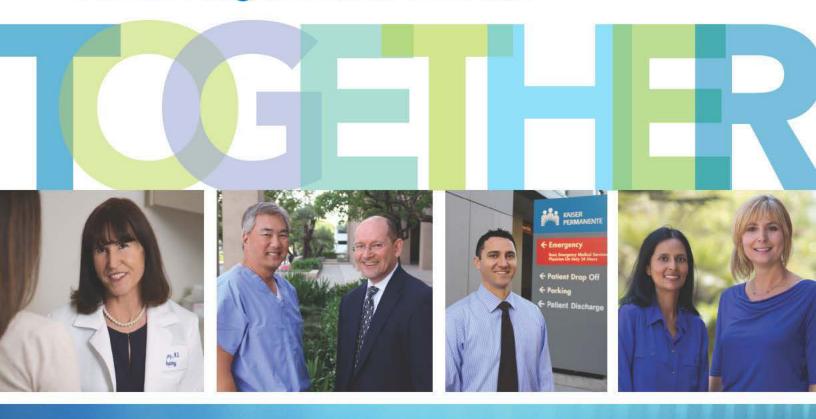
# Kaiser Permanente **Research**

Department of Research & Evaluation
2013 Annual Report

## Transforming the future of health



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# Transforming the future of health



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## Message from the scientific director



### Steven Jacobsen, MD, PhD

Senior Director of Research Kaiser Permanente Southern California People inside and outside Kaiser Permanente often talk about our databases as the prize asset of our research program. It's true that few other institutions have decades of detailed health records for such a large and diverse population. When it comes to certain types of research, there is no denying that our databases give us a unique vantage point.

But databases don't make the discoveries that transform health. That takes people with the right kind of expertise to figure out which questions really matter, to develop strategies to answer those questions, and to translate those findings into practice.

Discoveries that transform health happen when people work across traditional boundaries of academic disciplines, clinical specialties, and care settings.

That's the true crown jewel of our research program. We bring people together, breaking through many of the traditional barriers of academic research and real-world clinical practice, to transform the future of health.

# Together, we're turning research into reality

Soon after arriving at Kaiser Permanente, I caught my first glimpse of the power of research born through cross-disciplinary collaboration. I sat in on a meeting of the inter-regional chiefs of urology and listened as they shared questions about current practices. Right away, I realized that our research teams could help answer those questions. You can read more about the ensuing collaboration on page 4.

I see it happening with our clinical trials programs. For many years, Permanente physician investigators have contributed to medical advances through participation in clinical trials (see page 8). Dr. Bill Towner has a vision for pragmatic trials that will draw on that expertise to examine and evaluate care delivery and practices. These types of trials will take input from clinicians, operational leaders, and scientists. The Care Improvement Research Team (CIRT) is another great example of the power of combining expertise to pursue transformative research. The team includes people from a wide range of disciplines, including pulmonology, emergency medicine, nursing research, social work and sociology, organizational behavior, health services, and implementation science. CIRT works closely with practicing clinicians to encourage innovation and improvements in care delivery and promoting best practices (see page 12).

### Together, we're building a great team

Our department has grown exponentially. In 2006, we had a scientific team of 6 research scientists at our Pasadena offices. Today, the faculty includes nearly 30 research scientists and a small group of post-doctoral research fellows. Our staff in Pasadena and around the region was near 260 at the end of 2013, and continued to increase into 2014. We also have a growing roster of associate investigators and clinical collaborators.

This growth is possible in part because of continual increases in extramural funding. New federal and state grants in 2013 provided funding for innovative new projects, including studies on environmental effects on pregnancy, cardiotoxicity of breast cancer treatments, and activity levels as young women transition into adulthood.

Kaiser Permanente has also made substantial investments. Community Benefit has funded the development of our Care Improvement Research Team. The Center for Safety and Effectiveness Research (CESR) has provided funding for important studies that address real-world questions from our clinical leaders. And Southern California Permanente Medical Group leadership has provided critical support for operationally focused projects.

### Together, we're rising to the challenge

Growth is good. But rapid growth can present its own challenges. At times, we haven't been able to fill research positions as quickly as we'd like. We've almost run out of cubicles and office space. The increased workload can put a strain on our people and systems.

We're rising to these challenges together. Senior Director of Research Administration, Sac Carreathers, has led much of that work to grow the staff and improve our infrastructure. I'd like to thank him for helping to steer us toward a bright future, even when the roads have been difficult.

We've also faced sadness together. Over the past year and a half, we lost 3 colleagues: Peggy Balcius, one of our talented programmers, Dr. Mike Marcy, one of my favorite collaborators, and Ron Nakamura, who helped me understand the true power of collaboration at Kaiser Permanente.

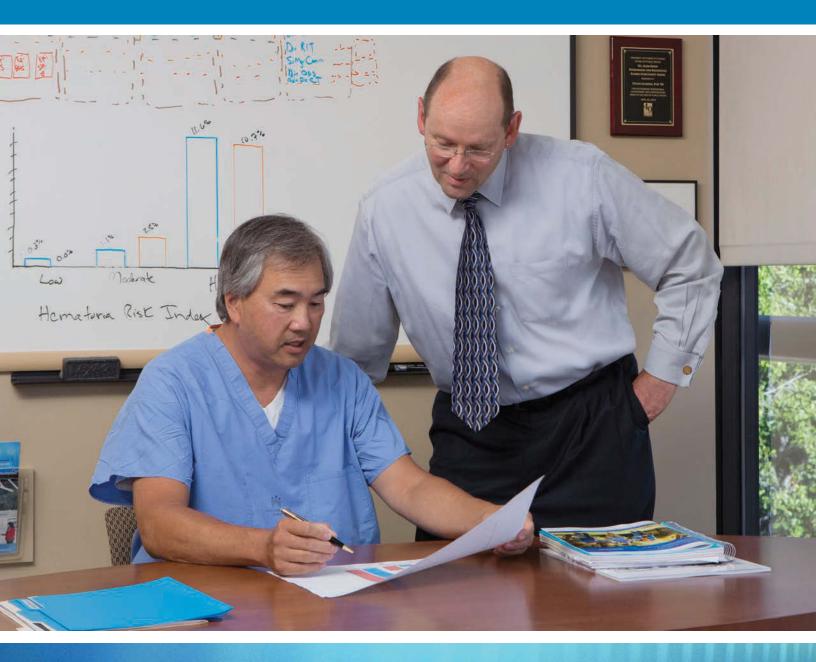
These losses make me even more appreciative of how privileged I am to come to work every day with so many talented and dedicated people. Our scientists and clinicians are setting a truly transformative agenda that will benefit our members and the community at large. We couldn't do it without the support of the entire team, from our IT and administrative support to our research associates and biostatisticians.

# Together, we're transforming the future of health,

**Steven Jacobsen, MD, PhD** Senior Director of Research Kaiser Permanente Southern California

# To test or not to test?

Patients with Asymptomatic Microscopic Hematuria



Clinicians and researchers at Kaiser Permanente Southern California collaborated from day one on a study to identify patients who could safely avoid unnecessary radiation and instrumentation after the detection of microscopic hematuria (blood in the urine that can't be seen by the naked eye). Their work has already changed clinical practice at Kaiser Permanente Southern California and promises to have worldwide implications for the workup of patients with asymptomatic microscopic hematuria.

### How did Kaiser Permanente's clinicians and researchers come together to do this study?

## **Ronald Loo, MD,** Regional Coordinating Chief of Urology, Kaiser Permanente Southern California:

Dr. Jacobsen and I first met informally when he became the new head of research for Kaiser Permanente Southern California in 2006. He'd come from the Mayo Clinic and had a reputation as a world-renowned researcher in my specialty of urology, so I wanted to meet him. As soon as we started talking I knew that we had similar ideas about using research as a way to effect change in clinical practice.

## **Steven Jacobsen, MD, PhD,** Senior Director of Research, Kaiser Permanente Southern California:

Soon after we met, Dr. Loo invited me to the interregional chiefs of urology meeting. He thought it might be interesting for me to hear their conversation and to see what might transpire.

**Dr. Loo:** So he was there with all of Kaiser Permanente's clinical leaders for urology from across the country as an equal partner.

**Dr. Jacobsen:** I listened as the chiefs talked about some of the most burning questions in their practices and how they wished there was more definitive evidence to answer those questions. That launched a discussion about how we might work together to address a question that would have a direct impact on clinical care.

**Dr. Loo:** And the issue of microscopic hematuria came up. It's important to understand that many healthy people—up to 18% of the population—can actually have microscopic hematuria.

At the time, the American Urological Association recommended follow-up evaluations for microscopic hematuria that included urine testing, CT scans, X-rays, renal ultrasound, and cystoscopy. The risks associated with these procedures include radiation exposure, urinary tract infections, and sepsis.

**Dr. Loo:** Everybody sitting around the table knew that these practice guidelines were not right. The likelihood that these tests will find cancer is very low since the prevalence of urinary tract cancer in the general population is only 0.01% to 3%.

**Dr. Jacobsen:** We all agreed these evaluations resulted in a lot of instrumentation and radiation exposure with very low yield.

**Dr. Loo:** In other words, we all had concerns that we could potentially cause more harm than good.

**Dr. Jacobsen:** So they thought it would be really helpful to have some evidence about which patients with microscopic hematuria needed an extensive workup versus those who didn't.

**Dr. Loo:** Fortunately, we had the luxury of having a researcher at the table who could help us devise and conduct a study with an eye toward developing a better way to work up patients with microscopic hematuria.

The observational study that grew out of this clinician/researcher partnership examined the electronic health records of more than 4,000 patients with microscopic hematuria between January 2009 and August 2011. The study found that an extremely small proportion of these patients was subsequently discovered to have cancer; only 2.3% were diagnosed with bladder cancer and only 0.2% had a pathologically confirmed diagnosis of renal cancer.

The findings, published in the journal *Mayo Clinic Proceedings* in 2013, suggest that microscopic hematuria is an unreliable indicator of urinary tract malignancy. The researchers conclude that patients with microscopic hematuria may not benefit from further evaluation and therefore could avoid further routine tests.

Investigators used the findings to create and validate a screening tool called the Hematuria Risk Index to more accurately predict renal and bladder cancer risk. The Hematuria Risk Index uses age and gross hematuria (visible blood in the urine) as the strongest predictors of cancer, but also factors in other risk factors including male sex and smoking history.



To test or not to test? Patients with Asymptomatic Microscopic Hematuria

### Did the study lead to a change in clinical practice guidelines?

**Dr. Loo:** The short answer is yes. The long answer is that it took us 3 years, 2 publications, and a whole lot of evidence review, a whole lot of education, and a whole lot of work in our electronic health record to change the guidelines and change the practice.

**Dr. Jacobsen:** Even so, we were able to do it in about half the time it would have taken elsewhere because these data were generated internally, we knew the results of the study, and we had the risk score in hand. We shared all this with our guidelines development people at the same time that our findings were published in *Mayo Clinic Proceedings*, so there wasn't the typical 6-to-12-month lag from the publication of a practice-changing article to really effecting a change in guidelines.

**Dr. Loo:** So yes, Kaiser Permanente has changed its clinical practice guidelines to reduce unnecessary testing. In the most simplistic terms, we use the Hematuria Risk Index to find the patients who need further workup and those who can safely avoid it. It really comes down to a few demographics and a simple question—have you seen blood in your urine in the last 6 months? If the answer is yes, then we need to see you.

**Dr. Jacobsen:** The study is also now beginning to influence how this condition is worked up outside of Kaiser Permanente, so we view this work as potentially having worldwide implications as to how the practice should change.

**Dr. Loo:** This shows the value of clinicians and researchers working together and it doesn't happen often enough.

**Dr. Jacobsen:** Agreed! There's a great advantage of researchers talking to the physicians on the front line and thinking about a problem for which there isn't adequate evidence.

**Dr. Loo:** If Kaiser Permanente's mission is to be the answer to health care, it makes sense that our research has direct implications on patient care. You try to answer the questions that are the most relevant, that are going to have the most impact, that are going to affect the most people.

**Dr. Jacobsen:** Our investigators are actually very selfmotivated to reach out to our clinicians to understand the burning issues for which research findings could actually effect a change in practice. I encourage them to do this.

**Dr. Loo:** I believe that only about half the medicine we practice in this country is based on good evidence, and we can do a whole lot better. There are a number of fundamental clinical issues that we need to address, and if we're really going to be serious and do this, we need to do it the right way and we need to have our clinicians work closely with our researchers to make sure that we can actually go in to answer these questions and change the way we practice.



# Advancing care and saving lives

**Clinical Trials Division** 



New drugs to prevent a recurrence of breast cancer. New therapies to cure hepatitis C. New devices for coronary diagnostic and intervention procedures.

The Clinical Trials Division advances medical innovation by evaluating next-generation treatments that prevent illness, treat health problems, and save lives.

By participating in clinical trials, Kaiser Permanente members gain access to treatments not yet available to the general public; it gives our physicians advance knowledge about new therapies before they come onto the market.

## William Towner, MD, FACP, FIDSA, Regional Physician Director for Clinical Trials:

There's no question that offering clinical trials helps us get the latest investigational agents to patients who need them the most.

#### Jonathan Polikoff, MD, Director of Cancer Clinical Trials Access Program:

Since I started practicing oncology in the 1980s, I've seen steady progress leading to improved survival and quality of life for our cancer patients. This would not have been possible without the innovations established through well-conducted clinical trials.

## Lisa Nyberg, MD, MPH, Principal Investigator, San Diego Hepatology Research Program:

It's very gratifying to see many of the hepatitis C treatments we've tested in clinical trials now approved and being used to cure a disease that was once thought to be incurable.

## Kaiser Permanente Southern California conducts well over 300 active clinical trials at any one time.

**Dr. Towner:** What makes Kaiser Permanente such fertile ground for clinical trials is our sheer size and our integrated health care system. Our electronic medical record makes it easy to search for and identify potential study subjects. That—and the dedication of our clinicians—is why we've been so successful in enrolling so many patients.

Kaiser Permanente Southern California has been named as a "Top-Accruing Affiliate Institution" by the Southwestern Oncology Group (SWOG), a cooperative group within the National Cancer Institute's National Clinical Trials Network. The recognition is based on the number of patients enrolled in clinical trials. "It's wonderful to be part of a team that's striving to improve medical care and medical knowledge through our participation in clinical trials."

— William Towner, MD, Regional Physician Director for Clinical Trials

#### **Robert Cooper, MD,** Principal Investigator for the Kaiser Permanente Southern California Pediatric Clinical Trials Program:

Our pediatric oncologists always look first for clinical trials when planning care for our patients, which is why we have such high enrollments. All our clinicians consider offering clinical trials as a standard of care. We regularly enroll upwards of 30 to 40% of all our new pediatric cancer patients in clinical trials.

Our clinical trials programs give more than 1,500 Kaiser Permanente Southern California members access to investigational drugs, devices, and procedures every year.

**Dr. Towner:** We are very fortunate at Kaiser Permanente to have so many dedicated and passionate researchers who are interested in advancing medical knowledge and providing new treatments to patients before they can get them elsewhere.

**Dr. Cooper:** During my career at Kaiser Permanente, I've seen a huge change in the investments that Southern California Permanente Medical Group and the Department of Research & Evaluation have made in supporting our participation in clinical trials. I believe our leadership truly understands how much clinical trials benefit our patients and has worked diligently to provide the infrastructure necessary to provide this type of very sophisticated medical care. Kaiser Permanente Southern California has formal clinical trials programs in several areas, including oncology, pediatric oncology, infectious disease, and hepatology. Independent investigators also conduct clinical trials in at least 2 dozen different specialties and sub-specialties.

### Adult Oncology

Dr. Polikoff: Kaiser Permanente played a very important role in securing FDA approval for raloxifene to reduce the risk of breast cancer in postmenopausal women, Avastin to prolong the life of colon cancer patients, and Herceptin for HER2-positive breast cancer. We are currently involved in 3 major adjuvant breast cancer studies with the potential to change clinical practice and save even more lives. First, to help determine which patients will benefit from chemotherapy and which won't; second, to evaluate metformin (commonly used to treat diabetes) in preventing recurrence in women with early stage breast cancer; and third, to determine if adding Herceptin to chemotherapy enhances survival for women with invasive disease and low HER2 levels — this has the potential to more than double the number of women Herceptin benefits. Next up for us is to study an immune therapy for lung and bladder cancer. Of course, until we cure every patient with cancer, our job's not done. That's why we have to keep doing this.

### Pediatric Oncology

**Dr. Cooper:** I credit the success of our program to the commitment and enthusiasm of our clinicians in offering and enrolling children in clinical trials. For example, we have a long-running trial for the chimeric monoclonal antibody 14.18 to treat neuroblastoma, a common cancer that affects small children. This antibody has proven to be a very beneficial treatment and our children would not have had access to it outside of a clinical trial setting. Clinical trials have also proven that adding a first-generation Tyrosine Kinase Inhibitor (TKI) to chemotherapy dramatically increased survival without the need for a bone marrow transplant in children with Philadelphia-positive acute leukemia. We are currently evaluating a second-generation TKI with a somewhat reduced chemotherapy regimen for that disease.

"Our participation in cutting-edge studies gives our patients access to novel treatments they can only receive on a clinical trial."

— Jonathan Polikoff, MD, Director of Cancer Clinical Trials Access Program

### HIV/AIDS

**Dr. Towner:** Kaiser Permanente has been conducting HIV/AIDS clinical trials since the beginning of the epidemic in the 1980s when it was almost always a uniformly fatal disease. Since then, we've played a major role in securing FDA approval for virtually all of the therapies currently used to treat HIV. With so many good HIV therapies now in the pipeline, our next big step is to help mitigate the toxicity of these therapies and, of course, to find a cure.

## Hepatology

**Dr. Nyberg:** In 2011, we were one of the very few sites in the country involved in early clinical trials for sofosbuvir (then called Pharmasset, PSI-7977), a breakthrough drug for hepatitis C, a condition that has long defied a cure. Through our clinical trials we were able to offer sofosbuvir to our patients long before it came on the market, saving many from liver transplant, liver failure, and even death because we were able to cure their disease. We are also conducting many other hep C clinical trials to develop different oral regimens that are well tolerated with cure rates in the 95% range. We are now also involved in several clinical trials to develop new novel therapies to cure chronic hepatitis B, a disease that puts countless people around the world at risk of liver failure and liver cancer. A cure for chronic hepatitis B is now within sight.

# Kaiser Permanente Southern California clinical trials...the next step

**Dr. Towner:** We've done an outstanding job in using clinical trials to get the latest investigational agents to our patients who need them the most, and we'll certainly continue along that path. But beyond new drug therapy, I see us expanding the scope of our clinical trials to include the study of how we deliver care. I think there is a tremendous need for us to more rigorously study what it is we do in terms of care implementation and delivery.

After all, we do a fantastic job caring for our members and oftentimes we use very innovative approaches that are way ahead of the pack, so we need to scientifically evaluate those approaches and then disseminate our successes—and even our failures—to the greater medical community. This process will take time to develop, but we are in the planning stages to bring this to fruition.







# Clinical Trials Division

# Bridging research and operations

Care Improvement Research Team (CIRT)



The Care Improvement Research Team. The name says it all.

CIRT was created in 2012 to identify and answer research questions to help Kaiser Permanente achieve our goals of better health, better care, and improved affordability.

The team comprises core scientists, affiliated scientists, post-doctoral scholars, and support staff. It has established close working relationships with a number of clinical and operational partners who are equally committed to innovation, improvement, and encouraging adherence to Kaiser Permanente national guidelines.

Michael Gould, MD, MS, CIRT Program Leader and Director of Health Services and Implementation Research:

I want to emphasize 3 things about CIRT. First, we aim to create a new model of research that is embedded in health systems and mixes externally funded scientific investigation with internally focused care improvement efforts. Second, we want to help our clinical and operational leaders to identify, prioritize, and solve problems related to quality and affordability. And third, we have diverse interests and draw on the strengths of the resources and staff in the Department of Research & Evaluation, along with the strong relationships that we have developed with Kaiser Permanente Southern California clinicians and leaders.

**CIRT PROJECT:** Measure Kaiser Permanente Southern California adherence to the American Society of Clinical Oncology (ASCO) Choosing Wisely recommendations for reducing low-value practices in cancer care.

### Erin Hahn, PhD, MPH, Post-Doctoral Research Fellow\*:

We chose to study our adherence to 3 of the 10 Choosing Wisely recommendations, which address use of imaging for staging of early prostate and breast cancer and the use of imaging and biomarker tests for surveillance in asymptomatic breast cancer patients.

**Dr. Gould:** When we looked at our use of imaging during staging for both prostate and breast cancer, we found that the utilization rates were very low—less than 10% across the region.

**Dr. Hahn:** In doing chart reviews of these patients we found that approximately 50% of the time there was a documented reason for the imaging. So we are doing a terrific job on these 2 Choosing Wisely recommendations. We are not over-imaging our patients and when an imaging test is ordered, there is a good reason.

**Dr. Gould:** Our study of the breast cancer surveillance piece showed a higher rate of imaging. About 30% of asymptomatic breast cancer patients had received at least 1 imaging test.

**Dr. Hahn:** But the chart reviews showed that approximately 95% of this imaging was triggered by a symptom, sign, or another abnormal test result, so again—entirely appropriate.

## But a study of biomarker testing told a different story.

**Dr. Gould:** We learned that 35% of our patients got at least 1 biomarker test but virtually none of those tests were prompted by a symptom, complaint, or other sign. They were done purely for surveillance purposes despite the fact that there's little or no published evidence to suggest that the test is helpful. We also saw great variation in the ordering of biomarker tests—some oncologists never ordered the tests, some always ordered them—and everything in between.



\*Dr. Hahn was appointed as a Research Scientist I in August 2014.

**Dr. Hahn:** We shared these results with Dr. Joanne Schottinger, our regional lead for oncology.

Joanne Schottinger, MD, Regional Assistant Medical Director for Quality and Clinical Analysis:

The imaging results were very reassuring. It was good to know that most of the imaging appears to be driven by symptoms, so that was very appropriate. But the biomarker study was an eye-opener. We don't like to think we're doing unnecessary tests, but when someone presents the data to us, you can only say, "Oh, I see we are."

In following up, Dr. Schottinger arranged for Dr. Gould and Dr. Hahn to share their data with the regional oncology chiefs. Efforts are now underway to reduce routine biomarker testing.

"As a physician, it's frustrating when a patient asks a question and we don't have a good, evidence-based answer. One of the exciting things about our program is that if we find an answer, we can share it with our colleagues and make it happen in practice."

— Joanne Schottinger, MD, Regional Assistant Medical Director for Quality and Clinical Analysis

# **CIRT PROJECT:** Study the link between physical activity and 30-day hospital readmission for patients with COPD.

### Huong Nguyen, PhD, RN, Research Scientist:

The Centers for Medicare and Medicaid Services now closely tracks readmission rates for patients with COPD. So we were interested in seeing if there were modifiable risk factors for 30-day readmissions.

Researchers examined the electronic health records of 6,000+ patients who'd been hospitalized with COPD.

**Dr. Nguyen:** Because Kaiser Permanente documents patients' self-reported physical activity in their electronic health record during routine clinical visits, we could readily see the relationship between physical activity and readmission.

The study showed that patients with COPD who were physically active were less likely to be readmitted within 30 days than patients who were inactive.



## Care Improvement Research Team

**Dr. Nguyen:** As a result of this study, we are now referring all hospitalized COPD patients to pulmonary rehab upon discharge, ideally to start a supervised exercise program. We're also working to prevent the initial hospitalization by developing a program for patients to exercise safely at home.

Additional studies are now being planned to help determine if increased physical activity will reduce the risk of future hospitalization.

**Dr. Nguyen:** Working in the CIRT group allows us to leverage our expertise in an area of particular concern to Kaiser Permanente and conduct research that has an impact and can change the way we practice.

**CIRT PROJECT:** Measure Kaiser Permanente Southern California adherence to the American Academy of Family Physicians Choosing Wisely recommendations for treating acute sinusitis patients.

### Adam Sharp, MD, MS, Research Scientist:

When I started working with CIRT about a year ago, Marc Klau, MD, MBA, the regional chief of head and neck surgery, expressed an interest in looking at acute sinusitis. Hence, this study.

The Choosing Wisely guidelines recommend that clinicians avoid imaging and antibiotics for patients with uncomplicated acute sinusitis.

**Dr. Sharp:** The bottom line is that most patients have a viral infection, so will not benefit from diagnostic imaging or antibiotics. We found Kaiser Permanente Southern California physicians rarely use CT imaging, but commonly prescribe unwarranted antibiotics for acute sinusitis.

Over 99% of acute sinutitis encounters follow imaging recommendations, but only about one-third follow antibiotic guidelines.

**Dr. Sharp:** The study showed that the majority of our patients (89%) seeking care for acute sinusitis were prescribed an antibiotic, even though it was unlikely to help them. Based on previous evidence, antibiotics are more likely to harm these patients than help them. Our work gives providers and health systems a good standard to aim for in acute sinusitis performance improvement efforts.



"As CIRT researchers, we're part of the team, but we can't do this without working with the clinical and operational leaders and to get their agreement that a project is worth caring about."

— Michael Gould, MD, MS, Director of Health Services and Implementation Research

Dr. Sharp's team is now preparing educational materials for all providers with the current acute sinusitis recommendations. They are also building an alert within the electronic medical record to help providers and patients.

**Dr. Sharp:** For me, what sets Kaiser Permanente apart is the potential to implement evidence into realworld clinical practice and that's very exciting—it's why I'm here.

**Dr. Gould:** As CIRT researchers, we're part of the team, but we can't do this without working with the clinical and operational leaders and to get their agreement that a project is worth caring about. We are beginning to meet regularly with medical group and hospital leaders to identify research opportunities. We've embedded several researchers in key operational work groups to participate in the extraordinary quality improvement work that's already going on.

## Scientific Accomplishments

## New grants fund innovative research

Public and private partnerships build the research program

Extramural funding from a variety of sources, including federal and state agencies, private foundations, and industry sources, has powered the growth of Kaiser Permanente Southern California's transformative research program. The following are a small sample of projects funded in 2013. Each takes on questions with important clinical and public health implications. The findings will guide prevention, treatment, and implementation strategies.

### Environmental effects on pregnancy

The National Institute of Environmental Health Sciences awarded a Research Project Grant (R01) to Kaiser Permanente Southern California to examine the effects of flame-retardant chemicals on pregnancy and maternal health.

Researchers seek to understand if exposure to polybrominated diphynyl ethers (PBDEs)—compounds commonly used as flame retardant in furniture, clothing, and other products—is associated with premature labor. North Americans—and Californians in particular have the highest level of exposure to flame retardant chemicals of anyone in the world. Previous studies showed that nearly all Americans have some level of PBDEs in their bodies.

The research team will compare blood samples from women who deliver preterm with randomly selected women who had term deliveries to determine if the women who delivered preterm have higher levels of PBDE-47, the most prevalent type of PBDE found in maternal plasma and thyroid stimulating hormones. The specimens collected will be assayed at Winthrop University.

Darios Getahun, MD, PhD, MPH, is the principal investigator from Kaiser Permanente Southern California. Morgan Peltier, PhD, is the principal investigator from Winthrop University. Michael Fassett, MD, from Kaiser Permanente's West Los Angeles Medical Center, is a coinvestigator on the study.





"Given the ubiquitous exposure of women and their infants to these compounds, there is a critical need to understand their potential as risk factors for preterm birth and other adverse pregnancy outcomes."

— Darios Getahun, MD, PhD, MPH, Research Scientist

### Elective induction of labor

The National Institute of Child Health and Human Development awarded a Research Project Grant (R01) to Kaiser Permanente Southern California and the Seattlebased Group Health Research Institute to examine the risks and benefits associated with inducing labor when it is not medically necessary.

Researchers will compare outcomes for elective induction at 38, 39, or 40 weeks gestation with outcomes when the pregnancy continued to term. Specifically, they will evaluate risks for outcomes such as cesarean delivery, postpartum hemorrhage, chorioamnionitis, neonatal intensive care unit stay, shoulder dystocia, low APGAR score, stillbirth, and neonatal death. Researchers will also examine how risks vary by several factors, including race and ethnicity, the number of times a woman has come to term and delivered a baby, and prepregnancy obesity.

**Darios Getahun, MD, PhD, MPH,** is the principal investigator at Kaiser Permanente Southern California. Sascha Dublin, MD, PhD, is the principal investigator from Group Health Research Institute.

### Cardiotoxicity of breast cancer treatment

In 2013, the California Breast Cancer Research Program granted a Translational Research Award to Kaiser Permanente Southern California to examine the risk of new cardiovascular disease among breast cancer survivors exposed to aromatase inhibitors and other adjuvant treatments.

Aromatase inhibitors (Als) stop the production of estrogen in postmenopausal women. Als, which became generic in 2010, are becoming the cornerstone of treatment for postmenopausal women with hormonepositive cancer.

The decision regarding the optimal endocrine treatment for breast cancer has become complex. New evidence suggests that Als may increase the risk of cardiovascular disease, but few studies have been able to follow women long enough to determine if risk is truly greater. By contrast, recent studies indicate that tamoxifen, another common adjuvant therapy, may protect heart health.

Researchers have assembled a cohort of nearly 30,000 breast cancer survivors followed for up to 20 years after diagnosis to examine cardiovascular risk. Researchers will also examine the interaction of the adjuvant medications with other cardiotoxic treatments, including certain chemotherapy and radiation treatments.

The researchers aim to generate a tool to help clinicians evaluate the risks and benefits of aromatase inhibitors versus tamoxifen for their post-menopausal patients diagnosed with breast cancer.

**Reina Haque, PhD, MPH,** is the principal investigator for the study. **Joanne Schottinger, MD,** is a co-investigator on the study.

### Breast cancer survivors and depression

Researchers from Kaiser Permanente Southern California and the UCLA Clinical & Translational Research Center are collaborating on a study to better understand factors that may contribute to sleep problems and depression in breast cancer survivors. The study is funded by the National Cancer Institute.

The goal of this study is to examine how depression and sleep problems may negatively affect quality of life after breast cancer diagnosis. A better understanding of sleep problems and depression in women diagnosed with breast cancer will contribute to the development of future methods to enhance quality of life for breast cancer survivors. The research team is working with nurses and clinicians to recruit patients from Kaiser Permanente medical centers in the greater Los Angeles area to take part in the study.

Researchers will evaluate data collected from patient interviews and surveys including psychometrics, mood and sleep patterns, general health, physical activity and social functioning, as well as inflammation markers of patient blood samples. They will collect data 4 times over 2 years to assess for changes in depression, lifestyle, and inflammation markers in blood specimens.

**Reina Haque, PhD, MPH,** is the site principal investigator. Joanne Schottinger, MD, is a coinvestigator on the study. Michael Irwin, MD, from UCLA is the principal investigator.

### Activity as girls transition to adulthood

The National Heart, Lung, and Blood Institute awarded a Research Project Grant (R01) to Kaiser Permanente Southern California to study the trajectories of physical activity and sedentary behavior among girls as they transition into early adulthood.

Physical activity declines during adolescence and early adulthood, particularly among girls. Some girls, however, manage to maintain or increase activity levels as they move into adulthood. Researchers seek to understand the factors that predict increases or decreases in physical activity levels, as well as changes in sedentary behavior.

This is the third phase of a study that has followed a cohort of 589 girls as they transitioned through adolescence. The research team, initially based at the University of Maryland, assessed activity levels among the girls in 8th grade and again in 11th grade. The team will measure activity levels again when the same individuals are about 23 years old.

Ultimately, researchers aim to identify predictors that are amenable to change in order to develop effective interventions to stop the decline in physical activity and the rise of excessive sedentary behavior.

**Deborah Rohm Young, PhD, MBA,** is the principal investigator for the study. **Corinna Koebnick, PhD, MSc,** is a co-investigator on the study.

# Change in medical utilization associated with sleep apnea therapy

The ResMed Foundation awarded researchers at Kaiser Permanente Southern California a grant to study the costeffectiveness of diagnosing and treating sleep apnea.

Sleep apnea is a disorder that repeatedly interrupts breathing while a person is asleep. It affects approximately 1 in 5 Americans and can increase the risk of other health problems, including high blood pressure,



heart attack, heart failure, stroke, and arrhythmia.

Past research indicates that treating sleep apnea may reduce medical care expenditures, but strong evidence is lacking. Researchers hope that a better understanding of the cost-effectiveness of positive airway pressure (PAP) therapy

in general populations may guide health care and policy decisions related to the screening and treatment of sleep apnea.

Researchers seek to determine if PAP therapy results in a reduction in utilization of emergency department and inpatient hospitalization services. They will also examine variation in utilization of these services by geographic areas and demographic groups.

**Stephen Derose, MD, MSHS,** is the principal investigator for the study.

### Barriers to the 3-dose HPV vaccine series

The Merck Investigator Studies Program has awarded a contract to researchers from Kaiser Permanente Southern California to study system- and physician-level factors that may facilitate or hinder completion of the 3-dose human papillomavirus (HPV) vaccine series.

HPV is the most common sexually transmitted disease in the U.S. While many infected with the virus may never know it, HPV can cause a variety of health problems, including cervical cancer. The quadrivalent HPV vaccine can prevent the most harmful strains of the virus.

Since 2009, the Advisory Committee on Immunization Practices has recommended routine HPV vaccination for girls and boys starting at age 11 to 12, as well as catchup vaccination among adolescents and young adults up to 26 years old. The vaccination requires 3 doses over a period of 6 months. Nationwide, less than half of girls given the first vaccine completed the series within a year.

Researchers will conduct a qualitative study to solicit information from physicians administering the 3-dose series to learn more about attitudes, behaviors, barriers, facilitators, and strategies related to completing the vaccine series. The knowledge gained will guide the design of multilevel interventions to improve the rate of vaccine series completion.

Chun Chao, PhD, MS, is the principal investigator for the study. Co-investigators from Kaiser Permanente Southern California include Sharon Hudson, PhD, MA, and June Rondinelli, PhD, RN, CNS.

## An investment in the future of health Kaiser Permanente invests in transformative research

Investing in research helps Kaiser Permanente continually improve care to our members. Internal funds often support projects that might be difficult to fund through extramural sources, but provide valuable insights into real-world problems. When we discover answers to those problems, we translate them back into practice.

Internal sources of research funding include Kaiser Permanente's Community Benefit program, the Southern California Permanente Medical Group's Regional Research Committee, the Center for Safety and Effectiveness Research, and the Garfield Memorial Fund.

### Safety and effectiveness research

The Kaiser Permanente Center for Effectiveness and Safety Research (CESR) brings together the expertise of research and analytic teams across Kaiser Permanente to answer comparative effectiveness and safety questions that affect our members' health.

CESR funded a series of studies that originated from questions gathered through a survey of clinical and

operational leaders at Kaiser Permanente. The goal of these studies is to answer key questions that will enable our leaders to improve care delivery.

One of the studies funded in 2013 compared the incidence of osteoporosis-related fractures in women who stopped taking bisphosphonates for at least 12 months to women who continued to take the drugs.

Bisphosphonates are the most commonly prescribed medication to prevent osteoporosis fractures. Some studies, however, have suggested that bisphosphonates are associated with an increased risk of serious side effects, including atypical femur fractures. Amid a debate about the safety of long-term use of bisphosphonates, clinicians have speculated a "drug holiday" might mitigate the risk of serious side effects.

**Richard Dell, MD,** the regional lead for Kaiser Permanente Southern California's Healthy Bones program, contributed the question during the CESR survey. **Annette Adams, PhD, MPH,** is the principal investigator. Collaborators include researchers and clinicians from Colorado, the Northwest, and Hawaii.

"This is a great example of work that provided important information back to the delivery system and has also been recognized as high-quality research. This work can make a difference in the health of our members, the communities we serve, and the nation." — Elizabeth McGlynn, PhD, Director, Kaiser Permanente Center for Effectiveness and Safety Research



## Scientific Accomplishments



Researchers have found that women who take a holiday from bisphosphonates do not appear to be at increased risk for osteoporosis-related fragility fractures. Preliminary findings were presented at the 2014 ASBMR (American Society for Bone and Mineral Research) Annual Meeting. Conference organizers named it the "2014 Most Outstanding Clinical Abstract Award."

In another CESR-funded study, researchers are working to determine whether PSA screening reduces the incidence of prostate cancer mortality while evaluating various methodologic approaches and associated biases. This study, led by principal investigators Lauren Wallner, PhD, MPH, and Steven Jacobsen, MD, PhD, involves researchers and clinicians from Kaiser Permanente Southern California, the Northwest, Colorado, Hawaii, Georgia, and the Mid-Atlantic States.

### Operational projects add new evidence

Evidence-based care is a cornerstone of Permanente medicine. But there are many gaps in knowledge, and filling gaps through traditional approaches can take years.

Several years ago, the medical group leadership team initiated a program to identify high-priority operational research questions. The first set of projects, which were funded in 2011, spanned topics ranging from diabetes to surgical safety. Scientists from our department embarked on a second round of operational research projects in 2013, which address the following topics:

- An evaluation of Kaiser Permanente Southern California's program to identify hypertension when patients visit specialty departments. (Principal investigator: Corinna Koebnick, PhD, MSc)
- A study of adherence to statins and its effect on lipid control and the risk of hospitalization for cardiovascular disease. (Principal investigator: Kristi Reynolds, PhD, MPH)
- An analysis of the impact of a worksite clinic on utilization patterns by employees at California Steel. (Principal investigator: David Glass, PhD)
- A study of the effectiveness of diabetes panel management in improving glycemic control. (Principal investigator: Anny Xiang, PhD)
- An assessment of efforts to implement guideline changes for prostate cancer screening in men older than 75 years of age. (Principal investigator: Steven Jacobsen, MD, PhD)
- An intervention using an accelerometer in the inpatient setting to look at the impact on ambulation, length of stay, use of physical therapy services, and readmission. (Principal investigator: Huong Nguyen, PhD, RN)
- An evaluation of measures taken to rein in *Clostridium* difficile, or *C. diff*, infections in Kaiser Permanente Southern California facilities. (Principal investigator: Sara Yee Tartof, PhD, MPH)

These studies, though originally identified because of their importance to the medical group, can also shed light on broader public health issues.

For example, researchers working on the *C. diff* study found that more than 80% of hospitalized patients who tested positive for the infection were tested outside the hospital or within the first 72 hours of hospitalization. This suggests that settings outside of the hospital may play key roles in the identification, onset, and possible transmission of the disease.

This contagious and potentially deadly infection is most often associated with hospitals and other inpatient health care settings. This study's findings provide an important new perspective, pointing to the need to test for the infection both in the hospital and in outpatient settings.

### Incubator funding for care improvement

In 2013, the newly formed Care Improvement Research Team (CIRT) established a new funding mechanism to support incubator projects that aim to improve care delivery. Financial support from Kaiser Permanente Southern California President **Ben Chu, MD, MPH,** and the Community Benefit program made the new program possible. In its inaugural year, the CIRT program funded 3 new incubator projects.

- An evaluation of knee arthroscopy versus physical therapy alone for treatment of meniscal damage in patients with osteoarthritis. (Principal investigator: Mary Helen Black, PhD, MS. Clinical lead: Ronald Navarro, MD)
- An assessment of treatment patterns and quality gaps in non-muscle invasive bladder cancer care. (Principal investigator: Kim Danforth, ScD, MPH. Clinical leads: Stephen Williams, MD, and Ronald Loo, MD)
- An assessment of the implementation of acute sinusitis clinical best practices. (Principal investigator: Adam Sharp, MD, MS. Clinical leads: David Keschner, MD, JD, and Marc Klau, MD, MBA)

In the case of the evaluation of knee arthroscopy, the idea for the question came from the clinical lead, Dr. Navarro, whose clinical expertise led him to question whether knee arthroscopy was beneficial to patients with meniscal tears complicated by osteoarthritis.

Recent clinical trials indicate that patients who received physical therapy alone improved, with respect to pain level and physical functioning, to a similar degree as those who had undergone arthroscopy. In general, as knee pain worsens and physical functioning declines over time, many patients with osteoarthritis eventually undergo knee replacement surgery.

Dr. Navarro and Dr. Black chose to look at time to knee replacement surgery as a key measure of the effectiveness of arthroscopy in patients with meniscal tears and osteoarthritis. The thinking is that if they find no difference in time to surgery it may support use of physical therapy alone, helping patients avoid a potentially unnecessary and costly surgery.

### Regional Research Committee funding

One of the longest-standing internal funding sources for research in Kaiser Permanente Southern California is the Regional Research Committee. Each year, the Regional Research Committee allocates funds to support research by Kaiser Permanente Southern California physicians and employees. See the next page for a list of projects funded in 2013.

The Regional Research Committee recognizes 1 physician each year from a group of nominees who have produced outstanding research. Jashin J. Wu, MD, Director of Dermatology Research at Los Angeles Medical Center, received the 2013 Southern California Permanente Medical Group Physician Research Award.



## Scientific Accomplishments

## Regional Research Committee projects funded in 2013

| Project title   | Principal investigator  |
|---|---|
| Allergy/Immunology<br>Serum biomarkers in eosinophilic esophagitis  | Susan Kim, MD (Resident)<br>Los Angeles Medical Center                                  |
| Dermatology<br>The effect of psoriasis on HIV   | Jashin Wu, MD   |
| Family Medicine/Sports Medicine<br>Core body temperature drop of triathletes during a cold water<br>swim of 1900 meters   | Los Angeles Medical Center<br>Janet Howard, MD (Resident)<br>Los Angeles Medical Center |
| Gastroenterology<br>A prospective, randomized double-blind, placebo-controlled trial<br>on the use of antibiotics for pancreatic cyst aspiration: a pilot study   | Karl Kwok, MD<br>Los Angeles Medical Center   |
| Head and Neck Surgery<br>The efficacy and safety of medical therapy in the treatment of<br>peritonsillar abscesses  | Alex Battaglia, MD<br>San Diego Medical Center  |
| <b>Neurology</b><br>Early intervention for sleep apnea in stroke patients   | Prasanth Manthena, MD<br>Los Angeles Medical Center                                     |
| Obstetrics-Gynecology<br>Analysis of the effect of treatment of pre-diabetes and gestational<br>diabetes as determined by the IADPSG criteria   | 5   |
| Prognostic factors related to 2-year epithelial ovarian cancer survival:<br>Does metformin use improve surgical outcomes and survival of<br>epithelial cancer treatment with primary surgery?             | Scott Lentz, MD<br>Los Angeles Medical Center   |
| Orthopedics<br>Outcomes of arthoscopic arthroplasty osteocapsular of the elbow  | Neil Harness, MD<br>Orange County-Irvine Medical Center                                 |
| Failure rates after acromio-clavicular joint reconstruction   | Lawrence Hsu, MD (Resident)<br>Orange County-Irvine Medical Center                      |
| Complications associated with radial column plating   | Brett Peterson, MD<br>Orange County-Irvine Medical Center                               |
| 30-day hospital readmission rates and mortality after operative<br>fixation of proximal humerus fractures   | Edward Yian, MD<br>Orange County-Anaheim Medical<br>Center-Kraemer                      |
| Perioperative risk of hepatic decompensation and death in previously<br>compensated cirrhotics after orthopedic surgery: an observational<br>study of patients in a large health maintenance organization | Anshuman Singh, MD<br>San Diego Medical Center  |
| <b>Pediatrics</b><br>Intravenous immunoglobulin administration during maintenance<br>chemotherapy in pediatric acute lymphoblastic leukemia:<br>evaluation of indication, use, and efficacy               | Patrick Van Winkle, MD<br>Orange County-Anaheim Medical<br>Center-Kraemer               |
| <b>Radiation Oncology</b><br>Radiotherapy for brain metastases at the end of life: implications<br>for quality of cancer care   | Joan Ryoo, MD, MSHS<br>Los Angeles Medical Center                                       |

# Research and quality improvement

Collaborations that transform care delivery

Although quality improvement and research often operate in separate realms at other institutions, the leadership team at Kaiser Permanente Southern California has encouraged quality improvement and research teams to break out of those traditional silos.

Researchers often look to clinicians to gain insights into potential new research topics and to develop questions that will lead to clinically relevant findings. In turn, researchers bring rigor to the evaluation process, helping clinicians better understand what works and what doesn't.

# Evaluating prostate cancer care quality improvement efforts

Kaiser Permanente Southern California has quality improvement programs across the spectrum of care for prostate cancer. Researchers have played a critical role in the success of the program, bringing an unbiased and disciplined perspective to the evaluation process and building credibility for the program. Programs address a range of health concerns, including:

- age-appropriate screening to prevent over-diagnosis,
- a safety net to ensure follow-up for men who have an abnormal PSA,
- an improved dosing regimen for Lupron (hormonal therapy) based on serum testosterone measurement,
- a program to evaluate the quality and outcomes of robotic technology,
- a program to prevent osteoporosis fractures for men treated with hormonal therapy, and
- a prospective registry capturing patient-reported outcomes and quality of life.

Clinicians and researchers have published results from many of these programs in peer-reviewed literature. The program has also gained recognition internally, winning the Kaiser Permanente 2014 James A. Vohs Award for Quality.



## Scientific Accomplishments



# Clinicians and researchers team up to reduce colorectal cancer mortality

In 2013, the Southern California Permanente Medical Group set a bold goal to reduce the number of patients dying from colorectal cancer by half. The medical group aims to achieve this goal by 2023.

Researchers will work with clinicians and operational leaders to implement and evaluate a myriad of new and ongoing improvement efforts. Proposed programs include expanded screening and surveillance for people at higher risk for colorectal cancer, clinical trials for the prevention of colorectal cancer, and lifestyle interventions for prevention of colorectal cancer recurrence.

At the same time, we are developing a comprehensive research program in colorectal cancer. Current projects include:

- the NCI-funded Population-based Research Optimizing Screening through Personalized Regimens (PROSPR) network,
- the effectiveness of Screening Colonoscopy in Reducing Deaths from Colorectal Cancer, and
- the colorectal cancer cohort that is part of the PCORIfunded Patient Outcomes Research to Advance Learning (PORTAL) network.



"Not many organizations are in a position to set this kind of goal for longterm survivorship. As researchers, we have a unique opportunity to partner with Kaiser Permanente Southern California's clinical leadership and innovative quality improvement teams to help achieve this goal."

- Virginia Quinn, PhD, MPH, Research Scientist

"Our goal is to create unparalleled cancer outcomes by combining evidence-based medicine with coordinated care, systems engineering, and an aligned cancer research program whose results can be immediately incorporated into clinical care."

— Michael Kanter, MD, Medical Director of Quality and Clinical Analysis

## **Research that changes community health** Sharing knowledge with policy makers and the public

Research is part of our commitment to the communities we serve. In addition to sharing findings internally, we share them with the community at large through publications and presentations so others can benefit as well. Researchers also participate in discussions about public policy, contributing their expertise to national health advocacy groups and government advisory committees.

# Creating healthier communities by sharing places to play

Opening up school recreational facilities to neighboring communities could help improve the health of Americans by providing increased opportunities for physical activity, particularly for neighborhoods that lack easy access to public parks or other facilities, according to a policy statement by the American Health Association published in the American Journal of Public Health.

The statement recommended that school districts enter "shared use" agreements with community organizations to allow supervised activities like sports leagues and unsupervised playing.

**Deborah Rohm Young, PhD, MBA** was the lead author of the policy statement.



"I'm looking forward to the opportunity to translate research knowledge into practice through the creation of new materials to help young people with diabetes and their families."

— Jean Lawrence, ScD, MPH, MSSA, Research Scientist

### Improving the lives of youth with diabetes

Research Scientist Jean Lawrence, ScD, MPH, MSSA, became a member of the Youth Strategies Committee for the American Diabetes Association in 2013. The committee oversees the development and enhancement of resources and programs for children and young adults diagnosed with type 1 or type 2 diabetes. Committee members will also develop tools to support family members and caregivers of young people with diabetes.

### Physical Activity Guidelines for Americans Midcourse Report

The Partnership for a Healthier American summit in Washington, D.C., a subcommittee of the President's Council on Fitness, Sports & Nutrition, presented findings from an examination of the best ways to help kids become more physically active: The Physical Activity Guidelines for Americans Midcourse Report: Strategies to Increase Physical Activity.

One of the key findings was that schools are a realistic setting for interventions that increase physical activity. Some examples include physical education classes, activity breaks during classes, active recess periods, and after-school activities. Researchers found that teachers and staff need to be trained to implement these ideas successfully.

**Deborah Rohm Young, PhD, MBA**, is a member of the subcommittee that created the report.

## Scientific Accomplishments

# Selected findings

## 2013 publications

| Total publications: | 371 |
|---------------------|-----|
| First author:       | 215 |
| Senior author:      | 169 |

In 2013, Kaiser Permanente Southern California scientists and clinician researchers made important findings in a variety of research areas. The following is a small sample of some of these discoveries. For a full list of publications from Kaiser Permanente Southern California in 2013, please see the bibliography on page 54.

### Allergy and Asthma

The risk of severe asthma attacks for overweight and obese adults is greater during the fall and winter months.<sup>1</sup>

Five questions about medication adherence and asthma control can aid clinicians in identifying patients at risk of not taking their prescribed medications and the specific barriers involved.<sup>2</sup>

#### **Bone Health and Orthopedics**

Patients with diabetes who undergo total knee replacement surgery do not have increased risk of surgical complications compared to those patients without diabetes.<sup>3</sup> Use of a comprehensive infection surveillance system, combined with a total joint replacement registry, identified patient and surgical factors associated with infection following knee replacement surgery.<sup>4</sup>

Risks and benefits of using routine medications to prevent blood clots should be considered in surgeries in which the risk of blood clots may be higher. These include reverse shoulder arthroplasties and traumatic hemiarthroplasties.<sup>5</sup>

#### Cancer

The presence of microscopic hematuria—blood found in urine that can't be seen by the naked eye—does not necessarily indicate the presence of cancer. This study suggests that tests routinely done on patients with microscopic hematuria could be avoided and has led to the creation of a screening tool to better identify certain types of cancers (see page 4).<sup>6</sup>

Measurements of serum prostate-specific antigen (PSA) taken over time, the most commonly used screening test for prostate cancer in men, improve the accuracy of aggressive prostate cancer detection when compared to a single measurement of PSA.<sup>7</sup>

### **Cardiovascular Disease**

Nearly 13% of people with high blood pressure have resistant hypertension, meaning their hypertension cannot be controlled with 3 or more medications or they require 4 or more medications to treat their hypertension.<sup>8</sup>

<sup>1</sup> Schatz M, Zeiger RS, Zhang F, Chen W, Yang SJ, Camargo CA. Overweight/obesity and risk of seasonal asthma exacerbations. J Allergy Clin Immunol Pract. 2013;1(6):618-622.

<sup>2</sup> Schatz M, Zeiger RS, Yang SJ, Weinstein AG, Chen W, Saris-Baglama RN, Turner-Bowker DM. Development and preliminary validation of the Adult Asthma Adherence Questionnaire™. J Allergy Clin Immunol Pract. 2013;1(3):280-288.

<sup>3</sup> Adams AL, Paxton EW, Wang JQ, Johnson ES, Bayliss EA, Ferrara A, Nakasato C, Bini SA, Namba RS. Surgical outcomes of total knee replacement according to diabetes status and glycemic control, 2001 to 2009. *J Bone Joint Surg Am.* 2013;95(6):481-487.

<sup>4</sup> Namba RS, Inacio MC, Paxton EW. Risk factors associated with deep surgical site infections after primary total knee arthroplasty: an analysis of 56,216 knees. *J Bone Joint Surg Am.* 2013;95(9):775-782.

<sup>5</sup> Navarro RA, Inacio MC, Burke MF, Costouros JG, Yian EH. Risk of thromboembolism in shoulder arthroplasty: effect of implant type and traumatic indication. *Clin Orthop Relat Res.* 2013;471(5):1576-1581.

<sup>6</sup> Loo RK, Lieberman SF, Slezak JM, Landa HM, Mariani AJ, Nicolaisen G, Aspera AM, Jacobsen SJ. Stratifying risk of urinary tract malignant tumors in patients with asymptomatic microscopic hematuria. *Mayo Clin Proc.* 2013;88(2):129-138.

<sup>7</sup> Wallner LP, Frencher SK, Hsu JW, Chao CR, Nichol MB, Loo RK, Jacobsen SJ. Changes in serum prostate-specific antigen levels and the identification of prostate cancer in a large managed care population. *BJU Int.* 2013;111(8):1245-1252.

<sup>8</sup> Sim JJ, Bhandari SK, Shi J, Liu IL, Calhoun DA, McGlynn EA, Kalantar-Zadeh K, Jacobsen SJ. Characteristics of resistant hypertension in a large, ethnically diverse hypertension population of an integrated health system. *Mayo Clin Proc.* 2013;88(10):1099-1107.

#### **Child and Adolescent Health**

Boys are more likely to receive the quadrivalent human papillomavirus vaccine if their mothers receive flu shots or Pap screenings.<sup>9</sup>

#### **Clinical Guidelines**

A multi-disciplinary panel developed new recommendations for evaluating patients with potentially cancerous pulmonary nodules. The new guidelines stress the value of assessing the probability of cancer, the accuracy and utility of imaging tests, the need to weigh the benefits and harms of different management strategies (nonsurgical biopsy, surgical resection, and surveillance with chest CT imaging), and the importance of eliciting patient preferences.<sup>10</sup>

#### Diabetes

The distribution of DRB1-DQB1 haplotypes and their association with onset-related characteristics of autoimmune diabetes varies across major racial/ethnic groups in the U.S. This may contribute to variation in clinical presentation of autoimmune diabetes by race/ ethnicity.<sup>11</sup>

High-fat diets may contribute to increased obesity, insulin resistance, and associated beta-cell dysfunction in Mexican-Americans.<sup>12</sup>

#### **Gestational Diabetes**

Women who are overweight or obese are more likely to deliver infants who are large for their gestational age at delivery, regardless of whether they develop gestational diabetes during their pregnancy.<sup>13</sup>

#### **Health Equity**

Among California Medicaid rheumatoid arthritis patients, African-Americans had 53% lower odds of receiving biologic disease-modifying anti-rheumatic drugs as compared to Caucasians.<sup>14</sup>

#### Injury

Greater body mass index in children is associated with increased odds of lower extremity injuries and pain issues. Because the benefits of physical activity may still outweigh the risk of injury, attention should be paid to injury prevention strategies for children at greater risk for lower extremity injuries.<sup>15</sup>

#### **Innovation and Process Transformation**

Patients who received automated telephone calls inviting them to get their blood pressure checked at a walk-in clinic were more likely to have controlled hypertension than patients who did not receive calls.<sup>16</sup>

#### **Kidney Disease**

Black, Hispanic, and Asian patients have higher rates of end-stage renal disease than white patients, due in part to faster kidney function decline and in part to increased survival.<sup>17</sup>

<sup>11</sup> Black MH, Lawrence JM, Pihoker C, Dolan LM, Anderson A, Rodriguez B, Marcovina SM, Mayer-Davis EJ, Imperatore G, Dabelea D, SEARCH for Diabetes in Youth Study Group. HLA-associated phenotypes in youth with autoimmune diabetes. *Pediatr Diabetes*. 2013;14(2):121-128.

<sup>12</sup> Black MH, Watanabe RM, Trigo E, Takayanagi M, Lawrence JM, Buchanan TA, Xiang AH. High-fat diet is associated with obesitymediated insulin resistance and beta-cell dysfunction in Mexican-Americans. *J Nutr.* 2013;143(4):479-485.

<sup>13</sup> Black MH, Sacks DA, Xiang AH, Lawrence JM. The relative contribution of prepregnancy overweight and obesity, gestational weight gain, and IADPSG-defined gestational diabetes mellitus to fetal overgrowth. *Diabetes Care.* 2013;36(1):56-62.

<sup>14</sup> Chu LH, Portugal C, Kawatkar AA, Stohl W, Nichol MB. Racial/ethnic differences in the use of biologic disease-modifying antirheumatic drugs among California Medicaid (MediCal) rheumatoid arthritis patients. *Arthritis Care Res* (Hoboken). 2013;65(2):299-303.

<sup>15</sup> Adams AL, Kessler JI, Deramerian K, Smith N, Black MH, Porter AH, Jacobsen SJ, Koebnick C. Associations between childhood obesity and upper and lower extremity injuries. *Inj Prev.* 2013;19(3):191-197.

<sup>17</sup> Derose SF, Rutkowski MP, Crooks PW, Shi JM, Wang JQ, Kalantar-Zadeh K, Kovesdy CP, Levin NW, Jacobsen SJ. Racial Differences in Estimated GFR Decline, ESRD, and Mortality in an Integrated Health System. *Am J Kidney Dis.* 2013;62(2):236-244.

<sup>&</sup>lt;sup>9</sup> Hechter RC, Chao CR, Sy LS, Ackerson BK, Slezak JM, Sidell MA, Jacobsen SJ. Quadrivalent human papillomavirus vaccine uptake in adolescent boys and maternal utilization of preventive care and history of sexually transmitted infections. *Am J Public Health.* 2013;103(9):e63-68.

<sup>&</sup>lt;sup>10</sup> Gould MK, Donington J, Lynch WR, Mazzone PJ, Midthun DE, Naidich DP, Wiener RS. Evaluation of individuals with pulmonary nodules: when is it lung cancer?: diagnosis and management of lung cancer, 3rd ed: American College of Chest Physicians evidence-based clinical practice guidelines. *Chest.* 2013;143(5 Suppl):e93S-120S.

<sup>&</sup>lt;sup>16</sup> Harrison TN, Ho TS, Handler J, Kanter MH, Goldberg RA, Reynolds K. A randomized controlled trial of an automated telephone intervention to improve blood pressure control. *J Clin Hypertens* (Greenwich). 2013;15(9):650-654.

#### Maternal and Infant/Neonatal Health

The incidence of chorioamnionitis—an infection of the amniotic fluid, fetal membranes, and placental tissues, and one of the most frequent causes of preterm birth and infant illness—more than doubled between 1995 and 2010.<sup>18</sup>

The rate of children diagnosed with Attention Deficit Hyperactivity Disorder rose dramatically between 2001 and 2010, with non-Hispanic white children having the highest diagnosis rates. There also was a 90% increase in the diagnosis of ADHD among non-Hispanic black girls during the same 9-year period.<sup>19</sup>

#### **Medication Adherence**

Automated phone and letter intervention was effective in reducing the number of patients who didn't fill their first-time statin prescriptions. Because of the low cost of this outreach, this strategy appears feasible for reducing primary nonadherence and may generalize well to other medications and chronic conditions.<sup>20</sup>

Patients who do not fill their first prescription for cholesterol-lowering statins give a wide range of reasons for not doing so, including perceived concerns about the medication, a fear of side-effects and a decision to try lifestyle modifications instead of prescription.<sup>21</sup> Nearly 30% of women failed to pick up their bisphosphonate prescriptions, a medication that is most commonly used to treat osteoporosis and similar bone diseases. The failure to pick up these newly prescribed medications can lead to an increased risk of fractures for these patients.<sup>22</sup>

#### **Neurological Disorders**

Multiple sclerosis is more common in black women than in white women. The finding runs contrary to the widely accepted belief that blacks are less susceptible to MS.<sup>23</sup>

#### **Prevention and Behavior Change**

High body weight in children and adolescents is strongly associated with the likelihood of hypertension.<sup>24</sup>

#### **Sports Medicine**

Although the overall infection rate after anterior cruciate ligament reconstruction (ACLR) is 0.48%, there is an increased risk of deep infections with hamstring tendon autografts.<sup>25</sup>

#### Vaccine Safety and Effectiveness

Older adults who were immunized with the tetanus-diphtheria-acellular pertussis vaccine (Tdap) to help prevent pertussis were at no greater risk of side effects than older adults immunized with tetanus and diphtheria vaccine (Td).<sup>26</sup>

<sup>18</sup> Fassett MJ, Wing DA, Getahun D. Temporal trends in chorioamnionitis by maternal race/ethnicity and gestational age (1995 - 2010). *Int J Reprod Med.* 2013; 2013(5).

<sup>19</sup> Getahun D, Jacobsen SJ, Fassett MJ, Chen W, Demissie K, Rhoads GG. Recent Trends in Childhood Attention-Deficit/ Hyperactivity Disorder. JAMA Pediatr. 2013;167:282-288.

<sup>20</sup> Derose SF, Green K, Marrett E, Tunceli K, Cheetham TC, Chiu VY, Harrison TN, Reynolds K, Vansomphone SS, Scott RD. Automated outreach to increase primary adherence to cholesterol-lowering medications. *JAMA Intern Med.* 2013;173(1):38-43.

<sup>21</sup> Harrison TN, Derose SF, Cheetham TC, Chiu V, Vansomphone SS, Green K, Tunceli K, Scott RD, Marrett E, Reynolds K. Primary nonadherence to statin therapy: patients' perceptions. *Am J Manag Care*. 2013;19(4):e133-139.

<sup>22</sup> Reynolds K, Muntner P, Cheetham TC, Harrison TN, Morisky DE, Silverman S, Gold DT, Vansomphone SS, Wei R, O'Malley CD. Primary non-adherence to bisphosphonates in an integrated healthcare setting. *Osteoporos Int.* 2013;24(9):2509-2517.

<sup>23</sup> Langer-Gould A, Brara SM, Beaber BE, Zhang JL. Incidence of multiple sclerosis in multiple racial and ethnic groups. *Neurology.* 2013;80(19):1734-1739.

<sup>24</sup> Koebnick C, Black MH, Wu J, Martinez MP, Smith N, Kuizon B, Cuan D, Young DR, Lawrence JM, Jacobsen SJ. High blood pressure in overweight and obese youth: implications for screening. *J Clin Hypertens* (Greenwich). 2013;15(11):793-805.

<sup>25</sup> Maletis GB, Inacio MC, Reynolds S, Desmond JL, Maletis MM, Funahashi TT. Incidence of postoperative anterior cruciate ligament reconstruction infections: graft choice makes a difference. *Am J Sports Med.* 2013;41(8):1780-1785.

<sup>26</sup> Tseng HF, Sy LS, Qian L, Marcy SM, Jackson LA, Glanz J, Nordin J, Baxter R, Naleway A, Donahue J, Weintraub E, Jacobsen SJ, Vaccine Safety Datalink (VSD) Team. Safety of a tetanus-diphtheria-acellular pertussis vaccine when used off-label in an elderly population. *Clin Infect Dis.* 2013;56(3):315-321.

# Transforming the future of health



## Department leaders partner to grow the research program

Senior Director of Research Steven Jacobsen, MD, PhD, and Senior Director of Research Administration Sac Carreathers have worked in partnership to dramatically expand the research program in the past 8 years. When Dr. Jacobsen started with the department in 2006, there were about 60 people in the Department of Research & Evaluation. By the end of 2013, the department included nearly 260 people.

In 2013 alone, we added more than 40 employees in Pasadena and at medical centers throughout the region. New hires included scientists, post-doctoral research fellows, biostatisticians, programmers, clinical trials staff, research associates, project managers, IT staff, administrative assistants, and communication staff. We also created several new manager positions to lead the growing research staff in Research Support, Clinical Trials, and the Biostatistics, Programming and Research Databases Services group.

As the number of people working in research has grown, so too has the need for space. In January 2006, all Pasadena-based research staff fit on a single floor at 100 S. Los Robles. By the end of 2013, the department occupied space on all 6 floors of the building. As the department has grown, the leadership responsibilities have also expanded. In 2013, the department introduced a new leadership structure that included 3 new scientific directors:

- Michael Gould, MD, MS, was appointed Director for Health Services Research and Implementation Science.
- Anny Hui Xiang, PhD, was appointed Director of Biostatistics Research.
- Deborah Rohm Young, PhD, MBA, was appointed Director of Behavioral Research.

The appointment of the new directors was the first step in an anticipated reorganization of the department during 2014 and 2015. The new structure will include 6 divisions: Behavioral Research, Biostatistics Research, Clinical Trials, Epidemiology, Health Services Research, and Research Administration. Dr. Jacobsen will lead the Epidemiology Team. Sac Carreathers will lead Research Administration.



"Clinical trials have always been the heart of evidence-based medicine. Whether it is an explanatory design like a trial for a desperately needed new drug or a pragmatic trial that looks at care delivery in the 'real world,' clinical trials really do play an essential role in determining how medicine is practiced every day."

— William Towner, MD, Regional Physician Director for Clinical Trials



### Clinical Trials taps new leadership

William Towner, MD, FACP, FIDSA, was appointed Regional Physician Director for Clinical Trials in 2013. Dr. Towner has more than 13 years of experience leading clinical trials for Kaiser Permanente members with HIV/ AIDS and other infectious diseases.

Clinical trials advance medical innovation by supporting evaluation of new drugs, therapies, and devices. Kaiser Permanente members and our clinicians benefit from participating in clinical trials: Members have access to treatments not yet available to the public and our clinicians learn about new therapies before they come onto the market.

In 2013, we conducted more than 370 clinical trials for a wide range of conditions including cancer, HIV, stroke, and diabetes. More than 70 Southern California Permanente Medical Group physicians served as principal investigators.

# New scientists and post-doctoral research fellows add to expertise

In 2013, the department added new scientific expertise to the team with the addition of 2 new scientists and 2 post-doctoral research fellows.

- Adam Sharp, MD, MS, an emergency medicine physician health services researcher, joined the department in July 2013. Previously, Dr. Sharp was a Robert Wood Johnson Clinical Scholar at the University of Michigan Department of Emergency Medicine. Through his research, Dr. Sharp aims to identify gaps between best and current practices for common acute conditions, and evaluate intervention strategies to facilitate best practices.
- Sharon Hudson, PhD, MA, who had been a Senior Research Project Manager, became a Research Scientist in August 2013. Dr. Hudson now leads the effort to develop tools and education for clinicians in the region who want to conduct research, helping to build stronger connections to those in clinical practice. She is also developing her own research program, capitalizing on her background in mixed methods (qualitative and quantitative) research.
- Erin Hahn, PhD, MPH, joined the department in August 2013 as a Post-Doctoral Research Fellow. She previously worked with the UCLA Division of Cancer Prevention and Control, where she maintains an affiliation as an Assistant Research Scientist. Dr. Hahn's research focuses on improving the quality of care in oncology, with an emphasis on survivorship care. Her specific areas of interest include clinical guideline implementation and delivery system improvement.
- Nirupa Ghai, PhD, MPH, who previously worked for the department as a Research Associate, was appointed as a Post-Doctoral Research Fellow in June 2013. Dr. Ghai's research interests include cancer epidemiology with a focus on health disparities, as well as cancer prevention and screening.

# Events bring research and operations leaders together

During 2013, one of the department's priorities was to strengthen relationships between researchers, quality improvement programs, operational leaders, and clinicians. To that end, we hosted a series of events that focused on bringing together people with different types of expertise.

- In March, the department hosted an offsite meeting focused on "Bridging Research & Operations." The meeting brought together 70 individuals who have expertise in clinical practice, scientific inquiry, technological innovation, quality improvement, and organizational effectiveness.
- In June, we invited regional and medical center clinicians and quality leaders to attend a new Health Sciences Seminar series, which brings in prominent speakers from other institutions around the country. The first 2 speakers in the series focused on health care delivery (see page 35).
- In December, scientists from the Department of Research & Evaluation hosted a "Conversation Corner" at Kaiser Permanente's 19th Annual Diabetes Symposium. The corner gave attendees and researchers a place to talk about current and future diabetes research.

# New associate investigator position established

In 2013, we established a new associate investigator position for researchers based at medical centers and other Kaiser Permanente Southern California facilities. Under the new policy, clinicians who serve as principal investigator or site principal investigator on an externally funded research study (not including clinical trials) will be asked to apply for an appointment as an associate investigator.

The new policy outlines resources and support for associate investigators (including administrative support), assistance with grant applications and fund management, access to databases and research offices, and invitations to participate in or attend department seminars.

"Our goal is to build a bridge between research and operations. We have a tremendous opportunity to improve care delivery and health outcomes by applying what we learn from research to clinical operations."

— Steven Jacobsen, MD, PhD, Senior Director of Research



# New information technology introduced to support researchers

As the Kaiser Permanente Southern California research community has expanded, we have outgrown many of the paper-based processes that worked when we were a smaller group. This year marked the introduction of several new information technology programs to support more efficient business processes.

### InfoEd grants-management system rolls out for Kaiser Permanente Southern California

We introduced an integrated grants-management program, InfoEd, late in 2013. The new software system tracks and manages research projects from concept to closeout. A team including staff from Research Finance, Sponsored Project Administration, and Research IT worked together to roll out the new system.

One of the most notable features of InfoEd is the Sponsored Programs Information Network (SPIN), a web-based search engine that allows investigators to find funding opportunities for their projects. SPIN's database includes, but is not limited to, federal, foundation, and pharmaceutical sources.

# Automated systems streamline administrative processes

The Time, Effort, and Resource Management System, or TERMS, which replaced a paper-based timesheet system used by Research & Evaluation scientists and staff, went live at the end of 2013.

We also continue to refine existing applications, such as the new iRIS system, which provides online support for clinical trials management and the Institutional Review Board process.

"This shift to a more sophisticated research administration software system will dramatically improve our ability to track and manage research projects regionwide. "

— Sac Carreathers, Senior Director of Research Administration





## Milestones





"I find it fun to work with physicians. It makes me feel good that I can help them formulate their studies and help them translate their novel ideas into statistical setups."

— Jiaxiao Shi, PhD, Biostatistician

# New biostatistics team supports physician research

In order to formalize biostatistical support for physician investigators, a dedicated team was founded in 2013 to provide statistical services for physician-initiated projects. The group provides the following services:

- Consultation on study design and choices/application of statistical methods
- Power and sample size calculations
- Research study feasibility
- Preliminary data analysis for grant or Institution Review Board (IRB) submission
- Programming and data management
- Data analysis and interpretation of results
- Assistance in manuscript preparation for publication
- Consultation on Kaiser Permanente Southern California electronic data systems and data-quality related issues
- Natural language processing

This new biostatistics group adds to a growing support structure for physician researchers. In 2010, the department established the Off-Site Administrative Support team, which provides administrative support to clinician researchers for project-related business. The team supported 10 physician researchers in 2013.

# Research community gets connected through *Science Matters* newsletter

In November 2013, the department launched *Science Matters*, a bimonthly e-newsletter for Kaiser Permanente Southern California's research community. The publication celebrates accomplishments such as recent publications and new grants and awards. It also includes regular columns from research leaders, profiles of scientists and clinician researchers, and features on innovative research projects. Administrative news items include updates on change initiatives, reminders about upcoming deadlines, and notifications regarding new policies and procedures.

"It's really critical to have a team that understands what the physician investigators need, because their needs are different than other investigators. Our team works closely with physician investigators to make sure they have the resources needed to perform their research in an efficient and timely manner."

--- Somjot Brar, MD, MPH, Associate Investigator

# **Education and development**

As part of its commitment to the professional development of researchers and staff, the Department of Research & Evaluation sponsors several seminar series and educational events.

# **Research Seminars**

The Research Seminars provide an opportunity for investigators to present published research as well as research in progress. In 2013, scientists and staff presented current research related to a broad range of topics, from depression among breast cancer survivors to bisphosphonate use and atypical hip fractures.

The department also brings in outside speakers from other Kaiser Permanente departments and the local community to participate in the series. Speakers from outside the department included the Nursing Research team. Also, public health officials from Los Angeles and Pasadena joined with Southern California Permanente Medical Group physician **David Cuan**, **MD**, in a seminar focused on childhood obesity.

# Health Sciences Seminars

In 2013, the department launched a new Health Sciences Seminar, which brings in nationally and internationally recognized scholars who have expertise in areas of interest to our researchers and clinical leaders.

Veronique L. Roger, MD, of the Center for the Science of Health Care Delivery at Mayo Clinic kicked off the series in June 2013 with a presentation about the "Science of Health Care Delivery." Lucy Savitz, PhD, MBA, of the Institute for Health Care Delivery Research, Intermountain HealthCare, presented "Research and Operations Partnerships to Improve Care Delivery" in November.

# Care Improvement Research Team Seminars

The Care Improvement Research Team (CIRT) introduced a new weekly lecture series in 2013. The series includes 4 types of lectures and meetings: implementation science lectures, guest lectures, journal club meetings, and strategic planning.

The seminar series brought in speakers from Sweden, Greece, the Netherlands, and Australia, as well as local experts from the University of California, Los Angeles. Topics ranged from cancer care delivery to the role of digital health technologies.

# Administrative Grand Rounds

The Administrative Grand Rounds provide a forum for scientists and staff to learn about new department initiatives and projects as well as relevant administrative topics.

Topics covered in 2013 included the InfoEd system, a new automated travel request system, enhancements to the research preliminary data application, responsible conduct of research, and new research policies. The Clinical Trials team, the Biostatistics team, and the IT team presented general updates from their groups.







# Committees

Many scientists and staff members contribute to the development of the research program through participation in committees. The department has more than a dozen committees that serve a wide range of functions, from establishing a biospecimen repository to recruiting scientists. Through committee participation, researchers and staff have a voice in shaping the future of the research program.

Department committees active in 2013 included:

- Academic Appointments and Promotions Committee
- Biospecimens Committee
- Communications and Web Committee
- Compliance Committee
- Data Quality Committee
- Education and Training Committee
- Scientist Recruiting Committee
- Senior Scientist Committee
- Staff Appreciation Committee
- Staff Recruiting and Retention Committee

# **Regional Research Committee**

The Regional Research Committee involves physician researchers from all medical centers. **Donald Fong, MD, MPH**, who oversaw the growth and development of the Regional Research Committee for 9 years, stepped down as Regional Research chair at the end of 2013. **Somjot Brar, MD, MPH**, became the regional chair at the beginning of 2014.

During Dr. Fong's tenure, regional research programs grew stronger and generated many contributions to direct patient care. In addition, Dr. Fong was successful in helping to embed research as one of Southern California Permanente Medical Group's core functions.

# Members of the Regional Research Committee as of December 31, 2013

Donald Fong, MD, MPH Chair, Regional Research Committee

Baldwin Park Area Research Chair: Gregory Maletis, MD Vice Chair: Gaurav Khanna, MD

Downey Area Research Chair: Han Koh, MD Vice Chair: John P. Brusky, MD

Fontana/San Bernardino Area Research Chair: Robert Sallis, MD Vice Chair: Renu Mittal, MD

South Bay Area Research Chair: Bradley K. Ackerson, MD Vice Chair: William W. Crawford, MD

Kern County Area Research Chair: Michael J. Fassett, MD

Los Angeles Area Research Chair: John Sim, MD Vice Chair: Somjot Brar, MD, MPH

Orange County Area Research Chair: Patrick J. Van Winkle, MD Vice Chair: Edward H. Yian, MD

Panorama City/Valencia Area Research Chair: Shireen Fatemi, MD

Riverside/Palm Springs Area Research Chair: Robert G. Bota, MD Vice Chair: Brian S. Lim, MD

San Diego Area Research Chair: Robert Hye, MD

West Los Angeles/Kern County Area Research Chair: Michael J. Fassett, MD Vice Chair: Daniel T. Lang, MD

Woodland Hills Area Research Chair: Fredrick Ziel, MD Vice Chair: Theodore X. O'Connell, MD

Department of Research & Evaluation Area Research Chair: Steven J. Jacobsen, MD, PhD RRC Operations: Usha G. Vaghasia

# Milestones

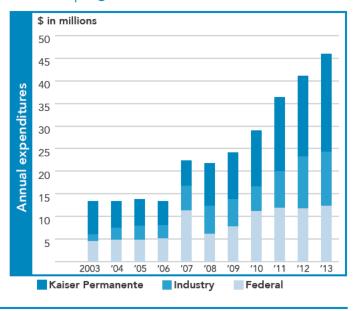
# Funding overview

Funding for research has increased rapidly in the past decade to support a growing portfolio of innovative and clinically relevant research. This rate of growth continued in 2013.

Total research expenditures topped \$46.1 million in 2013, up from \$41.7 million in 2012. Federal grants contributed more than \$12.2 million to the total funding. Industry contracts totaled nearly \$12.3 million.

Kaiser Permanente provided the remaining funds. Internal funding sources included the Kaiser Permanente Community Benefit program, the Southern California Permanente Medical Group, the Garfield Memorial Fund, and the Center for Effectiveness and Safety Research.

# Kaiser Permanente Southern California Research program financial trend



# New grants and awards

New grants and contracts awarded in 2013 will fund research at Kaiser Permanente Southern California over a period of years.

### Awards overview

|                                | Direct costs | Indirect costs | Total        |
|--------------------------------|--------------|----------------|--------------|
| New grants awarded (all years) | \$12,578,600 | \$5,429,215    | \$18,007,815 |
| Continued grants (all years)   | \$8,596,716  | \$4,533,215    | \$13,129,931 |

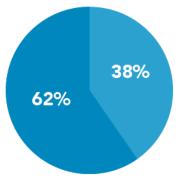
The department submitted 378 grant and contract applications in 2013 and processed 233 awards.

#### Submissions report

| Grants submitted | 378 |
|------------------|-----|
| Grants awarded   | 233 |
| Pending review   | 90  |

Kaiser Permanente Southern California was the lead institution, or "prime," for 62% of all the grants and contracts submitted in 2013, up from 54% in 2012. For the remaining submissions, Kaiser Permanente Southern California was the subcontractor institution.

# Prime vs. subcontract grant proposals



# **Research Scientists**



#### Annette L. Adams, PhD, MPH | Research Scientist I

Dr. Annette Adams is primarily involved in research on bone health and orthopedic injuries in older adults, particularly osteoporosis-related injuries of the hip and lower extremities. Much of her current work is focused on pharmacologic exposures and risk of fractures. Previously, she examined the association between preexisting and comorbid conditions and surgical outcomes in patients undergoing total joint replacement. Dr. Adams' previous work includes hospital-level influences on outcomes in trauma patients and older adults with orthopedic injuries, and the association between body mass index and orthopedic injuries in children.

#### John L. Adams, PhD, MS | Research Scientist Biostatistician III



Dr. John Adams joined Kaiser Permanente in 2012 as the Principal Senior Statistician with the Center for Effectiveness and Safety Research. Before that, he was the Senior Statistician in RAND's Statistics Service. He is a Fellow of the American Statistical Association and former head of RAND's Statistical Consulting Group. Dr. Adams' current work focuses on improving quantitative methods in comparative effectiveness research and causal analysis of observational data. His interests include quasi-experimental and improved study design methods. Dr. Adams is a co-author on the 2003 *New England Journal of Medicine* paper: "The quality of health care delivered to adults in the United States," which reported that only 55% of needed care is actually delivered.



#### Mary Helen Black, PhD, MS | Research Scientist Biostatistician I

A biostatistician and genetic epidemiologist, Dr. Mary Helen Black focuses on the application and development of statistical methods to better understand the genetic architecture of gestational and type 2 diabetes, obesity, and cardiovascular disease. She also studies environmental influences and their complex interaction with genetic background. Her other research interests include comparative effectiveness, medication adherence, and pharmacogenetics studies aimed at improving outcomes in the treatment of diabetes and cardiovascular disease. Dr. Black is an adjunct professor of biometrics in the Department of Biological Sciences at California State University, Los Angeles.



#### Chun Chao, PhD, MS | Research Scientist II

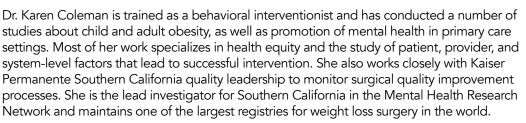
Dr. Chun Chao is a cancer epidemiologist whose interests are primarily in adolescent and young adult cancers, lymphoid malignancies, and cervical cancer prevention and screening. The goals of Dr. Chao's research program are to generate knowledge to guide clinical practices and to inform guideline development related to cancer care in the areas from primary prevention to survivorship care. Dr. Chao's ongoing projects examine correlates, barriers, and facilitators for HPV vaccine uptake for cervical cancer prevention; changing landscape of cervical cancer screening; clinical, and biological factors that affect disease progression and outcomes of lymphoma patients; as well as clinical and biological factors that affect risk of chemotherapy-induced complications. Dr. Chao is an adjunct assistant professor of epidemiology at the University of California, Los Angeles.

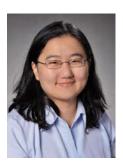


#### Craig Cheetham, PharmD, MS | Research Scientist II

Dr. Craig Cheetham's research interests include drug and vaccine safety, medication adherence, and health services research. His work with drugs and vaccines has focused on the safety of these pharmaceutical products for pregnant women. Dr. Cheetham also has studied the cardiovascular risks associated with a variety of medications and drug classes. He is especially interested in research that can be translated into medical practice at Kaiser Permanente. Dr. Cheetham practiced hospital-based clinical pharmacy for nearly 20 years before coming to Kaiser Permanente. He recently joined the Department of Research & Evaluation after 10 years as a researcher within the Pharmacy Analytical Services Department.

#### Karen J. Coleman, PhD, MS | Research Scientist II





#### Kim N. Danforth, ScD, MPH | Research Scientist I

Dr. Kim Danforth's primary interest is to use research to answer health questions with real-world significance. She has broad interests in health research, and has studied a wide range of risk factors for ovarian, prostate, lung, bladder, endometrial, and colorectal cancers. These factors have included self-reported lifestyle factors, circulating markers, and genetic variation. She has conducted prospective, nested case-control, and cross-sectional studies in the context of several large cohort studies. Dr. Danforth also conducts health services and outcomes-based research.



#### Stephen F. Derose, MD, MSHS | Research Scientist |

Dr. Stephen Derose's research focuses on primary and secondary prevention of chronic disease at the individual and population levels. He uses a variety of research methods to address questions regarding clinical care delivery and outcomes. During his recent sabbatical year, Dr. Derose completed a fellowship on sleep medicine. His other areas of interest include sleep disorders, chronic kidney disease, cardiovascular disease, and emergency department outcomes.



#### Darios Getahun, MD, PhD, MPH | Research Scientist II

Dr. Darios Getahun's current research interests include studies related to perinatal and child health, successive pregnancy outcomes, fetal origin of childhood diseases, asthma morbidity and mortality, and health disparities. He studies the heritability of adverse perinatal outcomes to examine the contribution of genetic and shared intrauterine factors. He is principal investigator on 2 NIH-funded grants that examine the impact of 1) elective induction of labor on perinatal outcomes, and 2) Polybrominated diphenyl ethers or PBDEs (commonly used in flame retardants) on preterm birth. Dr. Getahun is a clinical assistant professor of obstetrics-gynecology at the Rutgers-Robert Wood Johnson Medical School, New Jersey.



#### David Glass, PhD | Operational Research Scientist III

Dr. David Glass' research interests include the decision-making processes of members, patients, and doctors on a variety of health care and delivery system issues, with the goal of improving operations to better meet their needs. His research includes how primary care residents make their career choices; why and how low-acuity patients decide to go to the emergency department; the impact of breaking down the barriers to primary care on utilization; member reactions to physician video encounters in a retail setting; member and physician perceptions and utilization of health education services; and how end-of-life preferences and experiences among patients and doctors can be systematically captured and acted upon.



#### Michael K. Gould, MD, MS I Director of Health Services and Implementation Research

Dr. Michael Gould uses observational and experimental research methods to compare the effectiveness of interventions for patients with lung cancer, venous thromboembolism, and acute and chronic respiratory disease. His other interests include the development and implementation of clinical practice guidelines and the use of computerized decision-support systems to improve the quality of care. Dr. Gould is a research associate professor of medicine at the University of Southern California's Keck School of Medicine.



#### Reina Haque, PhD, MPH | Research Scientist II

Dr. Reina Haque is a senior cancer epidemiologist whose research interests include pharmacoepidemiology, cancer screening, and molecular markers for prognosis and cancer survivorship. She has led studies on breast, colorectal, and prostate cancer. Her studies have examined the incidence, treatment, recurrence, and pathology of cancer, as well as pharmaceutical use in cancer treatment. She is leading several survivorship projects: 1) common drug interactions in a large cohort of breast cancer survivors; 2) cardiotoxicity following aromatase inhibitor use; and 3) outcomes of chronic myelogenous leukemia by tyrosine kinase inhibitor drug adherence. Dr. Haque also serves as the scientific advisor for the Kaiser Permanente Southern California tumor registry.



#### Sharon M. Hudson, PhD, MA | Research Scientist I

Dr. Sharon Hudson is a behavioral scientist whose broad interests include the psychosocial determinants of health and health behavior. Having conducted both qualitative and quantitative research, she applies mixed methods in her work. Her primary focus is on individual-, physician-, and system-related factors affecting medication adherence. She is also engaged in more diverse work, including studies examining recovery from hysterectomy and the impact of parents reading to infants in the neonatal intensive care unit. Dr. Hudson splits her time between her responsibilities as a scientist and her additional role of promoting research in Kaiser Permanente Southern California and engaging more physicians in research.



#### Steven J. Jacobsen, MD, PhD | Senior Director of Research

Dr. Steven Jacobsen is a chronic disease epidemiologist by training. He has been the site principal investigator for the Kaiser Permanente Southern California Vaccine Safety Datalink since 2007. He recently led 2 large, pivotal post-licensure vaccine safety studies. He served as the lead epidemiologist for a variety of population-based studies, including studies of prostate disease, vaccine safety and immunogenetics, and many chronic diseases. He has authored or co-authored more than 450 peer-reviewed manuscripts and has served on the editorial board of the *American Journal of Epidemiology* since 1997 and for *Vaccine* since 2011. He is a research professor of preventive medicine at the University of Southern California's Keck School of Medicine.



### Aniket A. Kawatkar, PhD, MS | Research Scientist I

Dr. Aniket Kawatkar's research interests are in health inequity and disparities; health care and pharmaceutical utilization; and the associated economic, clinical, and humanistic outcomes. He uses established methods of econometrics, cost-effectiveness, conjoint analysis, and net-benefit analysis to evaluate interventions and treatments aimed at improving patient care in real-world clinical settings. Dr. Kawatkar's research focuses on comparative effectiveness, medication adherence and persistence, cost and expenditure data modeling, health-related quality-of-life, and health utility elicitation in chronic diseases.

#### Corinna Koebnick, PhD, MSc | Research Scientist II

Dr. Corinna Koebnick's research interests include investigating the health consequences of obesity in children and young adults, and improving health services for young people with obesity-related conditions. Dr. Koebnick is the site principal investigator for the Kaiser Permanente Biobank in Southern California. This program includes a large biobank resource that will link comprehensive electronic medical records, relevant behavioral and environmental factors, and information on genetic and nongenetic biomarkers from consenting health plan members. The program is designed to identify genetic and nongenetic factors involved in the pathogenesis of health conditions as well as in the determination of treatment modalities that can improve care and disease outcomes.



#### Annette M. Langer-Gould, MD, PhD, MS | Research Scientist I

Dr. Annette Langer-Gould is a practicing neurologist at Kaiser Permanente's Los Angeles Medical Center. Her research interests include multiple sclerosis, neuroepidemiology, prognosis of chronic diseases, novel randomized controlled clinical trial designs, and the role of biomarkers and surrogate outcomes in clinical research. She has conducted studies on pregnancy and its modulation of multiple sclerosis. Dr. Langer-Gould is currently conducting a study on the role of vitamin D and genotype on the risk of developing multiple sclerosis. She is an associate clinical professor at the University of Southern California's Keck School of Medicine.



#### Jean M. Lawrence, ScD, MPH, MSSA | Research Scientist III

Dr. Jean Lawrence is trained in epidemiology, maternal and child health, and psychology. She focuses most of her research on the incidence, prevalence, health care utilization, and psychosocial implications of type 1 and type 2 diabetes for children, adolescents, young adults, and gestational diabetes mellitus for childbearing women. She is the principal investigator for the SEARCH for Diabetes in Youth Study California Center, which is in its 14th year, and the site principal investigator for several other federally funded studies. Dr. Lawrence is a research associate professor at the University of Southern California's Keck School of Medicine. She is a member of the national Youth Strategies Committee for the American Diabetes Association.



#### Marlene M. Lugg, DrPH, MPH | Research Scientist I

Dr. Marlene Lugg's research interests are primarily in 3 areas: 1) the study of immunization practices, quality, and vaccine safety; 2) development of health information systems, including data linkage and immunization tracking systems (registries); and 3) the causes and control of accidental injury. Dr. Lugg is an adjunct professor in health care administration at West Coast University in Los Angeles, California.





# Elizabeth A. McGlynn, PhD I Director, Kaiser Permanente Center for Effectiveness and Safety Research

Dr. Elizabeth McGlynn is responsible for the strategic direction and scientific oversight of the Center for Effectiveness and Safety Research (CESR), an interregional research center designed to assess the diagnostic and treatment strategies that work best for different people. She is an internationally known expert on methods for evaluating the appropriateness, quality, and efficiency of health care delivery. She led major initiatives that evaluated state and federal health care reform options leading up to the passage of the Affordable Care Act. She is a member of the Institute of Medicine and serves on several boards and national advisory committees.



### Brian S. Mittman, PhD | Research Scientist III

Dr. Brian Mittman focuses on the organization and delivery of health care services and the development and application of quality and outcome-improvement strategies. He works to strengthen the fields of implementation and improvement science and to facilitate more effective collaborations between researchers, policy leaders, and practice leaders. Dr. Mittman is a senior scientist with the VA Center for Implementation Practice and Research Support, a senior advisor with RAND Health, and a co-leader of the UCLA Clinical and Translational Science Institute's Implementation and Improvement Science Initiative.



### Huong Q. Nguyen, PhD, RN | Research Scientist II

Dr. Huong Nguyen is trained in applied informatics, behavioral epidemiology, and biobehavioral nursing research in chronically ill adults and older adults. Her research is primarily centered in 2 areas. The first is developing and testing technology-supported interventions to activate and motivate collaborative self-management, improve physical activity, and reduce depressive symptoms in older adults with chronic conditions. The second is understanding genetic, physiological, psychosocial, and ecological determinants of self-management and behavior change.



# Virginia P. Quinn, PhD, MPH | Research Scientist II

Dr. Virginia Quinn is a behavioral health and health services researcher. Her research focus includes the development and testing of interventions for changing diet, physical activity, smoking, and adherence to medications and medical treatment in diverse patient populations and families. Dr. Quinn is the Kaiser Permanente Southern California site principal investigator for the National Cancer Institute-funded Cancer Research Network. She is a co-investigator in the Kaiser Permanente Population-based Research Optimizing Screening through Personalized Regime (PROSPR) Research Center studying the screening process for colorectal cancer. Her interests in cancer research include prevention, screening, quality of life, quality of care, and survivorship.



#### Kristi Reynolds, PhD, MPH | Research Scientist II

Dr. Kristi Reynolds is a chronic disease epidemiologist whose primary research interests include the prevention and treatment of cardiovascular disease and cardiovascular disease outcomes. Her research has focused on lifestyle interventions to prevent hypertension; risk factors for obesity, diabetes, end-stage renal disease, hypertension and stroke; cardiovascular disease surveillance; medication adherence; and quality of care and outcomes for patients with cardiovascular disease. Dr. Reynolds serves on the *Hypertension* journal editorial board and is a member of the program planning committee of the American Heart Association Quality of Care and Outcomes Research in Cardiovascular Disease and Stroke.



### Adam L. Sharp, MD, MS | Research Scientist I

Dr. Adam Sharp is an emergency physician health services researcher with special interest in implementation science and acute care coordination. In relation to implementation research, he works to identify gaps between best and current practices for common acute conditions, and evaluate intervention strategies to facilitate best practices. Dr. Sharp also studies how to optimize the role of the emergency department in facilitating efficient inpatient and outpatient acute medical care.



#### Hung Fu Tseng, PhD, MPH | Research Scientist III

Dr. Hung Fu Tseng's research interests include utilization of large data resources to study vaccine effectiveness, post-marketing surveillance of the adverse effects of vaccines, and vaccine outcomes in real-world settings. He is the principal investigator of a National Institutes of Health–funded study evaluating the shingles vaccine. He has led several Vaccine Safety Datalink studies funded by the CDC. Dr. Tseng is the principal investigator for a Phase IV clinical trial assessing the safety of a meningococcal vaccine. He has presented his findings to national advisory panels. Dr. Tseng is a fellow of the American College of Epidemiology and an adjunct research professor at the University of Southern California's Keck School of Medicine.



### Anny Hui Xiang, PhD I Director of Biostatistics Research

Dr. Anny Xiang is an investigator and applied biostatistician who uses statistical methodologies to understand disease development and conduct clinical trials in disease prevention and intervention. Her research interests include diabetes, gestational diabetes, and obesity. She focuses on outcomes of children whose mothers have those conditions, as well as identifying approaches in diabetes prevention. Additional research interests include methodological investigation of biostatistical questions; collaborative investigations of etiology, biology, and risk factors for disease development; and design of clinical trials. Dr. Xiang is an adjunct research associate professor at the University of Southern California's Keck School of Medicine.



# Deborah Rohm Young, PhD, MBA | Director of Behavioral Research

Dr. Deborah Rohm Young's research interests include the conduct of physical activity intervention trials for adults and adolescents based in primary care clinics and community settings. She also studies how physical inactivity and excess sedentary time are associated with cardiovascular risk and risk factors. She studies health behaviors during the transition from adolescence to young adulthood, and factors associated with maintaining physical activity, low sedentary time, and healthy weight status. Much of her work involves studying racial/ethnic minority groups to identify and reduce health disparities.

# **Post-Doctoral Research Fellows**



#### Josh Banerjee, MD, MPH | Post-Doctoral Research Fellow

Dr. Josh Banerjee is a primary care physician, formerly an associate with Southern California Permanente Medical Group. He is completing a National Research Service Award Fellowship at UCLA in primary care and health services research. His research interests include ambulatory redesign. His fellowship project investigates communication patterns between primary care and specialty physicians during the co-management of chronic disease in care settings at Kaiser Permanente Southern California.



#### Nirupa R. Ghai, PhD, MPH | Post-Doctoral Research Fellow

Dr. Nirupa Ghai is a chronic disease epidemiologist. Her research interests include cancer epidemiology with a focus on health disparities, and prevention and screening. She is currently working on a colorectal cancer screening and prevention study. She also studies physical activity, obesity, and medications/medical treatment in patient populations.



#### Erin Elizabeth Hahn, PhD, MPH | Post-Doctoral Research Fellow\*

Dr. Erin Elizabeth Hahn is a health services researcher. Her primary interest is quality of care in oncology, focusing on clinical guideline implementation and delivery systems. Dr. Hahn's work is a combination of qualitative and quantitative methods that explore variations in care, views and opinions of clinicians, and the association of patient-, clinician-, and system-level factors with health care utilization and outcomes. Her recent work focuses on overutilization issues in the delivery of post-treatment health services for breast cancer survivorship care.



#### Rulin C. Hechter, MD, PhD | Post-Doctoral Research Fellow

Dr. Rulin Hechter's research focuses on 3 main areas: 1) the safety and effectiveness of vaccines and the influence of policy and intervention on vaccine uptake in children and adults; 2) prevention of HIV infection; and 3) care for people with HIV, including management of HIV-associated cardiovascular disease, impact of psychiatric disorders and substance abuse on HIV care retention, and disparities in HIV treatment adherence. She is the principal investigator of a CDC-funded study to evaluate syphilis treatment response in a HIV-syphilis coinfected population, and the co-investigator (site principal investigator) of an NIH-funded study to explore contextual factors and disparity in HIV testing, linkage, and retention in care.

\*Dr. Hahn was appointed as a Research Scientist I in August 2014.



### Kimberly R. Porter, PhD, MPH | Post-Doctoral Research Fellow

Dr. Kimberly Porter is a chronic disease epidemiologist who focuses on cancer research, specifically health disparities, epidemiologic methods, and quality of care. Her primary focus is prostate cancer. Current projects include: 1) evaluating variations in cancer diagnosis dates from the Kaiser Permanente Southern California cancer registry, pathology reports, and electronic health data sources; and 2) understanding prostate-specific health-related quality of life in different race/ethnicity and age groups.



#### Sara Yee Tartof, PhD, MPH | Post-Doctoral Research Fellow

Dr. Sara Tartof is an infectious disease epidemiologist with interest in vaccine-preventable diseases and hospital-acquired infections. She is a coinvestigator on the Vaccine Safety Datalink, where she leads projects on febrile convulsions. She also leads projects identifying risk factors for shingles and Clostridium difficile, evaluation of prevention strategies for C. diff, and evaluating the effects of shingles vaccination on post-herpetic neuralgia, among others. In the past, Dr. Tartof led outbreak and other field investigations in the United States and internationally as an Epidemic Intelligence Service officer with the Centers for Disease Control and Prevention.



#### Lauren P. Wallner, PhD, MPH | Post-Doctoral Research Fellow

Dr. Lauren Wallner's research interests include understanding the determinants, outcomes, and utilization of health services associated with cancer and other chronic diseases. Specifically, her research focuses on improving the quality of care for men with benign and malignant urologic conditions such as prostate cancer, urinary incontinence, and benign prostatic hyperplasia. In recent projects, she studied the potential effects of treatment and management of benign urologic conditions on prostate cancer outcomes, assessed prostate cancer survivors' utilization of health care services, evaluated the use and accuracy of prostate cancer screening, and identified factors associated with prostate cancer mortality.

# Associate Investigators

#### Roger Bitar, MD, MPH | Associate Investigator

Dr. Roger Bitar focuses on inpatient evaluation for, and management of, infectious diseases, including HIV and others, such as malaria, acquired in tropical environments. He also has been involved in extensive planning for management of pandemic influenza and infectious agents that might be used for bioterrorism.

#### Somjot S. Brar, MD, MPH | Associate Investigator

Dr. Somjot Brar's research interests include cardiovascular diseases. He studies the comparative effectiveness of medical devices, strategies, and medications for the management of coronary artery disease. Dr. Brar also studies predictors, outcomes, and therapies for contrast medium-induced nephropathy, and rare cardiomyopathies.

#### Sirichai Chayasirisobhon, MD | Associate Investigator

Dr. Sirichai Chayasirisobhon's interests include research into the mechanism of refractory epilepsy, the use of vagus nerve stimulation for epilepsy, and clinical trials of new antiepileptic drugs. His most recent published research examines possible new treatments for migraines.

#### John H. Crabtree, MD | Associate Investigator

Dr. John Crabtree's research focuses on issues related to peritoneal dialysis as renal replacement therapy for kidney failure. He has authored numerous articles and book chapters covering dialysis catheters, implantation techniques, and resolution of dialysis access complications. Dr. Crabtree serves as visiting clinical faculty in the Division of Nephrology and Hypertension at Harbor-UCLA Medical Center.

#### R. James Dudl, MD | Associate Investigator

Dr. James Dudl's research interests include population-level cardiovascular disease prevention and diabetes. His most recent interest and research are in population glucose control in patients with diabetes.

#### Vincent J. Felitti, MD | Associate Investigator

For the past 17 years, Dr. Vincent Felitti has been co-principal investigator for the Adverse Childhood Experiences Study, a cohort study of the prevalence and long-term impact of adverse childhood experiences in 17,400 adult Kaiser Permanente members. The study has produced more than 70 publications to date.

#### Donald S. Fong, MD, MPH | Associate Investigator

Dr. Donald Fong's research interests are in the field of retinal diseases. He has conducted observational studies and clinical trials in diabetic retinopathy and macular degeneration. He also is interested in the ocular safety of systemic medications.

#### Richard Fortuna, MD | Associate Investigator

Dr. Richard Fortuna, the former chief of interventional cardiology for Kaiser Permanente in San Diego, has been conducting clinical research since 1988. His focus has been on device research, specifically coronary stents, and most recently bioabsorbable stents. In recent years, he also has been the primary investigator for the placement of aortic transcatheter valves in both the Partner I and Partner II trials.

#### Jason Jones, PhD | Associate Investigator

# Executive Director, Clinical Intelligence and Decision Support, Kaiser Permanente Southern California

Dr. Jason Jones is interested in supporting improvement in patient care and reducing cost through decision support, both at the system and point-of-care levels. His research focuses on patient identification, risk prediction, and treatment strategy selection around emergency department and inpatient encounters.

#### George F. Longstreth, MD | Associate Investigator

Dr. George Longstreth's research interests include gastrointestinal epidemiology, functional gastrointestinal disorders, acute large bowel ischemia, diverticulitis, celiac disease, and medical anthropology. He is a voluntary clinical professor of medicine in the internal medicine program at the University of California, San Diego School of Medicine.

#### S. Michael Marcy, MD | Associate Investigator

Dr. Michael Marcy's research interests included vaccine efficacy and safety, management of infectious diseases in office practice, and appropriate and judicious use of antimicrobials. He was also a clinical professor of pediatrics at the University of Southern California and UCLA. Dr. Marcy passed away on September 5, 2014 (see In memoriam on page 77).

#### David A. Sacks, MD | Associate Investigator

Dr. David Sacks' current research interests include consequences of maternal obesity, the relationship between maternal glycemia and adverse pregnancy outcomes, and the use of telemedicine in the care of women with gestational diabetes.

#### Michael Schatz, MD, MS | Associate Investigator

Dr. Michael Schatz's current research interests include patient-centered asthma outcomes, risk stratification for asthma population management, asthma quality-of-care measures, the interrelationships of asthma and pregnancy, and the safety of medications and vaccines during pregnancy. He is editor-in-chief for *The Journal of Allergy and Clinical Immunology: In Practice.* 

#### Mitsuo Tomita, MD | Associate Investigator

Dr. Mitsuo Tomita's research assesses the value of interactive patient groups with other modalities to improving care. Specific research interests include the contributions of continuing medical education, the clinical effectiveness of complementary medicine, and the value of understudied primary care practices.

#### Robert S. Zeiger, MD, PhD | Associate Investigator

Dr. Robert Zeiger's research interests include prevention of asthma and allergic disorders, clinical asthma trials of comparative treatments, cost analysis of asthma and allergic disorders, and outcomes research. He is deputy editor of *The Journal of Allergy and Clinical Immunology: In Practice.* 

# **Clinical Trials Investigators**



### Robert Cooper, MD

#### Pediatric Oncology, Los Angeles Medical Center

Dr. Robert Cooper leads the Kaiser Permanente Southern California Pediatric Clinical Trials Program, which oversees clinical trials for children and adolescents with cancer. He is also the principal investigator for the Children's Oncology Group at the Kaiser Permanente Los Angeles Medical Center. His research interests include treatment and survivorship of cancer during childhood and adolescence, as well as in the young adult population.



#### Michael R. Girvigian, MD

#### Radiation Oncology, Los Angeles Medical Center

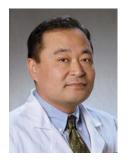
Dr. Michael Girvigian is the Assistant Chief for the Department of Radiation Oncology at the Kaiser Permanente Los Angeles Medical Center. He is also the principal investigator for Radiation Therapy Oncology Group clinical trials at Kaiser Permanente Southern California. Dr. Girvigian specializes in the management of central nervous system tumors of the brain and spine, as well as soft tissue tumors. He has been active in clinical research for many years.



#### Robert J. Hye, MD, FACS

#### Vascular Surgery, San Diego Medical Center

Dr. Robert Hye is the Area Research Chair and leads the Vascular Surgery Research Program for Kaiser Permanente Southern California, at the Kaiser Permanente San Diego Medical Center. He has participated in clinical trials in the area of carotid artery disease, aortic aneurysmal disease, peripheral arterial disease, and hemodialysis access for over 25 years. The Vascular Surgery Research Program in San Diego is consistently among the highest enrolling centers in the clinical trials in which they participate.



#### Han Koh, MD

#### Hematology/Oncology, Downey Medical Center

Dr. Han Koh is a principal investigator for the Cancer Clinical Trials Access Program for Kaiser Permanente Southern California. He practices at the Kaiser Permanente Downey Medical Center. He leads clinical trials for a range of adult cancers, including pancreatic, prostate, and renal cancers, and non-Hodgkin lymphoma.

This section lists the principal investigators for the established clinical trials programs in Kaiser Permanente Southern California. In addition to the investigators for these programs, independent investigators lead clinical trials at medical centers throughout the region. All clinical trials principal investigators that were active in 2013 are listed by specialty on page 51.



### Scott E. Lentz, MD

#### Gynecologic Oncology, Los Angeles Medical Center

Dr. Scott Lentz is the Regional Gynecologic Oncology Director for Southern California Permanente Medical Group as well as Los Angeles Regional Services. For the past 9 years, he has been the principal investigator for Gynecologic Oncology Group Trials and the coinvestigator for industry-sponsored clinical trials, including many practice-changing Phase II and Phase III gynecologic oncology trials. His clinical research interests include uterine sarcomas, novel approaches in minimally invasive surgery, and the history of colposcopy.



#### Shawn A. Menefee, MD

#### Ob-Gyn/Urogynecology, San Diego Medical Center

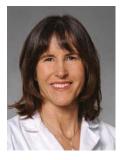
Dr. Shawn Menefee is the Division Director of Female Pelvic Medicine & Reconstructive Surgery for the Southern California Permanente Medical Group, San Diego Medical Center. His clinic is a clinical site for the Pelvic Floor Disorders Network, which is a multi-center NIH-sponsored network. His research interests include all aspects of pelvic floor disorders including urinary incontinence, pelvic organ prolapse, and fecal incontinence.



#### Anders Nyberg, MD, PhD

#### Hepatology, San Diego Medical Center

Dr. Anders Nyberg is a principal investigator with the San Diego Hepatology Research Program. He has extensive clinical and research experience in the field of liver disease and other gastrointestinal disorders, such as peptic ulcer disease and celiac disease. He is active in many clinical trials and performs database research with Dr. Lisa Nyberg in the hepatology research unit in San Diego.



#### Lisa Nyberg, MD, MPH

Hepatology, San Diego Medical Center

Dr. Lisa Nyberg is a principal investigator with the San Diego Hepatology Research Program. Together with Dr. Anders Nyberg, she leads an active hepatology research unit that focuses on providing new therapies and treatments for patients with hepatitis C. She has also led a number of investigator-initiated outcome studies. Dr. Nyberg works closely with the liver transplant team at the Kaiser Permanente San Diego Medical Center. She is the chair of Kaiser Permanente's National Transplant Network Liver Subcommittee, a member of the Regional Transplant Oversight Committee, and a member of the National Transplant Medical Advisory Board.

# Clinical Trials Investigators | continued



### Jonathan A. Polikoff, MD

Hematology/Oncology, San Diego Medical Center

Dr. Jonathan Polikoff is the Director of the Cancer Clinical Trials Access Program for Kaiser Permanente Southern California, which oversees oncology clinical trials for the prevention and treatment of cancer in adults. The program generally has more than 30 trials available to Kaiser Permanente members who need treatment for a wide variety of malignancies; about three-quarters are with NCI-sponsored cooperative groups. This program was recognized by the American Society of Clinical Oncology (ASCO) in 2008 with the Clinical Trial Participation Award and has been the highest-accruing Southwest Oncology Group (SWOG) affiliate for the last 2 years.

#### Ricardo Tomas Spielberger, MD

#### Oncology/Transplant, Los Angeles Medical Center

Dr. Ricardo Spielberger is Director of Bone Marrow Transplantation for the Southern California Permanente Medical Group. A board-certified hematologist and medical oncologist with subspecialty training in stem cell transplantation, Dr. Spielberger joined Kaiser Permanente's bone marrow transplant team in 2000. His research interests include the use of hematopoietic cell transplantation for the treatment of hematologic malignancies, with emphasis in leukemias. He has also been involved in clinical trials focused on the use of new agents to reduce serious side effects following transplant and the management of opportunistic infections.



#### William J. Towner, MD, FACP, FIDSA

Internal Medicine, Los Angeles Medical Center Regional Physician Director for Clinical Trials

Dr. William Towner is focused on the continued expansion of clinical trials for pharmaceuticals and devices in Kaiser Permanente Southern California. Patients participating in these trials are often offered the chance to receive drugs and devices long before they are available in routine clinical care. He also is interested in the development and execution of pragmatic clinical trials that seek to answer how to best deliver care for a multitude of chronic disease conditions. His current clinical trial research focuses on infectious diseases, particularly HIV and hepatitis C. Dr. Towner also conducts outcomes research in infectious disease.



#### Steven Vasilev, MD, MBA

#### Gynecologic Oncology, Los Angeles Medical Center

Dr. Steven Vasilev is Director of the Surgical and Radiation Oncology Clinical Trials Access Program, which conducts clinical trials at several Kaiser Permanente Southern California medical centers. He initiated our Gynecologic Oncology Group clinical trials program and oversaw its expansion as it grew to include surgical, radiation, chemotherapy, and biological trials. It now spans surgical, gynecologic, urologic, head and neck, and neurologic oncology departments.

# Clinical trials principal investigators by specialty

# Allergy

Sandra Christiansen, MD, San Diego - Clairemont Mesa Medical Offices

Noah Friedman, MD, San Diego - Clairemont Mesa Medical Offices

Michael Kaplan, MD, Los Angeles Medical Center Robert Zeiger, MD, PhD, San Diego - Clairemont Mesa Medical Offices

#### Cardiology

Vicken Aharonian, MD, Los Angeles Medical Center Somjot Brar, MD, MPH, Los Angeles Medical Center Jeffrey Cavendish, MD, San Diego Medical Center Eric Chou, MD, Fontana Medical Center Richard Fortuna, MD, PhD, San Diego Medical Center Nigel Gupta, MD, Los Angeles Medical Center William Keen, MD, San Diego Medical Center Daniel Lang, MD, West Los Angeles Medical Center

#### Dermatology

Jashin Wu, MD, Los Angeles Medical Center

#### **Emergency Medicine**

Garo Balkian, MD, Woodland Hills Medical Center Donald Mebust, MD, San Diego Medical Center

#### Endocrinology

Patricia Wu, MD, San Diego - Carmel Valley Medical Offices

#### Gastroenterology

Chris Conteas, MD, Los Angeles Medical Center Bechien Wu, MD, MPH, Los Angeles Medical Center

#### General and Oncologic Surgery

Yasir Akmal, MD, Los Angeles Medical Center

#### **General Surgery**

Louis Difronzo, MD, Los Angeles Medical Center Gregory Marrujo, MD, Riverside Medical Center

#### Genetics

George Tiller, MD, PhD, Los Angeles Medical Center

#### Gynecologic Oncology

Steven Vasilev, MD, MBA, Los Angeles Medical Center Scott Lentz, MD, Los Angeles Medical Center

#### Hepatology

Anders Nyberg, MD, PhD, San Diego Medical Center Lisa Nyberg, MD, MPH, San Diego Medical Center

Hepatology/Transplant Amandeep Sahota, MD, Los Angeles Medical Center

#### Infectious Diseases

Holly Kim, MD, West Los Angeles Medical Center Jim Nomura, MD, Los Angeles Medical Center Mario Perez, DO, Fontana Medical Center Bhavani Rao, MD, Panorama City Medical Center Jared Spotkov, MD, MPH, South Bay Medical Center

#### **Internal Medicine**

David Buccigrossi, MD, San Diego - Carlsbad Medical Offices William Towner, MD, Los Angeles Medical Center

#### Nephrology

John Sim, MD, Los Angeles Medical Center

# Clinical Trials Principal Investigators by Specialty | continued

# Neurology

Zahra Ajani, MD, Los Angeles Medical Center Sirichai Chayasirisobhon, MD, Anaheim - La Palma Medical Offices Suresh Gurbani, MD, PhD, Anaheim - Kraemer Medical Offices

Annette Langer-Gould, MD, PhD, MS, Los Angeles Medical Center

Prasanth Manthena, MD, Los Angeles Medical Center Navdeep Sangha, MD, Los Angeles Medical Center

# Neuro-Oncology

Richard Green, MD, Los Angeles Medical Center

#### Ob-Gyn

Keisha Dyer, MD, MPH, San Diego - Pt. Loma Medical Offices Malcolm Munro, MD, Los Angeles Medical Center

#### Ob-Gyn/Urogynecology

Karl Luber, MD, San Diego - Pt. Loma Medical Offices

Shawn Menefee, MD, San Diego - Pt. Loma Medical Offices

John Nguyen, MD, Downey - Orchard Medical Offices

Jasmine Tan-Kim, MD, San Diego - Pt. Loma Medical Offices

#### Oncology

Jonathan Polikoff, MD, San Diego Medical Center Han Koh, MD, Downey Medical Center

#### Oncology/Transplant

Ricardo Tomas Spielberger, MD, Los Angeles Medical Center

#### Ophthalmology

Nicole Benitah, MD, West Los Angeles Medical Center

#### Orthopedics

Kamran Aurang, MD, Irvine - Alton/Sand Canyon Medical Offices Jennifer Weiss, MD, Los Angeles Medical Center

#### Pediatrics

Barbara Lounsbury, MD, San Diego - Clairemont Mesa Medical Offices

Pediatrics-Adolescent/Teen Health Luis Zeledon, MD, Los Angeles Medical Center

Pediatric Cardiology Morris Salem, MD, Los Angeles Medical Center

Pediatric Oncology Jerry Cheng, MD, Los Angeles Medical Center Robert Cooper, MD, Los Angeles Medical Center

#### Radiation Oncology

Michael Girvigian, MD, Los Angeles Medical Center

#### Radiology

Lei Feng MD, PhD, Los Angeles Medical Center Jordan Ziegler, MD, San Diego Medical Center

#### **Regional Metabolic Services**

Rebecca Mardach, MD, Los Angeles Medical Center

#### Urology

Gary Chien, MD, Los Angeles Medical Center Polina Reyblat, MD, Los Angeles Medical Center Eugene Rhee, MD, San Diego - Otay Mesa Medical Offices

#### Vascular Surgery

Robert Hye, MD, San Diego Medical Center Jeffrey Hsu, MD, Los Angeles Medical Center

# Transforming the future of health



# **Bibliography of 2013 Publications**

In 2013, researchers and clinicians from Kaiser Permanente Southern California published 371 scholarly articles. Of these, 215 were first-author papers and 169 were senior-author papers. Kaiser Permanente Southern California authors are noted in **bold**.



# **Aging and Geriatrics**

Lee A, Lee KW, Khang P. Preventing falls in the geriatric population. *Perm J.* 2013;17(4):37-9.

Pawloski PA, **Geiger AM**, **Haque R**, Kamineni A, Fouayzi H, Ogarek J, Petersen HV, Bosco JL, Thwin SS, Silliman RA, Field TS. Fracture risk in older, longterm survivors of early-stage breast cancer. *J Am Geriatr Soc.* 2013;61(6):888-895.

**Tsao SW**, **Fong DS**. Do statins have a role in the prevention of age-related macular degeneration? *Drugs Aging*. 2013;30(4):205-213.

# **Allergy and Asthma**

Beigelman A, King TS, Mauger D, **Zeiger RS**, Strunk RC, Kelly HW, Martinez FD, Lemanske RF Jr, Rivera-Spoljaric K, Jackson DJ, Guilbert T, Covar R, Bacharier LB, Childhood Asthma Research and Education Network of National Heart Lung and Blood Inst. Do oral corticosteroids reduce the severity of acute lower respiratory tract illnesses in preschool children with recurrent wheezing? *J Allergy Clin Immunol.* 2013;131(6):1518-1525.

Black MH, Zhou H, Takayanagi M, Jacobsen SJ, Koebnick C. Increased asthma risk and asthma-related health care complications associated with childhood obesity. *Am J Epidemiol*. 2013;178(7):1120-1128.

Brunworth J, Lin T, Keschner DB, Garg R, Lee JT. Use of the Hadad-Bassagasteguy flap for repair of recurrent cerebrospinal fluid leak after prior transsphenoidal surgery. *Allergy Rhinol (Providence)*. 2013;4(3):e155-61. Land MH, Piehl MD, Burks AW. Near fatal anaphylaxis from orally administered gelatin capsule. *J Allergy Clin Immunol Pract*. 2013;1(1):99-100.

Lee JT, Brunworth J, Garg R, Shibuya T, Keschner DB, Vanefsky M, Lin T, Choi S, Stea R, Thompson LD. Intracranial mucocele formation in the context of longstanding chronic rhinosinusitis: A clinicopathologic series and literature review. Allergy Rhinol (Providence). 2013;4(3):e166-175.

### Lee JT, Garg R, Brunworth J, Keschner DB,

**Thompson LD**. Sinonasal respiratory epithelial adenomatoid hamartomas: Series of 51 cases and literature review. *Am J Rhinol Allergy*. 2013;27(4): 322-328.

Meltzer EO, **Schatz M**, Nathan R, Garris C, Stanford RH, Kosinski M. Reliability, validity, and responsiveness of the Rhinitis Control Assessment Test in patients with rhinitis. *J Allergy Clin Immunol.* 2013;131(2):379-386.

**Namazy JA**, Murphy VE, Powell H, Gibson PG, Chambers C, **Schatz M**. Effects of asthma severity, exacerbations and oral corticosteroids on perinatal outcomes. *Eur Respir J*. 2013;41(5):1082-1090.

Namazy JA, Schatz M. The management of asthma during pregnancy. In: Mattison DR, editor. *Clinical pharmacology during pregnancy*. London: Academic Press, 2013; 145-155.

Nkoy FL, Stone BL, Fassl BA, Uchida DA, Koopmeiners K, Halbern S, Kim EH, Wilcox A, Ying J, Greene TH, Mosen DM, **Schatz MN**, Maloney CG. Longitudinal validation of a tool for asthma selfmonitoring. *Pediatrics*. 2013;132(6):e1554-1561.

O'Byrne PM, Pedersen S, **Schatz M**, Thoren A, Ekholm E, Carlsson LG, Busse WW. The poorly explored impact of uncontrolled asthma. *Chest*. 2013;143(2):511-523.

**Roth R, Schatz M**. Allergic bronchopulmonary aspergillosis presenting as chronic cough in an elderly woman without previously documented asthma. *Perm J*. 2013;17(2):e103-108.

Schatz M, Zeiger RS, Sicherer SH. What the world needs now: Journal of Allergy and Clinical Immunology: In Practice. J Allergy Clin Immunol Pract. 2013;1(1):37-38.

Schatz M, Zeiger RS, Yang SJ, Weinstein AG, Chen W, Saris-Baglama RN, Turner-Bowker DM. Development and preliminary validation of the Adult Asthma Adherence Questionnaire<sup>™</sup>. J Allergy Clin Immunol Pract. 2013;1(3):280-288.

Schatz M, Zeiger RS, Zhang F, Chen W, Yang SJ, Camargo CA. Overweight/obesity and risk of seasonal asthma exacerbations. J Allergy Clin Immunol Pract. 2013;1(6):618-622.

Stanford RH, Shah MB, D'Souza AO, **Schatz M**. Predicting asthma outcomes in commercially insured and Medicaid populations? *Am J Manag Care*. 2013;19(1):60-67.

Zuraw BL, Banerji A, Bernstein JA, Busse PJ, **Christiansen SC**, Davis-Lorton M, Frank MM, Li HH, Lumry WR, Riedl M. US Hereditary Angioedema Association Medical Advisory Board 2013 recommendations for the management of hereditary angioedema due to C1 inhibitor deficiency. *J Allergy Clin Immunol Pract*. 2013;1(5):458-467.

# **Bone Health and Orthopedics**

Adams AL, Paxton EW, Wang JQ, Johnson ES, Bayliss EA, Ferrara A, Nakasato C, Bini SA, Namba RS. Surgical outcomes of total knee replacement according to diabetes status and glycemic control, 2001 to 2009. *J Bone Joint Surg Am*. 2013;95(6): 481-487.

Adams AL, Shi J, Takayanagi M, Dell RM, Funahashi TT, Jacobsen SJ. Ten-year hip fracture incidence rate trends in a large California population, 1997-2006. *Osteoporos Int.* 2013;24(1):373-376.

Bini S, **Khatod M**, **Cafri G**, **Chen Y**, **Paxton EW**. Surgeon, implant, and patient variables may explain variability in early revision rates reported for unicompartmental arthroplasty. *J Bone Joint Surg Am*. 2013;95(24):2195-2202.

Bini SA, **Chen Y**, **Khatod M**, **Paxton EW**. Does precoating total knee tibial implants affect the risk of aseptic revision? *Bone Joint J*. 2013;95-B(3):367-370.

**Csintalan RP, Inacio MC, Desmond JL, Funahashi TT**. Anterior cruciate ligament reconstruction in patients with open physes: early outcomes. *J Knee Surg.* 2013;26(4):225-232. **Dillon MT**, **Inacio MC**, **Burke MF**, **Navarro RA**, **Yian EH**. Shoulder arthroplasty in patients 59 years of age and younger. *J Shoulder Elbow Surg*. 2013;22(10):1338-1344.

Hoshino CM, Tran W, Tiberi JV, **Black MH**, **Li BH**, Gold SM, **Navarro RA**. Complications following tensionband fixation of patellar fractures with cannulated screws compared with Kirschner wires. *J Bone Joint Surg Am.* 2013;95(7):653-659.

**Inacio MC, Cafri G, Paxton EW**, Kurtz SM, **Namba RS**. Alternative bearings in total knee arthroplasty: risk of early revision compared to traditional bearings. *Acta Orthop.* 2013;84(2):145-152.

Inacio MC, Ake CF, Paxton EW, Khatod M, Wang C, Gross TP, Kaczmarek RG, Marinac-Dabic D, Sedrakyan A. Sex and risk of hip implant failure: assessing total hip arthroplasty outcomes in the United States. JAMA Intern Med. 2013;173(6):435-441.

**Inacio MC**, Kritz-Silverstein D, **Paxton EW**, **Fithian DC**. Do patients lose weight after joint arthroplasty surgery? A systematic review. *Clin Orthop Relat Res.* 2013;471(1):291-298.

Kessler J, Koebnick C, Smith N, Adams A.

Childhood obesity is associated with increased risk of most lower extremity fractures. *Clin Orthop Relat Res.* 2013;471(4):1199-1207.

Khatod M, Inacio MC, Bini S. Short-term outcomes of unresurfaced patellas in total knee arthroplasty. *J Knee Surg.* 2013;26(2):105-108.

**Maletis GB**, **Inacio MC**, **Desmond JL**, **Funahashi TT**. Reconstruction of the anterior cruciate ligament: Association of graft choice with increased risk of early revision. *Bone Joint J*. 2013;95-B(5):623-628.





**Matsuda DK**, **Safran MR**. Arthroscopic internal fixation of osteochondritis dissecans of the femoral head. *Orthopedics*. 2013;36(5):e683-686.

Mohan V, Inacio MC, Namba RS, Sheth D, Paxton EW. Monoblock all-polyethylene tibial components have a lower risk of early revision than metal-backed modular components. *Acta Orthop*. 2013;84(6): 530-536.

Namba RS, Cafri G, Khatod M, Inacio MC, Brox TW, Paxton EW. Risk factors for total knee arthroplasty aseptic revision. *J Arthroplasty*. 2013;28(8 Suppl):122-127.

Namba RS, Inacio MC, Paxton EW. Risk factors associated with deep surgical site infections after primary total knee arthroplasty: an analysis of 56,216 knees. J Bone Joint Surg Am. 2013;95(9):775-782.

Navarro RA, Inacio MC, Burke MF, Costouros JG, Yian EH. Risk of thromboembolism in shoulder arthroplasty: effect of implant type and traumatic indication. *Clin Orthop Relat Res.* 2013;471(5): 1576-1581.

**Park MC**. Biomechanical validation of rotator cuff repair techniques and considerations for a 'technical efficiency ratio'. *Arthroscopy*. 2013;29(7):1230-1234.

**Park MC**, Bui C, Park CJ, Oh JH, Lee TQ. Rotator cuff tendon repair morphology comparing 2 single-anchor repair techniques. *Arthroscopy*. 2013;29(7):1149-1156.

**Pearl ML**, **Woolwine S**, **van de Bunt F**, Merton G, **Burchette R**. Geometry of the proximal humeral articular surface in young children: a study to define normal and analyze the dysplasia due to brachial plexus birth palsy. *J Shoulder Elbow Surg*. 2013;22(9):1274-1284.

#### Cancer

Acree SC, Tovar JP, Pattengale PK, Wang LL, Church JA, Gaynon PS, **Cassarino DS**. Subcutaneous panniculitis-like T-cell lymphoma in 2 pediatric patients: an HIV-positive adolescent and a 4-monthold infant. *Fetal Pediatr Pathol*. 2013;32(3):175-183.

**Aelony Y**. Best current therapy for patients with malignant pleural effusion. *Respiration*. 2013;85(1): 13-14.

Argyris PP, Reed RC, Manivel JC, Lopez-Terrada D, Jakacky J, Cayci Z, Tosios KI, Pambuccian SE, **Thompson LD**, Koutlas IG. Oral alveolar soft part sarcoma in childhood and adolescence: report of 2 cases and review of literature. *Head Neck Pathol*. 2013;7(1):40-49.

Armstrong AJ, Haggman M, Stadler WM, Gingrich JR, Assikis V, **Polikoff J**, Damber JE, Belkoff L, Nordle O, Forsberg G, Carducci MA, Pili R. Long-term survival and biomarker correlates of Tasquinimod efficacy in a multicenter randomized study of men with minimally symptomatic metastatic castration-resistant prostate cancer. *Clin Cancer Res.* 2013;19(24):6891-6901.

**Bugoci DM**, **Girvigian MR**, **Chen JC**, Miller MM, **Rahimian J**. Photon-based fractionated stereotactic radiotherapy for postoperative treatment of skull base chordomas. *Am J Clin Oncol*. 2013;36(4):404-410.

Buist DS, Bosco JL, Silliman RA, Gold HT, Field T, Yood MU, **Quinn VP**, Prout M, Lash TL, The Breast Cancer Outcomes in Older Women (BOW) Investigators. Long-term surveillance mammography and mortality in older women with a history of early stage invasive breast cancer. *Breast Cancer Res Treat*. 2013;142(1):153-163.

**Chang-Halpenny CN**, **Natarajan S**, **Hwang-Graziano** J. Early stage papillary serous or clear cell carcinoma confined to or involving an endometrial polyp: outcomes with and without adjuvant therapy. *Gynecol Oncol*. 2013;131(3):598-603.

**Chao C, Chi M, Preciado M, Black MH**. Methylation markers for prostate cancer prognosis: a systematic review. *Cancer Causes Control.* 2013;24(9):1615-1641.

**Chao C, Chiu V, Mueller LA, Cooper R**. Exploring the feasibility of establishing a retrospective cohort of survivors of adolescent and young adult cancer to study long-term health outcomes in an integrated managed care environment. *J Adolesc Young Adult Oncol.* 2013;2(2):59-65.

Chao C, Jacobsen SJ, Xu L, Wallner LP, Porter KR, Williams SG. Use of statins and prostate cancer recurrence among patients treated with radical prostatectomy. *BJU Int.* 2013;111(6):954-962.

Chao C, Williams SG, Xu L, Chen J, Wallner LP, Porter KR, Jacobsen SJ. Statin therapy is not associated with prostate cancer recurrence among patients who underwent radiation therapy. *Cancer Lett.* 2013;335(1):214-218.

Chia VM, Page JH, **Rodriguez R, Yang SJ, Huynh J**, **Chao C**. Chronic comorbid conditions associated with risk of febrile neutropenia in breast cancer patients treated with chemotherapy. *Breast Cancer Res Treat*. 2013;138(2):621-631.

Clough-Gorr KM, Thwin SS, Bosco JL, Silliman RA, Buist DS, Pawloski PA, **Quinn VP**, Prout MN. Incident malignancies among older long-term breast cancer survivors and an age-matched and site-matched nonbreast cancer comparison group over 10 years of follow-up. *Cancer*. 2013;119(8):1478-1485.

Collins LC, Achacoso N, **Haque R**, Nekhlyudov L, Fletcher SW, Quesenberry CP Jr, Schnitt SJ, Habel LA. Risk factors for non-invasive and invasive local recurrence in patients with ductal carcinoma in situ. *Breast Cancer Res Treat*. 2013;139(2):453-460.

Dehal A, Abbas A, **Johna S**. Comorbidity and outcomes after surgery among women with breast cancer: analysis of nationwide in-patient sample database. *Breast Cancer Res Treat*. 2013;139(2): 469-476.

Dehal A, Abbas A, **Johna S**. Racial disparities in clinical presentation, surgical treatment and inhospital outcomes of women with breast cancer: analysis of nationwide inpatient sample database. *Breast Cancer Res Treat*. 2013;139(2):561-569.

Johnson BE, Kabbinavar F, Fehrenbacher L, Hainsworth J, Kasubhai S, Kressel B, Lin CY, Marsland T, Patel T, **Polikoff J**, Rubin M, White L, Yang JC, Bowden C, Miller V. ATLAS: Randomized, doubleblind, placebo-controlled, phase IIIB trial comparing bevacizumab therapy with or without erlotinib, after completion of chemotherapy, with bevacizumab for first-line treatment of advanced non-small-cell lung cancer. *J Clin Oncol.* 2013;31(31):3926-3934.

Kim YS, Wu H, Pawlowska AB, Bautista-Quach MA, Huang Q, Gaal K, **Chang KL**. Pediatric mast cell sarcoma of temporal bone with novel L799F (2395 C>T) KIT mutation, mimicking histiocytic neoplasm. *Am J Surg Pathol.* 2013;37(3):453-458.

**Kogut N**, Tsai NC, Thomas SH, Palmer J, Paris T, Murata-Collins J, Forman SJ. Extramedullary relapse following reduced intensity allogeneic hematopoietic cell transplantation for adult acute myelogenous leukemia. *Leuk Lymphoma*. 2013;54(3):665-668. Krishnan AY, Mei M, Sun CL, Thomas SH, Teh JB, Kang T, Htut M, **Somlo G, Sahebi F**, Forman SJ, Bhatia S. Second primary malignancies after autologous hematopoietic cell transplantation for multiple myeloma. *Biol Blood Marrow Transplant*. 2013;19(2):260-265.

Lalezari S, Chou AP, Tran A, Solis OE, Khanlou N, Chen W, Li S, Carrillo JA, Chowdhury R, Selfridge J, Sanchez DE, Wilson RW, Zurayk M, Lalezari J, Lou JJ, Ormiston L, Ancheta K, Hanna R, Miller P, Piccioni D, Ellingson BM, Buchanan C, Mischel PS, Nghiemphu PL, **Green R**, Wang HJ, Pope WB, Liau LM, Elashoff RM, Cloughesy TF, Yong WH, Lai A. Combined analysis of O6-methylguanine-DNA methyltransferase protein expression and promoter methylation provides optimized prognostication of glioblastoma outcome. *Neuro Oncol.* 2013;15(3):370-381.

Leung AM, Morton DL, Ozao-Choy J, Hari DM, Shin-Sim M, **Difronzo AL**, Faries MB. Staging of regional lymph nodes in melanoma: a case for including nonsentinel lymph node positivity in the American Joint Committee on Cancer Staging System. *JAMA Surg.* 2013;148(9):879-884.

**Loo RK**, Lieberman SF, **Slezak JM**, Landa HM, Mariani AJ, Nicolaisen G, Aspera AM, **Jacobsen SJ**. Stratifying risk of urinary tract malignant tumors in patients with asymptomatic microscopic hematuria. *Mayo Clin Proc*. 2013;88(2):129-138.

Müller S, **Thompson LD**. An update on salivary gland pathology. *Head Neck Pathol*. 2013;7 Suppl 1:S1-2.

**Palta R, McClune A, Esrason K**. Hodgkin's lymphoma coexisting with liver failure secondary to acute on chronic hepatitis B. *World J Clin Cases*. 2013;1(1): 37-40.





Porter KR, Hsu JW, Chien GW, Xiang AH, Jung H, Chao C, Jacobsen SJ. Racial and ethnic differences in time to treatment for patients with localized prostate cancer. *Urology*. 2013;81(2):283-287.

**Pretorius RG**, Belinson JL, **Peterson P**, **Azizi F**, **Lo A**. Yield and mode of diagnosis of cervical intraepithelial neoplasia 3 or cancer among women with negative cervical cytology and positive high-risk human papillomavirus test results. *J Low Genit Tract Dis*. 2013;17(4):430-439.

**Sahebi F**, Shen Y, Thomas SH, Rincon A, Murata-Collins J, Palmer J, Krishnan AY, Karanes C, Htut M, **Somlo G**, **Forman SJ**. Late relapses following reduced intensity allogeneic transplantation in patients with multiple myeloma: a long-term follow-up study. *Br J Haematol*. 2013;160(2):199-206.

Siziopikou KP, Anderson SJ, Cobleigh MA, Julian TB, Arthur DW, Zheng P, Mamounas EP, Pajon ER, Behrens RJ, Eakle JF, Leasure NC, Atkins JN, **Polikoff JA**, Seay TE, McCaskill-Stevens WJ, Rabinovitch R, Costantino JP, Wolmark N. Preliminary results of centralized HER2 testing in ductal carcinoma in situ (DCIS): NSABP B-43. *Breast Cancer Res Treat*. 2013;142(2):415-421.

Spencer C, **Fatemi S**. Thyroglobulin antibody (TgAb) methods—Strengths, pitfalls and clinical utility for monitoring TgAb-positive patients with differentiated thyroid cancer. *Best Pract Res Clin Endocrinol Metab.* 2013;27(5):701-712.

Storb R, Gyurkocza B, Storer BE, Sorror ML, Blume K, Niederwieser D, Chauncey TR, Pulsipher MA, Petersen FB, **Sahebi F**, Agura ED, Hari P, Bruno B, McSweeney PA, Maris MB, Maziarz RT, Langston AA, Bethge W, Vindeløv L, Franke GN, Laport GG, Yeager AM, Hübel K, Deeg HJ, Georges GE, Flowers ME, Martin PJ, Mielcarek M, Woolfrey AE, Maloney DG, Sandmaier BM. Graft-versus-host disease and graft-versustumor effects after allogeneic hematopoietic cell transplantation. *J Clin Oncol.* 2013;31(12):1530-1538.

Swain SM, Tang G, Geyer CE Jr, Rastogi P, Atkins JN, Donnellan PP, Fehrenbacher L, Azar CA, Robidoux A, **Polikoff JA**, Brufsky AM, Biggs DD, Levine EA, Zapas JL, Provencher L, Northfelt DW, Paik S, Costantino JP, Mamounas EP, Wolmark N. Definitive results of a phase III adjuvant trial comparing 3 chemotherapy regimens in women with operable, node-positive breast cancer: the NSABP B-38 trial. *J Clin Oncol.* 2013;31(26):3197-3204.

**Wallner LP**, Frencher SK, **Hsu JW**, **Chao CR**, Nichol MB, **Loo RK**, **Jacobsen SJ**. Changes in serum prostate-specific antigen levels and the identification of prostate cancer in a large managed care population. *BJU Int*. 2013;111(8):1245-1252.

Wallner LP, Jacobsen SJ. Prostate-specific antigen and prostate cancer mortality: a systematic review. Am J Prev Med. 2013;45(3):318-326.

Wallner LP, Wang R, Jacobsen SJ, Haque R. Androgen deprivation therapy for treatment of localized prostate cancer and risk of second primary malignancies. *Cancer Epidemiol Biomarkers Prev*. 2013;22(2):313-316.

Weinmann S, Van Den Eeden SK, **Haque R**, Chen C, Richert-Boe K, Schwartzman J, Gao L, Berry DL, Kallakury BV, Alumkal JJ. Immunohistochemical expression of ERG in the molecular epidemiology of fatal prostate cancer study. *Prostate*. 2013;73(13):1371-1377.

Wu J, Chu PG, Jiang Z, **Lau SK**. Napsin A expression in primary mucin-producing adenocarcinomas of the lung: an immunohistochemical study. *Am J Clin Pathol.* 2013;139(2):160-166.

# **Cardiovascular Disease**

Akhtar MJ, Rosengart RM, Salem MM. Transcatheter closure of a giant communication between the right pulmonary artery and left atrium in a neonate. *Catheter Cardiovasc Interv.* 2013;82(1):159-162.

Akingba AG, **Bojalian M**, Shen C, Rubin J. Managing recurrent carotid artery disease with redo carotid endarterectomy: a 10-year retrospective case series. *Ann Vasc Surg*. 2014;28(4):908-916.

Borlaug BA, Redfield MM, Melenovsky V, Kane GC, Karon BL, **Jacobsen SJ**, Rodeheffer RJ. Longitudinal changes in left ventricular stiffness: a community-based study. *Circ Heart Fail*. 2013;6(5):944-52.

**Bui AL**, Grau-Sepulveda MV, Hernandez AF, Peterson ED, Yancy CW, Bhatt DL, Fonarow GC. Admission heart rate and in-hospital outcomes in patients hospitalized for heart failure in sinus rhythm and in atrial fibrillation. *Am Heart J.* 2013;165(4):567-574.e6.

**Carlson N, Mah R, Aburto M, Peters MJ, Dupper MV, Chen LH**. Hypovitaminosis D correction and high-sensitivity C-reactive protein levels in hypertensive adults. *Perm J.* 2013;17(4):19-21.

**Chugh R**. Management of pregnancy in women with repaired congenital heart defects or after the Fontan procedure. *Curr Treat Options Cardiovasc Med*. 2013;15(5):646-662.

Doering LV, Chen B, Cross Bodán R, **Magsarili MC**, Nyamathi A, Irwin MR. Early cognitive behavioral therapy for depression after cardiac surgery. *J Cardiovasc Nurs*. 2013;28(4):370-379.

**Handler J**. Commentary in support of a highly effective hypertension treatment algorithm. *J Clin Hypertens (Greenwich)*. 2013;15(12):874-7.

Hodgkiss-Harlow KD. Interpretation of visceral duplex scanning: before and after intervention for chronic mesenteric ischemia. *Semin Vasc Surg.* 2013;26(2-3):127-132.

Hodgkiss-Harlow KD, Bandyk DF. Interpretation of arterial duplex testing of lower-extremity arteries and interventions. *Semin Vasc Surg.* 2013;26(2-3):95-104.

Klapman MH, Sosa VB, Mattson-Gates GF, Baker CN, Sydorak RM, Ong VL, Li BH, Yao JF. Smaller platelet volumes associated with vascular malformations. *Clin Appl Thromb Hemost*. 2013;19(3):324-326.

**Kochar M**, Min JK. Physiologic assessment of coronary artery disease by cardiac computed tomography. *Korean Circ J*. 2013;43(7):435-442.

Liebling PD, Baudendistel TE, **Wolf AM**, Sandhu A. The heart of the matter. *J Hosp Med*. 2013;8(6): 346-350.

**Nageh MF, Watanabe CT, Chou ET**. Ablation of isthmus and non-isthmus-dependent flutters in a patient with cor triatriatum dexter. *Europace*. 2013;15(11):1573.

**Nguyen HQ**, Fan VS, Herting J, Lee J, Fu M, Chen Z, Borson S, Kohen R, Matute-Bello G, Pagalilauan G, Adams SG. Patients with COPD with higher levels of anxiety are more physically active. *Chest*. 2013;144(1):145-151.

Parsa P, **Hodgkiss-Harlow K**, Bandyk DF. Interpretation of intraoperative arterial duplex ultrasound testing. *Semin Vasc Surg.* 2013;26 (2-3):105-110.

**Poon K**, **Vakulenko M**, Young C, **Gupta N**. Runaway pacemaker protection—or a problem? *Heart Rhythm*. 2013;10(11):1732-1734.

Rebholz CM, **Reynolds K**, Wofford MR, Chen J, Kelly TN, Mei H, Whelton PK, He J. Effect of soybean protein on novel cardiovascular disease risk factors: a randomized controlled trial. *Eur J Clin Nutr*. 2013;67(1):58-63.

Sim JJ, Bhandari SK, Shi J, Liu IL, Calhoun DA, McGlynn EA, Kalantar-Zadeh K, Jacobsen SJ. Characteristics of resistant hypertension in a large, ethnically diverse hypertension population of an integrated health system. *Mayo Clin Proc.* 2013;88(10):1099-1107.

Singer DE, Chang Y, Borowsky LH, Fang MC, Pomernacki NK, Udaltsova N, **Reynolds K**, Go AS. A new risk scheme to predict ischemic stroke and other thromboembolism in atrial fibrillation: the ATRIA Study stroke risk score. *J Am Heart Assoc*. 2013;2(3):e000250.

# **Child and Adolescent Health**

Ackerson BK, Sy LS, Yao JF, Cheetham TC, Espinosa-Rydman AM, Jones TL, Jacobsen SJ. Agreement between medical record and parent report for evaluation of childhood febrile seizures. *Vaccine*. 2013;31(27):2904-2909.





Christensen SB, Black MH, Smith N, Martinez MM, Jacobsen SJ, Porter AH, Koebnick C. Prevalence of polycystic ovary syndrome in adolescents. *Fertil Steril*. 2013;100(2):470-477.

Glanz JM, Narwaney KJ, Newcomer SR, Daley MF, Hambidge SJ, Rowhani-Rahbar A, Lee GM, Nelson JC, Naleway AL, Nordin JD, **Lugg MM**, Weintraub ES. Association between undervaccination with diphtheria, tetanus toxoids, and acellular pertussis (DTaP) vaccine and risk of pertussis infection in children 3 to 36 months of age. JAMA Pediatr. 2013;167(11):1060-1064.

Glanz JM, Newcomer SR, Narwaney KJ, Hambidge SJ, Daley MF, Wagner NM, McClure DL, Xu S, Rowhani-Rahbar A, Lee GM, Nelson JC, Donahue JG, Naleway AL, Nordin JD, **Lugg MM**, Weintraub ES. A population-based cohort study of undervaccination in 8 managed care organizations across the United States. *JAMA Pediatr.* 2013;167(3):274-281.

Harrold LR, Salman C, Shoor S, Curtis JR, Asgari MM, Gelfand JM, **Wu JJ**, Herrinton LJ. Incidence and prevalence of juvenile idiopathic arthritis among children in a managed care population, 1996-2009. *J Rheumatol.* 2013;40(7):1218-1225.

Hechter RC, Chao CR, Sy LS, Ackerson BK, Slezak JM, Sidell MA, Jacobsen SJ. Quadrivalent human papillomavirus vaccine uptake in adolescent boys and maternal utilization of preventive care and history of sexually transmitted infections. *Am J Public Health.* 2013;103(9):e63-68.

# Koebnick C, Black MH, Wu J, Martinez MP, Smith N, Kuizon BD, Jacobsen SJ, Reynolds K. The

prevalence of primary pediatric prehypertension and hypertension in a real-world managed care system. J Clin Hypertens (Greenwich). 2013;15(11):784-792. Tsai J, Shaul DB, Sydorak RM, Lau ST, Akmal Y, Rodriguez K. Ingestion of magnetic toys: report of serious complications requiring surgical intervention and a proposed management algorithm. *Perm J*. 2013;17(1):11-14.

# **Clinical Guidelines**

Cooke CR, **Gould MK**. Advancing clinical practice and policy through guidelines: the role of the American Thoracic Society. *Am J Respir Crit Care Med*. 2013;187(9):910-914.

**Gould MK**, Donington J, Lynch WR, Mazzone PJ, Midthun DE, Naidich DP, Wiener RS. Evaluation of individuals with pulmonary nodules: when is it lung cancer?: diagnosis and management of lung cancer, 3rd ed: American College of Chest Physicians evidence-based clinical practice guidelines. *Chest.* 2013;143(5 Suppl):e93S-120S.

Jacobs AK, Kushner FG, Ettinger SM, Guyton RA, Anderson JL, Ohman EM, Albert NM, Antman EM, Arnett DK, Bertolet M, Bhatt DL, Brindis RG, Creager MA, DeMets DL, Dickersin K, Fonarow GC, Gibbons RJ, Halperin JL, Hochman JS, **Koster MA**, Normand SL, Ortiz E, P. ACCF/AHA clinical practice guideline methodology summit report: a report of the American College of Cardiology Foundation/American Heart Association Task Force on Practice Guidelines. *J Am Coll Cardiol.* 2013;61(2):213-265.

Jacobs AK, Kushner FG, Ettinger SM, Guyton RA, Anderson JL, Ohman EM, Albert NM, Antman EM, Arnett DK, Bertolet M, Bhatt DL, Brindis RG, Creager MA, DeMets DL, Dickersin K, Fonarow GC, Gibbons RJ, Halperin JL, Hochman JS, **Koster MA**, Normand SL, Ortiz E, P. ACCF/AHA clinical practice guideline methodology summit report: a report of the American College of Cardiology Foundation/American Heart Association Task Force on Practice Guidelines. *Circulation*. 2013;127(2):268-310.

Lee LS, **Wu BU**, Banks PA, Kadiyala V, Mehta S, Saltzman JR, Thompson CC, Bellizzi AM. Utility of commercial DNA analysis in detecting malignancy within pancreatic cysts. *JOP*. 2013;15(2):182-188.

Ost DE, Yeung SC, Tanoue LT, **Gould MK**. Clinical and organizational factors in the initial evaluation of patients with lung cancer: diagnosis and management of lung cancer, 3rd ed: American College of Chest Physicians evidence-based clinical practice guidelines. *Chest.* 2013;143(5 Suppl):e121S-141S.

Silvestri GA, Gonzalez AV, Jantz MA, Margolis ML, **Gould MK**, Tanoue LT, Harris LJ, Detterbeck FC. Methods for staging non-small cell lung cancer: diagnosis and management of lung cancer, 3rd ed: American College of Chest Physicians evidencebased clinical practice guidelines. *Chest*. 2013;143(5 Suppl):e211S-50S.

### **Comparative Effectiveness**

Chang J, Ahn JE, Landsman N, Rhee K, Chun L, Patel KK. Efficacy of contemporary medical management for asymptomatic carotid artery stenosis. *Am Surg.* 2013;79(10):987-991.

**Danforth KN**, Patnode CD, Kapka TJ, Butler MG, Collins B, Compton-Phillips A, Baxter RJ, Weissberg J, **McGlynn EA**, Whitlock EP. Comparative effectiveness topics from a large, integrated delivery system. *Perm J*. 2013;17(4):4-13.

Wade RL, Chaudhari P, **Natoli JL**, Taylor RJ, Nathanson BH, Horn D. Comparison of adverse events and hospital length of stay associated with various amphotericin B formulations: sequential conventional amphotericin B/lipid versus lipid-only therapy for the treatment of invasive fungal infections in hospitalized patients. *P T.* 2013;38(5):278-287.

# **Critical Care**

Brown SM, Lanspa MJ, **Jones JP**, Kuttler KG, Li Y, Carlson R, Miller RR, Hirshberg EL, Grissom CK, Morris AH. Survival after shock requiring high-dose vasopressor therapy. *Chest.* 2013;143(3):664-671.

Brown SM, Tate Q, **Jones JP**, Knox DB, Kuttler KG, Lanspa M, Rondina MT, Grissom CK, Behera S, Mathews VJ, Morris A. Initial fractal exponent of heart rate variability is associated with success of early resuscitation in patients with severe sepsis or septic shock: a prospective cohort study. *J Crit Care*. 2013;28(6):959-963.

**Imam TH**. Propofol-related infusion syndrome: role of propofol in medical complications of sedated critical care patients. *Perm J.* 2013;17(2):85-87.

Lanspa MJ, Grissom CK, Hirshberg EL, **Jones JP**, Brown SM. Applying dynamic parameters to predict hemodynamic response to volume expansion in spontaneously breathing patients with septic shock. *Shock*. 2013;39(2):155-160.

#### Dermatology

**Abdulla FR, Sarpa H, Cassarino D**. The expression of ALK in mycosis fungoides, stage IA. *J. Cutan Pathol.* 2013;40(3):348-350.

**Chan S, Cassarino DS**. Rapidly enlarging "bruise" on the back of an infant. *JAMA Dermatol*. 2013;149(11):1337-1338.

**Chang L, Cassarino D, Sosa V**. Diffuse umbilicated vesicles in a critically ill child. *JAMA Dermatol*. 2013;149(5):641-642.

Channual J, Fife DJ, **Wu JJ**. Axillary granular parakeratosis. *Cutis*. 2013;92(2):61;65-66.

**Famenini S**, **Wu JJ**. The efficacy of ustekinumab in psoriasis. *J Drugs Dermatol*. 2013;12(3):317-320.

**Famenini S**, **Wu JJ**. Infliximab-induced psoriasis in treatment of Crohn's disease-associated ankylosing spondylitis: case report and review of 142 cases. *J Drugs Dermatol.* 2013;12(8):939-943.

**Famenini S**, **Wu JJ**. Combination therapy with tumor necrosis factor inhibitors in psoriasis treatment. *Cutis.* 2013;92(3):140-147.

**Famenini S**, **Wu JJ**. Partial reversal of androgenetic alopecia with methotrexate therapy for psoriasis. *Cutis.* 2013;92(3):127-128.

Gupta R, Levin E, **Wu JJ**, **Koo JY**, Liao W. Possible drug-drug interaction between Adalimumab and Duloxetine and/or Pregabalin in a psoriasis patient. *J Drugs Dermatol.* 2013;12(10):1089.

Lin SK, Cassarino DS. Cystic tricholemmal carcinoma in situ. Am J Dermatopathol. 2013;35(6):e99-e102.

Park KK, **Wu JJ**, **Koo J**. A randomized, 'head-tohead' pilot study comparing the effects of etanercept monotherapy vs. etanercept and narrowband ultraviolet B (NB-UVB) phototherapy in obese psoriasis patients. *J Eur Acad Dermatol Venereol*. 2013;27(7):899-906.





Sako EY, **Famenini S**, **Wu JJ**. Bullous drug eruption in a patient with psoriasis after a test dose of methotrexate. *J Am Acad Dermatol*. 2013;69(5): e264-265.

Sangoi AR, **Cassarino DS**. PAX-8 expression in primary and metastatic Merkel cell carcinoma: an immunohistochemical analysis. *Am J Dermatopathol*. 2013;35(4):448-451.

White GM, Zhou HC, Burchette RJ. Biopsy followed by immediate curettage and electrodesiccation of suspected basal cell carcinomas at the first visit. JAMA Dermatol. 2013;149(8):980-981.

**Wu JJ**. Tumor necrosis factor inhibitors and myocardial infarction in psoriasis. *JAMA*. 2013;310(10):1075-1076.

**Wu JJ**, Caperton C. Images in clinical medicine. Psoriasis flare from Koebner's phenomenon after acupuncture. *N Engl J Med*. 2013;368(17):1635.

**Wu JJ, Poon KY**. Association of gender, tumor necrosis factor inhibitor therapy, and myocardial infarction risk in patients with psoriasis. *J Am Acad Dermatol.* 2013;69(4):650-651.

**Wu JJ, Poon KY, Bebchuk JD**. Association between the type and length of tumor necrosis factor inhibitor therapy and myocardial infarction risk in patients with psoriasis. *J Drugs Dermatol.* 2013;12(8):899-903.

# **Diabetes**

**Black MH**, Lawrence JM, Pihoker C, Dolan LM, Anderson A, Rodriguez B, Marcovina SM, Mayer-Davis EJ, Imperatore G, Dabelea D, SEARCH for Diabetes in Youth Study Group. HLA-associated phenotypes in youth with autoimmune diabetes. *Pediatr Diabetes*. 2013;14(2):121-128. **Black MH**, Watanabe RM, Trigo E, **Takayanagi M**, **Lawrence JM**, Buchanan TA, **Xiang AH**. High-fat diet is associated with obesity-mediated insulin resistance and beta-cell dysfunction in Mexican Americans. *J Nutr*. 2013;143(4):479-485.

**Chen Z, Black MH**, Watanabe RM, Trigo E, **Takayanagi M**, **Lawrence JM**, Buchanan TA, **Xiang AH**. Self-reported physical activity is associated with beta-cell function in Mexican American adults. *Diabetes Care*. 2013;36(3):638-644.

Couch SC, Crandell JL, Shah AS, Dolan LM, Merchant AT, Liese AD, **Lawrence JM**, Pihoker C, Mayer-Davis EJ. Fructose intake and cardiovascular risk factors in youth with type 1 diabetes: SEARCH for diabetes in youth study. *Diabetes Res Clin Pract*. 2013;100(2): 265-271.

Crume TL, Andrews JS, D'Agostino RB, Pettitt DJ, Mayer-Davis EJ, Law JR, Dolan L, **Lawrence JM**, Saydah S, Greenbaum C, Rodriguez BL, Dabelea D. The influence of exposure to maternal diabetes in utero on the rate of decline in beta-cell function among youth with diabetes. *J Pediatr Endocrinol Metab.* 2013;26(7-8):721-727.

Goodarzi MO, Guo X, Cui J, Jones MR, Haritunians T, **Xiang AH**, Chen YD, Taylor KD, Buchanan TA, Hsueh WA, Raffel LJ, Rotter JI. Systematic evaluation of validated type 2 diabetes and glycaemic trait loci for association with insulin clearance. *Diabetologia*. 2013;56(6):1282-1290.

Habel LA, **Danforth KN**, Quesenberry CP, Capra A, Van Den Eeden SK, Weiss NS, Ferrara A. Cohort study of insulin glargine and risk of breast, prostate, and colorectal cancer among patients with diabetes. *Diabetes Care*. 2013;36(12):3953-3960.

Hilliard ME, **Lawrence JM**, Modi AC, Anderson A, Crume T, Dolan LM, Merchant AT, Yi-Frazier JP, Hood KK, for the SEARCH for Diabetes in Youth Study Group. Identification of minimal clinically important difference scores of the pediatric quality of life inventory in children, adolescents, and young adults with type 1 and type 2 diabetes. *Diabetes Care*. 2013;36(7):1891-1897.

Kanakatti Shankar R, Pihoker C, Dolan LM, Standiford D, Badaru A, Dabelea D, Rodriguez B, **Black MH**, Imperatore G, Hattersley A, Ellard S, Gilliam LK; SEARCH for Diabetes in Youth Study Group. Permanent neonatal diabetes mellitus: prevalence and genetic diagnosis in the SEARCH for Diabetes in Youth Study. *Pediatr Diabetes*. 2013;14(3):174-180.

Lotstein DS, Seid M, Klingensmith G, Case D, Lawrence JM, Pihoker C, Dabelea D, Mayer-Davis EJ, Gilliam LK, Corathers S, Imperatore G, Dolan L, Anderson A, Bell RA, Waitzfelder B, SEARCH for Diabetes in Youth Study Group. Transition from pediatric to adult care for youth diagnosed with type 1 diabetes in adolescence. *Pediatrics*. 2013;131(4):e1062-1070.

Maahs DM, Dabelea D, D'Agostino RB, Andrews JS, Shah AS, Crimmins N, Mayer-Davis EJ, Marcovina S, Imperatore G, Wadwa RP, Daniels SR, **Reynolds K**, Hamman RF, Dolan LM, SEARCH for Diabetes in Youth Study. Glucose control predicts 2-year change in lipid profile in youth with type 1 diabetes. *J Pediatr*. 2013;162(1):101-107.e1.

Mayer-Davis EJ, Dabelea D, Crandell JL, Crume T, D'Agostino RB, Dolan L, King IB, **Lawrence JM**, Norris JM, Pihoker C, N The. Nutritional factors and preservation of C-peptide in youth with recently diagnosed type 1 diabetes: SEARCH nutrition ancillary study. *Diabetes Care*. 2013;36(7):1842-1850.

Mottl AK, Lauer A, Dabelea D, Maahs DM, D'Agostino RB Jr, Dolan LM, Gilliam LK, **Lawrence JM**, Rodriguez B, Marcovina SM, Imperatore G, Kanakatti Shankar R, Afkarian M, **Reynolds K**, Liese AD, Mauer M, Mayer-Davis EJ, for the SEARCH for Diabetes in Youth Study Group. Albuminuria according to status of autoimmunity and insulin sensitivity among youth with type 1 and type 2 diabetes. *Diabetes Care*. 2013;36(11):3633-3638.

Pihoker C, Badaru A, Anderson A, Morgan T, Dolan L, Dabelea D, Imperatore G, Linder B, Marcovina S, Mayer-Davis E, **Reynolds K**, Klingensmith GJ, SEARCH for Diabetes in Youth Study Group. Insulin regimens and clinical outcomes in a type 1 diabetes cohort: the SEARCH for Diabetes in Youth study. *Diabetes Care*. 2013;36(1):27-33.

Pihoker C, Gilliam LK, Ellard S, Dabelea D, Davis C, Dolan LM, Greenbaum CJ, Imperatore G, **Lawrence JM**, Marcovina SM, Mayer-Davis E, Rodriguez BL, Steck AK, Williams DE, Hattersley AT; SEARCH for Diabetes in Youth Study Group. Prevalence, characteristics and clinical diagnosis of maturity onset diabetes of the young due to mutations in HNF1A, HNF4A, and glucokinase: results from the SEARCH for Diabetes in Youth. *J Clin Endocrinol Metab*. 2013;98(10):4055-4062.

Raebel MA, Xu S, Goodrich GK, Schroeder EB, Schmittdiel JA, Segal JB, O'Connor PJ, Nichols GA, **Lawrence JM**, Kirchner HL, Elston Lafata J, Butler M, Newton KM, Steiner JF. Initial antihyperglycemic drug therapy among 241 327 adults with newly identified diabetes from 2005 through 2010: a surveillance, prevention, and management of diabetes mellitus (SUPREME-DM) study. *Ann Pharmacother*. 2013;47(10):1280-1291. Van Den Eeden SK, Ferrara A, Shan J, **Jacobsen SJ**, **Quinn VP**, **Haque R**, Quesenberry CP. Impact of type 2 diabetes on lower urinary tract symptoms in men: a cohort study. *BMC Urol*. 2013;13:12.

Xiang AH, Takayanagi M, Black MH, Trigo E, Lawrence JM, Watanabe RM, Buchanan TA. Longitudinal changes in insulin sensitivity and beta cell function between women with and without a history of gestational diabetes mellitus. *Diabetologia*. 2013;56(12):2753-2760.

# **Digestive System Disorders/Gastroenterology**

Abbass MA, Cannom RR, Chiu VY, Burchette RJ, Radner GW, Haigh PI, Etzioni DA. Triage of patients with acute diverticulitis: are some inpatients candidates for outpatient treatment? *Colorectal Dis.* 2013 Apr;15(4):451-457.

**Abbass MA, Tsay AT, Abbas MA**. Laparoscopic resection of chronic sigmoid diverticulitis with fistula. *JSLS*. 2013;17(4):636-640.

Anand N, Sampath K, Wu BU. Cyst features and risk of malignancy in intraductal papillary mucinous neoplasms of the pancreas: a meta-analysis. *Clin Gastroenterol Hepatol.* 2013;11(8):913-921.

Hwang SS, Li BH, Haigh PI. Gallstone pancreatitis without cholecystectomy. *JAMA Surg.* 2013;148(9): 867-872.

Tam MS, Abbas MA. Perforation following colorectal endoscopy: what happens beyond the endoscopy suite? *Perm J.* 2013;17(2):17-21.





Tam MS, Shaul DB, Sydorak RM. Successful salvage of late failure of hepatic portocholecystostomy (gallbladder Kasai) with Roux-en-Y cholecystojejunostomy. *J Pediatr Surg.* 2013;48(3):e37-79.

Wong JT, Abbas MA. Laparoscopic right hemicolectomy. *Tech Coloproctol*. 2013;17 Suppl 1:S3-9.

**Wu BU**, Banks PA. Clinical management of patients with acute pancreatitis. *Gastroenterology*. 2013;144(6):1272-1281.

# **Emergency Care**

**Dohrenwend PB, Le MV, Bush JA, Thomas CF**. The impact on emergency department visits for respiratory illness during the Southern California wildfires. *West J Emerg Med.* 2013;14(2):79-84.

Gabayan GZ, Sun BC, Asch SM, Timmermans S, Sarkisian C, **Yiu S**, **Lancaster EM**, **Poon KT**, Kellermann AL, Ryan G, Miniel NJ, Flansbaum D, Hoffman JR, **Derose SF**. Qualitative factors in patients who die shortly after emergency department discharge. *Acad Emerg Med*. 2013;20(8):778-785.

Jones B, Gundlapalli AV, **Jones JP**, Brown SM, Dean NC. Admission decisions and outcomes of community-acquired pneumonia in the homeless population: a review of 172 patients in an urban setting. *Am J Public Health*. 2013;103 Suppl 2:S289-293.

**Kei J**. Image diagnosis: pericardial cyst. *Perm J*. 2013;17(4):e149.

**Kei J, Dohrenwend PB**. Case report: dealing with a ventilation complication after successful cricothyrotomy. *J Emerg Med*. 2013;44(5):936-938.

**Sharp AL**, Choi H, Hayward RA. Don't get sick on the weekend: an evaluation of the weekend effect on mortality for patients visiting US EDs. *Am J Emerg Med.* 2013;31(5):835-837.

**Silver M**, **Kohler S**. Evolution of a round pneumonia. *West J Emerg Med.* 2013;14(6):643-644.

# Endocrinology

Said M, **Chiu V**, **Haigh PI**. Hypothyroidism after hemithyroidectomy. *World J Surg.* 2013;37(12): 2839-2844.

Yeh MW, Ituarte PH, Zhou HC, Nishimoto S, Liu IL, Harari A, Haigh PI, Adams AL. Incidence and prevalence of primary hyperparathyroidism in a racially mixed population. *J Clin Endocrinol Metab*. 2013;98(3):1122-1129.

# Genetics

**Black MH**, Dabelea D. Genetics: new HLA variants could predict type1 diabetes mellitus risk in African Americans. *Nat Rev Endocrinol*. 2013;9(10):570-571.

Cyr AR, **Hitchler MJ**, Domann FE. Regulation of SOD2 in cancer by histone modifications and CpG methylation: closing the loop between redox biology and epigenetics. *Antioxid Redox Signal*. 2013;18(15):1946-1955.

Himes BE, Qiu W, Klanderman B, Ziniti J, Senter-Sylvia J, Szefler SJ, Lemanske RF Jr, **Zeiger RS**, Strunk RC, Martinez FD, Boushey H, Chinchilli VM, Israel E, Mauger D, Koppelman GH, Nieuwenhuis MA, Postma DS, Vonk JM, Rafaels N, Hansel NN, Barnes K, Raby B. ITGB5 and AGFG1 variants are associated with severity of airway responsiveness. *BMC Med Genet*. 2013;14:86.

Himes BE, Sheppard K, Berndt A, Leme AS, Myers RA, Gignoux CR, Levin AM, Gauderman WJ, Yang JJ, Mathias RA, Romieu I, Torgerson DG, Roth LA, Huntsman S, Eng C, Klanderman B, Ziniti J, Senter-Sylvia J, Szefler SJ, Lemanske RF Jr, **Zeiger RS**, Strunk RC, Mart. Integration of mouse and human genomewide association data identifies KCNIP4 as an asthma gene. *PLoS One*. 2013;8(2):e56179.

**Reddy KS**, Aradhya S, Meck J, **Tiller G**, **Abboy S**, **Bass H**. A systematic analysis of small supernumerary marker chromosomes using array CGH exposes unexpected complexity. *Genet Med*. 2013;15(1):3-13.

Zimran A, Pastores GM, Tylki-Szymanska A, Hughes DA, Elstein D, **Mardach R**, Eng C, Smith L, Heisel-Kurth M, Charrow J, Harmatz P, Fernhoff P, Rhead W, Longo N, Giraldo P, Ruiz JA, Zahrieh D, Crombez E, Grabowski GA. Safety and efficacy of velaglucerase alfa in Gaucher disease type 1 patients previously treated with imiglucerase. *Am J Hematol.* 2013;88(3):172-178.

# **Gestational Diabetes**

Black MH, Sacks DA, Xiang AH, Lawrence JM. The relative contribution of prepregnancy overweight and obesity, gestational weight gain, and IADPSG-defined gestational diabetes mellitus to fetal overgrowth. *Diabetes Care*. 2013;36(1):56-62.

# Head and Neck

Argyris PP, Reed RC, Manivel JC, Lopez-Terrada D, Jakacky J, Cayci Z, Tosios KI, Pambuccian SE, **Thompson LD**, Koutlas IG. Oral alveolar soft part sarcoma in childhood and adolescence: report of 2 cases and review of literature. *Head Neck Pathol*. 2013;7(1):40-49.

**Schwartz HC**. Pathophysiology and pharmacologic control of osseous mandibular condylar resorption. *J Oral Maxillofac Surg*. 2013;71(1):4.

Slootweg PJ, Ferlito A, Cardesa A, **Thompson LD**, Hunt JL, Strojan P, Takes RP, Triantafyllou A, Woolgar JA, Rinaldo A, Devaney KO, Barnes L. Sinonasal tumors: a clinicopathologic update of selected tumors. *Eur Arch Otorhinolaryngol*. 2013;270(1):5-20.

**Thompson LD**. Mucocele: retention and extravasation types. *Ear Nose Throat J.* 2013;92(3):106-108.

**Thompson LD**. Wegener granulomatosis. *Ear Nose Throat J.* 2013;92(1):18-22.

**Thompson LD**. Endolymphatic sac tumor. *Ear Nose Throat J*. 2013;92(4-5):184-188.

**Thompson LD**. Osteosarcoma. *Ear Nose Throat J*. 2013;92(7):288-290.

**Thompson LD**. Larynx: nodules and polyps. *Ear Nose Throat J*. 2013;92(9):426-428.

**Thompson LD**. Undifferentiated thyroid carcinoma. *Ear Nose Throat J.* 2013;92(10-11):500-504.

Wilson JJ, **Schwartz HC**, **Tehrany GM**. Brown tumor of the posterior maxilla as initial manifestation of primary hyperparathyroidism: case report. *J Oral Maxillofac Surg.* 2013;71(5):886-890.

Woolgar JA, Triantafyllou A, Lewis JS, Hunt J, Williams MD, Takes RP, **Thompson LD**, Slootweg PJ, Devaney KO, Ferlito A. Prognostic biological features in neck dissection specimens. *Eur Arch Otorhinolaryngol.* 2013;270(5):1581-1592.

**Zakrzewski L**, Lee DT. An algorithmic approach to otitis media with effusion. *J Fam Pract*. 2013;62(12):700-706.

# **Health Economics**

**Cueva RA**. In reference to cost analysis of asymmetric sensorineural hearing loss investigations. *Laryngoscope*. 2013;123(8):2077.

**Kawatkar AA**, Hay JW, Stohl W, Nichol MB. Incremental expenditure of biologic disease modifying antirheumatic treatment using instrument variables in panel data. *Health Econ*. 2013;22(7):807-823.

Matlock DD, Groeneveld PW, Sidney S, Shetterly S, Goodrich G, Glenn K, Xu S, Yang L, Farmer SA, **Reynolds K**, Cassidy-Bushrow AE, Lieu T, Boudreau DM, Greenlee RT, Tom J, Vupputuri S, Adams KF, Smith DH, Gunter MJ, Go AS, Magid DJ. Geographic variation in cardiovascular procedure use among Medicare fee-for-service vs Medicare Advantage beneficiaries. JAMA. 2013;310(2):155-162.

Sommers R, Goold SD, **McGlynn EA**, Pearson SD, Danis M. Focus groups highlight that many patients object to clinicians' focusing on costs. *Health Aff* (*Millwood*). 2013;32(2):338-346.

# Health Equity

**Chu LH, Portugal C, Kawatkar AA**, Stohl W, Nichol MB. Racial/ethnic differences in the use of biologic disease-modifying antirheumatic drugs among California Medicaid (MediCal) rheumatoid arthritis patients. *Arthritis Care Res (Hoboken)*. 2013;65(2):299-303.





DiSantis KI, Grier SA, Odoms-Young A, Baskin ML, Carter-Edwards L, **Young DR**, Lassiter V, Kumanyika SK. What "price" means when buying food: insights from a multisite qualitative study with Black Americans. *Am J Public Health*. 2013;103(3):516-522.

# **Health Informatics**

Chen JC, **Pfeffer T**, Johnstone S, **Chen Y**, **Kiley ML**, Richter R, Lee H. Analysis of mitral valve replacement outcomes is enhanced by meaningful clinical use of electronic health records. *Perm J*. 2013;17(2):12-16.

Chen LH, Quinn V, Xu L, Gould MK, Jacobsen SJ, Koebnick C, Reynolds K, Hechter RC, Chao CR. The accuracy and trends of smoking history documentation in electronic medical records in a large managed care organization. *Subst Use Misuse*. 2013;48(9):731-742.

Chronaki C, **Dolin RH**, Melgara M, Solbrig H, Ferguson J, Kalra D. Bridging patient summaries across the Atlantic. *Stud Health Technol Inform*. 2013;192:1254.

Derose SF, Contreras R, Coleman KJ, Koebnick C, Jacobsen SJ. Race and ethnicity data quality and imputation using U.S. Census data in an integrated health system: the Kaiser Permanente Southern California experience. *Med Care Res Rev.* 2013;70(3):330-345.

Fan JW, Yang EW, Jiang M, Prasad R, Loomis RM, Zisook DS, Denny JC, Xu H, Huang Y. Syntactic parsing of clinical text: guideline and corpus development with handling ill-formed sentences. J Am Med Inform Assoc. 2013;20(6):1168-1177. Getahun D, Rhoads GG, Fassett MJ, Chen W, Strauss JA, Demissie K, Jacobsen SJ. Accuracy of reporting maternal and infant perinatal service system coding and clinical utilization coding. *J Med Stat Inform.* 2013;1:3.

Hechter RC, Qian L, Sy LS, Greene SK, Weintraub ES, Naleway AL, Rowhani-Rahbar A, Donahue JG, Daley MF, Vazquez-Benitez G, Lugg MM, Jacobsen SJ. Secular trends in diagnostic code density in electronic healthcare data from health care systems in the Vaccine Safety Datalink Project. Vaccine. 2013;31(7):1080-1085.

Johnson KE, Beaton SJ, Andrade SE, **Cheetham TC**, Scott PE, Hammad TA, Dashevsky I, Cooper WO, Davis RL, Pawloski PA, Raebel MA, Smith DH, Toh S, Li DK, Haffenreffer K, Dublin S. Methods of linking mothers and infants using health plan data for studies of pregnancy outcomes. *Pharmacoepidemiol Drug Saf.* 2013;22(7):776-782.

#### Kohler SW, Chen R, Kagan A, Helvey DW,

**Buccigrossi D**. The use of a fully integrated electronic medical record to minimize cumulative lifetime radiation exposure from CT scanning to detect urinary tract calculi. *Emerg Radiol.* 2013;20(3):213-218.

Lo Re V 3rd, Haynes K, Goldberg D, Forde KA, Carbonari DM, Leidl KB, Hennessy S, Reddy KR, Pawloski PA, Daniel GW, **Cheetham TC**, Iyer A, Coughlin KO, Toh S, Boudreau DM, Selvam N, Cooper WO, Selvan MS, Vanwormer JJ, Avigan MI, Houstoun M, Zornberg GL, Racoosin JA, Shoaibi A. Validity of diagnostic codes to identify cases of severe acute liver injury in the U.S. Food and Drug Administration's Mini-Sentinel Distributed Database. *Pharmacoepidemiol Drug Saf.* 2013;22(8):861-872.

**Monroe CD**, **Chin KY**. Specialty pharmaceuticals care management in an integrated health care delivery system with electronic health records. *J Manag Care Pharm.* 2013;19(4):334-344.

Paxton EW, Kiley ML, Love R, Barber TC, Funahashi TT, Inacio MC. Kaiser Permanente implant registries benefit patient safety, quality improvement, cost-effectiveness. *Jt Comm J Qual Patient Saf.* 2013;39(6):246-252.

**Shin J**, Hunt CM, Suzuki A, Papay JI, Beach KJ, **Cheetham TC**. Characterizing phenotypes and outcomes of drug-associated liver injury using electronic medical record data. *Pharmacoepidemiol Drug Saf.* 2013;22(2):190-198.

Strauss JA, Chao CR, Kwan ML, Ahmed SA, Schottinger JE, Quinn VP. Identifying primary and recurrent cancers using a SAS-based natural language processing algorithm. J Am Med Inform Assoc. 2013;20(2):349-355. Wells AF, Arnold LM, Curtis CE, Dunegan LJ, Lapp CW, **McCarberg BH**, Clair A. Integrating health information technology and electronic health records into the management of fibromyalgia. *Postgrad Med.* 2013;125(4):70-77.

# **Health Policy**

Chamberlain LJ, Wu S, Lewis G, Graff N, Javier JR, Park JS, Johnson CL, **Woods SD**, Patel M, Wong D, Blaschke GS, Lerner M, Kuo AK, California Community Pediatrics and Legislative Advocacy Training Collaborative. A multi-institutional medical educational collaborative: advocacy training in California pediatric residency programs. *Acad Med*. 2013;88(3):314-321.

Hung Y, Ayala A, Morales F, Frierman-Hunt G,

**Moreno A, Nwachuku I**. Sustaining engagement and partnership: model of enhancing cultural capital among nonaffiliated IRB members. *J Empir Res Hum Res Ethics*. 2013;8(3):34-45.

Kanter MH, Nguyen M, Klau MH, Spiegel NH, Ambrosini VL. What does professionalism mean to the physician? *Perm J.* 2013;17(3):87-90.

**Nelson CM**, **Nazareth BA**. Nonbeneficial treatment and conflict resolution: building consensus. *Perm J*. 2013;17(3):23-27.

**Stevenson C**. RE: The Affordable Care Act: politics over policy. *Am J Orthop (Belle Mead NJ).* 2013;42(7):E51.

**Yancey AK**, **Sallis RE**, **Bastani R**. Changing physical activity participation for the medical profession. *JAMA*. 2013;309(2):141-142.

# **Hospital Research**

**Chu BK**. Embracing change. *Hosp Health Netw*. 2013;87(11):14,4.

**Chu BK**, O'Brien JG. Helping members adapt, explore best practices and promote better care. *Hosp Health Netw.* 2013;87(1):12.

**Chu B**. Transforming care delivery. Doctors, patients, families acting as a team can lead to improved healthcare. *Mod Healthc.* 2013;43(21):26.

**Page AE**, Butler CA, Bozic KJ. Factors driving physician-hospital alignment in orthopaedic surgery. *Clin Orthop Relat Res.* 2013;471(6):1809-1817.

Tuso P, Huynh DN, Garofalo L, Lindsay G, Watson HL, Lenaburg DL, Lau H, Florence B, Jones J, Harvey P, Kanter MH. The readmission reduction program of Kaiser Permanente Southern California-knowledge transfer and performance improvement. *Perm J.* 2013;17(3):58-63.

# **Infectious Disease**

Acquah SE, Quaye L, Sagoe K, Ziem JB, **Bromberger PI**, Amponsem AA. Susceptibility of bacterial etiological agents to commonly-used antimicrobial agents in children with sepsis at the Tamale Teaching Hospital. *BMC Infect Dis.* 2013;13:89.

### Injury

Adams AL, Kessler JI, Deramerian K, Smith N, Black MH, Porter AH, Jacobsen SJ, Koebnick C. Associations between childhood obesity and upper and lower extremity injuries. *Inj Prev.* 2013;19(3):191-197.

**Spence MM**, Shin PJ, **Lee EA**, **Gibbs NE**. Risk of injury associated with skeletal muscle relaxant use in older adults. *Ann Pharmacother*. 2013;47(7-8):993-998.

# **Innovation and Process Transformation**

Harrison TN, Ho TS, Handler J, Kanter MH, Goldberg RA, Reynolds K. A randomized controlled trial of an automated telephone intervention to improve blood pressure control. J Clin Hypertens (Greenwich). 2013;15(9):650-654.

Kanter MH, Lindsay G, Bellows J, Chase A. Complete care at Kaiser Permanente: transforming chronic and preventive care. *Jt Comm J Qual Patient Saf.* 2013;39(11):484-494.

**Novak SM, Marlowe EM**. Automation in the clinical microbiology laboratory. *Clin Lab Med*. 2013;33(3):567-588.





# **Kidney Diseases**

Bacchetta J, Wesseling-Perry K, **Kuizon B**, Pereira RC, Gales B, Wang HJ, Elashoff R, Salusky IB. The skeletal consequences of growth hormone therapy in dialyzed children: a randomized trial. *Clin J Am Soc Nephrol.* 2013;8(5):824-832.

Derose SF, Rutkowski MP, Crook PW, Shi JM, Wang JQ, Kalantar-Zadeh K, Kovesdy CP, Levin NW, Jacobsen SJ. Racial differences in estimated GFR decline, ESRD, and mortality in an integrated health system. *Am J Kidney Dis.* 2013;62(2):236-244.

Kovesdy CP, Bleyer AJ, Molnar MZ, Ma JZ, **Sim JJ**, Cushman WC, Quarles LD, Kalantar-Zadeh K. Blood pressure and mortality in U.S. veterans with chronic kidney disease: a cohort study. *Ann Intern Med*. 2013;159(4):233-242.

Li J, Molnar MZ, Zaritsky JJ, **Sim JJ**, Streja E, Kovesdy CP, Salusky I, Kalantar-Zadeh K. Correlates of parathyroid hormone concentration in hemodialysis patients. *Nephrol Dial Transplant*. 2013;28(6): 1516-1525.

Park J, Rhee CM, **Sim JJ**, Kim YL, Ricks J, Streja E, Vashistha T, Tolouian R, Kovesdy CP, Kalantar-Zadeh K. A comparative effectiveness research study of the change in blood pressure during hemodialysis treatment and survival. *Kidney Int.* 2013;84(4): 795-802.

Sim JJ, Bhandari SK, Smith N, Chung J, Liu IL, Jacobsen SJ, Kalantar-Zadeh K. Phosphorus and risk of renal failure in subjects with normal renal function. *Am J Med*. 2013;126(4):311-318. **Tuso P**. Choosing wisely and beyond: shared decision making and chronic kidney disease. *Perm J*. 2013;17(4):75-78.

**Tuso P**. The renal palliative care program. *Perm J*. 2013;17(1):78-79.

# Maternal and Infant/Neonatal Health

Darney BG, Snowden JM, Cheng YW, Jacob L, Nicholson JM, Kaimal A, Dublin S, **Getahun D**, Caughey AB. Elective induction of labor at term compared with expectant management: maternal and neonatal outcomes. *Obstet Gynecol*. 2013;122(4): 761-769.

**Fassett MJ**, Wing DA, **Getahun D**. Temporal trends in chorioamnionitis by maternal race/ethnicity and gestational age (1995 - 2010). *Int J Reprod Med*. 2013; 2013(5).

**Getahun D**, Rhoads GG, Demissie K, Lu SE, **Quinn VP**, **Fassett MJ**, Wing DA, **Jacobsen SJ**. In utero exposure to ischemic-hypoxic conditions and attention-deficit/hyperactivity disorder. *Pediatrics*. 2013;131(1):e53-6.

**Gilboa M.** Unraveling the devil in disguise: how I dodged a bullet and turned the worst possible patient experience into the greatest achievement of my medical career. *Perm J.* 2013;17(3):95.

Levy DJ, Pretorius DH, Rothman A, Gonzales M, Rao C, Nunes ME, Bendelstein J, Mehalek K, Thomas A, Nehlsen C, Ehr J, Burchette RJ, Sklansky MS. Improved prenatal detection of congenital heart disease in an integrated health care system. *Pediatr Cardiol.* 2013;34(3):670-679.

# **Medication Adherence**

**An J**, Nichol MB. Multiple medication adherence and its effect on clinical outcomes among patients with comorbid type 2 diabetes and hypertension. *Med Care*. 2013;51(10):879-887.

Cheetham TC, Niu F, Green K, Scott RD, Derose SF, Vansomphone SS, Shin J, Tunceli K, Reynolds K. Primary nonadherence to statin medications in a managed care organization. *J Manag Care Pharm.* 2013;19(5):367-373.

Derose SF, Green K, Marrett E, Tunceli K, Cheetham TC, Chiu VY, Harrison TN, Reynolds K, Vansomphone SS, Scott RD. Automated outreach to increase primary adherence to cholesterol-lowering medications. JAMA Intern Med. 2013;173(1):38-43. **Gharibian D**, **Polzin JK**, **Rho JP**. Compliance and persistence of antidepressants versus anticonvulsants in patients with neuropathic pain during the first year of therapy. *Clin J Pain*. 2013;29(5):377-381.

Harrison TN, Derose SF, Cheetham TC, Chiu V, Vansomphone SS, Green K, Tunceli K, Scott RD, Marrett E, Reynolds K. Primary nonadherence to statin therapy: patients' perceptions. *Am J Manag Care*. 2013;19(4):e133-139.

**Reynolds K**, Muntner P, **Cheetham TC**, **Harrison TN**, Morisky DE, Silverman S, Gold DT, **Vansomphone SS**, Wei R, O'Malley CD. Primary non-adherence to bisphosphonates in an integrated healthcare setting. *Osteoporos Int*. 2013;24(9):2509-2517.

# **Mental Health**

**Bell DS**, Shipman WM, Cleves MA, Siegelman J. Which drug for which patient? Is there a fluoxetine responding versus a bupropion responding personality profile? *Clin Pract Epidemiol Ment Health*. 2013;9:142-147.

Daumit GL, Dickerson FB, Wang NY, Dalcin A, Jerome GJ, Anderson CA, **Young DR**, Frick KD, Yu A, Gennusa JV 3rd, Oefinger M, Crum RM, Charleston J, Casagrande SS, Guallar E, Goldberg RW, Campbell LM, Appel LJ. A behavioral weight-loss intervention in persons with serious mental illness. *N Engl J Med*. 2013;368(17):1594-1602.

Dube SR, **Felitti VJ**, Shobhana R. Moving beyond childhood adversity: Association between salutogenic factors and subjective well-being among adult survivors of trauma. In: Linden M, Rutkowski K, eds. Hurting memories and beneficial forgetting: Posttraumatic stress disorders, biographical developments and social conflicts. London: Elsevier; 2013:139-152.

**Getahun D**, Jacobsen SJ, Fassett MJ, Chen W, Demissie K, Rhoads GG. Recent trends in childhood attention-deficit/hyperactivity disorder. JAMA Pediatr. 2013;167(3):282-288.

Irwin MR, Olmstead RE, Ganz PA, **Haque R**. Sleep disturbance, inflammation and depression risk in cancer survivors. *Brain Behav Immun*. 2013;30 Suppl:S58-67.

Keenan TE, Yu A, Cooper LA, Appel LJ, Guallar E, Gennusa JV 3rd, Dickerson FB, Crum RM, Anderson CA, Campbell LM, **Young DR**, Daumit GL. Racial patterns of cardiovascular disease risk factors in serious mental illness and the overall U.S. population. *Schizophr Res.* 2013;150(1):211-216. Penfold RB, Stewart C, Hunkeler EM, Madden JM, Cummings JR, Owen-Smith AA, Rossom RC, Lu CY, Lynch FL, Waitzfelder BE, **Coleman KJ**, Ahmedani BK, Beck AL, Zeber JE, Simon GE. Use of antipsychotic medications in pediatric populations: what do the data say? *Curr Psychiatry Rep.* 2013;15(12):426.

**Quick EK**. Solution focused anxiety management: a treatment and training manual. Amsterdam: Elsevier/ Academic Press, 2013.

Toh S, Li Q, Cheetham TC, Cooper WO, Davis RL, Dublin S, Hammad TA, Li DK, Pawloski PA, Pinheiro SP, Raebel MA, Scott PE, Smith DH, Bobo WV, Lawrence JM, Dashevsky I, Haffenreffer K, Avalos LA, Andrade SE. Prevalence and trends in the use of antipsychotic medications during pregnancy in the U.S., 2001-2007: a population-based study of 585,615 deliveries. Arch Womens Ment Health. 2013;16(2):149-157.

# **Narrative Medicine**

Johna S, Dehal A. The power of reflective writing: narrative medicine and medical education. *Perm J.* 2013;17(4):84-85.

# **Neurological Disorders**

Amezcua L, Lerner A, Ledezma K, Conti D, Law M, Weiner L, **Langer-Gould A**. Spinal cord lesions and disability in Hispanics with multiple sclerosis. *J Neurol*. 2013;260(11):2770-2776.

**Baek WS**, **Swenseid SS**, **Poon KY**. Quality care assessment of Parkinson's disease at a tertiary medical center. *Int J Neurosci*. 2013;123(4):221-2215.





**Chayasirisobhon S**. Efficacy of Pinus radiata bark extract and vitamin C combination product as a prophylactic therapy for recalcitrant migraine and long-term results. *Acta Neurol Taiwan*. 2013;22(1): 13-21.

Langer-Gould A, Beaber BE. Effects of pregnancy and breastfeeding on the multiple sclerosis disease course. *Clin Immunol.* 2013;149(2):244-250.

Langer-Gould A, Brara SM, Beaber BE, Koebnick C. Childhood obesity and risk of pediatric multiple sclerosis and clinically isolated syndrome. *Neurology*. 2013;80(6):548-552.

Langer-Gould A, Brara SM, Beaber BE, Zhang JL. Incidence of multiple sclerosis in multiple racial and ethnic groups. *Neurology*. 2013;80(19):1734-1739.

Langer-Gould A, Hellwig K. One can prevent postpartum MS relapses by exclusive breast feeding: yes. *Mult Scler*. 2013;19(12):1567-1568.

Langer-Gould AM, Anderson WE, Armstrong MJ, Cohen AB, Eccher MA, Iverson DJ, **Potrebic SB**, Becker A, Larson R, Gedan A, Getchius TS, Gronseth GS. The American Academy of Neurology's top five Choosing Wisely recommendations. *Neurology*. 2013;81(11):1022-1023.

Lin JJ, Siddarth P, Riley JD, **Gurbani SG**, Ly R, Yee VW, Levitt JG, Toga AW, Caplan R. Neurobehavioral comorbidities of pediatric epilepsies are linked to thalamic structural abnormalities. *Epilepsia*. 2013;54(12):2116-2124.

**Rutkowski A**, Bonnemann C, Brown S, Thorsteinsdottir S, Dominov J, Ruegg MA, Matter ML, Guttridge D, Crosbie-Watson RH, Kardon G, Nagaraju K, Girgenrath M, Burkin DJ. Report on the Myomatrix Conference April 22-24, 2012, University of Nevada, Reno, Nevada, USA. *Neuromuscul Disord*. 2013;23(2):188-191.

# **Nursing Research**

**Cathro H**. A practical guide to making patient assignments in acute care. *J Nurs Adm*. 2013;43(1): 6-9.

**Chapman JA**, **Johnson JA**. On the spot! Peer validation of BP measurement competence. *Nurs Manage*. 2013;44(9):22-24.

**Johnson JA**. Does academic dishonesty result in unethical professional practice? *J Nurses Prof Dev.* 2013;29(5):271-273.

Johnson JA. Education objectives; business outcomes: are they in synch? *J Nurses Prof Dev.* 2013;29(2):90-91.

Johnson JA. Focus on the positive. J Nurses Prof Dev. 2013;29(3):155-156.

**Johnson JA**. Reflective learning, reflective practice, and metacognition: the importance in nursing education. *J Nurses Prof Dev*. 2013;29(1):46-48.

Laws D, **Crawford CL**. Alternative strategies to constant patient observation and sitters: a proactive approach. *J Nurs Adm*. 2013;43(10):497-501.

**Yuan W**. Managing the patient with transsphenoidal pituitary tumor resection. *J Neurosci Nurs*. 2013;45(2):101-107; quiz E1-2.

# Obesity

Arterburn DE, Bogart A, Sherwood NE, Sidney S, **Coleman KJ**, Haneuse S, O'Connor PJ, Theis MK, Campos GM, McCulloch D, Selby J. A multisite study of long-term remission and relapse of type 2 diabetes mellitus following gastric bypass. *Obes Surg.* 2013;23(1):93-102.

# **Pain Management**

**Arden D**, Seifert E, Donnellan N, Guido R, Lee T, Mansuria S. Intraperitoneal instillation of bupivacaine for reduction of postoperative pain after laparoscopic hysterectomy: a double-blind randomized controlled trial. *J Minim Invasive Gynecol*. 2013;20(5):620-626.

Kelley M, Demiris G, **Nguyen H**, Oliver DP, Wittenberg-Lyles E. Informal hospice caregiver pain management concerns: a qualitative study. *Palliat Med.* 2013;27(7):673-682. Marcus NJ, Shrikhande AA, **McCarberg B**, Gracely E. A preliminary study to determine if a muscle pain protocol can produce long-term relief in chronic back pain patients. *Pain Med*. 2013;14(8):1212-1221.

**McCarberg B**, D'Arcy Y. Options in topical therapies in the management of patients with acute pain. *Postgrad Med*. 2013;125(4 Suppl 1):19-24.

**Nguyen HQ**, Donesky D, Reinke LF, Wolpin S, Chyall L, Benditt JO, Paul SM, Carrieri-Kohlman V. Internetbased dyspnea self-management support for patients with chronic obstructive pulmonary disease. *J Pain Symptom Manage*. 2013;46(1):43-55.

Robinson RL, Kroenke K, Williams DA, Mease P, Chen Y, Faries D, Peng X, Hann D, Wohlreich M, **McCarberg B**. Longitudinal observation of treatment patterns and outcomes for patients with fibromyalgia: 12-month findings from the REFLECTIONS study. *Pain Med*. 2013;14(9):1400-1415.

Sandoval M, Coleman P, **Govani R**, Siddiqui S, Todd KH. Pilot study of human recombinant hyaluronidase-enhanced subcutaneous hydration and opioid administration for sickle cell disease acute pain episodes. *J Pain Palliat Care Pharmacother*. 2013;27(1):10-18.

# **Palliative Care**

Chand P, Gabriel T, Wallace CL, Nelson CM. Inpatient palliative care consultation: describing patient satisfaction. *Perm J.* 2013;17(1):53-55.

# Pharmacoepidemiology

Andrade SE, Scott PE, Davis RL, Li DK, **Getahun D**, **Cheetham TC**, Raebel MA, Toh S, Dublin S, Pawloski PA, Hammad TA, Beaton SJ, Smith DH, Dashevsky I, Haffenreffer K, Cooper WO. Validity of health plan and birth certificate data for pregnancy research. *Pharmacoepidemiol Drug Saf.* 2013;22(1):7-15.

Asgari MM, **Wu JJ**, Gelfand JM, Salman C, Curtis JR, Harrold LR, Herrinton LJ. Validity of diagnostic codes and prevalence of psoriasis and psoriatic arthritis in a managed care population, 1996-2009. *Pharmacoepidemiol Drug Saf.* 2013;22(8):842-849.

Avery TR, Kulldorff M, Vilk Y, Li L, **Cheetham TC**, Dublin S, Davis RL, Liu L, Herrinton L, Brown JS. Near real-time adverse drug reaction surveillance within population-based health networks: methodology considerations for data accrual. *Pharmacoepidemiol Drug Saf.* 2013;22(5):488-495.

### **Prevention and Behavior Change**

Bazzano LA, Green T, **Harrison TN**, **Reynolds K**. Dietary approaches to prevent hypertension. *Curr Hypertens Rep.* 2013;15(6):694-702.

Borok J, Galier P, Dinolfo M, **Welgreen S**, Hoffing M, Davis JW, Ramirez KD, Liao DH, Tang L, Karno M, Sacco P, Lin JC, Moore AA. Why do older unhealthy drinkers decide to make changes or not in their alcohol consumption? Data from the Healthy Living as You Age Study. *J Am Geriatr Soc.* 2013;61(8):1296-1302.

**Caparosa SL**, **Shordon M**, Santos AT, **Pomichowski ME**, Dzewaltowski DA, **Coleman KJ**. Fundraising, celebrations and classroom rewards are substantial sources of unhealthy foods and beverages on public school campuses. *Public Health Nutr*. 2014;17(6):1205-1213.

**Ismail MH, Ho NJ**, Lara NI. Effect of direct physician involvement on tobacco abstinence rates and other variables affecting participants of a freedom from tobacco class. *Perm J.* 2013;17(2):4-11.

Koebnick C, Black MH, Wu J, Martinez MP, Smith N, Kuizon B, Cuan D, Young DR, Lawrence JM, Jacobsen SJ. High blood pressure in overweight and obese youth: implications for screening. *J Clin Hypertens (Greenwich)*. 2013;15(11):793-805.

**Tuso PJ**, Ismail MH, **Ha BP**, **Bartolotto C**. Nutritional update for physicians: plant-based diets. *Perm J*. 2013;17(2):61-66.

#### **Pulmonary Disease**

**Gould MK**. Randomized trials and bronchoscopy. *Chest.* 2013;143(2):584.





Wiener RS, **Gould MK**, Woloshin S, Schwartz LM, Clark JA. What do you mean, a spot?: A qualitative analysis of patients' reactions to discussions with their doctors about pulmonary nodules. *Chest*. 2013;143(3):672-677.

Wiener RS, Wiener DC, **Gould MK**. Risks of transthoracic needle biopsy: how high? *Clin Pulm Med*. 2013;20(1):29-35.

# **Quality Improvement**

Lee EA, Gibbs NE, Fahey L, Whiffen TL. Making hospitals safer for older adults: updating quality metrics by understanding hospital-acquired delirium and its link to falls. *Perm J.* 2013;17(4):32-6.

**Ryoo JJ**, Ordin DL, Antonio AL, Oishi SM, **Gould MK**, Asch SM, Malin JL. Patient preference and contraindications in measuring quality of care: what do administrative data miss? *J Clin Oncol*. 2013;31(21):2716-2723.

# **Quality of Life**

Van Liew C, Santoro MS, Chalfant AK, Gade S, Casteel DL, **Tomita M**, Cronan TA. The good life: assessing the relative importance of physical, psychological, and self-efficacy statuses on quality of well-being in osteoarthritis patients. *Arthritis*. 2013;2013:914216.

# **Radiology and Imaging**

Bach PB, **Gould MK**, Silvestri GA. Computed tomography screening for lung cancer. *Ann Intern Med*. 2013;159(2):155-156.

**Covarrubias DA**, O'Connor OJ, McDermott S, Arellano RS. Radiologic percutaneous gastrostomy: review of potential complications and approach to managing the unexpected outcome. *AJR Am J Roentgenol*. 2013;200(4):921-931.

**Finley DS**, Margolis D, Raman SS, Ellingson BM, Natarajan S, Tan N, Huang J, Reiter RE. Fine-tuning robot-assisted radical prostatectomy planning with MRI. *Urol Oncol.* 2013;31(6):766-775.

Flug JA, Garnet DJ, Widmer J, Stavropoulos S, Gidwaney R, Katz DS, **Abbas MA**. Advanced gastrointestinal endoscopic procedures: indications, imaging findings, and implications for the radiologist. *Clin Imaging*. 2013;37(4):624-630.

**Mebust D**. Image diagnosis: headache and an isolated oculomotor nerve palsy. *Perm J*. 2013;17(3):e120.

Sharma SD, **Fong CL**, Tzung BS, Law M, Nayak KS. Clinical image quality assessment of accelerated magnetic resonance neuroimaging using compressed sensing. *Invest Radiol.* 2013;48(9):638-645.

Van Le M, **Swap C**. Image diagnosis: a 16 year old with chest pain after blunt trauma. *Perm J*. 2013;17(4):e147-148.

# **Research Design and Methodology**

Elissen AM, **Adams JL**, Spreeuwenberg M, Duimel-Peeters IG, Spreeuwenberg C, Linden A, Vrijhoef HJ. Advancing current approaches to disease management evaluation: capitalizing on heterogeneity to understand what works and for whom. *BMC Med Res Methodol.* 2013;13:40.

# **Sports Medicine**

Bhatt JB, Glaser R, **Chavez A**, **Yung E**. Middle and lower trapezius strengthening for the management of lateral epicondylalgia: a case report. *J Orthop Sports Phys Ther.* 2013;43(11):841-847.

Charles MD, Haloman S, Chen L, Ward SR, **Fithian D**, Afra R. Magnetic resonance imaging-based topographical differences between control and recurrent patellofemoral instability patients. *Am J Sports Med*. 2013;41(2):374-384.

**Frank C**, Kobesova A, Kolar P. Dynamic neuromuscular stabilization & sports rehabilitation. *Int J Sports Phys Ther*. 2013;8(1):62-73.

Granan LP, Inacio MC, Maletis GB, Funahashi TT, Engebretsen L. Sport-specific injury pattern recorded during anterior cruciate ligament reconstruction. *Am J Sports Med.* 2013;41(12):2814-2818. Johnson EC, Kolkhorst FW, Richburg A, Schmitz A, **Martinez J**, Armstrong LE. Specific exercise heat stress protocol for a triathlete's return from exertional heat stroke. *Curr Sports Med Rep*. 2013;12(2): 106-109.

Joy EL, Blair SN, McBride P, **Sallis R**. Physical activity counselling in sports medicine: a call to action. *Br J Sports Med*. 2013;47(1):49-53.

Matheson GO, Klugl M, Engebretsen L, Bendiksen F, Blair SN, Borjesson M, Budgett R, Derman W, Erdener U, Ioannidis JP, Khan KM, Martinez R, van Mechelen W, Mountjoy M, **Sallis RE**, Schwellnus M, Shultz R, Soligard T, Steffen K, Sundberg CJ, Weiler R, Ljungqvist A. Prevention and management of noncommunicable disease: the IOC Consensus Statement, Lausanne 2013. *Clin J Sport Med*. 2013;23(6):419-429.

Matheson GO, Klugl M, Engebretsen L, Bendiksen F, Blair SN, Borjesson M, Budgett R, Derman W, Erdener U, Ioannidis JP, Khan KM, Martinez R, van Mechelen W, Mountjoy M, **Sallis RE**, Schwellnus M, Shultz R, Soligard T, Steffen K, Sundberg CJ, Weiler R, Ljungq. Prevention and management of non-communicable disease: the IOC Consensus Statement, Lausanne 2013. *Sports Med.* 2013;43(11):1075-1088.

**Maletis GB**, **Inacio MC**, **Funahashi TT**. Analysis of 16,192 anterior cruciate ligament reconstructions from a community-based registry. *Am J Sports Med*. 2013;41(9):2090-2098.

Maletis GB, Inacio MC, Reynolds S, Desmond JL, Maletis MM, Funahashi TT. Incidence of postoperative anterior cruciate ligament reconstruction infections: graft choice makes a difference. Am J Sports Med. 2013;41(8):1780-1785.

Matheson GO, Klugl M, Engebretsen L, Bendiksen F, Blair SN, Borjesson M, Budgett R, Derman W, Erdener U, Ioannidis JP, Khan KM, Martinez R, van Mechelen W, Mountjoy M, **Sallis RE**, Schwellnus M, Shultz R, Soligard T, Steffen K, Sundberg CJ, Weiler R, Ljungq. Prevention and management of non-communicable disease: the IOC consensus statement, Lausanne 2013. *Br J Sports Med*. 2013;47(16):1003-1011.

**Matsuda DK**, **Burchette RJ**. Arthroscopic hip labral reconstruction with a gracilis autograft versus labral refixation: 2-year minimum outcomes. *Am J Sports Med.* 2013;41(5):980-987.

Wyatt RW, **Inacio MC**, Liddle KD, **Maletis GB**. Factors associated with meniscus repair in patients undergoing anterior cruciate ligament reconstruction. *Am J Sports Med*. 2013;41(12):2766-2771.

# **Surgical Care**

Abbass MA, Slezak JM, Difronzo LA. Predictors of early postoperative outcomes in 375 consecutive hepatectomies: a single-institution experience. *Am Surg.* 2013;79(10):961-967.

Artime CA, **Sanchez A**. Preparation of the patient for awake intubation. In: Hagberg CA, Benumof J, editors. *Benumof and Hagberg's airway management*. 3rd edition. Philadelphia, Pa.: Mosby, 2013; 243-264.

**Cheng AW, Abbas MA**, **Tejirian T**. Outcome of abdominal wall hernia repair with Permacol<sup>™</sup> biologic mesh. *Am Surg.* 2013;79(10):992-996.

**Crabtree JH**, **Burchette RJ**. Peritoneal dialysis catheter embedment: surgical considerations, expectations, and complications. *Am J Surg*. 2013;206(4):464-471.

Hunter KT, Lopez AR, Yun KL. Emergent cardiopulmonary bypass for a 180 kilogram patient: support with a single oxygenator. *J Extra Corpor Technol.* 2013;45(3):178-182.

**Johna S**, Schein M. Study on the use of T-tube for patients with persistent duodenal fistula: is it useful? *World J Surg.* 2013;37(11):2546-2547.

Kim B, Chang A, Kaswick J, Derboghossians A, Jung H, Slezak J, Wuerstle M, Williams SG, Chien GW. Achieving proficiency with robot-assisted radical prostatectomy: laparoscopic-trained versus roboticstrained surgeons. *Can Urol Assoc J*. 2013;7(11-12):E711-715.

Kim Y, Johna S. Laparoscopic excision of splenic artery aneurysm. *JSLS*. 2013;17(1):132-134.





Kitabjian L, Bordi S, Elisha S, Gabot M, Heiner J, Nagelhout J, Thompson J. Anesthesia case management for video-assisted thoracoscopic surgery. AANA J. 2013;81:65-72.

**Kivnick S**, Parker W. Robot-assisted laparoscopic myomectomy compared with standard laparoscopic myomectomy. *Obstet Gynecol.* 2013;121(1):188.

**Nagelhout JJ**. Reversal of neuromuscular blocking agents: current practice. AANA J. 2013;Suppl:8-11.

**Putchakayala K**, **Difronzo LA**. Acute hemodilution is safe in patients with comorbid illness undergoing partial hepatectomy. *Am Surg.* 2013;79(10):1093-1097.

Shi ZS, **Ziegler J**, **Feng L**, Gonzalez NR, Tateshima S, Jahan R, Martin NA, Vinuela F, Duckwiler GR. Middle cranial fossa sphenoidal region dural arteriovenous fistulas: anatomic and treatment considerations. *AJNR Am J Neuroradiol.* 2013;34(2):373-380.

Soltani AM, Francis CS, Kane JT, Kazimiroff PB, **Edgerton BW**. Neural sheath tumors of the brachial plexus: a multidisciplinary team-based approach. *Ann Plast Surg.* 2013;71(1):80-83.

Stevanovic M, **Sharpe F**. Soft-tissue coverage of the elbow. *Plast Reconstr Surg*. 2013;132(3):387e-402e.

# Urology

Jackson RE, Casanova NF, **Wallner LP**, Dunn RL, Hedgepeth RC, Faerber GJ, Wei JT. Risk factors for delayed hematuria following photoselective vaporization of the prostate. *J Urol.* 2013;190(3): 903-908. **Wallner LP**, Hollingsworth JM, Dunn RL, Kim C, Herman WH, Sarma AV, Urologic Diseases of America Project. Hyperglycemia, hyperinsulinemia, insulin resistance, and the risk of BPH/LUTS severity and progression over time in community dwelling black men: the Flint Men's Health Study. *Urology*. 2013;82(4):881-886.

Zhumkhawala AA, Gleason JM, Cheetham TC, Niu F, Loo RK, Dell RM, Jacobsen SJ, Chien GW. Osteoporosis management program decreases incidence of hip fracture in patients with prostate cancer receiving androgen deprivation therapy. *Urology*. 2013;81(5):1010-1015.

# Vaccine Safety and Effectiveness

Greene SK, Rett MD, Vellozzi C, Li L, Kulldorff M, **Marcy SM**, Daley MF, Belongia EA, Baxter R, Fireman BH, Jackson ML, Omer SB, Nordin JD, Jin R, Weintraub ES, Vijayadeva V, Lee GM. Guillain-Barré syndrome, influenza vaccination, and antecedent respiratory and gastrointestinal infections: a casecentered analysis in the Vaccine Safety Datalink, 2009-2011. *PLoS One.* 2013;8(6):e67185.

Greene SK, Li L, Shay DK, Fry AM, Lee GM, **Jacobsen SJ**, Baxter R, Irving SA, Jackson ML, Naleway AL, Nordin JD, Narwaney KJ, Lieu TA. Risk of adverse events following oseltamivir treatment in influenza outpatients, Vaccine Safety Datalink Project, 2007-2010. *Pharmacoepidemiol Drug Saf.* 2013;22(4): 335-344.

Hechter RC, Tartof SY, Jacobsen SJ, Smith N, Tseng HF. Trends and disparity in zoster vaccine uptake in a managed care population. *Vaccine*. 2013;31(41):4564-4568.

Irving SA, Kieke BA, Donahue JG, Mascola MA, Baggs J, DeStefano F, **Cheetham TC**, Jackson LA, Naleway AL, Glanz JM, Nordin JD, Belongia EA, Vaccine Safety Datalink. Trivalent inactivated influenza vaccine and spontaneous abortion. *Obstet Gynecol.* 2013;121(1):159-165.

Jackson LA, Peterson D, Nelson JC, **Marcy SM**, Naleway AL, Nordin JD, Donahue JG, Hambidge SJ, Balsbaugh C, Baxter R, Marsh T, Madziwa L, Weintraub E. Vaccination site and risk of local reactions in children 1 through 6 years of age. *Pediatrics*. 2013;131(2):283-289.

Jackson ML, Yu O, Nelson JC, Naleway A, Belongia EA, Baxter R, Narwaney K, **Jacobsen SJ**, Shay DK, Jackson LA. Further evidence for bias in observational studies of influenza vaccine effectiveness: the 2009 influenza A(H1N1) pandemic. *Am J Epidemiol*. 2013;178(8):1327-1336. McCarthy NL, Weintraub E, Vellozzi C, Duffy J, Gee J, Donahue JG, Jackson ML, Lee GM, Glanz J, Baxter R, **Lugg MM**, Naleway A, Omer SB, Nakasato C, Vazquez-Benitez G, Destefano F. Mortality rates and cause-of-death patterns in a vaccinated population. *Am J Prev Med.* 2013;45(1):91-97.

Naleway AL, Gold R, Kurosky S, Riedlinger K, Henninger ML, Nordin JD, Kharbanda EO, Irving S, **Cheetham TC**, McCarthy NL. Identifying pregnancy episodes, outcomes, and mother-infant pairs in the Vaccine Safety Datalink. *Vaccine*. 2013;31(27):2898-2903.

Nelson JC, Yu O, Dominguez-Islas CP, Cook AJ, Peterson D, Greene SK, Yih WK, Daley MF, **Jacobsen SJ**, Klein NP, Weintraub ES, Broder KR, Jackson LA. Adapting group sequential methods to observational postlicensure vaccine safety surveillance: results of a pentavalent combination DTaP-IPV-Hib vaccine safety study. Am J Epidemiol. 2013;177(20:131-141.

Nordin JD, Parker ED, Vazquez-Benitez G, Kharbanda EO, Naleway A, **Marcy SM**, Molitor B, Kuckler L, Baggs J. Safety of the yellow fever vaccine: a retrospective study. *J Travel Med*. 2013;20(6):368-373.

**Qian L, Tseng HF, Sy LS, Jacobsen SJ**. Confounder adjustment in vaccine safety studies: comparing 3 offset terms for case-centered approach. *Vaccine*. 2013;31(2):431-435.

Rowhani-Rahbar A, Fireman B, Lewis E, Nordin J, Naleway A, **Jacobsen SJ**, Jackson LA, Tse A, Belongia EA, Hambidge SJ, Weintraub E, Baxter R, Klein NP. Effect of age on the risk of fever and seizures following immunization with measles-containing vaccines in children. *JAMA Pediatr.* 2013;167(12):1111-1117.

**Tartof S**, Cohn A, Tarbangdo F, Djingarey MH, Messonnier N, Clark TA, Kambou JL, Novak R, Diomandé FV, Medah I, Jackson ML. Identifying optimal vaccination strategies for serogroup A Neisseria meningitidis conjugate vaccine in the African meningitis belt. *PLoS One*. 2013;8(5):e63605.

**Tartof SY**, Lewis M, Kenyon C, White K, Osborn A, Liko J, Zell E, Martin S, Messonnier NE, Clark TA, Skoff TH. Waning immunity to pertussis following 5 doses of DTaP. *Pediatrics*. 2013;131(4):e1047-e1052.

Tseng HF, Sy LS, Liu IL, Qian L, Marcy SM,

Weintraub E, Yih K, Baxter R, Glanz JM, Donahue J, Naleway A, Nordin J, **Jacobsen SJ**. Postlicensure surveillance for pre-specified adverse events following the 13-valent pneumococcal conjugate vaccine in children. *Vaccine*. 2013;31(22):2578-2583.

Tseng HF, Sy LS, Qian L, Marcy SM, Jackson LA, Glanz J, Nordin J, Baxter R, Naleway A, Donahue J, Weintraub E, Jacobsen SJ, Vaccine Safety Datalink (VSD) Team. Safety of a tetanus-diphtheria-acellular pertussis vaccine when used off-label in an elderly population. *Clin Infect Dis.* 2013;56(3):315-321.

# Women's Health

Alperin M, Weinstein M, **Kivnick S**, **Duong TH**, **Menefee S**. A randomized trial of prophylactic uterosacral ligament suspension at the time of hysterectomy for prevention of vaginal vault prolapse (PULS): design and methods. *Contemp Clin Trials*. 2013;35(2):8-12.

Hill BJ, Morrell TJ, **Zhang MM**, Norian JM. Utility of antimullerian hormone level obtained for infertility assessment for alerting to ovarian tumor. *Obstet Gynecol.* 2013;121(2 Pt 2 Suppl 1):454-457.

**Kirby AC, Luber KM, Menefee SA**. An update on the current and future demand for care of pelvic floor disorders in the United States. *Am J Obstet Gynecol*. 2013;209(6):584.e1-5.

Lawrence JM, Andrade SE, Avalos LA, Beaton SJ, Chiu VY, Davis RL, Dublin S, Pawloski PA, Raebel MA, Smith DH, Toh S, Wang JQ, Kaplan S, Amini T, Hampp C, Hammad TA, Scott PE, Cheetham TC, Medication Exposure in Pregnancy Risk Evaluation Program (MEPREP) Study Group. Prevalence, trends, and patterns of use of antidiabetic medications among pregnant women, 2001-2007. Obstet Gynecol. 2013;121(1):106-114.





Lee J, Osann K, Noblett K. Comparison of motor and sensory response of InterStim® for overactive bladder syndrome. *Female Pelvic Med Reconstr Surg.* 2013;19(6):317-321.

Munro MG, Southern California Permanente Medical Group's Abnormal Uterine Bleeding Working Group. Acute uterine bleeding unrelated to pregnancy: a Southern California Permanente Medical Group practice guideline. *Perm J.* 2013;17(3):43-56.

**Nguyen HQ**, Herting JR, Kohen R, Perry CK, Lacroix A, Adams-Campbell LL, Beresford S AA, Eaton CB, Tinker L. Recreational physical activity in postmenopausal women is stable over 8 years of follow-up. *J Phys Act Health*. 2013;10(5):656-668.

Nygaard I, Brubaker L, Zyczynski HM, Cundiff G, Richter H, Gantz M, Fine P, **Menefee S**, Ridgeway B, Visco A, Warren LK, Zhang M, Meikle S. Long-term outcomes following abdominal sacrocolpopexy for pelvic organ prolapse. *JAMA*. 2013;309(19):2016-2024.

Perry CK, Herting JR, Berke EM, **Nguyen HQ**, Vernez Moudon A, Beresford SA, Ockene JK, Manson JE, Lacroix AZ. Does neighborhood walkability moderate the effects of intrapersonal characteristics on amount of walking in post-menopausal women? *Health Place*. 2013;21:39-45.

**Sacks DA**, Metzger BE. Classification of diabetes in pregnancy: time to reassess the alphabet. *Obstet Gynecol.* 2013;121(2 Pt 1):345-348.

Sidney S, **Cheetham TC**, Connell FA, Ouellet-Hellstrom R, Graham DJ, Davis D, Sorel M, Quesenberry CP, Cooper WO. Recent combined hormonal contraceptives (CHCs) and the risk of thromboembolism and other cardiovascular events in new users. *Contraception*. 2013;87(1):93-100.

#### Wong KS, Nguyen JN, White T, Menefee SA,

Walter AJ, Krulewitch CJ, Anderson-Smits CT, **Jakus-Waldman SM**. Adverse events associated with pelvic organ prolapse surgeries that use implants. *Obstet Gynecol.* 2013;122(6):1239-1245.

### **Other Topics**

Cui X, Huang X, **Xie F**, Hu G. Wave competitions around interfaces of 2 oscillatory media. *Phys Rev E Stat Nonlin Soft Matter Phys.* 2013;88(2):022905.

Kalantar-Zadeh K, Rhee C, **Sim JJ**, Stenvinkel P, Anker SD, Kovesdy CP. Why cachexia kills: examining the causality of poor outcomes in wasting conditions. *J Cachexia Sarcopenia Muscle*. 2013;4(2):89-94.

**Yeh J, Kagan A**, Steckel R. Ego-based medicine. *Int J Radiat Oncol Biol Phys.* 2013;86(1):13.

# In memoriam

Peggy Balcius, MS, a SAS programmer, passed away on June 13, 2014.

Peggy had been with Kaiser Permanente since 2010. Previously, she worked with the University of Southern California, Fannie Mae, the Board of Governors of the Federal Reserve System, and IBM.

At Research & Evaluation, Peggy supported projects related to cancer, HIV, and kidney disease. For a project on racial and ethnic disparities in chronic kidney disease, she brought together older and newer databases to create our first case-identification database for proteinuria, a major marker of kidney disease.

Peggy liked to understand not only the research but also the people with whom she worked. She was a conscientious and sweet-natured person who enjoyed chatting with colleagues about the natural beauties of the Southwest. An avid gardener, Peggy often brought fruit from the trees in her backyard into the office to share with her coworkers.

Peggy remained positive through the course of her illness and continued to visit the office regularly even after going out on medical leave. Outside of work, Peggy enjoyed exploring the local arts and culture scene with her husband, listening to live music, and practicing yoga.

S. Michael Marcy, MD, a pediatrician and researcher, passed away on September 5, 2014.

Dr. Marcy began his career at Kaiser Permanente as a pediatrician at the Panorama City Medical Center in 1970. He joined the UCLA Center for Vaccine Research in 1986 as a part-time investigator for the CDC's Vaccine Safety Datalink (VSD). He later became an associate investigator with the Department of Research & Evaluation.

Through his work as a pediatrician and his research on childhood immunizations, Dr. Marcy dedicated himself to advancing the well-being of children. He cared for his patients with great compassion, and was a mentor and friend to many of his colleagues.

As a researcher, Dr. Marcy drew heavily on his experience as a clinician. He constantly reminded his research colleagues of the patient, parent, or public perspective, disarming even the most contentious debate with his sense of humor and charm.

In 2012, Dr. Marcy received an award from the American Academy of Pediatrics (AAP) for Lifetime Contribution to Infectious Disease Education. He received another Lifetime Achievement Award at the national AAP conference in San Diego in October 2014, accepted by his family on his behalf.

Ronald Bruce Nakamura, MPH, research operations manager, passed away on June 1, 2013.

Over nearly 26 years with Kaiser Permanente, Ron left a deep footprint wherever he worked, from his early days at the Fontana Medical Center, to Regional Health Education, and ultimately at Research & Evaluation. At the time he passed, Ron was about to start a new role in the department that he was very excited about. Unfortunately, he never got the chance to take on that challenge.

Gregarious by nature, Ron showed genuine interest in the people he worked with. He relished the opportunity to solve problems collaboratively, often drawing attention to details others had missed. He routinely turned colleagues into friends—even if they happened to be USC fans.

A devoted Bruin, Ron found many ways to give back to his alma mater beyond donning blue and gold on game days. He was a member of the UCLA Parent's Council and always made time in his schedule to mentor promising young UCLA students.

Ron proudly shared stories of his youngest daughter's high school volleyball triumphs and his eldest daughter's success as a student at UCLA. He photographed events big and small with his ever-present camera, leaving behind a treasure trove of memories for his friends and family.

# Photo credits

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|         |  |

# Vision

The Department of Research & Evaluation has an integral role in the success of Kaiser Permanente Southern California by conducting high-quality, innovative translational research that benefits the health of its members and the communities from which they come.

# Mission

The mission of the Department of Research & Evaluation is to initiate and conduct high-quality public-sector health services, epidemiologic, behavioral, and clinical research that has a demonstrable positive impact on the health and well-being of Kaiser Permanente Southern California members and the general population.

# Kaiser Permanente **Research**

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