Rules and Regulations.

B. REAPPOINTMENTS

The process of reappointment to the Medical Staff of ZSFG through the Dermatology Clinical Service is in accordance with ZSFG Bylaws, Rules and Regulations, as well as these Clinical Service Rules and Regulations.

1. **Practitioners Performance Profiles**
   The Dermatology Clinical Service practitioners are evaluated by the following factors. Dermatology attendings in the clinic act as attendings or consultants. Several attendings may be present in the same clinic on a given day, so linking attendings to the patients on whom they consult is difficult. The attending performance is evaluated by several factors. The ~~supervised Senior Residents are asked to~~dermatology residents evaluate the attendings. Additionally, full time attendings at ZSFG work closely with the courtesy attendings regularly and discuss and evaluate cases seen in the clinic. These two sources are used to evaluate the performance of courtesy attendings. Courtesy attendings in general dermatology are not credentialed to perform or supervise any dermatologic procedures other than simple skin biopsy and cryotherapy.

2. **Staff Status Change**
   The process for Staff Status Change for members of the Dermatology Services is in accordance with ZSFG Bylaws, Rules and Regulations as well as these Clinical Service Rules and Regulations.

3. **Modification/Changes to Privileges**
   The process for Modification/Change to Privileges for members of the Dermatology Services is in accordance with ZSFG Bylaws, Rules and Regulations as well as these Clinical Service Rules and Regulations.

C. AFFILIATED PROFESSIONALS

The process of appointment and reappointment of the Affiliated Professionals of ZSFG through the Dermatology Clinical Service is in accordance with ZSFG Bylaws, Rules and Regulations as well as these Clinical Service Rules and Regulations.

D. STAFF CATEGORIES

The Dermatology Clinical Service staff fall into the same staff categories which are described in the ZSFG Bylaws, Rules and Regulations as well as these Clinical Service Rules and Regulations.

III. DELINEATION OF PRIVILEGES

A. DEVELOPMENT OF PRIVILEGE CRITERIA

Dermatology Clinical Service privileges are developed in accordance with ZSFG Medical Staff Bylaws, Rules and Regulations as well as these Clinical Service Rules and Regulations.

Minimum Formal Training: Successful completion of an approved four-year [one (1) transitional year PGY-1 year, and three (3) years in dermatology] residency program in Dermatology

Certification: Board Certification (and recertification when required)
In Dermatology from the American Board of Dermatology or is an active candidate as defined by the American Board of Dermatology.

Previous Experience: Demonstration that the applicant has provided care to at least twenty-five (25) patients as an attending physician (or senior resident) during the past 12 months.

Core Privileges: The ability to work up, consult and provide nonsurgical therapy to patients with illnesses and injuries of the integumentary system, including performance of the following procedures: skin biopsy, simple excision, and repair.

Surgical special privileges which require separate threshold criteria include nail surgery, scalp surgery, laser surgery, filler therapy and sclerotherapy. (Note: the following procedures are not being performed at ZSFG in Dermatology: Mohs Surgery, and Liposuction).

B. ANNUAL REVIEW OF CLINICAL SERVICE PRIVILEGE REQUEST FORM

The Dermatology Clinical Service Privilege Request Form shall be reviewed annually.

C. CLINICAL PRIVILEGES

Dermatology Clinical Service privileges shall be authorized in accordance with the ZSFG Medical Staff Bylaws, and the Rules and Regulations. All requests for clinical privileges will be evaluated and approved by the Chief of Dermatology Clinical Service. (Appendix A).

D. TEMPORARY PRIVILEGES

Temporary Privileges shall be authorized in accordance with the ZSFG Medical Staff Bylaws, Rules and Regulations.

IV. PROCTORING AND MONITORING

A. MONITORING (PROCTORING) REQUIREMENTS

Monitoring (proctoring) requirements for the Dermatology Clinical Service shall be the Responsibility of the Chief of the Service. Proctoring is performed by the full-time

Attendings at ZSFG. Performance by the attendings is regularly discussed at the Dermatology Staff meetings. If deemed necessary, charts from the clinic are reviewed to determine adequate performance.

B. ADDITIONAL PRIVILEGES

Requests for additional privileges for the Dermatology Clinical Service shall be in accordance with ZSFG Bylaws, Rules and Regulations as well as these Clinical Service Rules and Regulations.

C. REMOVAL OF PRIVILEGES

Requests for removal of privileges for the Dermatology Clinical Service shall be in accordance with ZSFG Bylaws, and the Rules and Regulations.

V. EDUCATION

All Dermatology Clinical Service attendings must complete a minimum of 50 hours Category I CME every two years. Dermatology members are encouraged to attend CME offering at UCSF.

VI. DERMATOLOGY CLINICAL SERVICE HOUSESTAFF TRAINING PROGRAM AND SUPERVISION

Housestaff evaluations are performed at six-month intervals by the full-time Attendings at ZSFG. Any substandard performances are brought before the Dermatology

"Residential Education Committee" and the appropriate action decided by this committee. The Residential Education Committee includes ~~two attendings~~one attending from ZSFG ~~–~~(the ~~Director of the Residency Program and the Department Chair.~~Division Chief). (See Dermatology Housestaff Manual – Appendix B). ~~(Refer to CHN Website, House Staff Competenies link.)~~

VII. DERMATOLOGY CLINICAL SERVICE CONSULTATION CRITERIA

Consultations in Dermatology are made by e-Referral in Epic. E-Referrals must have an attached photo unless an exception is granted by the dermatology team. Images and consultations are reviewed by the dermatology residents, supervised by an attending, at least once per week. The dermatology team will decide whether a dermatology clinic appointment is necessary, or whether a trial of virtual co-management with the referring provider is appropriate. If urgent consultation is required, the referring provider may contact the clinic, the dermatology resident, or the Service Chief or Assistant by phone or pager to make such arrangements.

Inpatient consultations are all arranged by phone or page contact. Inpatient consultations are seen within 24 hours. In some instances, due to the public health emergency, it may be appropriate for inpatient consults to be managed virtually. We will provide in-person consultation whenever possible.

All consultations, both inpatient and outpatient, are staffed by an attending dermatologist. All consultations, inpatient, outpatient, and virtual, are documented in Epic.

VIII. DISCIPLINARY ACTION

The Zuckerberg San Francisco General Hospital Medical Staff Bylaws, and the Rules and

Regulations will govern all disciplinary action involving members of the ZSFG Dermatology Clinical Service.

IX. PERFORMANCE IMPROVEMENT AND PATIENT SAFETY

To define the ZSFG Dermatology Clinical Service method of monitoring and evaluating patient care is carried out through the implementation of the following Performance Improvement and Patient Safety Plan.

The important aspects of care of the Dermatology Clinical Services have been identified below and these important aspects are monitored continuously. The monitoring data are compared to pre-established thresholds for evaluation to determine the quality and appropriateness of care and identify opportunities to improve patient care.

The following Performance Improvement and Patient Safety issues are discussed during the Dermatology Clinical Services department's monthly meeting, which is attended by all full-time faculty members.

1. Mortality report
2. Complications
3. Review of ongoing monitors
4. Report on indicator evaluation studies conducted by the QM program staff
5. General discussion of new or old issues pertaining to quality of care

A. CLINICAL INDICATORS

1. ~~Definitive~~Timely treatment of biopsy-proven ~~skin cancer~~melanoma - outcome indicator
2. Teledermatology- ~~e-consults scheduled, scheduled appointments attended, and~~ virtual co-management- process indicator
3. ~~Laboratory evaluation, vaccination and follow-up of~~Access to written educational materials for patients ~~on specific drug therapy – process~~with LEP– equity indicator
4. ~~Outpatient follow-up appointment attendance following inpatient consultation~~ High-quality biopsy site photographs to prevent wrong-site surgery- process indicator

B. THRESHOLDS

~~1. Melanoma definitive treatment: 100% within 12-16 weeks~~
1. Treatment of melanoma 100%
2. Teledermatology ~~60%~~ virtual co-management 60%
~~3. TB monitoring and vaccination and of patients on TNFi therapy:~~
   ~~Pneumococcal vaccination 91%~~
   ~~TB monitoring 76%~~
~~4. Outpatient appointments scheduled after inpatient consultation:~~
   ~~93%~~

	~~Outpatient appointments attended after inpatient consultation~~	~~77%~~
3.	Access to written educational materials	25%
4.	High-quality biopsy site photographs	90%

C. DATA COLLECTION

1. A department member appointed by the Chief of Dermatology will review the pathology book and note all biopsies positive for ~~skin cancer~~melanoma. The biopsy log records, departmental shadow charts, and the actual practitioners who performed the biopsy will be used to determine which patients have not received definitive treatment of skin cancers within 12-16 weeks. All such patients will be contacted by phone or notified by certified letter. A critical alert indicator will be placed in the Lifetime Clinic Record for individuals for whom there is no forwarding address or contact number.

2. The Performance Improvement and Patient Safety program director and dermatology faculty and staff, using medical records will collect and organize data as directed by the Department's representative to the PIPS committee.

D. EVALUATE CARE

Data will be monitored by the Department's PIPS representative and the entire Dermatology Clinical Service department at regular meetings, compared with predetermined objective measurable indicators and thresholds for evaluation.

E. TAKE ACTION TO SOLVE PROBLEMS

When problems are identified by the ~~Chairman~~Chair of the Dermatology Clinical Services and/or PIPS representative, the department will meet to correct or improve the situation. Actions to be taken will be communicated to all physicians at this meeting and in Performance Improvement and Patient Safety Committee minutes.

F. ASSESSMENT OF ACTION & DOCUMENTATION OF IMPROVEMENT

After allowing enough time to occur, a follow-up assessment is conducted as part of ongoing monitoring of indicators. If further action is required, it will be made until situation has met pre-established criteria. If the thresholds are met, further follow-up studies are performed to document sustained improvement. Threshold will also be altered as appropriate to reflect expected improvement over prior thresholds.

G. COMMUNICATE RELEVANT INFORMATION TO THE PERFORMANCE IMPROVEMENT AND PATIENT SAFETY DEPARTMENT

The Performance Improvement and Patient Safety Plan, and monthly minutes are reviewed by the Performance Improvement and Patient Safety Program staff.

H. DERMATOLOGY CLINICAL SERVICE PRACTITIONERS PERFORMANCE PROFILES

Monitoring requirements for the Dermatology Clinical Service shall be the responsibility of the Chief of the Service. Proctoring is performed by the full-time Attendings at ZSFG. Performance by the attendings is regularly discussed at the Dermatology Staff meetings. If deemed necessary, charts from the clinic are reviewed to determine adequate performance.

Housestaff evaluations are performed at six-month intervals by the full- time Attendings at ZSFG. Any substandard performances are brought before the Dermatology "Residential Education Committee" and the appropriate action decided by this committee. The Residential Education Committee includes two attendings from ZSFG - the Director of the Residency Program and the Department Chair.

The Dermatology Clinical Service has no Affiliated Professionals or ZSFG employees whom Dermatology is responsible to evaluate.

X. MEETING REQUIREMENTS

In accordance with ZSFG Medical Staff Bylaws, All Active Members are expected to show good faith participation in the governance and quality evaluation process of the Medical Staff by attending a minimum of 50% of all committee meetings assigned, clinical service meetings and the annual Medical Staff Meeting.

Dermatology Clinical Services shall meet as frequently as necessary, but at least quarterly to consider findings from ongoing monitoring and evaluation of the quality and appropriateness of the care and treatment provided to patients.

As defined in the ZSFG Medical Staff Bylaws, a quorum is constituted by at least three (3) voting members of the Active Staff for the purpose of conducting business.

XI. ADOPTION AND ADMENDMENT

The Dermatology Clinical Service Rules and Regulations will be adopted and revised by a majority vote of all Active members of the Dermatology Service annually at a quarterly Dermatology Clinical Service meeting.

APPENDIX A

DERMATOLOGY CLINICAL SERVICE PRIVILEGE REQUEST FORM

Privileges for Zuckerberg San Francisco General Hospital

Zuckerberg San Francisco General Hospital & Trauma Center
1001 Potrero Ave
San Francisco, CA 94110

Clinical Privileges

Provider:
Approved: -

Privilege	Status	Approved

Derm DERMATOLOGY 2017
(05/09 MEC)

FOR ALL PRIVILEGES
All complication rates, including problem transfusions, deaths, unusual occurrence sreports, patient complaints, and sentinel events, as well as Department quality indicators, will be monitored semiannually.

10.10 CORE PRIVILEGES: GENERAL DERMATOLOGY ___ ___
Patient management, including diagnostic and therapeutic treatments, procedures and interventions, requiring a structure and function of the skin and related systems diagnosis, medical therapy and surgical management (including administration of topical and local anesthesia) of abnormalities affecting the skin and related systems (specific examples: biopsy, excision benign lesion, cyst, lipoma, etc.; excision malignant lesions; incision & drainage abscess) in adults and children.

PREREQUISITES: Currently Board Admissible, Board Certified, or Re-Certified by the American Board of Dermatology.

PROCTORING: 5 reviewed cases

REAPPOINTMENT: 25 cases.

10.20 SPECIAL PRIVILEGES ___

10.21 DERMATOPATHOLOGY ___ ___
Diagnosis of skin conditions based on interpretation/reading of skin biopsy specimens.

PREREQUISITES: Currently Board Admissible, Board Certified, or Re-Certified by the American Board of Dermatology and additional certification in Dermatopathology Specialty Boards.

PROCTORING: 5 reviewed cancer cases

REAPPOINTMENT: 25 cases

10.22 DERMATOSURGERY ___ ___
To include dermabrasion and chemical peel, sclerotherapy of superficial veins, liposuction with local anesthesia and repair of cutaneous defects to include skin grafts and local flaps.

PREREQUISITES: Currently Board Admissible, Board Certified or Re-Certified by the American Board of Dermatology and additional certification in dermatologic surgery or micrographic surgery.

PROCTORING: 5 observed operative procedures and 15 retrospective reviews of operative procedures.

REAPPOINTMENT: 25 operative procedures.

10.23 MICROGRAPHIC SURGERY ___ ___
Surgical procedure that maps the skin in such a way that the sectioning can be performed allowing for complete examination of surgical margins.

PREREQUISITES: Currently Board Admissible, Board Certified or Re-Certified by the American Board of Dermatology and additional certification in dermatologic surgery or micrographic surgery.

PROCTORING: 5 observed operative procedures and 15 retrospective reviews of operative procedures

REAPPOINTMENT: 25 operative procedures.

10.24 PROCEDURAL SEDATION ___ ___
PREREQUISITES: The physician must possess the appropriate residency or clinical experience (read Hospital Policy 19.8 SEDATION) and have completed the procedural sedation test as evidenced by a satisfactory score on the examination. Currently Board Admissible, Board Certified, or Re-Certified by the American Board of Dermatology and has completed at least one of the following:
- Currently Board Admissible, Board Certified, or Re-Certified by the American Board of Emergency Medicine or Anesthesia or,
- Management of 10 airways via BVM or ETT per year in the preceding 2 years or,
- Current Basic Life Support (BLS) certification (age appropriate) by the American Heart Association.

PROCTORING: Review of 5 cases

REAPPOINTMENT: Completion of the procedural sedation test as evidenced by a satisfactory score on the examination, and has completed at least one of the following:
- Currently Board Admissible, Board Certified, or Re-Certified by the American Board of Emergency Medicine or Anesthesia or,
- Management of 10 airways via BVM or ETT per year for the preceding 2 years or,
- Current Basic Life Support (BLS) certification (age appropriate) by the American Heart Association.

10.25 LASER SURGERY ___ ___
Removal of congenital and acquired lesions (tattoos, hemangiomas, pigmented lesions) using Carbon Dioxide Laser, Argon Laser, Dye Laser, Copper Vapor Laser, and Solid-Crystal Lasers.

PREREQUISITES: Currently Board Admissible, Board Certified, or Re-Certified by the American Board of Dermatology. Appropriate training, complete the laser safety module prepared by the SFGH Laser Safety Committee and baseline eye examination within the previous 1 year.

PROCTORING: 2 observed procedures

REAPPOINTMENT: 2 cases in the previous two years

10.26 PUNCH BIOPSY NORMAL SKIN ___ ___

PREREQUISITES: Currently board admissible, certified, or re-certified by the American Board of Internal Medicine or an internal medicine subspecialty and completed punch biopsy training of normal skin under the chief of dermatology or a designated dermatology attending at SFGH with the approval of the chief of dermatology.

PROCTORING: Direct observation of 2 successful skin punch biopsies in 2 years by an SFGH dermatology faculty member.

REAPPOINTMENT: Direct observation of 2 successful skin punch biopsies in 2 years by an SFGH dermatology faculty member.

10.27 CTSI (CLINICAL AND TRANSLATIONAL SCIENCE INSTITUTE) - CLINICAL RESEARCH ___

Admit and follow adult patients for the purposes of clinical investigation in the inpatient and ambulatory CTSI Clinical Research Center settings.

PREREQUISITES: Currently Board Admissible, Certified, or Re-Certified by one of the boards of the American Board of Medical Specialties. Approval of the Director of the CTSI (below) is required for all applicants.

PROCTORING: All OPPE metrics acceptable

REAPPOINTMENT: All OPPE metrics acceptable

_____ _____
CTSI Medical Director Date

I hereby request clinical privileges as indicated above.

_____ _____
Applicant Date

Zuckerberg San Francisco General Hospital & Trauma Center
1001 Potrero Ave
San Francisco, CA 94110

APPROVED BY

_____ _____
Division Chief Date

_____ _____
Service Chief Date

APPENDIX B – DERMATOLOGY CLINICAL HOUSESTAFF MANUAL

~~***CURRENTLY HELD AT DERMATOLOGY SERVICES***~~

Current version of the housestaff manual may be found on the UCSF Dermatology Department Collaborative Learning Environment link at: https://courses.ucsf.edu/course/view.php?id=3708 under Residency Handbook →ZSFG Guidelines and Clinical Conference Schedule.

APPENDIX C - Dermatology Chief of Clinical Service Job Description

Chief of Dermatology Clinical Service

Position Summary:

The Chief of Dermatology Clinical Service directs and coordinates the Service's clinical, educational, and research functions in keeping with the values, mission, and strategic plan of Zuckerberg San Francisco General Hospital (ZSFG) and the Department of Public Health (DPH). The Chief also insures that the Service's functions are integrated with those of other clinical departments and with the Hospital as a whole.

Reporting Relationships:

The Chief of Dermatology Clinical Service reports directly to the Associate Dean and the University of California, San Francisco (UCSF) Department Chair. The Chief is reviewed not less than every ~~four~~five years by a committee appointed by the Chief of Staff. Reappointment of the Chief occurs upon recommendation by the Chief of Staff, in consultation with the Associate Dean, the UCSF Department Chair, and the ZSFG Executive Administrator, upon approval of the Medical Executive Committee and the Governing Body. The Chief maintains working relationships with these persons and groups and with other clinical departments.

Position Qualifications:

The Chief of Dermatology Clinical Service is board certified, has a University faculty appointment, and is a member of the Active Medical Staff at ZSFG.

Major Responsibilities:

The major responsibilities of the Chief of Dermatology Clinical Service include the following:

Providing the necessary vision and leadership to effectively motivate and direct the Service in developing and achieving goals and objectives that are congruous with the values, mission, and strategic plan of ZSFG and the DPH;

In collaboration with the Executive Administrator and other ZSFG leaders, developing and implementing policies and procedures that support the provision of services by reviewing and approving the Service's scope of service statement, reviewing and approving Service policies and procedures, identifying new clinical services that need to be implemented, and supporting clinical services provided by the Department;

In collaboration with the Executive Administrator and other ZSFG leaders, participating in the operational processes that affect the Service by participating in the budgeting process, recommending the number of qualified and competent staff to provide care, evaluating space and equipment needs, selecting outside sources for needed services, and supervising the selection, orientation, in-service education, and continuing education of all Service staff;

Serving as a leader for the Service's performance improvement and patient safety programs by setting performance improvement priorities, determining the qualifications and competencies of Service personnel who are or are not licensed independent practitioners, and maintaining appropriate quality control programs; and performing all other duties and functions spelled out in the ZSFG Medical Staff Bylaws.

Summary of Changes

Medicine SP

For Jan BMEC Meeting

Credentialing for Omaya Reservoir Use - Currently, proctoring for Intraventicle Chemotherapy Administration via Ommaya Reservoir SP is as follows: Performance of 3 procedures for a new provider and 2 procedures for an experienced provider. We would like to request that we decrease 3 procedures to 2 procedures for a new provider. (Requested by Terry Friedlander, M.D. Hematology/Oncology) – (Attached # 7)

Zuckerberg San Francisco General Hospital

Delineation Of Privileges

AFF Medicine 202~~2~~3

Provider Name:

Privilege	Status	Approved
AFF ~~2012~~ Medicine 202~~2~~3		
Major Sites: _____		___
Adult General Medical Clinic		___
HIV/ID & Global Medicine		___
Gastroenterology Clinic		___
Hematology/Oncology Clinic		___
Acute Medicine/Division Of Hospital Medicine		___
Cardiology Clinic		___
Renal Clinic		___
Occupational Clinic		___
CTSI - Clinical Research (CCRC)		___
CORE STANDARDIZED PROCEDURES		___
PREREQUISITES: Active California license, Board certification,(staff hired prior to Board requirement will be "grandfathered " in at reappointment), Basic Life Support (BLS) from an approved provider, Advanced Cardiac Life Support (ACLS) for noted procedures, possession of a Medicare/Medical Billable Provider identifier or have submitted an application, Furnishing Number and DEA number if applicable. Must be an ANP, FNP, PNP or PA. PROCTORING: Three months in length or time needed to review of 10 cases and 5 medical record reviews. The reviewer will be the Medical Director or a physician designee. REAPPOINTMENT: Chart reviews as noted in each protocol every 2 years.		
HEALTH CARE MANAGEMENT, PRIMARY CARE		___
HEALTH CARE MANAGEMENT, ACUTE AND URGENT CARE		___
FURNISHING MEDICATIONS AND DRUG ORDERS		___
DISCHARGE OF INPATIENT		___
OCCUPATIONAL HEALTH SCREENING (OCCUPATIONAL HEALTH SERVICES ONLY)		___
MANAGEMENT OF BENIGN AND MALIGNANT BREAST CONDITIONS (RESTRICTED TO BREAST CLINIC)		___
PROCTORING: Direct observation of 3 cases and 5 chart reviews. REAPPOINTMENT: Performance of 5 chart reviews every 2 years.		
SPECIAL STANDARDIZED PROCEDURES		___
EVALUATION AND TREATMENT OF OCCUPATIONAL ILLNESS/INJURY (OCCUPATIONAL HEALTH SERVICES ONLY) PREREQUISITE: On site training by OHS physician in California and CCSF Worker's Compensation procedures and management of body fluid exposure. PROCTORING: Direct observation of 3 evaluations and treatments. REAPPOINTMENT: Review of 4 chart reviews every 2 years.		___

Delineation Of Privileges

AFF Medicine 202~~2~~3

Provider Name:

Privilege	Status	Approved
eREFERRAL		___
PREREQUISITES: 6 months experience in the specific specialty area, are providing care to patients in the area they are reviewing, understanding of algorithms or referral guidelines used for screening, triaging and prioritizing of patients.		
PROCTORING: Concurrent review of the first 20 eReferral consultations.		
REAPPOINTMENT: Review of 1 eReferral every two years		
ABDOMINAL PARACENTESIS		___
PREREQUISITE: On site training by a privileged provider or documentation of previous training.		
PROCTORING: Direct observation of 4 procedures for a new provider and 2 procedures for an experienced provider. Chart review of all observed cases.		
REAPPOINTMENT: Perform 4 procedures and 2 chart reviews every 2 years.		
ARTHROCENTESIS AND INTRAARTICULAR INJECTION		___
PREREQUISITE: On site training by a privileged provider or documentation of previous training.		
PROCTORING: Direct observation of 3 procedures for a new provider and 2 direct observations for an experienced provider. Chart review for all observed procedures.		
REAPPOINTMENT: Performance of 4 procedures and 2 chart reviews every 2 years		
BONE MARROW ASPIRATION AND BIOPSY		___
PREREQUISITE: On site training by a privileged provider or documentation of previous training.		
PROCTORING: Direct observation of 3 procedures for a new provider and 2 procedures for an experienced provider. Chart review of all observed cases.		
REAPPOINTMENT: Performance of 2 procedures and 2 chart reviews every 2 years.		
BUPRENORPHINE INDUCTION AND MAINTENANCE		___
PREREQUISITE: Auditing of a training program in the use of buprenorphine.		
PROCTORING: Buprenorphine Credentialed provider will review 5 charts.		
REAPPOINTMENT: Review of 2 charts by a credentialed provider every 2 years.		
COLONOSCOPY (ACLS REQUIRED) (GI SERVICE ONLY)		___
PREREQUISITE: View videotapes from ASGE video library. Demonstrate proper set up of equipment.		
PROCTORING: Direct observation of 140 procedures, including 10 routine colonoscopy mucosal biopsies and 40 colonoscopy polypectomies for a new provider. An experienced provider must complete 6 demonstrations with 3 mucosal biopsies and 3 poylpectomies. Review of 50 procedure notes by trained provider.		
REAPPOINTMENT: Performance of 3 colonoscopies with mucosal biopsy and 3 polypectomies. Observation of 1 patient encounter and 3 chart reviews		
EGD (ACLS REQUIRED) (GI SERVICE ONLY)		___

Delineation Of Privileges

AFF Medicine 202~~2~~3

Provider Name:

Privilege	Status	Approved
PREREQUISITES: View video tapes from the ASGE video library. Observation of procedure equipment setup. PROCTORING: Direct observation of 130 diagnostic EGD with administration of moderate sedation for a new provider. 5 direct observations for an experienced provider. Review of 50 procedure notes. REAPPOINTMENT: Completion of 3 procedures and observation of 3 patient encounters every 2 years.		
ESOPHAGEAL MANOMETRY AND pH MONITORING (ACLS REQUIRED) (GI SERVICE ONLY) PREREQUISITES: Review of departmental policies and procedures. Demonstrate ability to set up procedure equipment. Observe 5 procedures by a qualified provider. PROCTORING: Perform a minimum of 3 procedures. Review of 20 procedure notes by a qualified provider. REAPPOINTMENT: Perform 2 procedures every 2 years. Direct observation of 2 patient encounters every 2 years.		___
EXERCISE TREADMILL TEST (ACLS REQUIRED) PREREQUISITE: Completion of a 12 lead EKG course or onsite training. PROCTORING: Performance of 3 procedures for a new provider and 2 procedures for an experienced provider. Chart review of all observed cases. REAPPOINTMENT: Perform 2 procedures and 2 chart reviews every 2 years.		___
HIGH RESOLUTION ANOSCOPY PREREQUISITE: Completion of a one week course in theory and practice of anal colposcopy at UCSF or other recognized university. PROCTORING: Direct observation o 50 procedures and 3 chart reviews by a credentialed colposcopist. REAPPOINTMENT: Perform 20 procedures and 3 chart reviews.		___
INCISION AND DRAINAGE OF ABSCESSES PREREQUISITES: Training by a privileged provider or documentation of previous training. PROCTORING: 2 successful observed procedures by a new provider and 1 successful observation by an experienced provider. REAPPOINTMENT: Completion of 1 procedure and 1 chart review every 2 years.		___
INTRAPERITONEAL CHEMOTHERAPY PREREQUISITES: On site training by a privileged provider or documentation of previous training. PROCTORING: Performance of 3 procedures for a new provider and 2 procedures for an experienced provider. Chart review of all observed cases. REAPPOINTMENT: 2 procedures and 2 chart reviews every 2 years		___

Delineation Of Privileges

AFF Medicine 202~~2~~3

Provider Name:

Privilege	Status	Approved

___

INTRAVENTICULAR CHEMOTHERAPY ADMINISTRATION VIA OMAYA RESERVOIR

PREREQUISITES: Training will consist of instruction by clinical directors or physician/NP designee.

PROCTORING: Proctoring period for practitioners will be a minimum of ~~3~~ 2 successful observed demonstrations within the proctoring period, if there are insufficient opportunities within the proctoring period, and then procedure will be supervised until the minimum requirement is met.

REAPPOINTMENT:
A. A minimum of 2 procedures within a 2 year period. If no opportunities occur within a 2 year period, provider will be supervised for 1 additional procedure when the opportunity occurs.
B. 2 chart reviews every 2 years.

VENTRICULAR CHEMOTHERAPY ___

PREREQUISITE: On site training by a privileged provider or documentation of previous training.

PROCTORING: Performance of 3 procedures for a new provider and 2 procedures for an experienced provider. Chart review of all observed cases.

REAPPOINTMENT: 2 procedures and 2 chart reviews every 2 years.

LUMBAR PUNCTURE ___

PREREQUISITES: On site training by a privileged provider or documentation of previous training.

PROCTORING: Perform 3 procedures for a new provider and 2 procedures for an experienced provider.

REAPPOINTMENT: 3 procedures and 1 chart review every 2 years.

LUMBAR PUNCTURE WITH ADMINISTRATION OF INTRATHECAL CHEMOTHERAPY ___

PREREQUISITE: On site training by a privileged provider or documentation of previous training.

PROCTORING: Perform 3 procedures for a new provider and 2 procedures for an experienced provider. Minimum of 2 chart reviews.

REAPPOINTMENT: 2 procedures and 1 chart review every 2 years.

PROCEDURAL SEDATION (GI SERVICES ONLY) ___

PREREQUISITE: Read Hospital Policy 19.8 Procedural Sedation: Moderate and Deep" and completion of the procedural sedation test. Completion of the SFGH Moderate Sedation educational module for Nursing Staff.

PROCTORING: Direct observation by a qualified provider of 50 procedures with moderate sedation for a new provider and 10 observations for an experienced provider. Review of 50 procedure notes.

REAPPOINTMENT: Completion of 3 procedures and 1 direct observation of a patient encounter. Maintain ACLS certification.

Delineation Of Privileges

AFF Medicine 202~~2~~3

Provider Name:

Privilege	Status	Approved
ORDERING BLOOD TRANSFUSIONS PREREQUISITES: Completion of SFGH Transfusion Training Course. Completion of Training Course on Informed Consent. Requires a passing score of 80%. PROCTORING: Read and Sign of SFGH Policy and Procedure 2.3. Read Blood Transfusion section of the Laboratory Manual. Review of 1 transfusion order. REAPPOINTMENT: Completion of 2 education modules with a passing sore of 80%. Order 2 transfusions every 2 years. Review any reports from the hospital Transfusion Committee.		___
ORDERING CHEMOTHERAPY PREREQUISITE: On site training by a privileged provider or documentation of previous training. PROCTORING: All new providers will have all chemotherapy orders cosigned for 3 months. Experienced providers will have 2 orders reviewed by the Clinical Director. REAPPOINTMENT: 3 orders and 2 chart reviews reviewed every 2 years.		___
SKIN BIOPSIES (SHAVE, PUNCH, EXCISION) PREREQUISITE: On site training by a privileged provider or documentation of previous training. Direct observation of aseptic technique. PROCTORING: Performance of 3 of each type of biopsy for a new provider and 2 of each type of biopsy for an experienced provider. REAPPOINTMENT: Perform 1 of each type of biopsy and 1 chart review every 2 years		___
SURFACE TRAUMA AND WOUND CARE PREREQUISITES: Completion of a wound care course either from outside or at SFGH. PROCTORING: Direct observation of 3 procedures for an experienced provider. and 1 direct observation for an experienced provider. 1 procedure should include suturing. Chart review of all observed procedures. REAPPOINTMENT: Performance of 4 procedures every 2 years.		___
THORACENTESIS PREREQUISITES: On site training by a privileged provider or documentation of previous training. PROCTORING: Direct observation of 3 procedures for a new provider and direct observation of 2 procedures for an experienced provider. REAPPOINTMENT: Perform 2 procedures and 2 chart reviews every 2 years.		___
WAIVED TESTING PREREQUISITE: Clinical assignment within the Department of Medicine. PROCTORING: Completion of Health stream quizzes for each test with a passing score of 80%. REAPPOINTMENT: Completion of Health stream quizzes for each test with passing score of 80%.		___
Fecal Occult Blood		___

Delineation Of Privileges

AFF Medicine 202~~2~~3

Provider Name:

Privilege	Status	Approved
Vaginal Ph Testing		___
Urine Pregnancy		___
Urine Dipstick		___
CONTRACEPTIVE IMPLANT INSERTION		___
REQUIREMENTS TO BE COMPLETED PRIOR TO INITIATION OF PROCTORING AND PROVISION OF CARE: A. Completion of a company sponsored training program PROCTORING: Direct observation of 2 insertions by a qualified provider for providers new to this procedure. Direct observation by a qualified provider of 1 insertion for an experienced provider (as defined by proctoring at another institution with ongoing performance assessment documented within the past 2 years). Chart review of all observed cases. REAPPOINTMENT: A minimum of 6 insertions every 2 years. One chart review needed every 2 years.		
CONTRACEPTIVE IMPLANT REMOVAL		___
REQUIREMENTS TO BE COMPLETED PRIOR TO INITIATION OF PROCTORING AND PROVISION OF CARE: A. Completion of a company sponsored training class PROCTORING: Performance of a minimum of 6 removals for a new provider and 2 removals for a provider who has prior experience with independent removal. Proctor must be a qualified provider. Chart review of all observed cases. REAPPOINTMENT: Performance of 8 removals every 2 years. Two chart review needed every 2 years.		

I hereby request clinical privileges as indicated above.

_____ _____
Applicant Date

APPROVED BY

_____ _____
Division Chief Date

_____ _____
Service Chief Date