

January 22 - 24, 2020  
Santa Clara, CA.

# UCSF

# Precision Medicine

# PMWC 2020



University of California  
San Francisco

A photograph of a busy operating room. Several medical professionals in blue scrubs and surgical masks are working around a patient on a table. Large overhead surgical lights are visible, along with various medical equipment and monitors. The room is brightly lit with overhead fluorescent lights.

UCSF

From Fundamental Discovery  
to Health Care Delivery:  
Advancing Precision Medicine for Public Benefit

A close-up photograph showing a person's foot in a blue sneaker with orange accents, standing on a green and white tiled floor. To the left, there is a piece of medical equipment with a black cable plugged into it.

On behalf of UC San Francisco, co-sponsor of the conference, I welcome you to PMWC 2020!

Precision medicine is a central element of UCSF's vision. We are inspired by the progress made in recent years, within our institution and in collaboration with colleagues at other academic centers, in industry, in government, and in patient advocacy organizations. With support and partnerships from federal, state and private sources, we have created and progressively expanded a multi-component precision medicine program across UCSF, enabled by high-powered computational tools, that is integrating and advancing biomedical research, health, and health care.

By establishing a continuum – a multi-directional flow of information – across basic, translational/clinical and population research, we can germinate lab-testable hypotheses, discover disease mechanisms that imply new therapeutic regimens and drive drug discovery, and identify social determinants of health to promote disease prevention and wellness.

A common misconception is that precision medicine is synonymous with, and limited to, cancer genomics. The remarkably broad scope of PMWC 2020 demonstrates the true breadth and depth of precision medicine, spanning the spectrum from fundamental discovery to health care delivery and economics. The UCSF speakers featured in these pages are just examples of this diversity of approaches, projects, partnerships, and their impact.

Importantly, as a public university, UCSF is committed to equity and health justice. Our deep conviction is that precision medicine can and must benefit everyone. As we advance technologies and innovations, our patients and community remain at the core of our mission.

I wish you a very productive meeting and look forward to connecting with many of you personally.

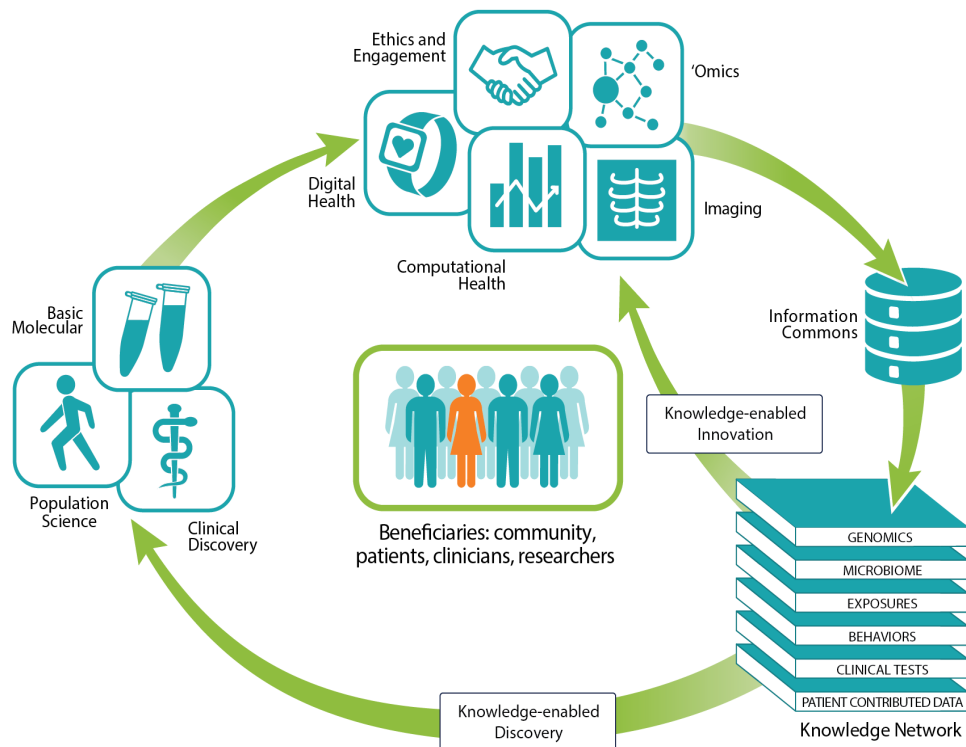


**Keith R. Yamamoto, PhD**  
**Director, UCSF Precision Medicine**  
**Vice Chancellor for Science Policy**  
**and Strategy**

# Precision Medicine at UCSF

Precision Medicine collects, connects and applies vast amounts of data about our health – from the basic molecular understanding of disease to clinical, environmental, psychosocial and mobile lifestyle data – to understand why individuals respond differently to treatments and to guide more precise and predictive medicine at the individual patient level. Universities associated with major medical centers, with their access to large amounts of patient data, a broad array of analytical and digital technologies and world-class faculty driving the innovation, are particularly well positioned to successfully carry out precision medicine approaches and UCSF has been at the forefront in advancing this field. Our investigators played key roles in establishing the full spectrum of precision medicine approaches, include helping to lead the 2011 National Academy of Sciences committee that envisioned and named precision medicine, and to develop President Obama's Precision Medicine Initiative, announced at the 2015 State of the Union address.

UCSF is committed to taking advantage of precision medicine approaches in advancing patient care worldwide and to that end has built out capabilities across multiple disciplines, such as advanced imaging, 'omics capabilities and computational capabilities along with robust and extensive Knowledge Networks (see figure). These resources are available to our faculty across the full range of indications and are being utilized in projects across our campuses. This brochure showcases three of the key precision medicine institutes and seventeen of the precision medicine projects our faculty are advancing.



If you would like to learn more, please visit us at: <https://precisionmedicine.ucsf.edu>  
For specific questions contact: [precisionmedicine@ucsf.edu](mailto:precisionmedicine@ucsf.edu)  
Join the conversation @UCSFPrecision

# UCSF in the News

February 15, 2019

## **Initiative Will Bring Together Engineers at UCSF to Tackle Challenges in Health.**

Tejal Desai Named Director of UCSF Health Innovation Via Engineering Program



June 20, 2019

## **UCSF Unveils Cancer Building Devoted to Precision Medicine**

New Care for Adult Patients Centers on Tailoring Treatments to Individual Biology



September 11, 2019

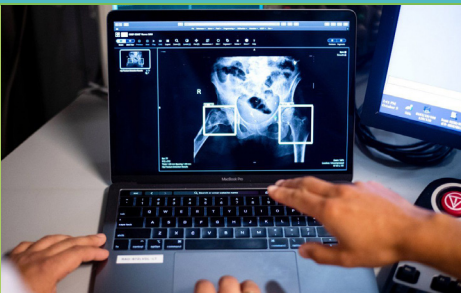
## **How a Powerful Genetic Test Found a Life-Saving Therapy for an Infant's Rare Cancer**



October 11, 2019

## **UCSF Launches Artificial Intelligence Center to Advance Medical Imaging**

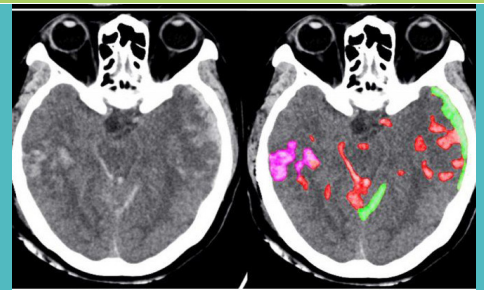
"Intelligent Imaging" Hub will Harness Computational Tools in Medical Imaging to Improve Patient Care



October 21, 2019

## **AI Rivals Expert Radiologists at Detecting Brain Hemorrhages**

Richly Annotated Training Data Vastly Improves Deep Learning Algorithm's Accuracy



January 21, 2020

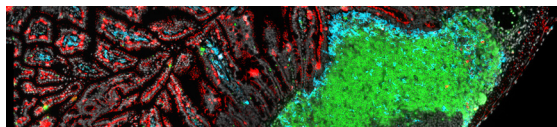
## **Laura van 't Veer recognized with Luminary Award at PMWC 2020**



# Key Centers and Institutes



[bakarinstitute.ucsf.edu](http://bakarinstitute.ucsf.edu)



[microbiome.ucsf.edu](http://microbiome.ucsf.edu)



[centerfordigitalhealthinnovation.org](http://centerfordigitalhealthinnovation.org)

## Bakar Computational Health Sciences Institute

Advancing computational health sciences in research, practice and education — in support of Precision Medicine for all

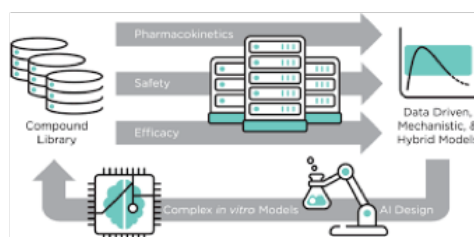
## The Benioff Center for Microbiome Research

Accelerating our understanding of how microbes promote health and prevent disease and leveraging this information to develop novel, effective treatment paradigms

## Center for Digital Health Innovation

Pairing UCSF expertise with healthcare and technology leaders to deliver on the promise of digital health technologies

# Examples of Driving Projects



[atomscience.org](http://atomscience.org)

## Accelerating Therapeutics for Opportunities in Medicine (ATOM)

Public-private partnership between GSK, LLNL, FNLCR and UCSF combining high performance computing, diverse biological data, and emerging biotechnologies to create a new pre-competitive platform for drug discovery



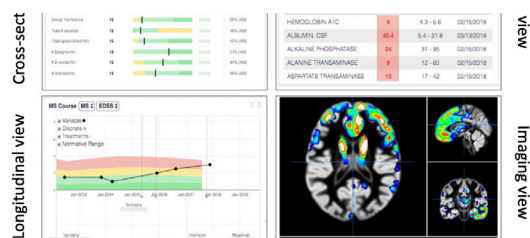
[immunox.ucsf.edu](http://immunox.ucsf.edu)

## The Bakar ImmunoX Initiative

Integrating space, infrastructure, and technology through CoProjects for scientists to share ideas and data and advance hypotheses around research for the benefit of the broader immunology community



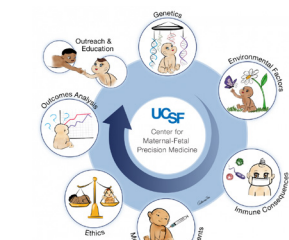
Facilitating precision medicine development by increasing the number, quality, and value of biospecimens available for research



bridge.ucsf.edu



Studying complexes of biological molecules, including particular proteins mutated in cancer



mfprecision.ucsf.edu

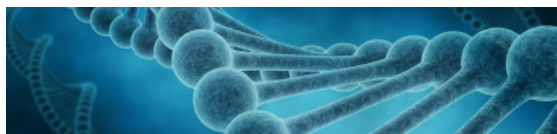
Trans-disciplinary program designed to improve our understanding and treatment of patients with congenital anomalies and pregnancy complications

[illegible]

[cancer.ucsf.edu/intranet/ccgl](http://cancer.ucsf.edu/intranet/ccgl)

UCSF500 Cancer Gene Panel to identify drivers within a patient's tumor and potential therapeutic targets

# Examples of Driving Projects



[epgpp.org](http://epgpp.org)

## Epilepsy Phenome/Genome Project

Identifying and studying the genes of epilepsy



[pretermbirth.ucsf.edu](http://pretermbirth.ucsf.edu)

## Global Preterm Birth Initiative

Working to eliminate racial disparities in preterm birth and improve health outcomes for babies born too soon

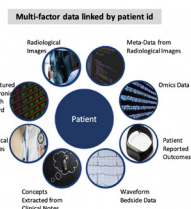


**The Health eHeart Study**  
Using big data to reduce heart disease

[health-eheartstudy.org](http://health-eheartstudy.org)

## Health eHeart

Gathering more data about heart health from more people than any research study has done before utilizing digital technologies



[informationcommons.ucsf.edu](http://informationcommons.ucsf.edu)

## Information Commons

A searchable and accessible repository of all UCSF clinical data and models, and related basic science & population data to enable new health insights to advance improved patient care



[precisionmedicine.ucsf.edu/building-knowledge-network](http://precisionmedicine.ucsf.edu/building-knowledge-network)

## KNECT

New data management and computational platform to analyze brain function in patients with neurodegenerative conditions by combining datasets gathered by researchers of different disciplines

Welcome to the  
**Open MS BioScreen**

A free tool by the University of California San Francisco MS Center  
Created to help you, your clinician, and your family keep track of your MS



[bioscreen.ucsf.edu](http://bioscreen.ucsf.edu)

## MS Bioscreen

A data infrastructure platform that gathers all relevant MS data from different sources and visually represents the disease course of an individual with MS within the context of a large cohort of patients

[nextgendiagnosics.ucsf.edu](http://nextgendiagnosics.ucsf.edu)

## Next-Generation Sequencing Diagnosis of Infectious Disease

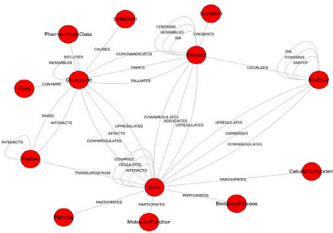
Providing the next generation of clinical testing to  
diagnose unexplained diseases



[pophealth.ucsf.edu/population-health-data-initiative](http://pophealth.ucsf.edu/population-health-data-initiative)

## Population Health Data Initiative (PHDI)

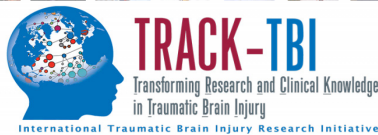
Supports efforts to provide data and other resources for  
population health, health equity, and health services re-  
search



[spoke.ucsf.edu](http://spoke.ucsf.edu)

## SPOKE Knowledge Network

Database of databases that allow researchers to explore  
the interconnected pathways of gene and cellular behavior



[tracktbi.ucsf.edu](http://tracktbi.ucsf.edu)

## Transforming Research and Clinical Knowledge in TBI (TRACK-TBI)

To better understand and treat traumatic brain injury,  
UCSF is working with public-private partners to collect  
and analyze detailed and extensive clinical data from  
multiple sites across the brain injury spectrum

# UCSF Presenters

Day One

January 22

9:45 am

“Practicing Safe, Fair and Responsible Data Analytics and Artificial Intelligence, in the Modern Patient Data Ecosystem”



**Atul Butte, MD, PhD**, is the Priscilla Chan and Mark Zuckerberg Distinguished Professor and inaugural Director of the Bakar Computational Health Sciences Institute ([bchsi.ucsf.edu](http://bchsi.ucsf.edu)) at the University of California, San Francisco (UCSF). Dr. Butte is also the Chief Data Scientist for the entire University of California Health System, with 17 health professional schools, 6 medical centers, and 10 hospitals.

@atulbutte

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10:30 am

“Unique Population Study Collaborations”

**Aleksandar Rajkovic, MD, PhD**, serves as the UCSF Chief Genomics Officer and is the Medical Director and Chief of the Center for Genetic and Genomic Medicine (CGGM) that organizes, coordinates and oversees Clinical Genetics and Genomics Services across the entire UCSF Health System. He also serves as the Director of the Genomic Medicine Initiative.



@Aleks\_Rajkovic

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3:45 pm

“How Epic Solutions Reduce Errors, Improve Patient Safety and Support Better Patient Outcomes.”



**Russ Cucina, MD, MS**, is the Vice President, Health Informatics and Chief Health Information Officer for the UCSF Health System, and Professor of Medicine in the Division of Hospital Medicine. In addition to his clinical practice, he is responsible for the clinical executive leadership of UCSF’s analytics, software, and information infrastructure to advance the missions of UCSF and its partners.

@RussCucina

# UCSF Presenters

Day One

January 22

3:45 pm

“Precision Oncology in Practice for the Earliest Stages of Cancer When it is Most Treatable”



**David M. Jablons, MD, FACS** is Professor and Chief of the Section of General Thoracic Surgery at UCSF, and Program Leader of Thoracic Oncology. Dr. Jablons is Director of the Thoracic Oncology Lab, one of the largest in the Department of Surgery, with seven principal investigators, an enviable portfolio of NIH grants, and state-of-art-equipment.

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4:30 pm

“Metagenomic Testing for Infectious Disease”

**Hannah Sample** manages the UCSF Center for Next-Gen Precision Diagnostics. The Center is a multi-disciplinary program that spans both the UCSF School of Medicine and UCSF Health, engaging both research and clinical laboratories. Beyond inflammatory diseases, Ms. Sample’s research interests include cross disciplinary collaboration, health equity, infectious disease, and global health.



# UCSF Presenters

Day Two

January 23

9:00 am

“Diagnostics in Clinical Practice”



**Aleksandar Rajkovic, MD, PhD**, serves as the UCSF Chief Genomics Officer and is the Medical Director and Chief of the Center for Genetic and Genomic Medicine (CGGM) that organizes, coordinates and oversees Clinical Genetics and Genomics Services across the entire UCSF Health System. He also serves as the Director of the Genomic Medicine Initiative.

@Aleks\_Rajkovic

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9:30 am

“Women’s Health Panel: Preterm Birth  
& The Promise of Biomarkers”

**Amy Murtha, MD**, is Professor and Chair of the UCSF Department of Obstetrics, Gynecology and Reproductive Sciences. Dr. Murtha’s research career has focused primarily on preterm delivery and specifically on preterm premature rupture of membranes (PPROM). As a clinician scientist, she has the unique perspective of understanding the clinical implications of both basic and laboratory research.



@amypmurtha

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9:45 am

“Women’s Health Panel: Preterm Birth  
& The Promise of Biomarkers”



**Laura Jelliffe-Pawlowski, PhD, MD**, is an Associate Professor of Epidemiology & Biostatistics in the UCSF School of Medicine and is the Director of Precision Health and Discovery with the UCSF California Preterm Birth Initiative. Dr. Jelliffe-Pawlowski and her team work to identify new tools, tests and technologies that can help identify pregnant women and babies at increased risk for preterm birth, complications of prematurity, and associated birth defects and developmental delays.

@Jelliffe\_Pawlow

# UCSF Presenters

Day Two

January 23

10:30 am

“Deriving Cardiovascular Clinical Insight from Remote Sensors”



**Geoff Tison, MD, MPH**, is a Cardiologist and an Assistant Professor in the Division of Cardiology at the University of California, San Francisco. He also served as the first UCSF “Digital Cardiology” fellow, where his efforts were focused on validating and improving various digital, mobile and medical-device-based technologies to achieve the greatest impact in clinical care and medical research.

@GeoffTison

10:30 am

“Fireside Chat: Microbe-specific Therapies with Reg Riley”

**Keith Yamamoto, PhD**, As UCSF’s first vice chancellor for Science Policy and Strategy, Dr. Yamamoto leads efforts to anticipate the needs of an increasingly dynamic biomedical research endeavor, and to position UCSF optimally, by influencing and shaping science policy at the state and national levels. He is an elected member of the National Academy of Sciences, the National Academy of Medicine, the American Academy of Arts and Sciences, and the American Academy of Microbiology, and a fellow of the American Association for the Advancement of Science.



@kryamamoto

10:45 am

“Deriving Cardiovascular Clinical Insight from Remote Sensors”



**Liviu Klein, MD, MS**, a cardiologist at the UCSF Heart & Vascular Center, is director of the Mechanical Circulatory Support Program for patients with advanced heart failure. He specializes in caring for patients with heart failure and arrhythmias, including care before and after surgery for those receiving heart transplants. He has expertise in cardiac resynchronization and mechanical therapies, such as ventricular assist devices for heart failure.

@LiviuKlein

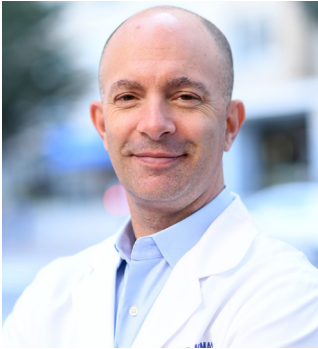
# UCSF Presenters

Day Two

January 23

10:45 am

“Deriving Cardiovascular Clinical Insight from Remote Sensors”



**Gregory Marcus, MD**, is a cardiologist and electrophysiologist who specializes in the diagnosis and treatment of arrhythmias, including cardiac mapping and catheter ablation for atrial fibrillation, supraventricular tachycardias and ventricular arrhythmias. He is also an expert in implanting pacemakers, biventricular devices and defibrillators.

@gregorymmarcus

11:15 am

“Data Science Drives Healthcare:  
A Next-Gen Research Computing Capability”

**Sharat Israni, PhD**, serves as the Executive Director of the Bakar Computational Health Sciences Institute. A long-serving Technology executive, Sharat’s teams pioneered the use of “Big Data.” He served as VP of Data at Yahoo!, and Intuit, which pioneered “Big” Data Science to re-invent their products. He led Digital Media systems for broadcast/interactive TV at Silicon Graphics; and Data teams at IBM and HP. Sharat has been PI for NSF, NIH and RCUK workshops on Data Science topics in Biomedicine.



@SharatIsrani

11:15 am

“Data Science Drives Healthcare:  
A Next-Gen Research Computing Capability”



**Sharmila Majumdar, PhD**, is a UCSF Professor and is the Vice Chair for Research and Margaret Hart Surbeck Distinguished Professor in Advanced Imaging in the Departments of Bioengineering and Therapeutic Sciences, Orthopedic Surgery at UCSF and Bioengineering at UC Berkeley. She is Director of the Musculoskeletal Research Interest Group at UCSF, an interdisciplinary group consisting of faculty, post-doctoral scholars and students. She obtained her PhD degree in Engineering and Applied Science from Yale.

@sharmilamajumda

# UCSF Presenters

Day Two

January 23

1:00 pm

“Women’s Health Panel: Oral Health and Preterm Birth”



**Michael Reddy, DMD**, an educator, clinician and researcher currently serving as dean and professor at UC San Francisco School of Dentistry. He is responsible for advancing UCSF Dentistry’s education, patient care and research missions with the fundamental goal of improving oral and craniofacial health world-wide.

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1:15 pm

“Leveraging Real World Evidence to Drive Decisions”

**Laura Van ‘T Veer, PhD**, Professor of Laboratory Medicine is the Program Leader of the UCSF Helen Diller Family Comprehensive Cancer Center Breast Oncology Program (BOP), Director of Applied Genomics with the UCSF Helen Diller Family Comprehensive Cancer Center, and UCSF-Site Principal Investigator of the Athena Breast Health Network. Dr. van ‘t Veer’s research focuses on personalized medicine, to advance patient management based on knowledge of the genetic make-up of the tumor as well as the genetic make-up of the patient.

@LVVprint



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1:45 pm

“Medical Imaging for a Precision Medicine Future”



**Rima Arnaout, MD**, is an Assistant Professor in Medicine (Cardiology) and a member of the UCSF Institute for Computational Health Sciences (ICHS). She is a physician-scientist with a background in genetics, clinical research and programming, and a practicing cardiologist board-certified in multi-modality cardiovascular imaging.

@rima\_arnaout

# UCSF Presenters

Day Two

January 23

1:45 pm

“Woman’s Health Panel:  
Ovarian Aging, Menopause and Early Predictors”



**Marcelle Cedars, MD**, a specialist in caring for patients going through in vitro fertilization and perimenopause, as well as patients with polycystic ovarian syndrome. She is director of the UCSF Center for Reproductive Health. Cedars also directs UCSF’s reproductive endocrinology division, coordinating the relationship between scientific research and personalized care for patients. In her own research, she focuses on ovarian aging and how it affects both fertility and women’s overall health.

2:15 pm

“Medical Imaging for a Precision Medicine Future”

**Michael Lesh, MD**, is a physician, scientist and entrepreneur. He earned undergraduate and graduate degrees in Computer Science and Bioengineering from the Massachusetts Institute of Technology (MIT) before entering medical school at the University of California San Francisco. He is currently Executive Director of Health Technology Innovation in the Office of the Vice Chancellor for Business Development, Innovation and Partnership at UCSF.



2:30 pm

“Implementing ML-Based Decision Support in Hospitals  
and Healthcare Systems”



**Rachael Callcut, MD**, Serves as the Director of Data Science for the UCSF Center for Digital Health and the Program Director of the UCSF SmarterHealth Artificial Intelligence Initiative. Dr. Callcut is double board certified in General Surgery and Critical Care maintaining an active clinical practice in trauma and critical care at UCSF and Zuckerberg San Francisco General Hospital. Dr. Callcut’s efforts with the Center for Digital Health Innovation focus on artificial intelligence to drive change in the delivery of health-care for both patients and providers.

@callcura

# UCSF Presenters

Day Two

January 23

3:30 pm

## “Cardiovascular Proteomics”



**Peter Ganz, MD**, is the Chief of Cardiology at the Zuckerberg San Francisco General Hospital and Maurice Eliaser Distinguished Professor at UCSF. Dr. Ganz has been a pioneer and a leader in translational and clinical cardiovascular research. His laboratory was the first to describe vascular endothelial function in the state of health and endothelial dysfunction in atherosclerosis in humans.

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3:30 pm

## “Computational Models that Expedite Clinical Diagnostics”

**Esther Yuh, MD, PhD**, Associate Professor of Radiology and Biomedical Imaging. She obtained her M.D. at Stanford University in 2002, and completed an internship in Internal Medicine at Stanford University Hospitals and Clinics in 2007, Radiology residency at UCSF in 2007, and advanced fellowship training in Neuroradiology at UCSF in 2009. Recently she was a leader of a team of UC Berkeley computer scientists and UCSF radiologists who developed a deep learning algorithm that identifies tiny abnormalities on clinical head CT scans with accuracy comparable to highly-trained physicians.



# UCSF Presenters

Day Three

January 24

9:00 am

## “Gene and Cell Editing Methods”

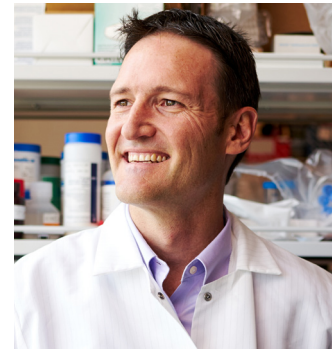


**Jennifer Puck, MD**, earned her undergraduate and medical degrees at Harvard University and Harvard Medical School, after which she completed clinical and research training in pediatrics, infectious diseases and immunology at Washington University in St. Louis, Missouri. she joined UCSF in 2006 as Professor of Pediatrics. In addition to caring for patients as an immunologist and teaching biomedical trainees, Dr. Puck has a translational research program that focuses on human immune disorders as well as mouse models of lymphocyte development.

9:15 am

## “The Genetic And Genomics Of MS”

**Sergio Baranzini, PhD**, Professor of Neurology his current research involves large genomic studies in MS patients to characterize the overall risk and activity of genes during different stages of the disease, differential response to treatment, and disease progression. His research also involves immunological studies using the EAE model, sequencing of whole genomes and transcriptomes from patients with MS and developing bioinformatics tools to integrate this information with that coming from other high throughput technologies.



11:00 am

## “The Medical Research Gender Gap”



**Nisha Parikh, MD**, Nisha Parikh is a noninvasive cardiologist and echocardiographer – a specialist in heart ultrasound. She sees patients in the Cardiovascular Care and Prevention Center as well as the Pregnancy and Cardiac Treatment Program. She has a particular interest in the prevention of cardiovascular disease in women. In an effort to develop tools that could give an early indication of later cardiovascular disease risk in women, Parikh is utilizing data from the Women's Health Initiative observational study and to develop and validate these tools.

@drnisha1972

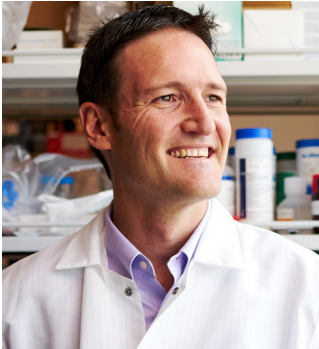
# UCSF Presenters

Day Three

January 24

11:00 am

“Data Science in Hospitals and Health Systems”



**Sergio Baranzini, PhD**, Professor of Neurology his current research involves large genomic studies in MS patients to characterize the overall risk and activity of genes during different stages of the disease, differential response to treatment, and disease progression. His research also involves immunological studies using the EAE model, sequencing of whole genomes and transcriptomes from patients with MS and developing bioinformatics tools to integrate this information with that coming from other high throughput technologies.

11:15 am

“Molecular Tumor Boards -  
Evolution of Function and Practice Utility”

**Cassie Kline, MD**, is a pediatric neuro-oncologist who specializes in caring for children, adolescents, and young adults with brain and spinal cord tumors of all types. Dr. Kline has a Master's of Advanced Studies in Clinical Research and focuses on early phase clinical trials and developmental therapeutics for pediatric brain tumor patients. Dr. Kline's other research interests include predictors of neurocognitive outcomes in pediatric brain tumor survivors and personalized and immunotherapy-based approaches for the treatment of brain tumors.



11:30 am

“Emerging Concepts in Precision Medicine  
in Racial/Ethnic Populations”



**Laura Fejerman, PhD**, Dr. Fejerman's research focuses on the discovery of genetic and non-genetic factors that contribute to breast cancer risk and prognosis in Latinas. Her past work established a relationship between genetic ancestry and breast cancer risk, where higher European ancestry in U.S. and Mexican Latinas was associated with an increased risk.

@Lfejerman

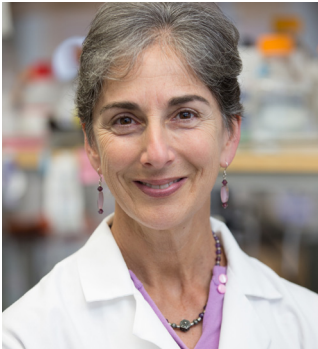
# UCSF Presenters

Day Three

January 24

1:00 pm

“Overview for Patients: The Latest Cancer Treatment”



**Jennifer Grandis, MD**, research focuses on the signal transduction in head and neck squamous cell carcinoma (HNSCC) development and progression with the ultimate goal of targeting key pathways for therapeutic benefit. By taking key findings from the clinic and investigating mechanisms in a series of preclinical models, as well as developing novel therapeutic approaches in the laboratory and carrying out innovative clinical trials that employ these treatment strategies.

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2:00 pm

“Developmental Biology As A Blueprint  
For Regenerative Medicine”

**Ophir Klein, MD, PhD**, is Professor of Orofacial Sciences and Pediatrics, the Larry L. Hillblom Distinguished Professor in Craniofacial Anomalies, and the Charles J. Epstein Professor of Human Genetics at the University of California, San Francisco (UCSF). He serves as Chief of the Division of Medical Genetics, Chair of the Division of Craniofacial Anomalies, Medical Director of the Craniofacial Center, and Director of the Program in Craniofacial Biology.



@OphirKlein

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2:00 pm

“Intelligent Medical Imaging”



**Valentina Padoia, PhD**, is an Assistant Professor in the Musculoskeletal and Imaging Research Group. She is a data scientist with a primary interest in developing algorithms for advanced computer vision and machine learning for improving the usage of non-invasive imaging as diagnostic and prognostic tools. She obtained her doctoral degree in computer science working on features extraction from functional and structural brain MRI in subjects with glial tumors.

@PadoiaValentina

# UCSF Presenters

Day Three

January 24

2:15 pm

“Intelligent Medical Imaging”



**Christopher Hess, MD, PhD**, is the Chair of the Department of Radiology and Biomedical Imaging at UCSF. Dr. Hess completed his PhD in Electrical Engineering and his MD at the University of Illinois in 1998 and 2002, respectively. He joined the UCSF faculty in the same year. After serving as Chief of Neuroradiology at the San Francisco VA, Fellowship Director for Neuroradiology at UCSF, and Chief of Neuroradiology at UCSF, he became the Chair of the Department in 2018.

@NeuroDx

2:30 pm

“Head and Neck Cancer Precision Medicine”

**Jennifer Grandis, MD**, research focuses on the signal transduction in head and neck squamous cell carcinoma (HNSCC) development and progression with the ultimate goal of targeting key pathways for therapeutic benefit. By taking key findings from the clinic and investigating mechanisms in a series of preclinical models, as well as developing novel therapeutic approaches in the laboratory and carrying out innovative clinical trials that employ these treatment strategies.



4:30 pm

“Clinical Implementation of Polygenic Risk Score”



**Lee-may Chen, MD**, a specialist in cancers of the female reproductive system, is director of UCSF's gynecologic oncology division. She has a particular interest in surgical and medical management of ovarian cancer. Chen's research focuses on early detection in women who are at high risk of developing gynecological cancer, as well as symptom management and decision making in the treatment of these cancers.

A photograph of the UCSF Medical Center building at dusk. The building is a modern, multi-story structure with a glass facade and a prominent cantilevered top section. The name "UCSF Medical Center" is visible on the upper part of the building. The interior lights are on, and the sky is a deep blue. A traffic light and a street lamp are visible in the foreground.

UCSF Medical Center

The UCSF logo is displayed in white text on a solid blue rectangular background in the bottom right corner of the image.

UCSF

<https://precisionmedicine.ucsf.edu>