

Resident Academic Project (RAP) Database

Division	Faculty Name	Faculty e-mail	Project Domain*	Field of study
ADOLESCENT MEDICINE Liaison(s): Dr. Maya Kumar m8kumar@ucsd.edu	Dr. Kay Rhee Dr. Maya Kumar	K1rhee@ucsd.edu M8kumar@ucsd.edu	QI, Research	<ul style="list-style-type: none"> - Eating Disorders: treatment, psychosocial issues, gut motility, gut microbiome, early detection computer modeling - Atypical Anorexia: characterization of previously overweight children who now have signs and symptoms of AN - Bradycardia and cardiac function in patients with severe AN - Patterns of cannabis use and effects on disease presentation in eating disorder inpatients
	Dr. Maya Kumar	M8kumar@ucsd.edu	CAL	Arranging health counseling and other services or creating patient information resources for young adults at San Diego Job Corps
	Dr. Maya Kumar	M8kumar@ucsd.edu	Research	Exploring whether a community garden has positive effects on nutrition patterns among group home foster youth
	Dr. Maya Kumar	M8kumar@ucsd.edu	MedEd	Creating a tutorial for medical students and residents about trauma-informed care
	Dr. Kanani Titchen	KTitchen@ucsd.edu	CAL	Human Trafficking, Strengthening Survivorship: A Trauma-Sensitive Community Response (AAP CATCH Grant)
	Dr. Kanani Titchen	KTitchen@ucsd.edu	CAL	Female Athlete Triad, Relative Energy Deficiency in Sport (RED-S): Training the Trainers. (AAP Resident CATCH Grant)
ALLERGY IMMUNOLOGY Liaison(s): Dr. Susan Laubach slaubach@ucsd.edu	Dr. Susan Laubach	slaubach@ucsd.edu	QI, Research	Anaphylaxis/Biphasic Reactions: Search Epic for anaphylactic reactions in the ED to determine the rate of biphasic reactions and timing relative to initial presentation. Describe risk factors for biphasic reactions in our population. Propose a decision-making tool to identify high-risk patients, and suggest an evidence-based length of observation to inform a prospective trial of reduced observation times.
	Dr. Susan Laubach	slaubach@ucsd.edu	Research	Anaphylaxis/Epidemiology: Determine demographics & clinical features of patients who present to RCHSD (or UC system) w/ anaphylaxis to determine factors associated w/ anaphylaxis including geographic location, socioeconomic status, race, gender, age, allergen, epi autoinjector Rx, asthma, etc.
	Dr. Susan Laubach	slaubach@ucsd.edu	CAL	Work with members of the American Academy of Pediatrics (AAP) and the American Academy of Allergy, Asthma, and Immunology (AAAAI) and other organizations to lobby for Stock Albuterol to be available in all schools receiving state or federal funding. Help form a Coalition to establish a standardized Asthma Action Plan for use at schools, and other standards of care for school children with asthma.

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ALLERGY IMMUNOLOGY Liaison(s): Dr. Susan Laubach slaubach@ucsd.edu	Dr. Stephanie Leonard	saleonard@ucsd.edu	QI, Research	QI project on treatment of anaphylaxis in the ED
	Dr. Stephanie Lenoard	saleonard@ucsd.edu	QI, Research	Chart review on FPIES patients
	Dr. Lori Broderick	lbroderick@ucsd.edu	Research	Genotype/Phenotype correlations in patients with NLRP12 variants. Phenotypic characterization and in vitro analysis of cells from patients with variants in NLRP12.
	Dr. Seema Aceves	saceves@ucsd.edu	Research	Studies to utilize the EoE database to answer a targeted question such as the longitudinal trajectory of cortisol levels and growth and DXA scans in children with EoE. A number of longitudinal phenotype questions can be queried. However, they require us to get approval for the resident to work on the study so must be planned in advance
	Dr. Seema Aceves	saceves@ucsd.edu	CAL	The American Partnership for Eosinophilic Disorders meeting will likely be in SD in July 2020. Can help with education portion for the patients, do survey studies on the attending patients, etc.
CARDIOLOGY Liaison(s): Dr. Sanjeet Hegde shgde@rchsd.org Dr. Kanishka Ratnayaka kratnayaka@rchsd.org Mark Abcede Mabcede1@rchsd.org	Our faculty and fellows are currently involved in over 65 ongoing research studies, which include clinical trials, to advance the understanding and application of pharmacological interventions, surgical procedures, electrophysiology procedures and transcatheter interventions in the treatment of children and adults with congenital heart defects. Dr. Hegde and/or Dr. Ratnayaka would be happy to speak with you about research opportunities within the Heart Institute. https://www.rchsd.org/programs-services/heart-institute/			
	Dr. John Moore	JMoore@rchsd.org	Research, QI	Catheterization & Interventional Cardiology, General Cardio
	Dr. Christopher Davis	CDavis@rchsd.org	Research, QI	Exercise Stress Testing, Cardiac Imaging, General Cardio
	Dr. Harjot Bassi	HBassi@rchsd.org	Research, QI	Intensive Care
	Dr. Jane Burns	JBurns@rchsd.org	Research, QI	Kawasaki Disease
	Dr. Tommy Do	TDo2@rchsd.org	Research, QI	Intensive Care
	Dr. Kirsten Dummer	KDummer@rchsd.org	Research, QI	Fetal Cardiology, Cardiac Imaging, General Cardiology, KD
	Dr. Howaida El-Said	HEL-Said@rchsd.org	Research, QI	Catheterization and Interventional Cardiology, Cardiac Imaging, Adult Congenital Heart Disease, General Cardiology, Fontan & the Liver, ASD Device Erosion, Melody Valve Implantation, PDA Stenting, Pulmonary Vein Stenosis
	Dr. Brian Fagan	BFagan@rchsd.org	Research, QI	Catheterization and Interventional Cardiology, Cardiac Imaging, General Cardiology
	Dr. Ian Golding	IGolding@rchsd.org	Research, QI	Fetal Cardiology, Cardiac Imaging, General Cardiology
	Dr. Paul Grossfeld	PGrossfeld@rchsd.org	Research, QI	General Cardiology, Genetic Basis of CHD
	Dr. Aamisha Gupta	AGupta@rchsd.org	Research, QI	Intensive Care, General Cardiology
	Dr. Jessica Haley	JHaley1@rchsd.org	Research, QI	Exercise Stress Testing, Preventative Cardiology, General Cardiology, Single Ventricle Home Monitoring Programs/

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CARDIOLOGY Liaison(s): Dr. Sanjeet Hegde shegde@rchsd.org Dr. Kanishka Ratnayaka kratnayaka@rchsd.org Mark Abcede Mabcede1@rchsd.org				Interstage Outcomes, Dyslipidemia, Hypertension, Obesity and Cardiac Effects
	Dr. Sanjeet Hegde	SHegde@rchsd.org	Research, QI	Cardiac Imaging, 3D printing, Computational Modeling, Medical Devices, General Cardiology
	Dr. Rachel McCandless	RMccandless@rchsd.org	Research, QI	Fetal Cardiology, Cardiac Imaging
	Dr. Dana Mueller	dmueller@RCHSD.org	Research, QI	Pediatric Cardiac Critical Care
	Dr. Hari Narayan	HNarayan@rchsd.org	Research, QI	Cardiac Imaging, General Cardiology, CardioOncology/ Cancer Treatment CardioToxicity
	Dr. James Perry	JPerry@rchsd.org	Research, QI	Electrophysiology, Adult Congenital Heart Disease, General Cardiology
	Dr. Beth Printz	BPrintz@rchsd.org	Research, QI	Cardiac Imaging, General Cardiology
	Dr. Kanishka Ratnayaka	KRatnayaka@rchsd.org	Research, QI	Catheterization and Interventional Cardiology, General Cardiology, MRI Catheterization, Transcatheter extra-anatomic bypass, Transcatheter Electrosurgery
	Dr. Aparna Rao	ARao2@rchsd.org	Research, QI	Pulmonary Hypertension
	Dr. Rohit Rao	RRao1@rchsd.org	Research, QI	Intensive Care, Pulmonary Hypertension
	Dr. Serena Sah	SSah@rchsd.org	Research, QI	Cardiac Imaging, General Cardiology
	Dr. Elenor Schuchardt	eschuchardt@ucsd.edu	Research, QI	Fetal Cardiology, Cardiac Imaging, General Cardiology
	Dr. Jose Sepulveda	JSepulveda@rchsd.org	Research, QI	Adult Congenital Heart Disease, General Cardiology
	Dr. Jesse Stringer	JStringer@rchsd.org	Research, QI	Intensive Care
	Dr. Heather Sun	HSun@rchsd.org	Research, QI	Fetal Cardiology, Cardiac Imaging, General Cardiology
	Dr. Adri Tremoulet	ATremoulet@rchsd.org	Research, QI	Kawasaki Disease
	Dr. Gabrielle Vaughn	GVaughn@rchsd.org	Research, QI	Heart Failure/ Heart Transplant, General Cardiology
Dr. David Werho	DWerho@rchsd.org	Research, QI MedEd	Intensive Care, Interventions and Assessment Tools, Virtual/ Augmented Reality and Simulation	
Dr. Matthew Williams	MWilliams@rchsd.org	Research, QI	Electrophysiology, General Cardiology	
CHILD ABUSE PEDS Liaison(s): Dr. Sarah Vega - fellow svega@rchsd.org Dr. Premi Suresh psuresh@rchsd.org	Dr. Sarah Vega (fellow)	svega@rchsd.org	MedEd	Assistance from housestaff in restructuring the child abuse pediatrics elective
	Dr. Shalon Nienow	snieonow@rchsd.org		
	Dr. Shalon Nienow	snienow@rchsd.org	Research	Case series: facial grab injuries in infants, assisting w/ case finding
	Dr. Nicole Ayson	nayson@rchsd.org	Research	Case series: mandibular fractures, assistance with case finding
	Dr. Suzanne Starling	sstarling@rchsd.org	Research	Case finding regarding the presence of witnessed toddler fractures in early ambulatory children
Dr. Sarah Vega (fellow)	svega@rchsd.org	QI	Improving access of child abuse patients to victim advocacy	

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COMMUNITY PEDIATRICS Liaison(s): Dr. Kay Rhee K1rhee@ucsd.edu	Dr. Kay Rhee	K1rhee@ucsd.edu	Research, QI, CAL	<ul style="list-style-type: none"> - Childhood obesity: treatment modalities and approaches, epidemiology, hunger and satiety profiles, family-based therapy, dissemination of effective treatment in the community, early life factors affecting the development of obesity, metabolic outcomes, gut microbiome, teaching kitchen - Executive functioning in preschool and school age children: programs to support EF training - Parent-Child Interactions: parenting styles, parent feeding practices, child eating behaviors - Food insecurity: programs to help alleviate food security - 2-1-1 San Diego: programs to increase access to social determinants of health issues
	Dr. Nancy Graff	ngraff@ucsd.edu	CAL	<ul style="list-style-type: none"> - AAP legislative process and issues - Oral Health Education; - Smoking, vaping and “juuling” prevention; - Legislative advocacy (and education around advocacy). - Heart Safe Schools, Improving access to AED’s & Hands only - CPR education (with Christine Johnson (Navy)) - Food Insecurity
	Dr. Howard Taras	htaras@ucsd.edu	Research, CAL	<ul style="list-style-type: none"> - School Health - Community Engagement
	Dr. Sheila Gahagan	sgahagan@ucsd.edu	Research	<ul style="list-style-type: none"> - Early determinants of childhood obesity - Metabolic outcomes of childhood obesity
	Dr. Ramon Hernandez Dr. Blanca Melendrez	rah003@ucsd.edu bmelendrez@ucsd.edu	CAL	<ul style="list-style-type: none"> - Hispanic Center of Excellence - Pipeline programs - Underrepresented minorities: access to healthcare, representation in health care professions - Policy and Advocacy - Obesity prevention Collective Impact Coalition (early care, healthcare, government, community, school and afterschool, business) - Lactation Supportive Environments - Healthy Campus Network Initiative (Students, staff & faculty)

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				<ul style="list-style-type: none"> - Faith-Based wellness - Worksite wellness - Refugee Health Unit - Food Insecurity Nutrition Incentive - Nutrition education - Physical activities/wellness in schools - Mental Health - Access to Education in Refugee Community - Social Justice-community grassroots engagement <p>www.ucsdcommunityhealth.org CCH Infographic</p>
CRITICAL CARE Liaison(s): Dr. Helen Harvey hharvey@rchsd.org	Dr. Nicole Coufal	ncoufal@ucsd.edu	Basic & Clinical Research	<ul style="list-style-type: none"> - Primary research interests are to understand the molecular and cellular mechanisms underlying the development and regulation of microglia. Current projects focus on understanding how microglia are affected by their environment and how they become dysregulated in the setting of neuroinflammatory disease. - Clinical research projects in collaboration with the Genomic Institute and utility of RWGS in critical care. Multiple projects in collaboration with ID division looking at use of genomic diagnostics of pathogens. - Clinical research interests: neurocritical care, pediatric stroke, refractory epilepsy
	Dr. Susan Duthie	sduthie@rchsd.org	Clinical Research	TBI, Near drowning, PRISM outcomes research
	Dr. Branden Engorn	bengorn@rchsd.org	Clinical Research, QI	Anesthesia (pediatric and cardiac), OR QI, procedural medical education and simulation, resuscitation research
	Dr. Justin Hamrick	jhamrick@rchsd.org	Clinical Research	Anesthesia, airway research, resuscitation research, procedural education
	Dr. Helen Harvey	hharvey@ucsd.edu	Clinical Research, MedEd, QI	<ul style="list-style-type: none"> - Clinical research projects focusing on TBI, ARDS, sepsis & AKI - QI projects involving cardiac arrest prevention and surveillance, early mobilization "Rady set go" program, delirium screening and implementation of critical care ABCDEF bundle. - Medical education projects focusing on critical care curriculum for residents and fellows, bedside ultrasound and simulation.
	Dr. Sandeep Khanna	skhanna@rchsd.org	Clinical Research	Clinical research interests: TBI, ARDS

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DEVELOPMENTAL BEHAVIORAL	Dr. Raveen Raviendran	rraviendran@rchsd.org	Clinical Research, QI	Clinical research interests: Transport medicine, end of life care, ethics, compassionate communication (Schwartz rounds implementation)
	Dr. Michael Worthen	mworthen@rchsd.org	Clinical Research	Clinical research interests: Anesthesia, cardiac critical care and cardiac anesthesia
DEVELOPMENTAL BEHAVIORAL	Dr. Sheila Gahagan	sgahagan@ucsd.edu	Research (secondary data analysis) Resident will learn to: Pose research question; Select variables; analyze data; write introduction, methods, results and discussion. A publication is expected.	Determinants and outcomes of childhood obesity. We study a longitudinal cohort, recruited in infancy and studied into early adulthood. Data, available from infancy, 5-years, 10-years, multiple time points in adolescence and early adulthood, includes sociodemographic data, family status, education, growth data, biomarkers (DXA scans, lipids, inflammation) and more. Residents can work with the research team to pose a research question, analyze data, write an abstract to present at a meeting and write a manuscript as first author. This focus would be of particular interest to residents interested in general pediatrics, endocrinology, development & behavior, and public health. Publication found here . All with trainees (undergrads, med students, residents, fellows).
	Dr. Sheila Gahagan	sgahagan@ucsd.edu	Research (secondary data analysis) Resident will learn to: Pose research question; Select variables; analyze data; write introduction, methods, results and discussion. A publication is expected.	Longitudinal study of neurocognitive and socioemotional development from infancy to young adulthood. The cohort began as an iron deficiency anemia preventive trial in 1991. We continue to study over 1000 participants with data available from infancy, 5-years, 10-years, multiple time points in adolescence and early adulthood. Residents can work with the research team to pose a research question, analyze data, write an abstract to present at a meeting and write a manuscript as first author. This focus would be of particular interest to residents interested in development & behavior, neurology, general pediatrics and public health. Publications found here . All with trainees (undergrads, med students, residents, fellows).

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	Dr. Vanessa Scott	vpscott@ucsd.edu	Research, MedEd QI, CAL	Parental vaccine hesitancy, pediatric vaccine uptake, physician-patient/parent health communication, digital health communication (video & social media) and misinformation, behavioral decision making, implementation science
DYSMORPHOLOGY- TERATOLOGY Liaison(s): Dr. Ken Lyons Jones klyons@ucsd.edu	Dr. Ken Jones	klyons@ucsd.edu	Research	- Mechanisms of normal and abnormal morphogenesis. Specifically understanding the mechanism responsible for the median raphe of the perineum - Using technology to raise awareness of Fetal Alcohol Spectrum Disorder
	Dr. Tina Chambers	chchambers@ucsd.edu	Research	Prenatal and breastfeeding exposures and short and long term child health outcomes
	Dr. Gretchen Bandoli	gbandoli@ucsd.edu	Research	Maternal predictors of neonatal hypoxic ischemic encephalopathy
GENETICS Liaison(s): Dr. Miguel Del Campo midelcampo@ucsd.edu	Dr. Miguel del Campo	midelcampo@ucsd.edu	Research	Prospective use of automated face recognition for improvement of clinical diagnosis in dysmorphic patients. We will study whether F2G is useful for identifying a potential clinical diagnosis in dysmorphic patients without a recognizable pattern on clinical grounds. Correlation of F2G findings and molecular results
	Dr. Miguel del Campo	midelcampo@ucsd.edu	Research	Retrospective review and classification of WES and gene panel results for the recognition of new or still rare genes for the phenotypes of intellectual disability and autism. Identification of potential cases for collaboration and publication
	Dr. Miguel del Campo	midelcampo@ucsd.edu	Research	Identification through prospective questionnaire of unmet needs for services in patients at the Genetics Clinic Hospital de las Californias Tijuana
	Dr. Miguel del Campo	midelcampo@ucsd.edu	Global Health	Identification of predictive factors for positive FBN1 Mutation in patients with Marfanoid habitus. Retrospective review of cardiac, ocular and systemic score in Marfanoid patients with and without mutation in FBN1.
	Dr. Miguel del Campo	midelcampo@ucsd.edu	Global Health	Use of standardized clinical note for assessment of patients with suspected prenatal alcohol exposure. Identification of pros, cons and difficulties associated with its use

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<p style="text-align: center; font-weight: bold; margin: 0;">EMERGENCY MEDICINE</p> <p style="text-align: center; margin: 5px 0 0 20px;">Liaison(s): Dr. John Kanegaye jkanegaye@rchsd.org</p> <p style="text-align: center; margin: 5px 0 0 20px;">Dr. Mike Gardiner mgardiner@rchsd.org</p> <p style="text-align: center; margin: 5px 0 0 20px;">Kathy Hollenbach, PhD khollenbach@rchsd.org</p>	Dr. Mike Gardiner	magardiner@ucsd.edu	Research, QI	<ul style="list-style-type: none"> - Natural Language Processing for the identification of KD - Machine learning algorithm for Acute Appendicitis - Machine learning for urinary tract infection risk - Point of care clinical prediction tools/models - Diagnostic testing in the emergency department - Lymphadenitis handout for diagnosis of node-first KD (QI) - Improving the workup of adolescent abdominal pain (QI)
	Kathy Hollenbach, PhD, MPH	khollenbach@ucsd.edu	Research , QI	<ul style="list-style-type: none"> - Integrating Behavioral Health into Primary Care - Use of diagnostic testing and procedures in the ED: effects on patient care and hospital metrics - Understanding & prevention of using the ED for primary care - Understanding and decreasing medication prescription errors - Behavioral health risk factors - Epidemiology of pediatric dental infections and injuries - Identifying and decreasing use of unnecessary testing and/or procedures - Understanding risk factors that affect serious dog bites in children
	Dr. Matt Murray	mpmurray@ucsd.edu	Research, QI, Med Ed	<ul style="list-style-type: none"> - Emergency department critical care and resuscitation - Cardiac arrest, both medical and traumatic - Airway management and teaching - Sepsis detection and care - Performing and teaching invasive procedures in the emergency department - ECMO-indications, protocols, and use of for critically ill emergency department patients - Simulation training - Communication during resuscitation
	Dr. Cindy Hoecker	choecker@rchsd.org	Research, QI	<ul style="list-style-type: none"> - Cognitive Errors in Medical Decision Making - Canine Socialization history as it relates to Ped Dog bites - Revenue Cycle Enhancement through Physician Charge Capture
	Dr. Paul Ishimine	pishimine@ucsd.edu	Research, MedEd	<ul style="list-style-type: none"> - Febrile young infants - Sepsis - Trauma: imaging and risk stratification - Pediatric emergency medicine practice in non-pediatric hospital settings

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EMERGENCY MEDICINE Liaison(s): Dr. John Kanegaye jkanegaye@rchsd.org Dr. Mike Gardiner mgardiner@rchsd.org Kathy Hollenbach, PhD khollenbach@rchsd.org				<ul style="list-style-type: none"> - Graduate medical education - Educational policy - Assessment and certification - Simulation
	Dr. Fareed Saleh	fsaleh@rchsd.org	Research, QI, CAL	<ul style="list-style-type: none"> - Behavioral health care and management in the ED - Clinical provider productivity
	Dr. Michael Hazboun (fellow)	mhazboun@ucsd.edu	QI	<ul style="list-style-type: none"> - Improving preventative asthma management in the emergency department - Workup and management of uncomplicated skin and soft infections in the emergency treatment
	Dr. Joelle Donofrio	jdonofrio@ucsd.edu	Research, MedEd, CAL	<ul style="list-style-type: none"> - Evaluation of pediatric disaster triage algorithms - Epidemiology of prehospital care at the San Diego – Tijuana border crossing - Evaluation of 911 dispatch systems - Prehospital education - National and state prehospital education podcasts - Accuracy of 911 dispatch in San Diego City - Effect of tertiary centers on surrounding hospital pediatric readiness scores - Community paramedicine (homelessness, substance abuse disorders, mental health access and outreach) - Injury prevention
	Dr. Amy Bryl	AWilliams2@rchsd.org	QI, CAL	<ul style="list-style-type: none"> - Management of pediatric pain & anxiety in the ED - Opioid use reduction - Streamlining orthopedic care in the emergency department - Advocacy and injury prevention
	Dr. Seema Shah	sshah@rchsd.org	QI	<ul style="list-style-type: none"> - Behavioral health in the emergency department & hospital-wide - Management of febrile neonates - Clinical pathways and order sets (ED and hospital-wide) - Best practice utilization (e.g. reduction of testing, evidence based practice, etc...)
	Dr. Kristy Schwartz	kschwartz2@rchsd.org	QI, MedEd, CAL	<ul style="list-style-type: none"> - Emergency department bedside teaching - Gamification in medical education - ED patient satisfaction - ED discharged patients' understanding of discharge instructions/follow-up/prescriptions

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	Dr. Tanya Vayngortin	TVayngortin@rchsd.org	QI,CAL	<ul style="list-style-type: none"> - Neonatal fever (QI) - Management of pediatric dental infections (QI) - Adolescent reproductive health research and advocacy - Legislative advocacy - Behavioral health
	Dr. Mario Bialostozky	mbialostozky@rchsd.org	QI, Research, CAL	<ul style="list-style-type: none"> - Using technology to improve patient care - Provider efficiency with EHR use and its relationship to burnout - Reduction of prescription medication errors (QI) - Data analytics - Measurement of impact: workflow changes in time spent in EHR - OpenNotes: Note sharing with patients and families to improve communication
	Dr. Kathryn Pade	kpade@rchsd.org	Research, QI, MedEd	<ul style="list-style-type: none"> - Validated asthma tools to assess chronic out and morbidity - Point of care ultrasound in the assessment of atraumatic limp - Point of care US for intussusception - Point of care US for appendicitis
	Dr. John Kanegaye	jkanegaye@rchsd.org	Research	<ul style="list-style-type: none"> - Kawasaki disease (biomarkers, diagnostic eval, variations on clinical presentation) - POC US of gallbladder hydrops variation in KD & febrile controls - Retrospective analysis of Ultrasound of cervical masses in KD and febrile controls - ID (UTI, meningitis) - Procedures, esp wound care - Sedation/analgesia/non-pharm measures for procedures Urine test utilization
	Dr. Margaræt Nguyen	mbn006@ucsd.edu	Research	<ul style="list-style-type: none"> - Studies using GIS (geographical information systems) to understand how location affects health: 1) Is there geographical clustering of pediatric UTI across the state of California? 2) How does location impact Pediatric Quality Indicators in California? 3) How does location affect return visits to the pediatric emergency department? - Retrospective study on pediatric anaphylaxis (PERN) Secondary analysis of US measurement of lumbar puncture related anatomy

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ENDOCRINOLOGY Liaison(s): Dr. Jane Kim jane@ucsd.edu	Dr. Jane Kim	jkk003@ucsd.edu	Research, QI, MedEd	- Use of Dexcom continuous glucose monitoring in infants - Genetics of Type 1 and Type 2 diabetes - Microbiome in Type 1 diabetes
	Dr. Carla Demeterco	cdemeterco@rchsd.org	Research, QI, MedEd	- Type 1 DM (quality of life, technology including CGM, apps, insulin pumps and other devices) - Unusual/rare endocrine disorders, new mutations - Open to mentor and to help residents design a project in their own area of choice
	Dr. Susan Phillips	saphillips@ucsd.edu	Research, QI, Med ED	- Use of InPen device and follow up change in HbA1c, % at target BGs. - QI: picture of discharge insulin instructions and ability to recall insulin doses - QI: use of smart phone for MedAlert information to increase patients having an active up to date MedAlert
	Dr. Maja Marinkovic	mmarinkovic@rchsd.org	Research, QI, Med ED	Transgender medicine
	Dr. Karen Klein	kklein@rchsd.org	Research, QI, Med ED	- Precocious puberty - Turner Syndrome
Dr. Marcela Vargas	mvargas1@rchsd.org	Research, QI, Med ED	- Disorders of Sex Development - Precocious puberty - How to improve and enhance education/experience for residents during their endocrinology rotation and curriculum improvement.	

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GASTROENTEROLOGY, HEPATOLOGY, & NUTRITION Liaison(s): Dr. Hayat Mousa hmousa@ucsd.edu				
GENERAL ACADEMIC PEDIATRICS Liaison(s): Dr. Sheila Gahagan sgahagan@ucsd.edu	Dr. Eyla Boies	eboies@ucsd.edu	Clinical Research	Breastfeeding in premature infants
	Dr. Marty Stein	mtstein@ucsd.edu	Clinical Case Reports	Development of a manuscript based on an interesting or challenging clinical case.
	Dr. Leah Kern	lkern@ucsd.edu	Research, QI	QI projects in general peds clinics, lipid screening in children, pediatric travel medicine, HIV infected and HIV exposed infants and children, med student direct observation in gen peds clinic
GENOME INFORMATION SCIENCES Liaison(s): Kelly Frazer, PhD kafraser@ucsd.edu				
HEMATOLOGY- ONCOLOGY Liaison(s): Dr. Jen Yu jyu@rchsd.org Dr. Sun Choo schoo@rchsd.org	Dr. Erin Trovillion	emtrovillion@rchsd.org	Research	Case series on wilms tumor patients with extensive caval thrombosis.
	Dr. Erin Trovillion	emtrovillion@rchsd.org	QI	A multi-disciplinary collaborative approach to improving fertility discussions with newly diagnosed male pediatric cancer patients prior to the initiation of systemic chemotherapy. Joint QI project with Urology department.
	Dr. Jen Yu	jyu@rchsd.org	MedEd	Goal is to set up a Hemoglobinopathies Transition Program (including patients with sickle cell disease and thalassemia). We are working with UCSD adult hematology to establish a transition program so that patients will be more prepared to transition to adult care. The project can include creating patient education materials

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Resident Academic Project (RAP) Database

Division	Faculty Name	Faculty e-mail	Project Domain*	Field of study
<p style="text-align: center; margin: 0;">HEMATOLOGY- ONCOLOGY</p> <p style="margin: 5px 0;">Liaison(s): Dr. Jen Yu jyu@rchsd.org</p> <p style="margin: 5px 0;">Dr. Sun Choo schoo@rchsd.org</p>	Dr. Jen Yu Dr. Jennifer Elster	jyu@rchsd.org jelster@rchsd.org	Research	Evaluating the incidence of incidentally found transient neutropenia in infants; retrospective chart review to determine incidence, and inform recommendations on work up (avoid BM evaluation?)
	Dr. Jen Yu	jyu@rchsd.org	MedEd	In hematology/oncology, we get a lot of referrals for patients who likely do not need to see a hematologist. We can save the family stress (due to coming to hem/onc clinic) and time, and save resources by providing education to general pediatricians in practice on certain common referrals and what can be done prior to referring to a specialist. The project would be to develop a method to educate community pediatricians on subspecialty topics (anemia, hyperbilirubinemia, bleeding disorder work up, etc) either webinars or creating educational materials.
	Dr. Jen Yu	jyu@rchsd.org	QI	Improving our thalassemia trait work up – creating an algorithm to decrease the use of unnecessary lab tests and needle pokes
	Dr. Victor Wong	vwong@rchsd.org	QI	Steroid induced hyperglycemia is a common finding in patients with patients in induction chemotherapy for ALL, added on the additional risks with asparaginase, few patients do have to be placed on insulin. Retrospective chart review to generate a QI project in collaboration with endocrine to create an algorithm for diagnosis and treatment and when to consult endo
	Dr. Victor Wong	vwong@rchsd.org	Research	Dr. Wong has an active translational project looking at the immune transcriptome profile of patients who undergo CAR-T therapy in collaboration with T. Rana at UCSD. The resident could be involved in clinical research database management, and could develop a related project
	Dr. Janet Yoon	jyoon@rchsd.org	QI	Create a survey to administer to the solid tumor patients/parents at the end of their chemotherapy admissions to determine optimal anti-emetic plan for the next chemo admission.
	Dr. Courtney Thornburg	cthornburg@rchsd.org	QI	Dr. Thornburg has developed Transition Tools in EPIC for the hemophilia population. The resident would work with Dr. Thornburg to evaluate the utilization and impact of the tools in the processes of transition and transfer to adult care. Currently filled by resident

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Resident Academic Project (RAP) Database

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HEMATOLOGY-ONCOLOGY Liaison(s): Dr. Jen Yu jyu@rchsd.org Dr. Sun Choo schoo@rchsd.org	Dr. Courtney Thornburg	cthornburg@rchsd.org	QI	VTE screening was implemented in June 2017 for all patients age 10 y and older who are admitted to RCHSD. The resident could work with Dr. Thornburg to evaluate the accuracy of the risk screening and adherence to thromboprophylaxis recommendations. The resident could also work with resident team to improve education on VTE prevention.
	Dr. Courtney Thornburg	cthornburg@rchsd.org	Clinical Guidelines	Work with Dr. Thornburg on the Anticoagulation Stewardship Committee to develop and refine guidelines for VTE diagnosis and management with a focus on anticoagulation safety.
	Dr. Courtney Thornburg	cthornburg@rchsd.org	Clinical Guidelines	The Clinical Laboratory is introducing new equipment for thromboelastogram (TEG) as a measure of whole blood coagulation. This may be used in trauma, surgical, and ICU settings to guide replacement therapy. The resident may work with Dr. Thornburg and the Clinical Laboratory staff to develop Clinical Guidelines on use of TEG.
	Dr. Courtney Thornburg	cthornburg@rchsd.org	Research	Support research activities and QI related to bleeding diathesis work-up and molecular diagnosis for patients with Noonan's syndrome. This would be part of a multi-disciplinary team including hematology, genetics and genomics.
	Dr. Courtney Thornburg	cthornburg@rchsd.org	Research	Work with Dr. Thornburg on shared decision-making tools to guide informed decisions regarding novel treatment for patients with hemophilia, including gene therapy.
	Dr. Courtney Thornburg	cthornburg@rchsd.org	QI	Develop QI project related to correct use & interpretation of TEG.
	Dr. Courtney Thornburg	cthornburg@rchsd.org	Community	Work with Dr. Thornburg and the Hemophilia Association of San Diego County to develop educational curriculum for hemophilia camp.
	Dr. Paula Aristizabal	paristizabal@rchsd.org	QI	Improving HPV vaccination rates in pediatric cancer survivors
	Dr. Paula Aristizabal	paristizabal@rchsd.org	QI	Improving Vitamin D supplementation in Hemonc patients (Sustainment)
	Dr. Paula Aristizabal	paristizabal@rchsd.org	QI	Improving patient socio-demographic documentation in EPIC
	Dr. Paula Aristizabal	paristizabal@rchsd.org	Clinical Research	Dr. Aristizabal has a clinical research program in pediatric cancer disparities focused on evaluation of social determinants of health in patients with cancer and blood disorders. Projects include the evaluation of patient-provider communication, health literacy, socio-demographics, and psychosocial distress in patients with cancer and blood disorders. The resident will have the

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HEMATOLOGY-ONCOLOGY Liaison(s): Dr. Jen Yu ju@rchsd.org Dr. Sun Choo schoo@rchsd.org				opportunity to analyze preliminary data and/or develop new research questions within the current cohort of patients.
	Dr. Paula Aristizabal	paristizabal@rchsd.org	Global Health	Dr. Aristizabal is the medical director of our international outreach program in pediatric oncology in Mexico. The resident will have the opportunity to review data and publish implementation outcomes related to capacity building initiatives in Tijuana.
	Dr. Victor Wong Dr. Alice Pong	vwong@rchsd.org ; apong@rchsd.org	Clinical Research	Retrospective review to evaluate incidence of patients who have developed localized E.Coli bacterial infection after having E.Coli bacteremia that cleared rapidly
	Dr. Jennifer Elster	jelster@rchsd.org	Clinical Research	Retrospective look at response of fever to tylenol in patients admitted with fever to see if there is any difference in response to Tylenol between those who do and do not have a documented bacterial or fungal infection.
	Dr. Jennifer Elster	jelster@rchsd.org	QI	Investigation of on therapy weight loss and measures of malnutrition among solid tumor patients and development of standardized evaluation and management algorithm for malnutrition during chemotherapy.
HOSPITAL MEDICINE Liaison(s): Dr. Heather Pierce hpierce@rchsd.org	Dr. Julia Beauchamp Walters	jbeauchamp@rchsd.org	Research, QI	<ul style="list-style-type: none"> - Complex medical children (Bernardy Center): effect of formula on gut microbiome - EMR based Improvements in Home Care Services - Home Care patients with palliative and chronic medical conditions Symptom Management Plan (patient empowerment, resource management) - CLABSI in Home based patients - Gtube stoma rating tool and evidence based treatment protocol - Overcoming Language barriers in underrepresented languages - PHM Transport Curriculum - Serial Karius in acute care setting to affect duration of abx therapy - DC med rec P4P - Impact of rWGS on physician well-being, parent communication, parent fatigue
	Dr. Laurie Bernard Stover	lbernard@rchsd.org	QI, MedEd	<ul style="list-style-type: none"> - Improving training and success for lumbar puncture - Improving hospital discharge flow and quality - Using an innovative EMR tool (the Emergency Care Plan) to improve acute care of chronic pediatric patients

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Resident Academic Project (RAP) Database

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HOSPITAL MEDICINE Liaison(s): Dr. Heather Pierce hpierce@rchsd.org				- Improving and streamlining the evaluations of pediatric victims of Medical Child Abuse
	Dr. Melissa Cameron	mcameron@rchsd.org	Research, QI, MedEd	- Simulations (Sim Center) - Vaccine administration in the inpatient setting
	Dr. Alicia Cantu	acantu@rchsd.org	Research, QI	- Juvenile Hall - Acute behavioral event care management (Code Grey and more)
	Alan Card, PhD	acard@rchsd.org	Research, QI	- Patient safety and harm reduction in the inpatient setting - Resilience and well-being: for patients, caregivers/parents, hospital staff/physicians - Injury Free Coalition for Kids Committee - Patient/family hand hygiene & healthcare-associated infections - Improving inpatient sleep quality - Evaluating and improving QI tools and techniques - Reducing the risk of harm, or ethical shortfalls, associated with the use of emerging technologies in health research, as part of the Research Center for Optimal Data Ethics (ReCODE) - Healthcare organizations' preparedness and response re: the COVID-19 pandemic
	Dr. Amy Chong	achong@rchsd.org	Research, QI	- Improving Intrusive Alerts - Improving Medical Student Note Quality and Discharge summary quality - Clinical Decision Support (in general) - Improving limited English proficiency screening (QI) - Self-service reporting training for physicians (MedEd/curriculum development)
	Dr. Ami Doshi	adoshi@rchsd.org	Research, QI, Med Ed	- Palliative Medicine - Comfort Codes - Hospice - Palliative Home Care Services - Provider wellness and resilience - Genetics and Palliative Care
	Dr. Michelle Edmunds	medmunds@rchsd.org	Research	- Identifying the impact of weight status on odontogenic infections in Hospitalized Children - ED-PHM QI Collaborative: Reducing unnecessary testing and improving prevention and care for children with dental infections

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Resident Academic Project (RAP) Database

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HOSPITAL MEDICINE Liaison(s): Dr. Heather Pierce hpierce@rchsd.org	Dr. Erin Fisher	efisher@rchsd.org	Research, QI, MedEd	<ul style="list-style-type: none"> - Predictive risk tools/models (PediBOOST RISK tool) - Social determinants of health and its impact in the inpatient setting and transitions of care (on hold for COVID) - Food insecurity (on hold for COVID) - Clinical Pathways (Multiple) – new opportunities with COVID - Ticket to Home discharge assessment and patient/parent engagement - Utilization of resources and clinical documentation improvement
	Dr. Dan Hershey	dhershey@rchsd.org	Research, QI, MedEd	<ul style="list-style-type: none"> - Safe Sleep campaign - Standardization of opioid weaning - Code Grey development/evaluation - Lysosomal Bupivacaine and Post-Operative Opioid Use - GI cleanout and electrolyte testing - Case reports - Medication safety - Research poster format impact on education
	Dr. Maria Huang	Mhuang3@rchsd.org	Research, QI	<ul style="list-style-type: none"> - Improving Access to Nicotine Replacement - Improving Referral for Smoking Cessation - Provider communication with patients and families - Clean sleep environments in the inpatient setting - Medical Provider Grief After Patient Death
	Dr. Manu Khare	mkhare@rchsd.org	Research, QI	<ul style="list-style-type: none"> - Pharmacokinetics of oral Dexamethasone in children with asthma and obesity - Pharmacokinetics of commonly used medications in hospitalized children with obesity - Prediction of Height from Ulnar Length - Safety of HFNC use on floor in children hospitalized with bronchiolitis - CPAP on floor in children hospitalized with bronchiolitis - Clinical characteristics in children hospitalized with COVID-19 multicenter study (PRIS network) - Immune dysregulation in severe and non-severe pediatric patients hospitalized with COVID-19 - Cytokines/immune protein gene expression in nasopharyngeal aspirates of pediatric patients hospitalized with COVID-19

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HOSPITAL MEDICINE Liaison(s): Dr. Heather Pierce hpierce@rchsd.org	Dr. Begem Lee	blee@rchsd.org	Research, QI, MedEd	<ul style="list-style-type: none"> - Streamlining/standardizing the documentation process in the inpatient setting - ED-PHM QI Collaborative: Reducing unnecessary testing and improving prevention and care for children with dental infections
	Dr. Chris Lenzen	clenzen@rchsd.org	Research, QI, GH	<ul style="list-style-type: none"> - Transport medicine - International medicine - Safe Sleep - CPAP for bronchiolitis on the general pediatric ward: Can it be done safely? - Strategies for behavioral challenges/Behavioral de-escalation
	Dr. Mike Levy	Mlevy1@rchsd.org	Research, QI	<ul style="list-style-type: none"> - Effect of new (genetic testing) methods of detecting bacteremia on provider behaviors and health care utilization - (Any) Respiratory therapist-physician communications, assessments, trainings - Hi-flow and CPAP use for bronchiolitis - Personal finance curriculum
	Dr. Liz Mannino Avila	emanninoAvila@rchsd.org	Research, QI	<ul style="list-style-type: none"> - Breast milk composition during respiratory infections - Breastfeeding experience of mother's of hospitalized infants on the general pediatric wards - Breastfeeding/breast milk related projects – including resident/trainee experience and improvement - Other projects (in the past or current involvement but not leading): febrile neonate evaluation; sedation simulation; ED-PHM collaborative QI projects (dental infections currently) led by Dr. Lee
	Dr. Aarti Patel	aartipatel@rchsd.org	MedEd, QI, Research	<ul style="list-style-type: none"> - MedEd topics involving inpatient hospital medicine - Medical education and educational technology - Family-centered rounds and inpatient communication - Evidence-based medicine - Provider wellness - Feedback Training for Pediatric Fellows
	Dr. Heather Pierce	hpierce@rchsd.org	QI, MedEd	<ul style="list-style-type: none"> - Hi-flow and CPAP use for bronchiolitis - Family Centered Care and Rounding - Discharge Readiness for Families/ Ticket to Home - Identifying and Addressing Substance Abuse and Sexual Health Issues Among Hospitalized Adolescents

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HOSPITAL MEDICINE Liaison(s): Dr. Heather Pierce hpierce@rchsd.org	Dr. Jane Rungvivatjarus	trungvivatjarus@rchsd.org	QI, Research	<ul style="list-style-type: none"> - Medication reconciliation at discharge - Assessing patient/caregiver retained understanding of medication use and risks post-discharge - Engaging the community: planning grant to identify best methods to teach and engage the community in understanding medications and their risks (multi-language approach) - MyChart Activation in the Inpatient setting - COVID-19 Drive Thru Testing Station development - Serial Karius Testing analysis
	Dr. Kay Rhee	krhee@rchsd.org	Research	<ul style="list-style-type: none"> - (May assist with any research activity) - Obesity - Food Insecurity - Social Determinants of Health
HOST- MICROBE SYSTEMS & THERAPEUTICS Liaison(s): Dr. Victor Nizet vnizet@ucsd.edu	Pieter Dorrestein, PhD	pdorrestein@ucsd.edu	Basic Research	New mass spectrometry (MS) based methods to understand the chemistry of microbes, our microbiome and their ecological niche. Tools that translate the chemical language between cells. https://dorresteinlab.ucsd.edu
	Jack Gilbert, PhD	jagilbert@ucsd.edu	Basic Research	The human microbiome. Microbial ecology of the built environment including hospitals. The intricate relationship between our microbiota and our health. http://www.gilbertlab.com
	Rob Knight, PhD	rknight@ucsd.edu	Basic Research	The human microbiome. Developing state-of-the-art computational and experimental techniques to ask fundamental questions about the evolution of the composition of biomolecules, genomes, and communities in the complex microbial ecosystems of the human body. https://knightlab.ucsd.edu/
	Nathan Lewis, PhD	n4lewis@ucsd.edu	Basic Research	Systems biology, -omics data analysis, network modeling, and synthetic biology. Cellular processes that influence cell growth, protein secretion, and metabolic regulation, to engineer cells for drug development and to discover the biochemical basis of disease. http://lewislab.ucsd.edu
	Victor Nizet, MD	vnizet@ucsd.edu	Basic Research	Bacterial pathogenesis, innate immunity including macrophage and neutrophil function, exploring novel approaches to therapy for sepsis and antibiotic-resistant pathogens. http://nizetlab.ucsd.edu

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Resident Academic Project (RAP) Database

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HOST- MICROBE SYSTEMS & THERAPEUTICS Liaison(s): Dr. Victor Nizet vnizet@ucsd.edu	Bernhard Palsson, PhD	bpalsson@ucsd.edu	Basic Research	Development of methods to analyze metabolic dynamics (flux-balance analysis, and modal analysis), and the formulation of complete models of selected cells (the red blood cell, E. coli, CHO cells, and several human pathogens). Systems biology of antibiotic resistance. http://systemsbiology.ucsd.edu
	Dr. Manuela Raffatellu	manuelar@ucsd.edu	Basic Research	Her research focuses on the interactions between bacterial pathogens and the immune response in the gut. Her recent efforts aim to design new strategies to reduce colonization of pathogens without affecting the beneficial microbes that inhabit our body. https://raffatellu.com
	Elizabeth Winzeler, PhD	ewinzeler@ucsd.edu	Basic Research	Phenotypic screens and compound testing to accelerate the search for new malaria treatments and malaria prevention methods. Chemical biology, in vitro evolution and whole genome sequencing to discover "chemically-validated" targets for structure guided drug design. Experimental systems, including yeast and human cells, to understand how drug resistance emerges. https://winzeler.ucsd.edu
	Karsten Zengler, PhD	kzengler@ucsd.edu	Basic Research	Complex interactions of microorganisms. Interactions between microbes, their environment, or their host play a crucial role in health and disease. A community systems biology approach involving both experimental and computational methods to unravel genome organization and community composition, metabolism, and exchanges microbes are engaged in. https://www.zenglerlab.com
	Brookie Best, PharmD	brookie@ucsd.edu	Clinical Research	Pharmacokinetics (PK) and pediatric clinical pharmacology research. Anti-HIV drugs in infants, children, adolescents and pregnant women. Drugs used to treat Kawasaki disease, maternal-fetal clinical pharmacology, therapeutic drug monitoring, antiretroviral pharmacogenomics, and penetration of antiretrovirals into the CNS.
	Edmund Capparelli, PharmD	ecapparelli@ucsd.edu	Clinical Research	Clinical pharmacokinetic, pharmacodynamic and disease modeling in pediatric populations using population methods. Leads a NIH supported Center for Research in Pediatric and Developmental Pharmacology and a specialized pharmacology laboratory for its pediatric HIV (IMPAACT) Network

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HOST- MICROBE SYSTEMS & THERAPEUTICS Liaison(s): Dr. Victor Nizet vnizet@ucsd.edu	Dr. George Sakoulas	gsakoulas@ucsd.edu	Clinical Research	Clinical therapeutics of antibiotic-resistant pathogens. The pharmacodynamic interactions of the various classes of anti-staphylococcal and anti-enterococcal antibiotics with each other and with innate host defense molecules such as cathelicidins and platelet-derived antimicrobial peptides.
	Dr. Adri Tremoulet	atremoulet@ucsd.edu	Clinical Research	Pediatric pharmacology and the testing of new therapies for immunological and infectious diseases. Kawasaki disease, clinical trial design, biomarker and immunological profiling.
INFECTIOUS DISEASE Liaison(s) Dr. Johana Tovar Padua ltpadua@rchsd.org	Dr. Johana Tovar Padua	LTPadua@rchsd.org	Clinical Research, QI	<ul style="list-style-type: none"> - Immunocompromised host - Transplant Infectious Diseases
	Dr. John Bradley	jbradley@rchsd.org	Clinical Research	<ul style="list-style-type: none"> - Development of antibacterial, antiviral and antifungal agents (Phase 1-4 antimicrobial therapeutics) - Novel therapies for CA-MRSA and MDR GNRs - PK/PD modeling and simulation for anti-infective dose optimization - Clinical treatment guidelines - Osteomyelitis
	Dr. Chris Cannavino	ccannavino@ucsd.edu	MedEd, Clinical Research	<ul style="list-style-type: none"> - Development and implementation of novel delivery methods for medical education - Development of anti-infective agents (Phase 1-4 antimicrobial therapeutics) - Clinical treatment algorithms - Novel diagnostic platforms in osteomyelitis - TB Osteomyelitis/Septic arthritis
	Dr. George Liu	gyliu@ucsd.edu	Research (Basic, Translational)	<ul style="list-style-type: none"> - Pathogenesis of Gram positive organisms (Staphylococcus, Streptococcus, P. acnes) - Vaccine development
	Dr. Alice Pong	apong@rhcsd.org	Clinical Research, QI	<ul style="list-style-type: none"> - Infection control - Antimicrobial stewardship - Tuberculosis
	Dr. Mark Sawyer	mhsawyer@ucds.edu	Research, CAL, MedEd	<ul style="list-style-type: none"> - Immunization policy and assessment - Immunization education for providers and community - Improved immunization delivery
	Dr. Lauge Farnaes	lfarnaes@rchsd.org	Clinical Research	Next Generation sequencing diagnostics for genetic disease and infectious diseases

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Resident Academic Project (RAP) Database

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INFECTIOUS DISEASE Liaison(s) Dr. Johana Tovar Padua itpadua@rchsd.org	Dr. Amaran Moodley	amoodley@ucsd.edu	Clinical Research	- Congenital and perinatal infections - Enterovirus infections
	Dr. Katie Ryan	KRyanLoker@rchsd.org	Global Health & Public Health, MedEd	- Global Public Health - Curriculum development
	Dr. Johana Tovar	itpadua@rchsd.org	Clinical Research, QI	- Immunocompromised host - Transplant Infectious Diseases
	Dr. Steve Spector	saspector@ucsd.edu	Research (Basic & Translational)	- HIV/AIDS pathogenesis - Host/pathogen interactions - Associations of host genetic variants on HIV diseases progression and HIV-related disease
INFORMATICS Liaison(s): Dr. Cindy Kuelbs ckuelbs@rchsd.org				
KAWASAKI DISEASE Liaison(s): Dr. Adri Tremoulet atremoulet@ucsd.edu	Dr. Adri Tremoulet	atremoulet@ucsd.edu	QI	KD patients with aneurysms need to understand the severity of their illness and be prepared for transition to an adult cardiologist. We have set up a KD Transition of care practicum and medical summary. We are looking for an enthusiastic resident to study this program's implementation as a QI project.
	Dr. Adri Tremoulet	atremoulet@ucsd.edu	Research	The current American Heart Association guidelines for incomplete KD were created over 15 years ago with limited clinical data. Using our REDCap database of over 1500 KD patients, we want to objectively determine the clinical variables and cutpoints for incomplete KD. As the upcoming Chair of the AHA Committee that writes these guidelines, Dr. Tremoulet has the ability take the results of this study and apply to AHA recommendation so that the results could directly impact the clinical diagnosis of KD.
	Dr. Adri Tremoulet	atremoulet@ucsd.edu	Research	The Latin American KD Network, led by Dr. Tremoulet, has amassed a database of nearly 2000 KD patients from 21 Latin American countries. I am looking for a self-motivated, Spanish speaking resident that is interested in analyzing these data and converting a number of key abstracts into manuscripts.

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KAWASAKI DISEASE Liaison(s): Dr. Adri Tremoulet atremoulet@ucsd.edu	Dr. Jane Burns Dr. Ian Golding	jcburns@ucsd.edu igolding@rchsd.org	Research	We are seeking a motivated resident interested in cardiology who could analyze the differences among different Z scoring methods and implications for clinical care depending on algorithm used.
	Dr. Jane Burns Dr. John Kanegaye	jcburns@ucsd.edu jkanegaye@rchsd.org	Research	We are seeking a resident to continue a previous project of node-first KD. In this continuation study, retrospective review of ultrasounds of KD LN vs. bacterial LN will help to define with more precision the ultrasound findings most commonly associated with the two diseases.
NEONATOLOGY Liaison(s): Dr. Lance Prince laprince@ucsd.edu	Dr. Eniko Sajti	esajti@ucsd.edu	Research	The role of macrophages and monocytes in neonatal lung injury and chronic lung disease. The Sajti lab uses multiple molecular approaches and mouse models to study how early exposures impact lung development and cause lasting effects on the immune system.
	Dr. Lance Prince	laprince@ucsd.edu	Research	The unique aspects of neonatal lung disease. The Prince lab uses mouse and human studies to better understand how the lung develops and regenerates following injury. Projects also investigate why newborns are particularly susceptible to certain infections.
	Dr. Laurel Moyer	lmoyer@rchsd.org	QI	Quality improvement strategies aimed at impacting neonatal outcomes. Dr. Moyer leads several collaborative projects aimed at improving surgical outcomes in neonates, reducing unnecessary antibiotic exposure, ensuring adequate nutritional support, and optimizing the care of infants exposed to opiates prior to delivery.
	Dr. Nathlay Sweeney	nsweeney@rchsd.org	Research	Genetic basis of congenital heart disease. Working with investigators in the Rady Genome Institute, Dr. Sweeney investigates how specific genomic variants not only cause structural heart defects, but also contribute to differences in clinical outcomes among patients with common diagnoses.
	Dr. Sandra Leibel	sleibel1@rchsd.org	Research	Using patient stem cells to develop personalized medicine strategies to study lung disease. The Leibel lab uses iPSC developed lung organoids from individual patients to investigate mechanisms of lung epithelial differentiation, surfactant production, and cellular metabolism.
	Dr. Shelley Lawrence	slawrence@ucsd.edu	Research	Development of innovative technologies for preventing, detecting, and treating neonatal sepsis. The Lawrence lab uses novel approaches for analyzing neutrophil maturation in patients

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				at risk of sepsis. Additional projects are developing new approaches and machine learning for the sensitive detection of multiple pathogens in clinical samples.
NEPHROLOGY Liaison(s): Dr. Liz Ingulli eingulli@ucsd.edu	Dr. Elizabeth Ingulli	eingulli@ucsd.edu	Research, QI, MedEd	<ul style="list-style-type: none"> - Does seeing a psychologist during clinic visits improve anxiety in children with chronic kidney disease? - Do immunizations induce a relapse of Nephrotic Syndrome? - Kidney Transplantation - Kidney stones
	Dr. Peter Yorgin	pyorgin@ucsd.edu	Research	<ul style="list-style-type: none"> - Lupus nephritis - Dialysis - Fluid and electrolytes - Tubular disorders
	Dr. Caitlin Carter	cecarter@ucsd.edu	Research	<ul style="list-style-type: none"> - NINJA study - nephrotoxic medications & acute kidney injury - Genetic disorders including Alport's syndrome - Do immunizations induce a relapse of Nephrotic Syndrome?
	Dr. Nouredin Nourbakhsh	nnourbakhsh@ucsd.edu	Research	<ul style="list-style-type: none"> - Acute Kidney Injury - Dialysis
	Dr. Lieuko Nguyen	lnguyen@rchsd.org	Research	<ul style="list-style-type: none"> - Hypertension - Obesity - Transplant
	Dr. Elliot Perens	eperens@ucsd.edu	Research, MedEd	<ul style="list-style-type: none"> - Congenital abnormalities of the kidney and urinary tract - Histological analysis of a genetic experimental model for hypoplastic kidneys - Nephrology Yellow team resident survival guide: Modify and update the electrolyte replacement and IVF section for mule
	Dr. Nadine Benador	nbenador@ucsd.edu	Research	<ul style="list-style-type: none"> - Chronic Kidney Disease - Dialysis
NEUROLOGY Liaison(s): Dr. Jeff Gold jjgold@ucsd.edu	UCSD has more than 150 Neurosciences faculty on the main campus and an entire department of adult neurology. Dr. Gold would be happy to speak with you about research opportunities in adult neurology or in basic science research on campus.			
	Dr. Jaime Friedman	jfriedman@ucsd.edu	Research, QI	Movement disorders (e.g. tics, chorea) and genetics
	Dr. Michelle Sahagian	msahagian@rchsd.org	Research, QI	General child neurology
	Dr. Dillon Chen	dyc017@ucsd.edu	Research, QI	Neonatal neurology
	Dr. ShiftehSattar	ssattar@ucsd.edu	Research, QI	Epilepsy, especially epilepsy surgery
	Dr. Mark Nesepeca	mnespeca@rchsd.org	Research, QI	Epilepsy, especially epilepsy syndromes like Angelman's Syndrome
	Dr. Neggy Rismanchi	nrismanchi@ucsd.edu	Research, QI	Epilepsy

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Resident Academic Project (RAP) Database

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NEUROLOGY Liaison(s): Dr. Jeff Gold jjgold@ucsd.edu	Dr. Olivia Kim-McManus	okimmcmanus@ucsd.edu	Research, QI	Epilepsy
	Dr. Jennifer Graves	JGraves@rchsd.org	Research, QI	White matter diseases (e.g., multiple sclerosis)
	Dr. Chamindra Konersman	ckonersman@ucsd.edu	Research, QI	Neuromuscular disorders (e.g. muscular dystrophy, myasthenia)
	Dr. Jonathan Bui	jdubui@ucsd.edu	Research, QI	Developmental and neurovascular disorders (e.g. stroke)
	Dr. Doris Trauner	dtrauner@ucsd.edu	Research, QI	Developmental and behavioral disorders (e.g. autism)
	Dr. Natalie Guido-Estrada	nguidoestrada@ucsd.edu	Research, QI	General child neurology and headaches
	Dr. Anuja Jindal	AVJindal@rchsd.org	Research, QI	Developmental and behavioral disorders (e.g. autism)
	Dr. Richard Haas	rhaas@ucsd.edu	Research, QI	Metabolic and mitochondrial disorders
	Dr. James Nelson	JNelson2@rchsd.org	Research, QI	General child neurology
	Dr. Michael Zimbric	mzimbric@rchsd.org	Research, QI	General child neurology and headaches
	Dr. John Crawford	jrcrawford@ucsd.edu	Research, QI	Neuro-oncology
Dr. Jeffrey Gold	jjgold@ucsd.edu	Research, QI	Neonatal neurology and epilepsy	
NEWBORN & BREASTMILK NUTRITION Liaison(s): Dr. Michelle Leff mleff@ucsd.edu	Dr. Tia Hubbard	ehubbard@ucsd.edu	Research, QI, MedEd, CAL	Late Preterm Infants, Neonatal Hypoglycemia, Nursing-Provider Communication, Readmissions
	Dr. Kathryn Johnson	kajohnson@ucsd.edu	Research, QI	Informatics, Congenital Infections
	Dr. Michelle Leff	mleff@ucsd.edu	Research, QI, MedEd, CAL	Breastfeeding, Neonatal Abstinence, Refusals, SIDS, Car Seat Safety, Early Childcare
	Dr. Chris Longhurst	clonghurst@ucsd.edu		Informatics
	Dr. Lisa Stellwagen	lstellwagen@ucsd.edu	Research, QI, CAL	Breastfeeding, Milk Banking, Late Preterm Infants
PALLIATIVE MEDICINE Liaison(s): Dr. Ami Doshi apdoshi@ucsd.edu	Dr. Ami Doshi	apdoshi@ucsd.edu	Research, QI, MedEd	<ul style="list-style-type: none"> - Palliative Medicine - Comfort Codes - Hospice - Palliative Home Care Services - Provider wellness and resilience - Genetics and Palliative Care - Role of palliative care in Congenital Heart disease population
	Dr. Krishelle Marc-Aurele	kmaurele@ucsd.edu	Research	<ul style="list-style-type: none"> - Descriptive study of outpatient palliative care population and metrics/ outcomes such as utilization - Qualitative study impact of outpatient palliative care for patients and families
	Dr. Lase Ajayi	lajayi@rchsd.org	CAL, MedEd, Research	<ul style="list-style-type: none"> - Palliative care education development - Palliative care and sickle cell

* Project Domains: Research, Quality Improvement (QI), Medical Education (MedEd), Community Service/Advocacy/Leadership (CAL), Global Health (GH)

Resident Academic Project (RAP) Database

Division	Faculty Name	Faculty e-mail	Project Domain*	Field of study
<p style="text-align: center;">PULMONOLOGY RESPIRATORY MEDICINE</p> <p style="text-align: center;">Liaison(s): Dr. Julie Ryu j1ryu@ucsd.edu</p> <p>Janelle Celso, BS, CCRC jcelso@rchsd.org</p>	Dr. Julie Ryu	J1ryu@ucsd.edu	Research	<ul style="list-style-type: none"> - Identify comparative differences in microbiota changes of discharged vs admitted children - Metabalome/microbiome - Pediatrics 0-3
	Dr. Julie Ryu	J1ryu@ucsd.edu	Research	<ul style="list-style-type: none"> -Further knowledge Pathophysiology of Primary Ciliary Dyskinesia - Induced pluripotent cells - Develop <i>in vitro</i> model
	Dr. Julie Ryu	J1ryu@ucsd.edu	Research	This study will explore the feasibility of the use of CoVa TM wireless monitor in children and if it can be used to monitor respiratory mechanics in peds patients. The data from the device will be compared to hospital monitor data to determine accuracy.
	Dr. Julie Ryu	J1ryu@ucsd.edu	Research – retrospective	<ul style="list-style-type: none"> - Respiratory and organ system failure are leading causes of significant morbidity and mortality in children. - This study intends to develop computer algorithms to help detect and predict episodes of acute clinical decline
	Dr. Julie Ryu	J1ryu@ucsd.edu	Research - retrospective	<ul style="list-style-type: none"> - We will evaluate weights/growth velocity of infants seen in various specialty clinics controlling for variables such as co-morbid conditions, and distance from health care facilities. - We will also investigate how lab studies, birth/NICU history, medications impact growth velocities within each group.
	Dr. Kathryn Akong	Kaakong@ucsd.edu	Research	<ul style="list-style-type: none"> - Determine microbiologic effects of azithromycin in CF subjects - Determine metabolomic effects of azithromycin in CF subjects - To quantitate azithromycin and its metabolites in plasma, PBMCs sub-sets and epidermal swabs
	Dr. Rakesh Bhattacharjee	rakesh@ucsd.edu	Research	<ul style="list-style-type: none"> - Compare exosomal miRNA profiles of children with OSA and/or obesity vs age-matched controls. - Compare exosome miRNA profiles of children with OSA before and after treatment (following adenotonsillectomy) - Corroborate exosome miRNA profiles of children with OSA compared to adults with OSA to determine if upregulation of specific miRNA in children is conserved in adults
	Dr. Rakesh Bhattacharjee	rakesh@ucsd.edu	Research	<ul style="list-style-type: none"> - Determine additional knowledge on tongue strength and how it affects OSA. - To identify if method of feeding (bottle or breast) is associated with the development of OSA. - To assess if methods of certain habits such as thumb sucking or use of a pacifier affects the development of OSA.

* Project Domains: Research, Quality Improvement (QI), Medical Education (MedEd), Community Service/Advocacy/Leadership (CAL), Global Health (GH)

Resident Academic Project (RAP) Database

Division	Faculty Name	Faculty e-mail	Project Domain*	Field of study
PULMONOLOGY RESPIRATORY MEDICINE Liaison(s): Dr. Julie Ryu j1ryu@ucsd.edu Janelle Celso, BS, CCRC jcelso@rchsd.org				- To evaluate data found in the patients sleep study visit and a questionnaire that will allow us to find the correlation between tongue strength and OSA.
	Dr. Rakesh Bhattacharjee	rakesh@ucsd.edu	Research – retrospective	- Obstructive Sleep Apnea (OSA) is highly prevalent children. - We plan to evaluate whether specific anthropometric measures such as body fat percentage are more strongly associated with indices of sleep disordered breathing than conventional measures such as the BMI.
	Dr. Thu Duong	taduong@ucsd.edu	Research	- Asthma is one of the most common chronic illnesses that affect children worldwide. - Simple education tool to help caregivers better understand the difference between asthma controller and rescue inhalers
RHEUMATOLOGY Liaison(s): Dr. Peter Chira pchira@rchsd.org	Dr. Johanna Chang	jchang@rchsd.org	Research, QI	Reproductive health, general rheumatology
	Dr. Peter Chira	pchira@ucsd.edu	Research, QI, CAL	Transition care, camps, general rheumatology, improving referrals
	Dr. Suhas Radhakrishna	sradhakrishna@rchsd.org	MedEd, Research	General rheumatology
	Dr. Robert Sheets	rsheets@rchsd.org	Research, QI, Other	General rheumatology, EPIC

* Project Domains: Research, Quality Improvement (QI), Medical Education (MedEd), Community Service/Advocacy/Leadership (CAL), Global Health (GH)