

D

DETAILS

N

NEWS

A

AWARDS

VOLUME VI

## FOCUS on Research

### Fighting a Disease that Takes Your Breath Away

While science and medicine have been able to put the brakes on many diseases, COPD incidence speeds at an alarming rate.

COPD (chronic obstructive pulmonary disease), which includes emphysema and chronic bronchitis, destroys air sacs in the lungs and narrows down the airways that lead to them. It advances slowly, eventually making it difficult for its victims to breathe. It is caused by smoking tobacco and breathing in polluted air.

COPD is the third leading cause of death in the U.S. In 2015 it killed nearly 150,000 people in the country, and deaths are projected to increase by more than 30 percent in the next 10 years if more interventions aren't developed. Although treatable with various bronchodilators, inhalers, oxygen therapies and surgery, there is no cure.

Today, more than 15 million people in the U.S. have been diagnosed with the disease, and another 15 million may have COPD without even knowing it, according to the American Lung Association.

Moreover, Veterans are three times more likely to develop COPD than in the general population. It's the fifth most prevalent disease among Veterans.

NCIRE-supported scientist Mehrdad Arjomandi, is trying to solve the puzzle of COPD in his laboratories and at SFVAHCS clinics.



Mehrdad Arjomandi, MD

*Professor of Medicine in the Division of Pulmonary, Critical Care, Allergy, Immunology, and Sleep Medicine at UCSF with a joint appointment at San Francisco Veterans Affairs Medical Center. Director of the UCSF Human Exposure Laboratory at San Francisco General Hospital, Director of Environmental Medicine Clinic at SFVAHCS, Investigator at the UCSF Center for Tobacco Control Research and Education.*

#### Veterans Vulnerable

Clearly, tobacco smoking is a leading cause of COPD, and Veterans and servicepeople smoke at much higher rates than the general public. But an estimated 25 percent of people with COPD have never smoked, so other factors, such as pollutants and occupational dusts are suspected culprits.

“Veterans are more highly exposed to environmental hazards than civilians,” said Arjomandi. “Those could be desert sandstorms, smoke from burn pits, gun powder, or aerosolized metals and chemicals from explosives.”

## **“If you can’t breath, nothing else matters”**

Arjomandi – a UCSF Professor of Medicine, Director of the Environmental Medicine Clinic at the SFVAHCS and Director of the UCSF Human Exposure Laboratory at San Francisco General Hospital – leads several COPD studies of how various environmental pollutants and toxins damage the lung.

One study, funded in 2019 by the state-supported and UC-administered Tobacco Related Disease Research Program, investigates the biology of immune cells in lung airway. Using inhalational exposure to ozone in human research subjects, he studies how environmental exposures could exacerbate chronic lung disease.

Another Arjomandi study is funded by the Department of Defense to understand the biology that leads to susceptibility of some people to develop COPD and resilience of others not to do so.

Arjomandi also leads the San Francisco VA site for the Post-Deployment Cardiopulmonary Evaluation Network (PDCEN) of the VA War-Related Injury and Illness Study Center (WRIISC) Airborne Hazard and Burn Pit Center of Excellence, which researches post-deployment respiratory health effects of exposure to combat-related pollutants.

Arjomandi credits his momentum in COPD research to previous studies – supported by non-government funders, such as Five Prime Therapeutics, Inc., and GlaxoSmithKline, Inc. - that laid the groundwork for his large series of studies that could lead to novel therapies, including biologics targeting the source of inflammation in the lung airways.

### **Lung Cancer Link**

COPD and lung cancer are closely related diseases. Patients with COPD are twice as likely to develop lung cancer. The diseases are also more likely to appear simultaneously rather than occur separately, noted Arjomandi.

This suggests COPD and lung cancer may share more than just common risk factors, such as tobacco exposure. For example, chronic inflammation that damages lung cells - a hallmark in the development of COPD - may also play a role in the pathogenesis of lung cancer. Understanding these processes could lead to improved preventative and therapeutic interventions for both diseases.

## **“Veterans are three times more likely to develop COPD than in the general population.”**

Arjomandi knows that getting to the bottom of COPD and eventually paving the way for new treatments is a piece-by-piece research process. But he’s in it for the long haul – for Veterans and the general public alike.

“As an advocate for clean air and a lung doctor, I want to see this research bear fruit,” said Arjomandi. “I want these people to be able to breathe because as the American Lung Association puts it, ‘if you can’t breathe, nothing else matters’.”

### **By the Numbers - COPD in California**

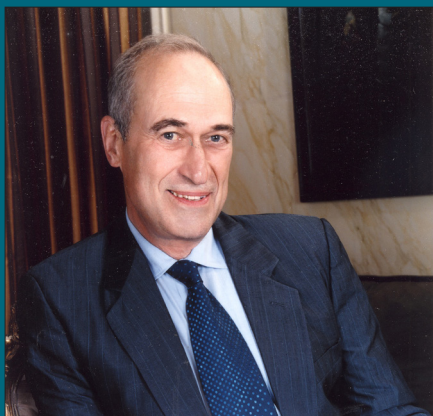
**4.3%** of adults have been diagnosed  
with COPD (prevalence)

**1,321,100** adults have been diagnosed  
with COPD (incidence)

**31.3** people out of every  
100,000 die per year

**\$2.43** billion is the annual  
cost for treatment

## Q and A: An Interview with Dr. Peter Elias



*Peter Elias, MD  
Staff Physician/Principal Investigator,  
Dermatology, SFVAHCS  
Professor of Dermatology, UCSF*

**Q:** You've had a long and illustrious career as a scientist, physician and professor. What are the highlights?

**A:** I arrived at the SFVA in 1974, when dermatology was a section within the Internal Medicine Service, with salary for only one staff physician. I am proud of my role in growing dermatology by changing our status to a separate service, adding two full-time physicians and a nurse practitioner and expanding our patient care to Santa Rosa and The Veterans Home in Yountville.

In parallel, I built a Dermatology Research Unit at the VA, which has now moved over to a new laboratory in the NCIRE laboratories in Mission Bay. With generous support from the VA and extramural programs, I developed a research program dedicated to investigating how the epidermis, the outermost layer of the skin, provides and maintains a water barrier, sufficient to allow life in a dry terrestrial environment. At a time when skin was still regarded to be no more complex than a sheet of plastic wrap, we characterized its structural basis, analyzed its lipid composition, and most importantly how its function is restored following various types of external insults.

Then, conversely, we examined barrier function in the youngest and oldest of humans, discovering that the skin shows signs of aging as early as 50 years. We then identified what goes wrong in aging skin, and suggested novel topical therapeutics for the "failed" barrier. Next, we characterized the role of a flawed barrier in the pathogenesis of common skin diseases, like atopic dermatitis, psoriasis and a group of inherited disorders, called "ichthyoses." Finally, once we identified the basis for the barrier defects in these disorders, we developed, patented and licensed several new products to treat skin diseases.

**Q:** Why did you devote more than 40 years to research aimed at improving Veterans health?

**A:** I am a Veteran myself and spent 25+ years in the clinics taking care of my fellow Veterans. I felt humbled by their often-greater sacrifices on our behalf. Though my research tends to be very much basic science, I have always tried to bring the "bench to the bedside." Several of our discoveries about aging skin have stimulated the development of new forms of therapy for our often-aged Veteran patients.

**Q:** What are some of the products developed from your research?

**A:** Some of my research findings have been translated into both prescription and over-the-counter treatments for aging, atopic dermatitis, eczemas, and premature infants' skin. One example, is a prescription formulation called EpiCeram (Primus Pharma, Scottsdale, AZ), which is highly effective and completely safe for the treatment of atopic dermatitis. Our research has also discovered (unfortunately) that almost all currently available moisturizers are damaging in patients with atopic or self-reporting "sensitive" skin.

**Q:** You will retire this year. What are your plans in "retirement?"

**A:** While it is true that I am officially retiring on July 1, 2020, I will continue to be available to my colleagues, students and post-doctoral fellows who will be continuing to work on our research programs. My wife, Mary Williams, and I will also offer up-to-date scientific information about skin on our website: Elias & Williams: The Inside-Out of Skin. (<https://eliasandwilliams.com/>)

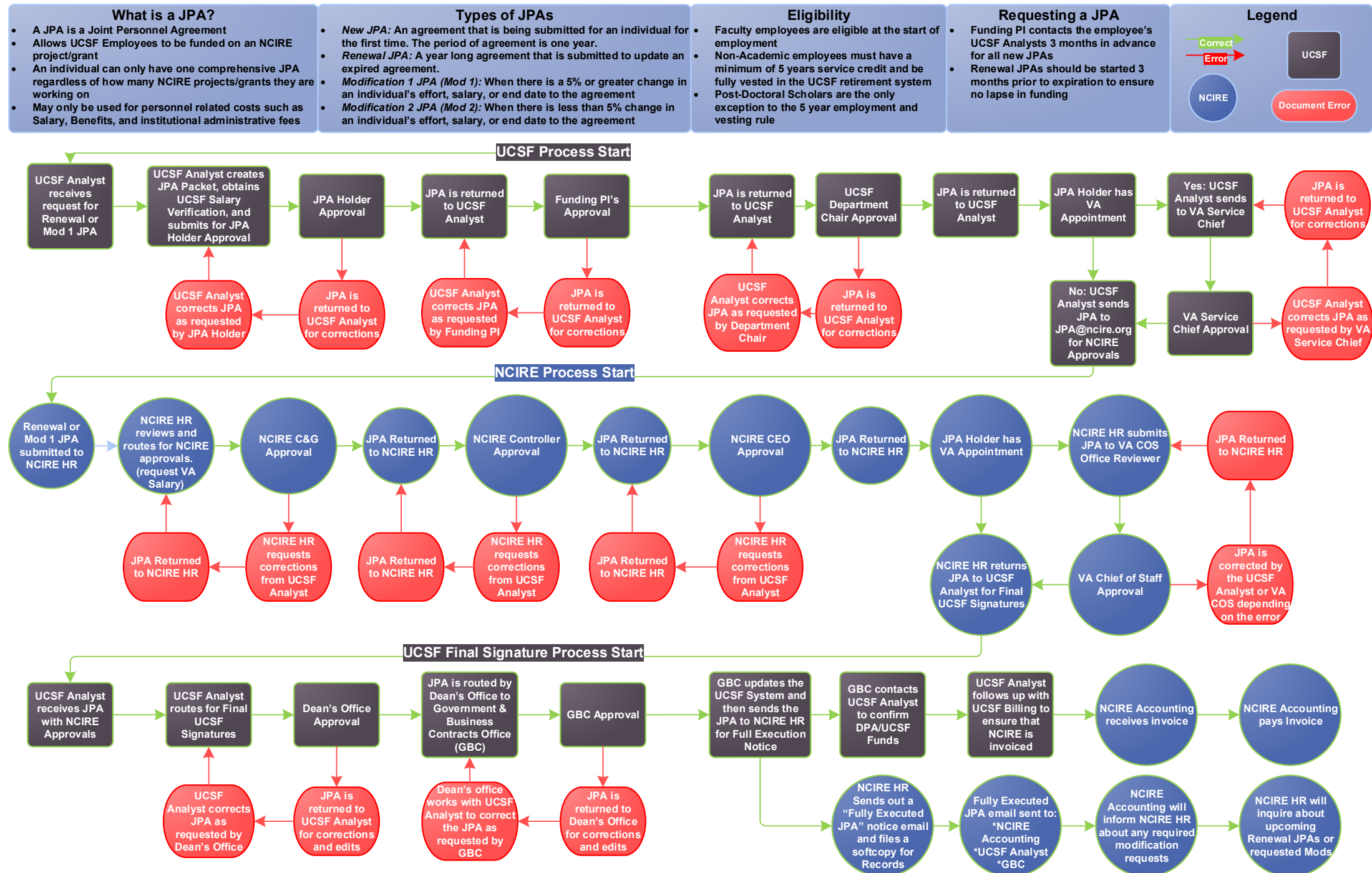
**Q:** You have mentored many scientists and pioneered dermatology research. Who will continue that important work?

**A:** Many of my former post-doctoral fellows and students around the world are continuing to focus their research interests on the many unsolved problems that remain. Fortunately, a member of our junior faculty, Dr. Jason Meyer, is interested in continuing this work. I will leave many unsolved problems in his hands, but he knows that I will continue to provide him with advice and help.

**Q:** What would most people be surprised to know about you?

**A:** I have many outside interests, many shared with my wife, Mary Williams, an emeritus member of both the UCSF Dermatology and Pediatric Departments. These include travel, particularly to places around the world to explore remaining rainforests, and therein we like to bird watch with expert guides. I am an amateur student of art history, often traveling to new shows in distant cities. I try to meditate periodically, including with a group that meets weekly at our VA. But perhaps most importantly, I am a grandfather to eight delightful grandchildren, ages 11 to 18 - spending time with them as they grow up has been an unending source of joy.





# Did You Know?

## Lourdes Ocbena



*Lourdes Ocbena,  
Contracts and Grants Specialist,  
NCIRE*

Lourdes joined NCIRE last December 2019, as a Contracts and Grants Specialist. Prior to NCIRE, she was a Contracts and Grants Officer doing pre-award at the Research Management Services (RMS), Office of Sponsored Research (OSR), UCSF. She also did pre- and post-award analysis in the Department of Family and Community Medicine and the Department of Medicine at UCSF before joining RMS in 2012. Lourdes holds a degree in Bachelor of Science Commerce with a major in Accounting. She is a Certified Public Accountant (CPA) who worked as Senior Financial Analyst at Chevron Corporation Philippines for a long time before emigrating to USA. Lourdes enjoys watching TV, movies, reading and listening to music.

“Being a part of the research, especially in the medical field, is a fulfillment for me. I know that the Principal Investigators’ work will improve the life not only of the veterans but of humankind. Being a part of their great work is a big accomplishment that I will treasure in my lifetime.”

## Francesca McCrossan



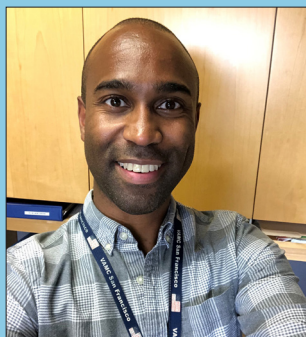
*Francesca McCrossan  
Executive Assistant, NCIRE*

Francesca is NCIRE’s new Executive Assistant and comes to the position with a tenure in a not-for-profit academic graduate program in Berkeley, and recent experience in a financial investment firm in San Francisco’s Financial District. She holds a BA in English from UC Berkeley, and a MA and PhD from the University of Pennsylvania, in the multidisciplinary field of Folklore and folklife.

She is Mom to a 20-year-old daughter, currently a sophomore at UC Santa Cruz. In her spare time, she is the active in Scottish cultural life of the Bay Area and is currently the President of the St Andrew’s Society of San Francisco; the first woman to hold the position in the Society’s 150+ year history.

“I am delighted to join the team at NCIRE. Helping support our Veteran’s health through supporting the wonderful research at the VA Campus and UCSF, suits my values and makes me proud to come to work every day. Everyone has been so welcoming, kind and patient with me, I feel comfortable already.”

# In the Helix



*Gregory Green  
Human Resource Protection Coordinator,  
SFVAHCS*

**Q:** What’s the one thing about you that surprises people?

**A:** I am a 5-time Burning Man attendee (aka, a burner). It’s especially unique to me as a way to disconnect from the hustle and bustle of everyday life and connect/commune with others from all over the world – mostly without the trappings of social media and technology (though most attendees do have electricity via generators and other comforts). I highly recommend that everyone attend at least once in their lives, for self-reflection and a bit of adventure.



*Alexandria Smetaniuk  
Administrative Assistant II,  
SFVAHCS*

**Q:** When you’re not working, how do you like to spend your time?

**A:** I do a lot of mixed media artwork, and sculpture type stuff; mostly this consists of me gluing things to other things (like random pieces of plastic, leaves, yarn, sticks- whatever I can find). When I’m not hunkered down doing an art project, I like to go out and hike or camp, I love being outside, I love trees and birds and all types of wildlife.



*Cheriene Agpoon  
Senior Contracts and Grants Specialist,  
NCIRE*

**Q:** When you’re not working, how do you like to spend your time?

**A:** I’m actually an extroverted introvert. Most people think I would have never done the things I’ve already done like tandem skydiving, scuba diving (I’ve gone diving in Monterey, Belize, Zanzibar, Hawaii, and St. Croix), and bungee jumping in South Africa, 709 feet above the Bloukrans River from the highest bridge in the world, the Bloukrans Bridge.

# HR Spotlight

## NCIRE Employees – We Now Have a Referral Program!

### Your Input

Our employees are the most familiar with our research culture. We value your insight and invite you to refer any qualified friends, family members, or colleagues who you believe would thrive in our exciting, biomedical research environment.



### The Details

If you refer a qualified candidate and they are hired into an open position, NCIRE will provide you with a monetary “thank you” after your referral has completed 90 days of employment. For standard job openings we will provide a “thank you” of \$250. For those jobs classified as hard to fill positions\* or a Veteran hire, we will provide you with a \$500 “thank you” payment.

### How it Works

The referring employee must be employed by NCIRE or must have accepted an offer of employment at the time he/she initiates the candidate referral and must inform Human Resources of their candidate referral prior to an offer of employment being extended to that individual. The referring employee should confirm the referral by sending an email to a member of the Human Resources team prior to the hire.

### Eligibility

All full or part-time regular status employees are eligible to participate in the program, with the exception of the manager or managers within the chain of command of the specific position.

### Our Thank You

If your referral is hired, and you remain a current employee, your payment will be issued after your referral has successfully passed the 90 day period. This check will be a hard copy check and will not be included with your normal payroll deposit.

### Need More Information

Please contact Lydia Blednyh in Human Resources at ext. 26109 with any questions.

\*Hard to fill positions are determined by Human Resources

## Reminder-The Annual Performance Appraisal Process Has Begun!

For NCIRE staff who are regular, full, or part-time employees, it is once again, performance appraisal time. Staff members should have already completed their self-assessments and returned them to their supervisor. Supervisors should now be completing their portion of the assessment and scheduling in-person meetings with their employees. Please remember that these appraisals are mandatory, and they are due to Human Resources no later than March 31st. Please contact Lydia Blednyh in Human Resources with any questions at ext.26109.

## Guidance on Salary Limitation for Grants and Cooperative Agreements FY 20

*Effective January 5, 2020, the salary limitation for Executive Level II is \$197,300.*  
NOT-OD-20-065

The Further Consolidated Appropriations Act, 2020, restricts the amount of direct salary to Executive Level II of the Federal Executive pay scale. The Office of Personnel Management has recently released new salary levels for the Executive Pay Scale. Effective January 5, 2020, the salary limitation for Executive Level II is \$197,300.

For a historical record of the salary cap, including effective dates, see: [https://grants.nih.gov/grants/policy/salcap\\_summary.htm](https://grants.nih.gov/grants/policy/salcap_summary.htm)



# Message from the Chief Executive Officer

This is the first volume of the NCIRE newsletter in 2020. Its various sections provide insight into the work of VA researchers, important HR information, and other features to expand our knowledge of the NCIRE community. We hope that you find it both interesting and useful.

The new year often brings changes to our Board of Directors. At the end of 2019, Dr. Raymond Swanson stepped down from his role as NCIRE Board Chair. He has dedicated nineteen (19) years to the NCIRE Board, and we are extremely grateful for his dedication. Effective January 1, 2020, Dr. Theodora Mauro will serve as the NCIRE Board Chair, and Dr. Hubert Kim will serve as Vice-Chair. We look forward to working with them in their continuing support of Veterans health research.

The NCIRE core office has had a few personnel updates. Francesca McCrossan joined NCIRE in January. She is an Executive Assistant, supporting the NCIRE management team and the Board of Directors and is looking forward to becoming a strong contributing member of the team. See "Did you Know" for more about her background.

If you are looking for information related to open clinical trial opportunities, federal funding opportunities and a database with information on funded federal research, it can be found at: <http://vhasfcappncire2.v21.med.va.gov/> on the NCIRE intranet site.

In January NCIRE rolled out several changes to the retirement plan. Among these are: auto enrollment of existing employees and an organizational match of up to 5% of employee contributions. These changes were meant to complement the existing benefit package and encourage savings for retirement, it is with pleasure I can report that 95% of staff are participating in the program.

Our newsletter is created and by a hardworking group of volunteers. We are very interested in your feedback, suggestions or comments. Please send them to [dna@ncire.org](mailto:dna@ncire.org).



Rebecca Rosales, MBA, CRA  
Chief Executive Officer

## About NCIRE

NCIRE - The Veterans Health Research Institute has one mission and one goal: Advancing Veterans Health. We sustain a scientific community of clinicians and researchers and support over 200 researchers who have joint faculty appointments at the University of California, San Francisco (UCSF) and the San Francisco VA Health Care System (SFVAHCS) and are working to foster innovation through leadership in the field of Veterans health research. Our broad portfolio of projects receives generous support from the National Institutes of Health, the Department of Defense, and individual donors, making us the largest nonprofit research institute devoted to Veterans health in the US. NCIRE is a 501(c)3 nonprofit. (Tax ID #94-3084159). Visit NCIRE at [www.ncire.org](http://www.ncire.org)



Like us on Facebook:  
<https://www.facebook.com/NCIREVeterans>



Follow us on Twitter:  
<https://twitter.com/NCIREVeterans>

The DNA Newsletter is an NCIRE Publication.  
Editor-in-Chief: Rebecca Rosales, Chief Executive Officer  
Staff Contributors: Lydia Blednyh, Andy Evangelista, Theresa Gio, Francesca M. McCrossan, Newton Ong, Elaine Quitiquit-Palmer, Janelle Wong

We welcome your input. Please send comments to [dna@ncire.org](mailto:dna@ncire.org)