

State of the School

2019-2020



Michael D. Lairmore
Dean and Distinguished Professor
University of California, Davis
School of Veterinary Medicine



University of
California Davis
Veterinary Science

#1

in Veterinary Science
globally

QS WORLD
UNIVERSITY
RANKINGS

by Subject | 2020

Mission

Advance the Health of Animals, People, and the Environment



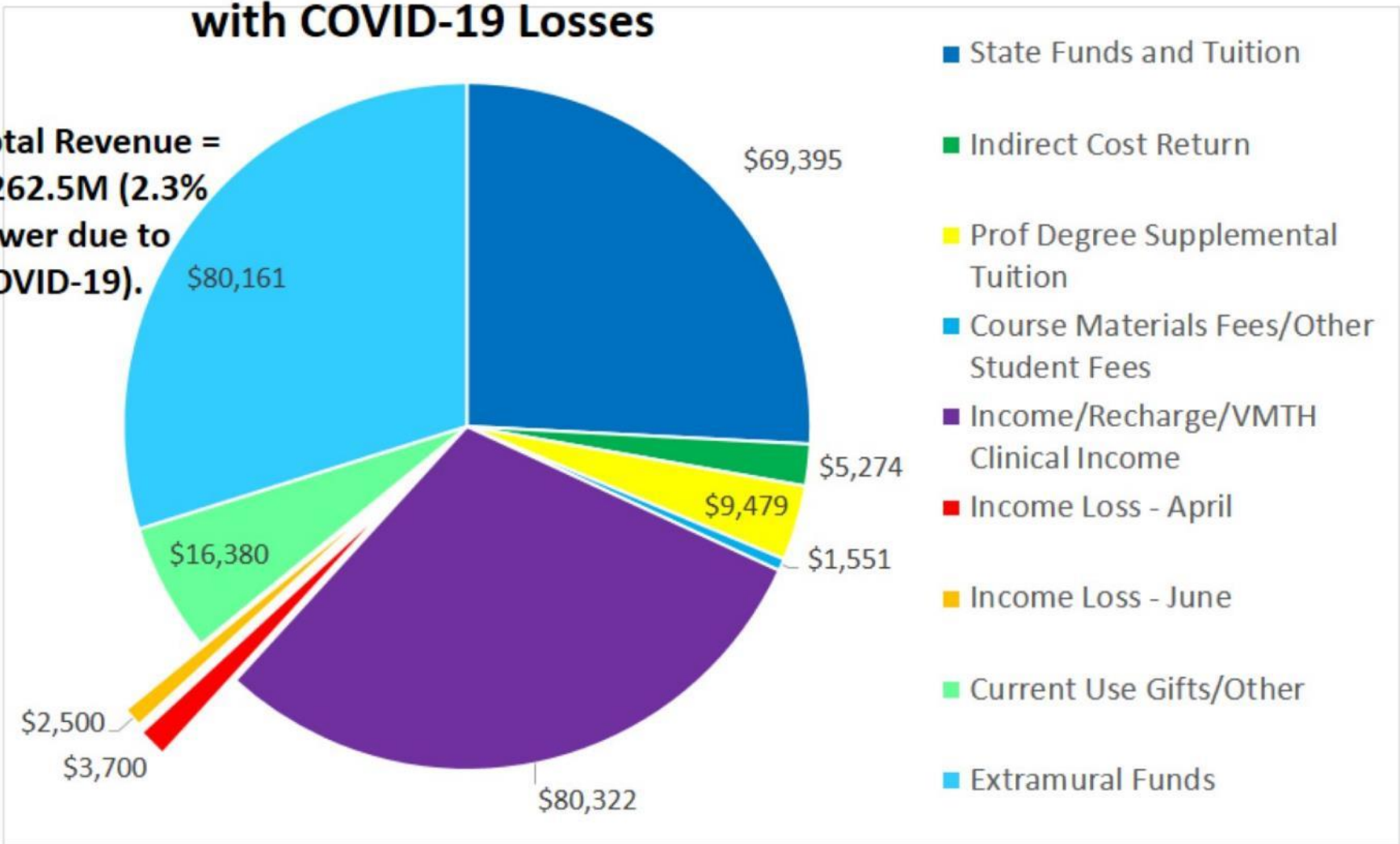
Vision

Leading Veterinary Medicine
Addressing Societal Needs

2019-20 Year-End Revenue Projection

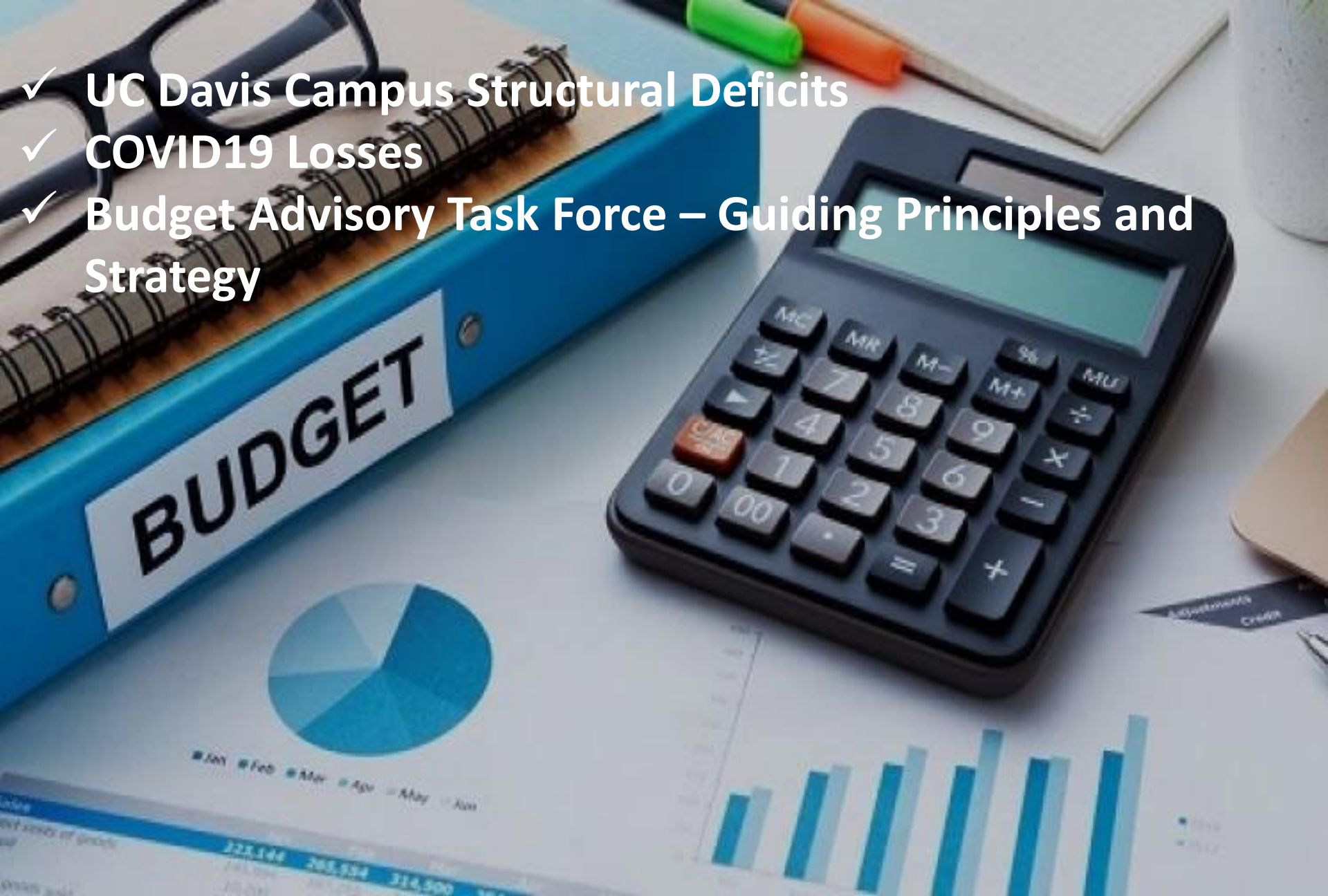
with COVID-19 Losses

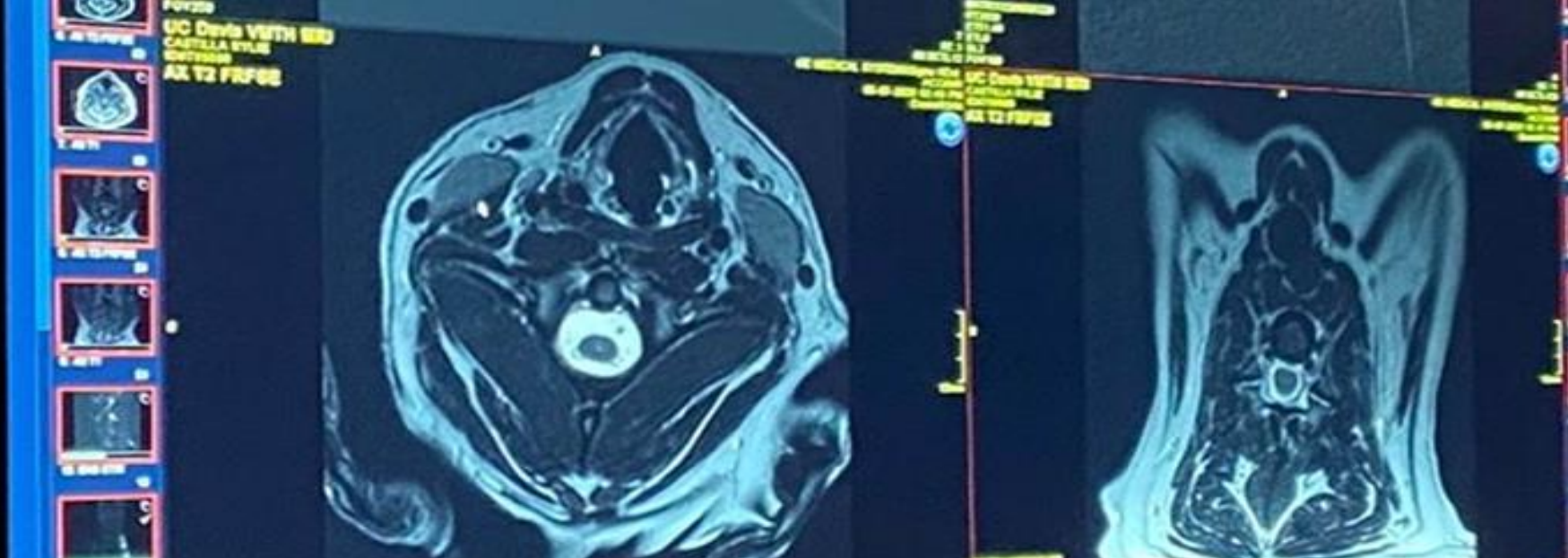
Total Revenue =
\$262.5M (2.3%
lower due to
COVID-19).



Red pie slice indicates \$3.7M in income losses from the VMTH and Center Labs through April. Orange pie slice indicates projected \$2.5M losses for VMTH and Center Labs May - June.

- ✓ UC Davis Campus Structural Deficits
- ✓ COVID19 Losses
- ✓ Budget Advisory Task Force – Guiding Principles and Strategy





VMACS Updates

Estimate Generator
Client Portal
Point of Service

VMTH iPhone Updates

Verizon > AT&T
FirstNet
300+ iPhones XR

UC Path Transition

Updated 140+ Stored Procedures
100's of source code changes

COVID-19 Activities

Zoom Security Guidance
Faculty Digital Resource Guide
VPN Access

We're in a Pandemic



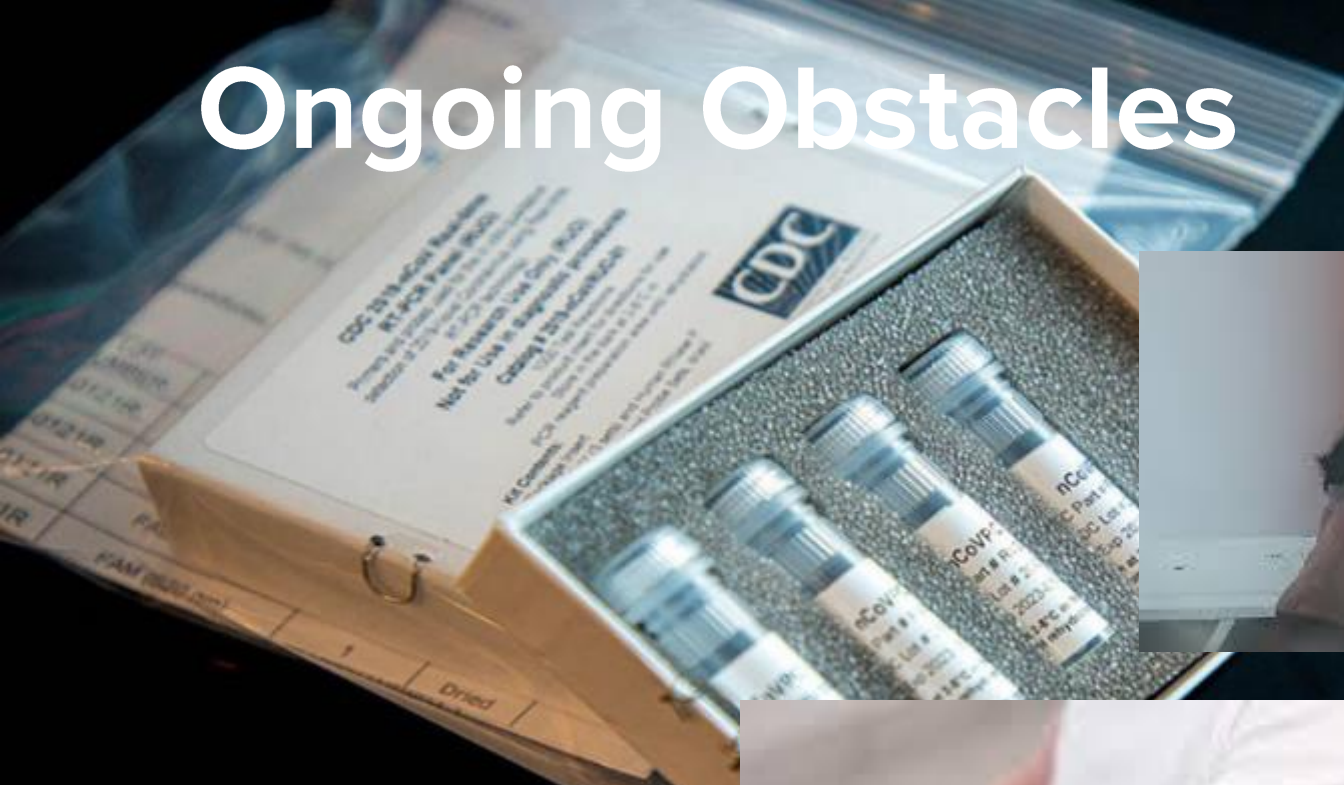
How did we get here?

COVID-19 Caused by SARS-CoV-2

- **United States (5/20/2020)**
 - Infections ~1.5 mil
 - Deaths ~ >90,000
- **California**
 - Cases: ~84,000
 - Deaths: ~3,400



Ongoing Obstacles



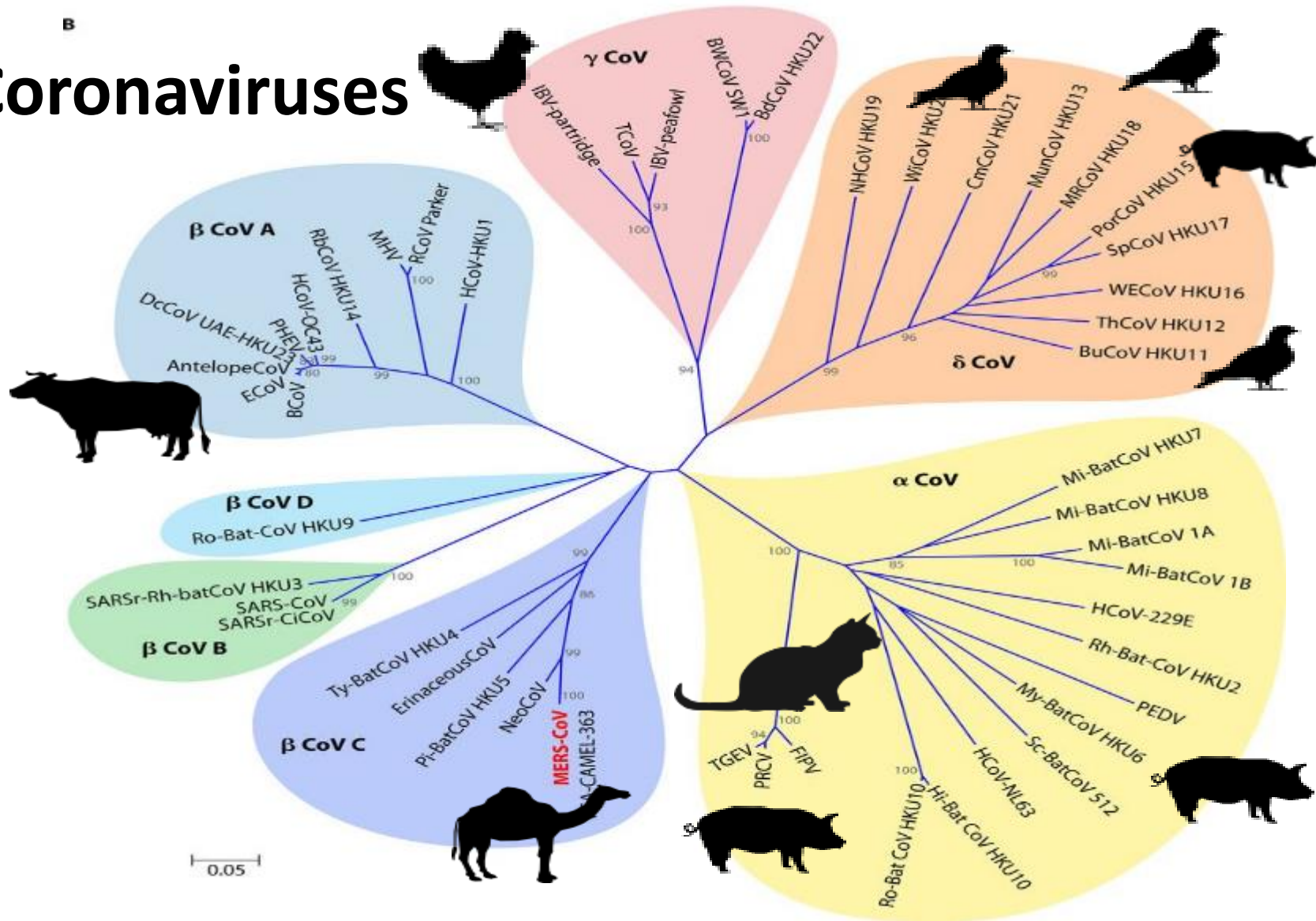
A photograph of a busy outdoor market stall. In the foreground, there is a wooden table displaying several large fish, some whole and some cut into pieces. To the left, a blue mechanical scale sits on the table. In the background, a woman wearing a patterned headscarf and a yellow apron is standing behind the stall, handling some items. The market is filled with various goods, including produce and other market items.

PREDICT Receives Extension for COVID-19 Pandemic Emergency Response

Early Laboratory Detection of SARS CoV-2, Tracking Animal Source Among Priorities

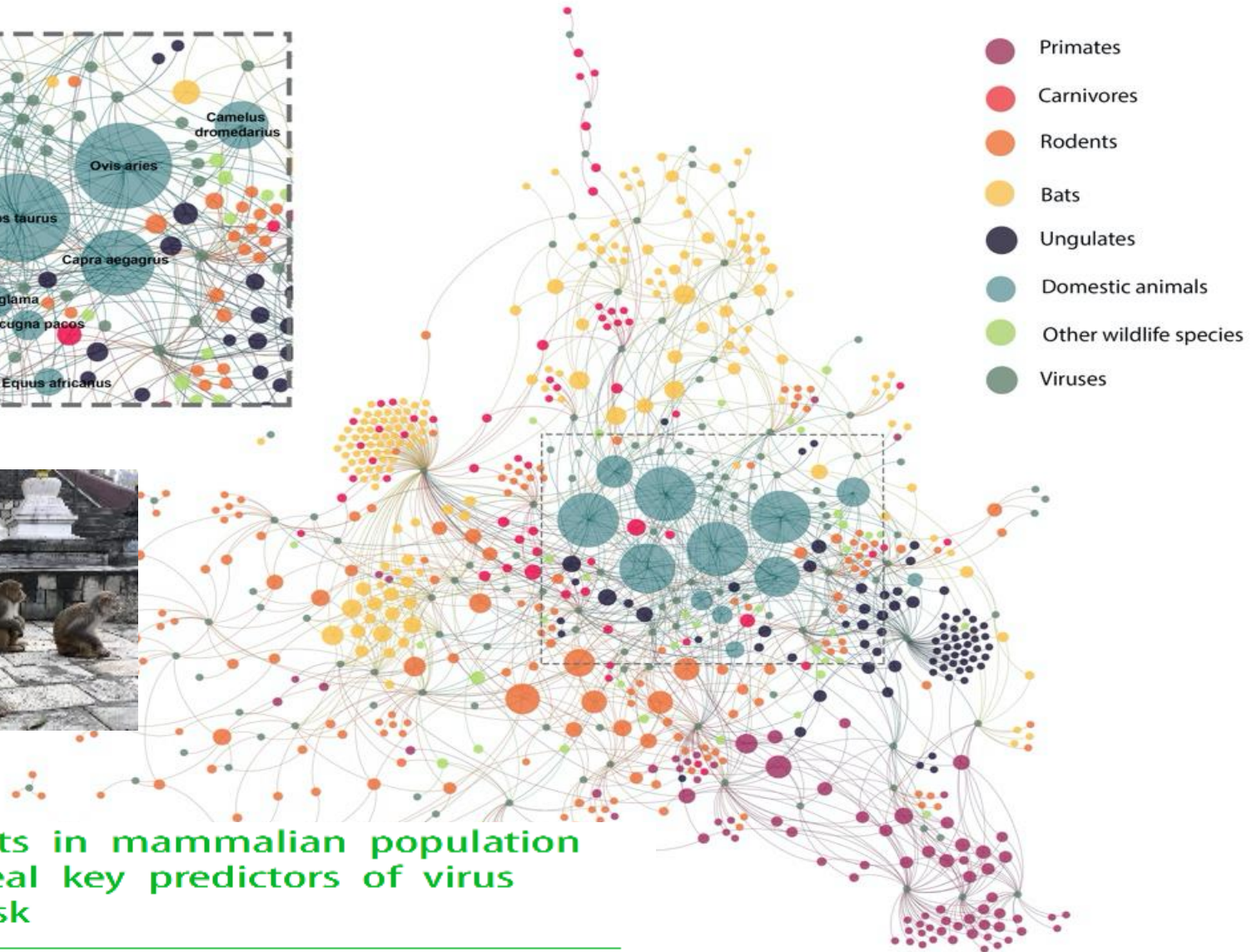
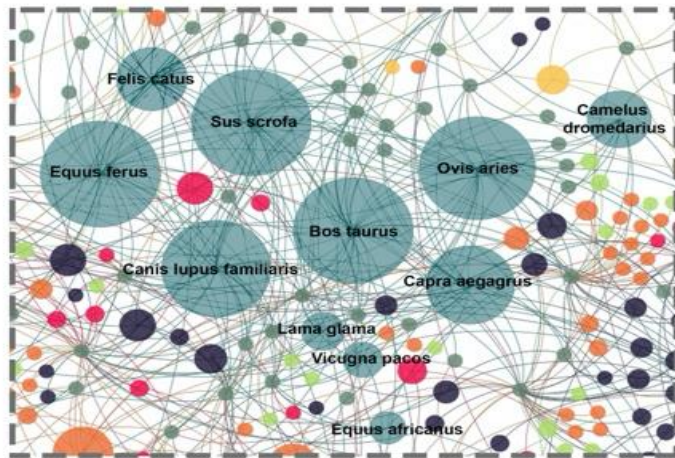
B

Coronaviruses



Jasper F. W. Chan et al. Clin. Microbiol. Rev. 2015; doi:10.1128/CMR.00102-14

Zoonotic Spillover Risk from Mammalian Hosts

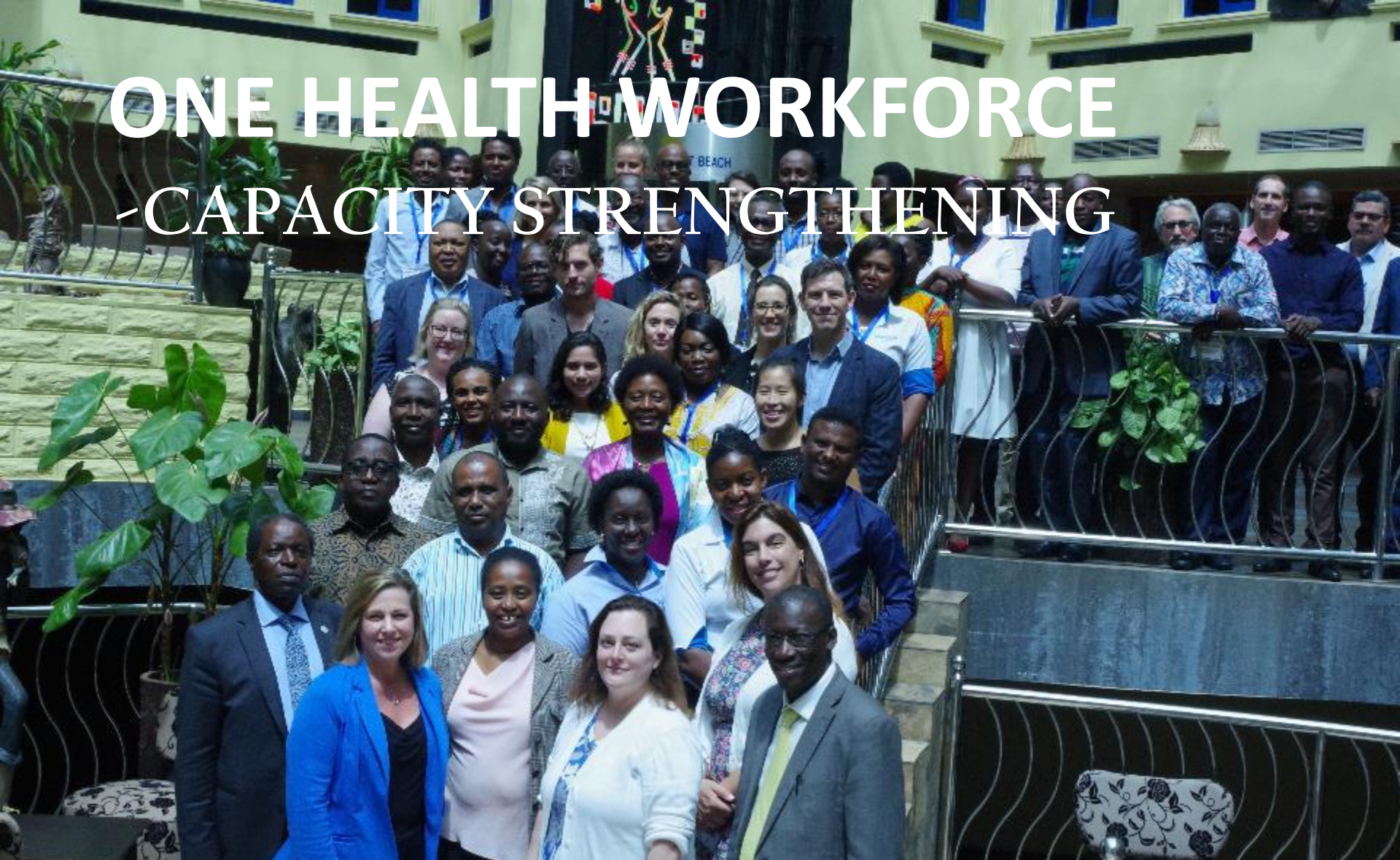


Global shifts in mammalian population trends reveal key predictors of virus spillover risk

Christine K. Johnson¹, Peta L. Hitchens², Pranav S. Pandit¹, Julie Rushmore¹, Tierra Smiley Evans¹, Cristin C. W. Young¹ and Megan M. Doyle¹

¹LpiCenter for Disease Dynamics, One Health Institute, School of Veterinary Medicine, University of California, Davis, CA 95616, USA

ONE HEALTH WORKFORCE -CAPACITY STRENGTHENING




 **USAID**
FROM THE AMERICAN PEOPLE

 **UC DAVIS**
One Health Institute
School of Veterinary Medicine

 **OHCEA**
Championing One Health

 **SEAoHUN**
Southeast Asia One Health
University Network

 **EcoHealth Alliance**

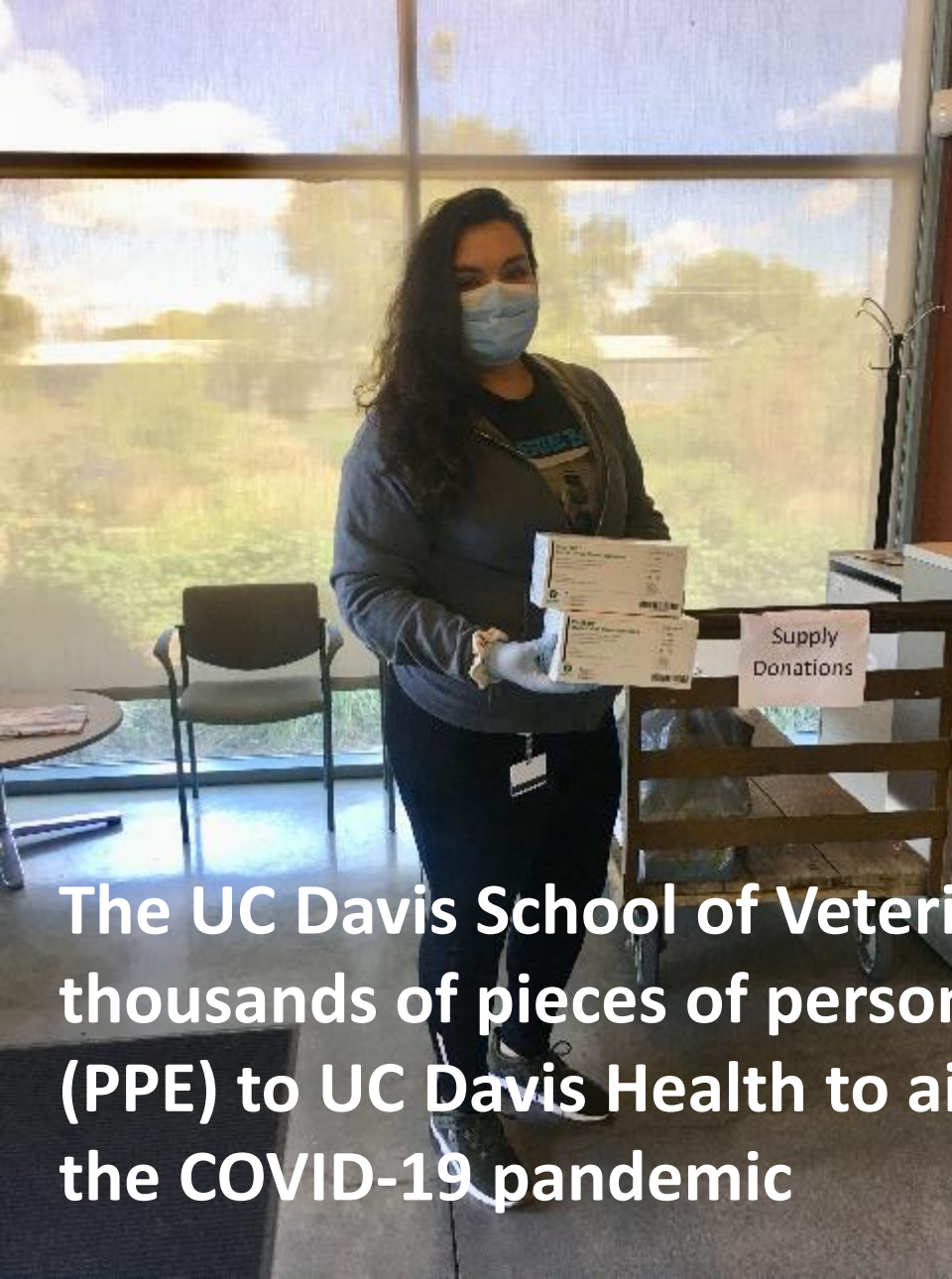
 **Ata Health Strategies**

 **ICAP**
Columbia University
Mailman School
of Public Health

 **Berkeley**
UNIVERSITY OF CALIFORNIA

 **ECHO**
Project

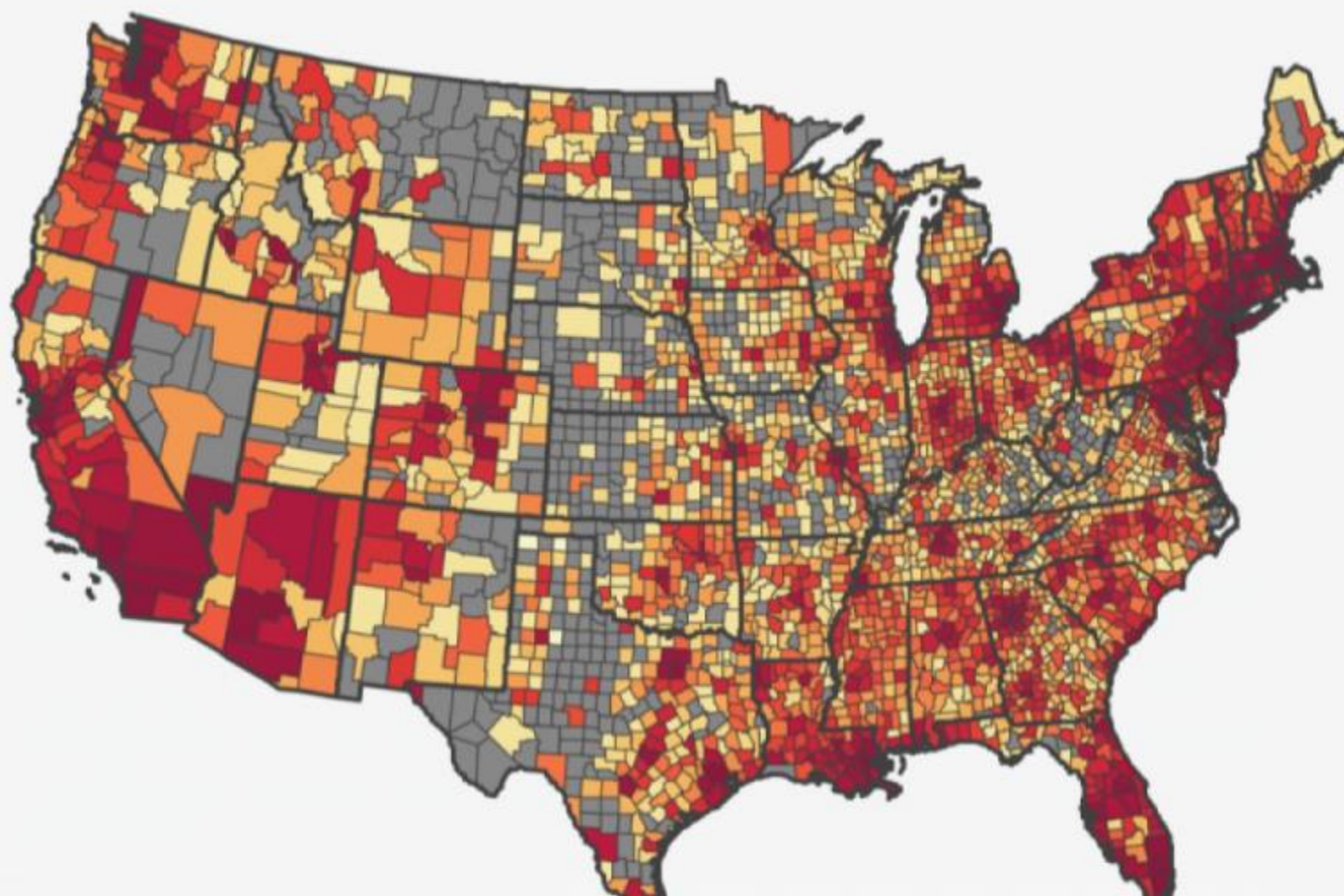
 **UCI** University of
California, Irvine



The UC Davis School of Veterinary Medicine donated thousands of pieces of personal protective equipment (PPE) to UC Davis Health to aid in their efforts to battle the COVID-19 pandemic

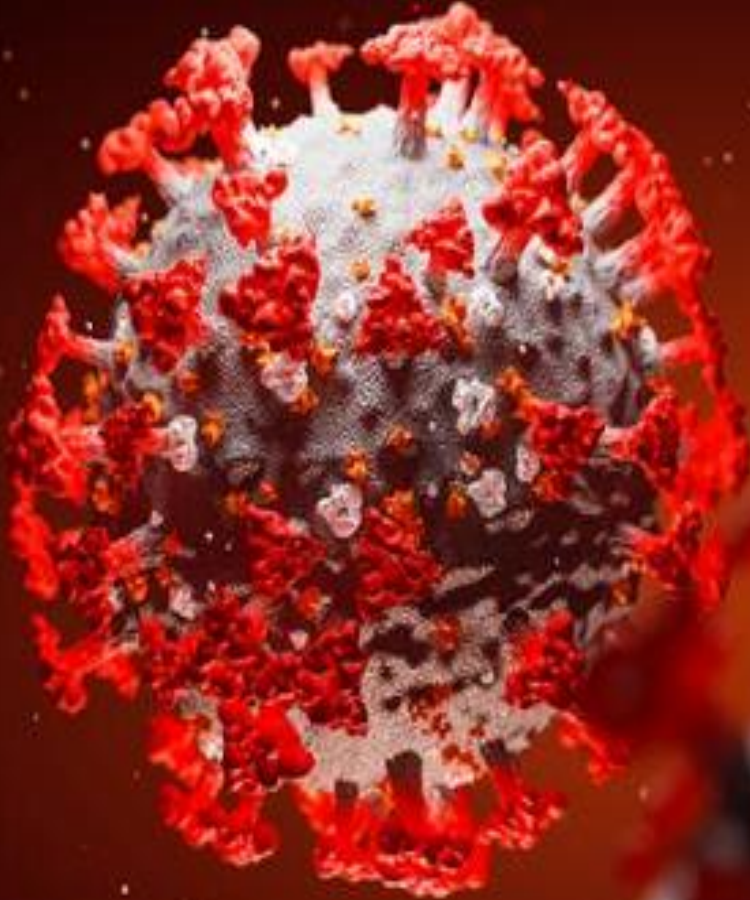
At UC Davis -Multiple units collaborating on new reagents, diagnostic tests and a vaccine for the COVID-19 coronavirus.





UC Davis Researchers Launch New COVID-19 Tracking Application - Associate Professor Chris Barker Named as Chancellor's Fellow, 2020

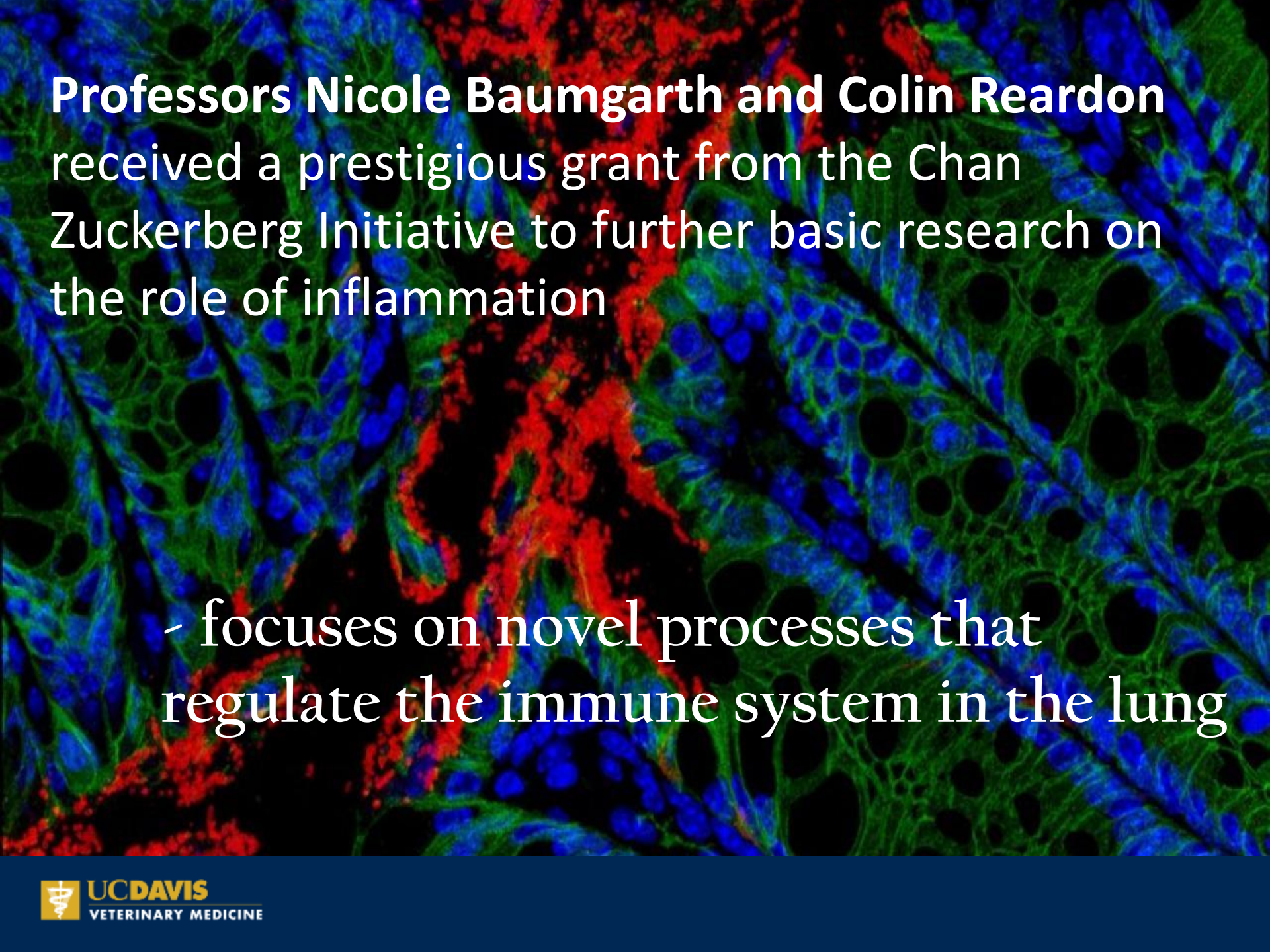
The genome of the SARS-CoV-2 coronavirus has mutated as it has spread around the world



By combining information about the virus's DNA with epidemiology, UC Davis researchers hope to understand when the virus is more likely to cause a rapid outbreak

-DJ Darwin R Bandy, C Weimer

MedRxiv doi: <https://doi.org/10.1101/2020.03.17.20037481>



Professors Nicole Baumgarth and Colin Reardon received a prestigious grant from the Chan Zuckerberg Initiative to further basic research on the role of inflammation

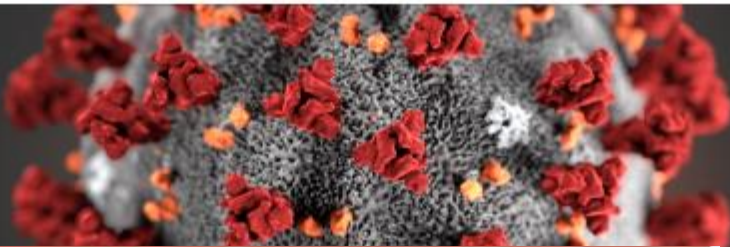
- focuses on novel processes that regulate the immune system in the lung



The Atlantic
EST. 1857



Efficacy and safety of the nucleoside analog GS-441524 for treatment of cats with naturally occurring feline infectious peritonitis Niels C Pedersen, et. al. J. Feline Med. Surg. February 13, 2019



COVID-19 Update: Hospital Operations

Due to developing circumstances surrounding the COVID-19 pandemic, including adhering to physical distancing and limiting public gatherings, the UC Davis Veterinary Medical Teaching Hospital is currently altering its patient receiving process. Clients are now being asked to stay in the parking lot, where they will be greeted by a hospital employee. Learn more about the patient receiving process in this video:

News & Events

- ▶ Latest News
- ▶ Events Calendar
- ▶ Publications
- ▶ Success Stories
- ▶ Animal Health Topics
- ▶ Social Media / Blogs
- ▶ Press Kit



April 20, 2020

To the UC Davis Veterinary Medicine community:

Research Continuity & Planning for COVID-19

Changes to Hospital Intake during the COVID-19 Pandemic Watch later

UC DAVIS
VETERINARY MEDICINE
Dr. Steve E.

As of 8am March 19, the VMTH will be OPEN FOR EMERGENCIES ONLY. Currently, this status is scheduled to stay in place until at least May 1. Based on the mandatory shelter in place order for Yolo County, the hospital's receiving will be restricted to emergent medical conditions, follow up of current patients with urgent medical needs, and ongoing chemotherapy and radiation therapy treatments. Veterinary facilities are considered essential during these times, and our aim is to remain open in order to provide patient care to animals with life-threatening medical conditions.



Updated 4/2/20

Social Media and Continuing Education outreach and engagement



ucdavisvetmed • Following



ucdavisvetmed Do you have concerns about #COVID19 and how it relates to wildlife and our pets? Drs. Jane Sykes and Brian Bird are hosting an Instagram #AskMeAnything! Submit your questions to our stories between now and Wednesday, April 22 at noon, and tune in on Friday, April 24 at noon for the answers! Due to time constraints, we may not be able to address all your questions, but we will try to answer as many as possible!

Dr. Jane Sykes is the chief veterinary medical officer at the UC Davis veterinary hospital and a founder of the International Society of Companion Animal Infectious Diseases.



Liked by lifeofavet and 567 others

23 HOURS AGO



TIME

HEALTH • COVID-19

Coronavirus Researchers Are Using High-Tech Methods to Predict Where the Virus Might Go Next

THE CORONAVIRUS CRISIS

Virus Researchers Cast Doubt On Theory Of Coronavirus Lab Accident

April 23, 2020 · 7:08 AM ET

Los Angeles Times

CALIFORNIA

Trump, Congress scramble to revamp virus-hunting agency that was mired in cuts

BBC Home News Sport Reel More

Show apps

NEWS

Science & Environment

Coronavirus: Exploiting nature 'drives outbreaks of new diseases'

THE WALL STREET JOURNAL.

English Edition | May 19, 2020 | Print Edition | Video

U.S.

Your Pets Probably Won't Get Coronavirus

Veterinary experts say there is little evidence of transmission from humans to pets

SCIENTIFIC AMERICAN 175

Subscribe

SHARE LATE

Destroyed Habitat Creates the Perfect Conditions for Coronavirus

CNN health

BBC Home News Sport Reel More

NEWS

Science & Environment

Coronavirus: Great apes on lockdown over threat of disease

By Helen Flegg
BBC Environment correspondent

10 April 2020

Facebook WhatsApp Twitter Email

CNN health Food Fitness Wellness Parenting Vital Signs

A real life 'Contagion': Humans may pass virus to animals

By Kristen Rogers, CNN

Updated 7:07 PM ET, Tue April 7, 2020

The virus hunters who search bat caves for the next pandemic

By Julie Zauig, for CNN

Updated 11:36 PM ET, Sun April 26, 2020

Newsweek RISK OF VIRUS SPILLOVER FROM

RISK OF VIRUS SPILLOVER FROM HUMANS INCREASES THROUGH EXPLOITATION AND DOMESTICATION

BY ARISTOS GEORGIU ON 4/7/20 AT 7:01 PM EDT



SCIENCE

A Much-Hyped COVID-19 Drug Is Almost Identical to a Black-Market Cat Cure

Cat owners are resorting to China's underground marketplace to buy antivirals for a feline coronavirus.


SARAH ZHANG MAY 8, 2020



Goal 1.0 - Educate World Leaders in Academic Veterinary Medicine, Veterinary Medical Practice, Biomedical and Agricultural Research, Industry, Government, and Public and Environmental Health



Goal -continued access to veterinary training while safeguarding student health and well-being



-Revamped curriculum delivery for all first-through fourth-year veterinary students

UC DAVIS CLASS OF 2020 COMMENCEMENT CELEBRATION



Forgot account?

facebook



UC Davis School of
Veterinary Medicine
@UCDavisVetMed



 **UC DAVIS**
VETERINARY MEDICINE

#1
in Veterinary Science
globally

 **QS** WORLD
UNIVERSITY
RANKINGS

Demographics

Average Age

22 (age range 19-37)

First Generation Students

28

Race/Ethnicity

White/Caucasian: 82

Asian: 31

Hispanic, Latino, or of Spanish

Origin: 8

African American/Black: 1

Mixed Race/Multi-ethnic: 28

Applica

Residen
Californ
Non-resi
Internati
Total

Class I

Residen
Californ
Non-resi

ffer

ts Admitted on
tion: 125
ation: 22
e application: 3

UC Davis -Best Value in Veterinary Education

- highest median starting salary of graduates of any of the 30 U.S. veterinary schools
- second for the most optimal debt-to-income ratio of all 30 schools
- third-least median debt of any of the 30 schools



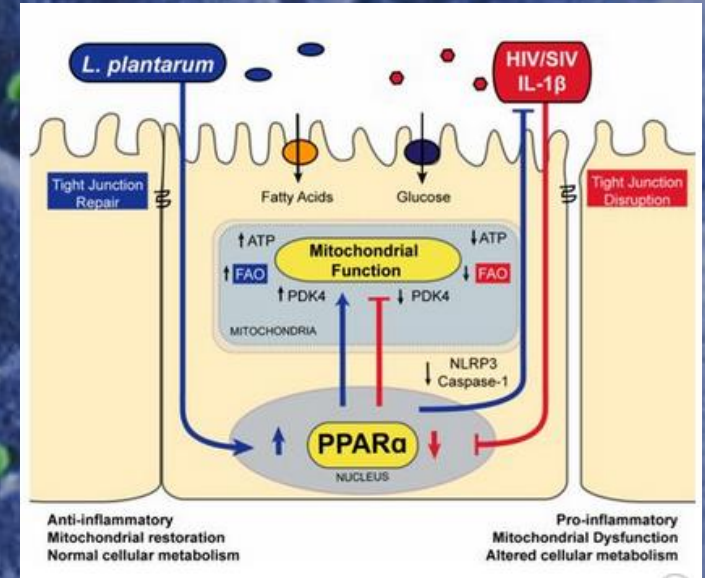
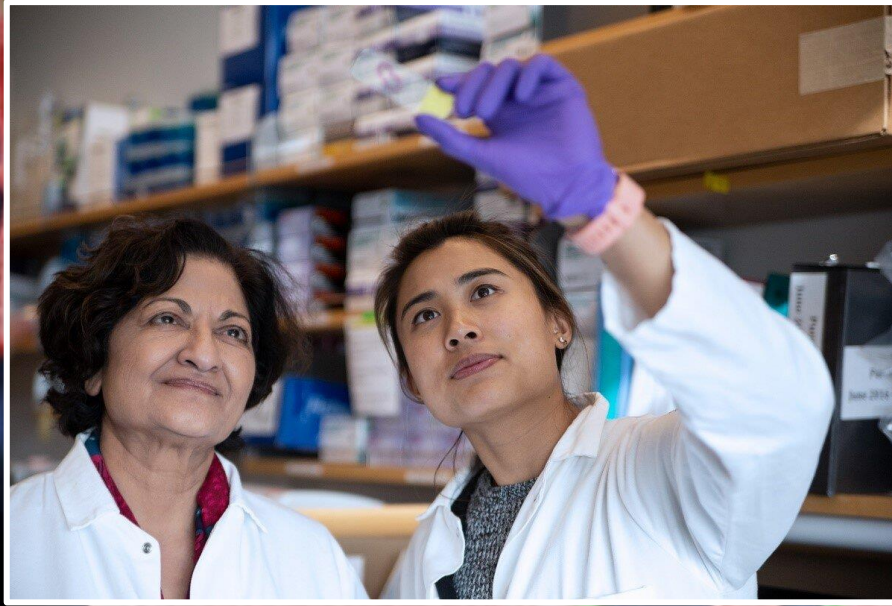
Student Externships – Expanding Educational Opportunities and Career Directions



Global Education and Research Programs – extending our impact



Training the Next Generation of Veterinary Scientists



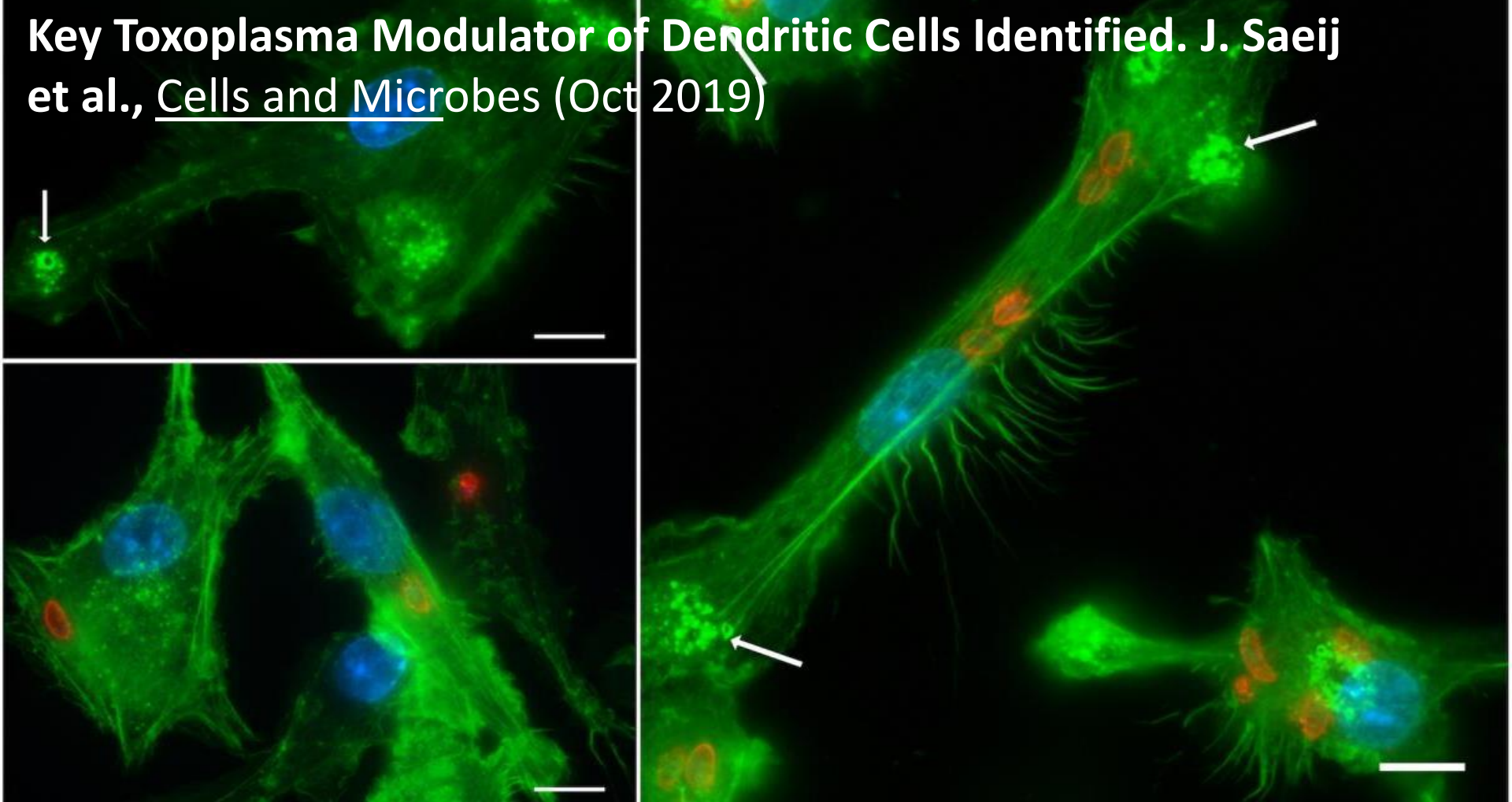
Study provides insights into restoring gut mucosal immunity and function

Proceedings of National Academy of Sciences, 2019

Training the Next Generation of Scientists – Leading in Graduate Education

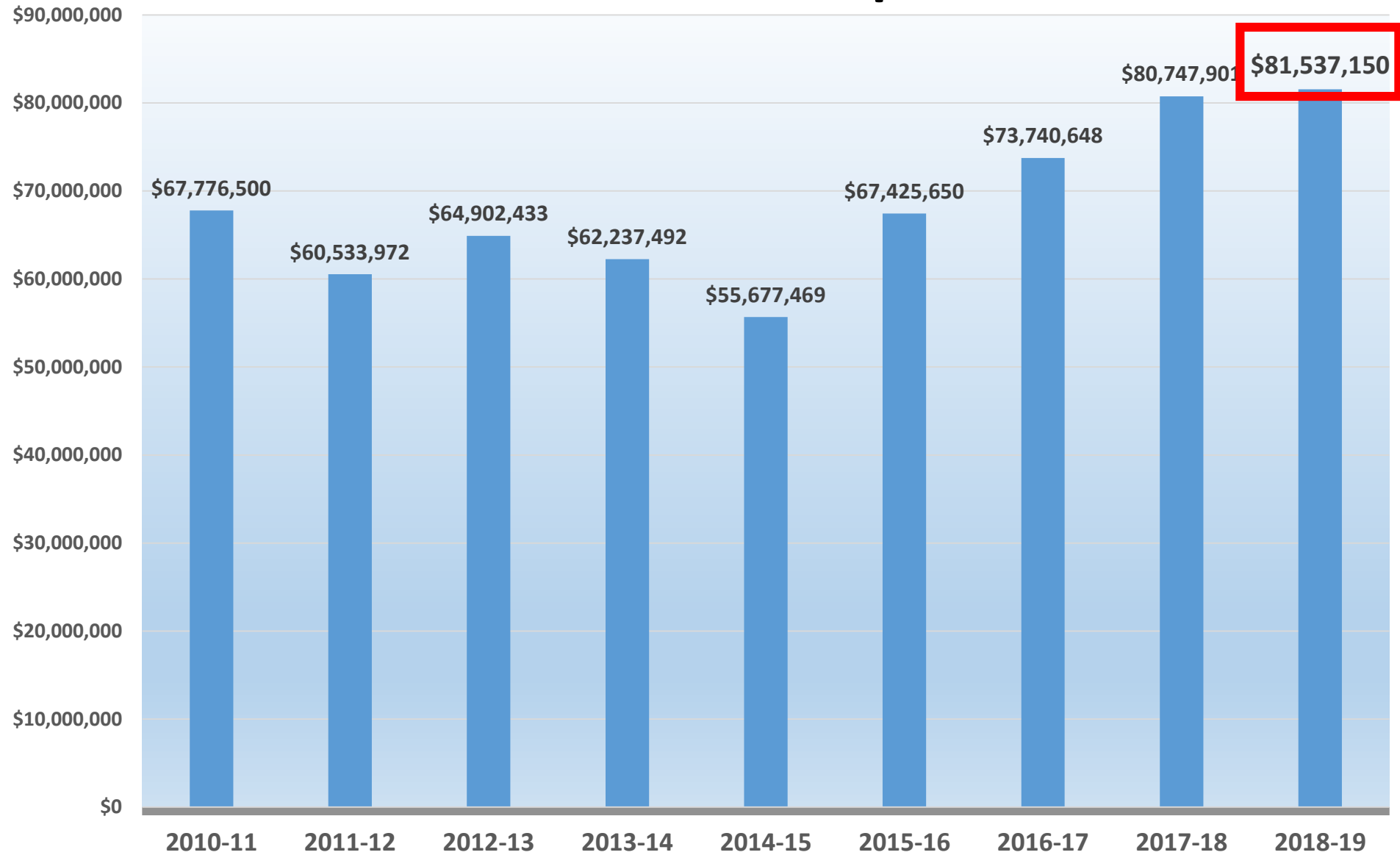
- ❖ Fellowships and Awards
- ❖ Publications and Research Presentations
- ❖ Specialty Training Certificates

Key Toxoplasma Modulator of Dendritic Cells Identified. J. Saeij et al., Cells and Microbes (Oct 2019)



Goal 2.0 - Lead in Innovation and High-Impact Transdisciplinary Research to Advance the Health of Animals, People, and the Environment

Trends in Research Expenditures



Melting Arctic Sea Ice Linked to Emergence of Deadly Virus in Marine Mammals

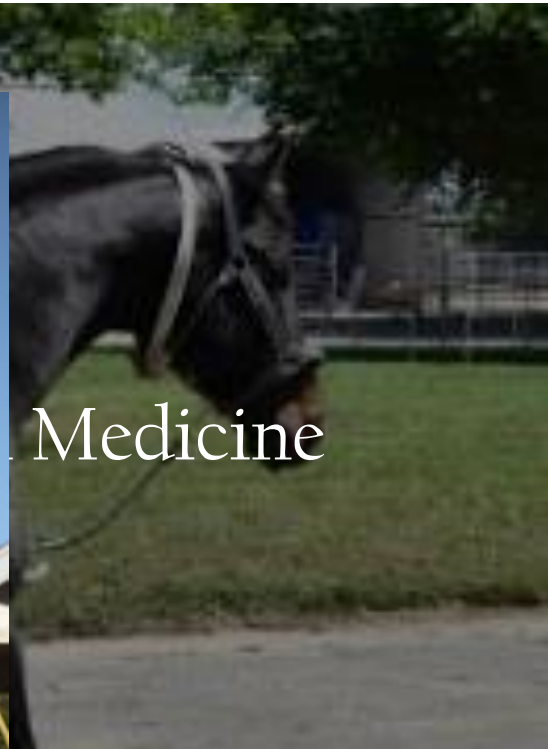
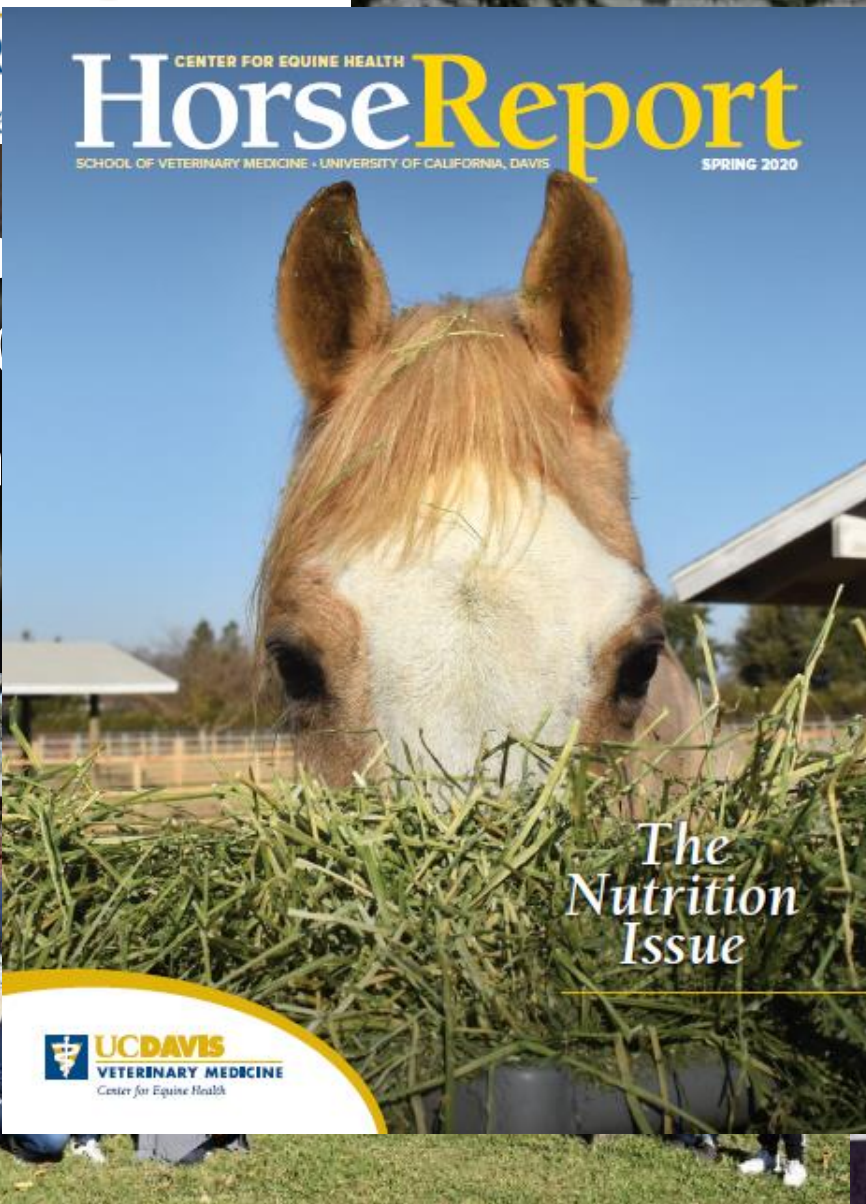
“As sea ice continues its melting trend, the opportunities for this virus and other pathogens to cross between North Atlantic and North Pacific marine mammals may become more common,”

Scientific Reports Nov 2019

Study demonstrated first genetic link between the Toxoplasma strains in felid hosts and parasites causing fatal disease in marine wildlife



Proceedings of the Royal Society B. Shapiro et al., Aug 2019



Medicine

- Research Funding
- ✓ - Pioneer 100
- Enhance shared resources
- Outreach and education



New Grant to Study Drugs that Impair Bone Repair in Racehorses



Center for Comparative Pathology - Winner of the 2020 campus-wide Lab Safety Award



- Performed ~ 220K genetic test across 24 species
- Completed 69 animal forensic cases
- Expanded portfolio of tests
- Genetic studies in horses
- Novel methods to monitor endangered lizards
- Excellence in Undergraduate Research



Goal 3.0 - Provide Cutting-Edge Clinical Programs that Deliver Exceptional Veterinary Services and Support Premier Education, Advanced Specialty Training, and Collaborative Translational Research

Excellence in Resident and House Officer Training



Dr. Maureen Griffin -2020 American Association of Veterinary Clinicians (AAVC) Resident Achievement Award



UC DAVIS
VETERINARY MEDICINE



2019 Annual Report

Center for Companion Animal Health

Are Cats the 'Canary in the Coal Mine' for Wildfire Effects on Human Health?

Learning From Cats Injured in California Wildfires -Scientific Reports.

Veterinarians Use Artificial Intelligence to Aid in the Diagnosis of Addison's Disease



Machine learning algorithm as a diagnostic tool for hypoadrenocorticism in dogs. Domestic Animal Endocrinology, Volume 72, July 2020, 106396

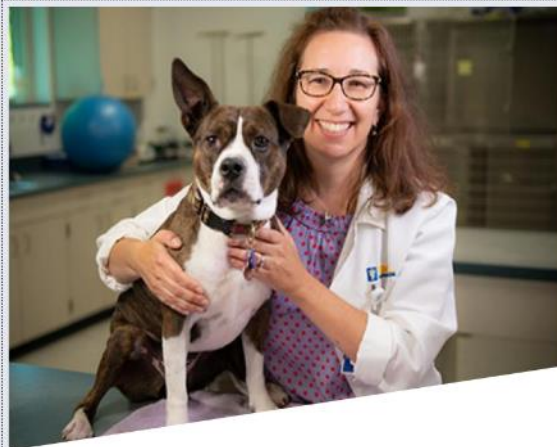
Veterinary Center for Clinical Trials

Advancing high quality clinical research

About Us



Pet Owners & Referring Vets

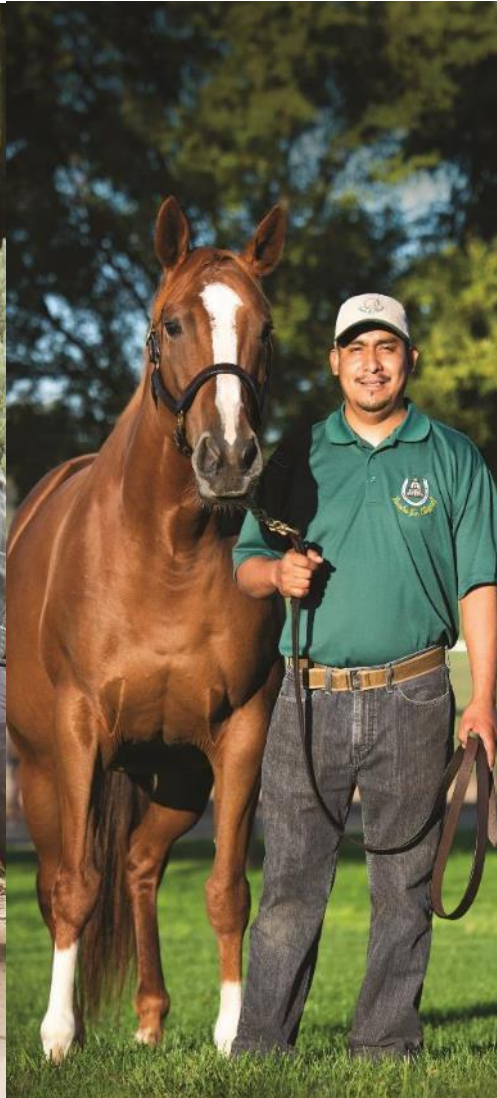


Clinical Investigators

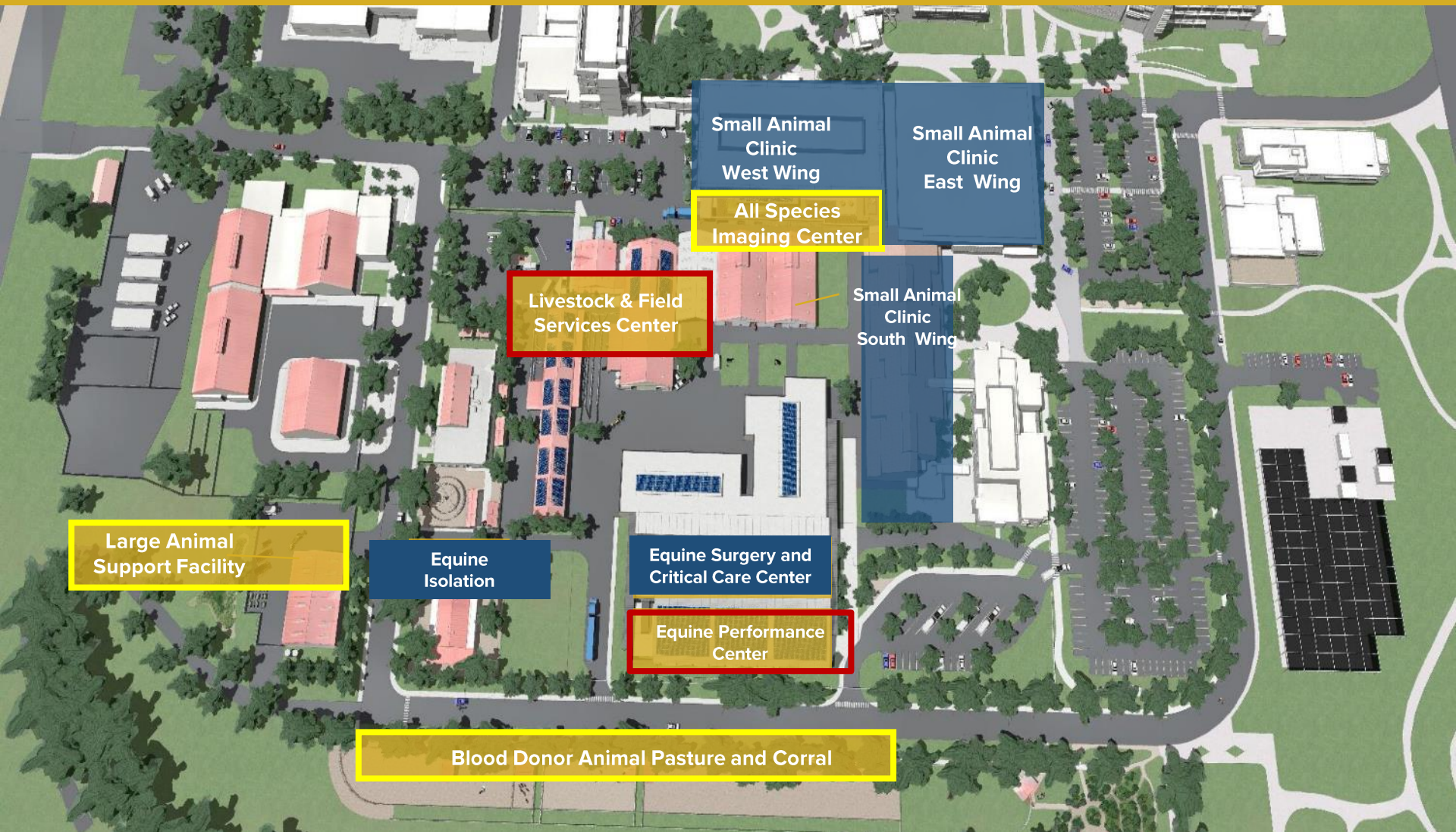


Sponsors

Transforming the Future of Veterinary Medicine



Veterinary Medical Center



Small Animal
Clinic
West Wing

Small Animal
Clinic
East Wing

All Species
Imaging Center

Livestock & Field
Services Center

Small Animal
Clinic
South Wing

Large Animal
Support Facility

Equine
Isolation

Equine Surgery and
Critical Care Center

Equine Performance
Center

Blood Donor Animal Pasture and Corral

USAID PREDICT
Courtesy: Simon Townsley



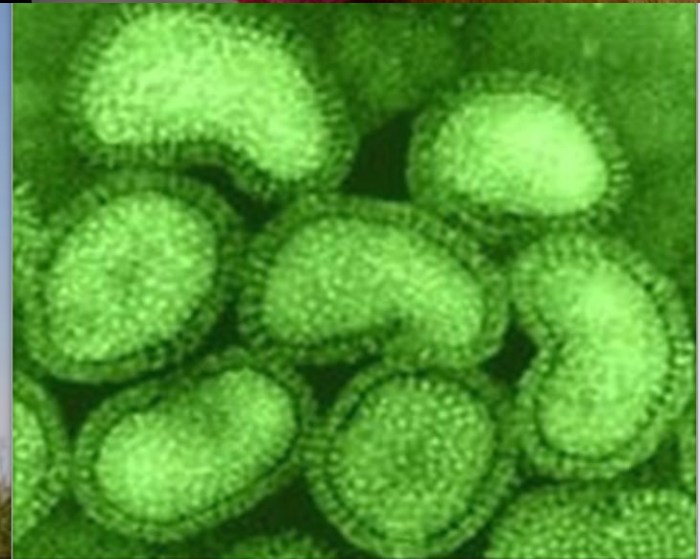
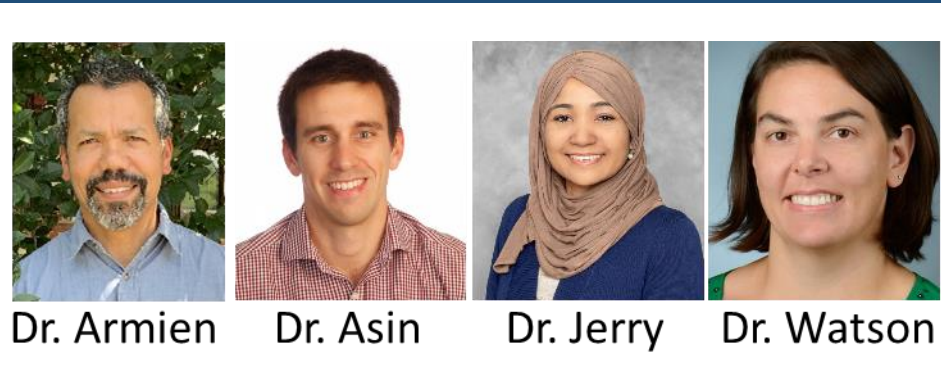
Goal 4.0 - Advance the Well-Being of Animals and People in California and Around the Globe



Advocating for support for one health approaches to advance animal, human, and environmental health – March 5th, 2020 Washington D.C.

California Animal Health and Food Safety Laboratory

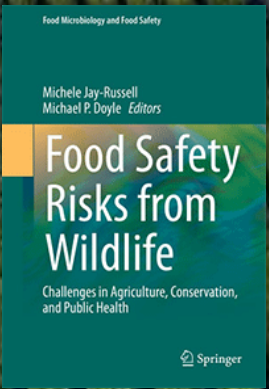
- Leading Diagnostics Nationally, Protecting California Locally





Microbial contamination of the US produce supply

- emerging & endemic pathogens, causal mechanisms driving multistate outbreaks, microbial fate & transport



Epidemiology of wildlife foodborne pathogens

Preparing for Animal Pandemics – New USDA Grant Collaboration Across 3 Western States

SITORS

**BIOSECURITY MANAGEMENT PLAN
APPLIES TO THIS PLACE**

Management area for the Biosecurity Management Plan
that applies to this place

Person entering, present at, or leaving a management
area must comply with the measures stated in the Biosecurity
Management Plan for this area unless the person has a reasonable excuse.

Visit our office before entering to obtain information about the
plan and your biosecurity obligations under the *Biosecurity Act 2014*.

Footwear and equipment can carry diseases, weed seeds and pests

UHF channel: _____



UNIVERSITY OF CALIFORNIA
Agriculture and Natural Resources

4-

Analyzing The Use of Selective Dry Cow Therapy

Fernanda C. Ferreira And Emmanuel Okello, University Of California Cooperative Extension



UCANR: Promoting economic prosperity in California

UC helps California dairy farmers experiment with milking robots



Small Farms and Urban Agriculture

A community-based One Health education program for disease risk mitigation at the human-animal interface.

Berrian AM¹, Smith MI², van Rooyen J³, Martinez López B⁴, Plank MN², Smith WA⁵, Conrad

FOOD BLOG

Food news from the UC Division of Agriculture and Natural Resources

BOVINE VETERINARIAN

Innovating dairy digester research

California Good Ag Neighbors

The Produce Safety - Livestock Interface Workshop

FDA Halts Over-The-Counter Sales Of Some Antibiotics

The move designed to promote responsible use of antibiotics for food-producing animals will affect your backyard flock.



UCDAVIS
VETERINARY MEDICINE

UC Veterinary Medical Center - San Diego

Continued Leadership in Fellowship Training



**Advanced
 Extracorporeal
 (Hemodialysis) and
 Urinary Disease
 Service**



Cardiology

Veterinary cardiologists
 a small group of speciali



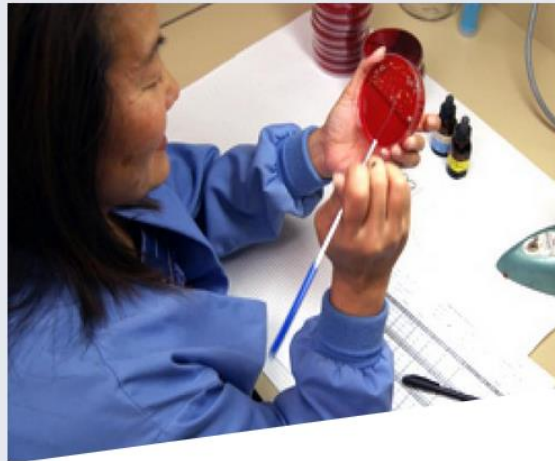
UCVMC-SD Launches Teleconsultation Service

Veterinary Medicine Teaching & Research Center

Healthy Cows - Sustainable Herds - Confident Consumers



**Academic
Instruction**



Research Activities



Outreach

Veterinary Emergency Response Team Medical Reserve Corps -California EMSA Award





Goal 5 -Promote a Vibrant and Diverse Community of Faculty, Staff and Students to Advance the Mission of the School in an Engaged and Respectful Community

Faculty Excellence - Recognized



Recognition of the 150th anniversary of the admission of women to the University of California



Jonna Mazet DVM, MPVM, PhD



Marguerite Pappaioanou, DVM, MPVM, PhD



Elizabeth Arnold Stone, DVM, MS, MPP, DACVS



Leadership Welcome



Bret McNabb
Director
Large Animal Clinic



Simone Stoute
Branch Chief at
CAHFS- Turlock



Patty Pesavento
2020-2021
Chair of the Faculty



Alison Zwingenberger
Director of Diagnostic
Imaging



Joanne Paul-Murphy
Messmer Family Presidential Chair
Companion Exotic Medicine and Surgery Service

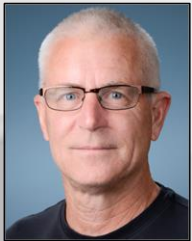
Leadership Reappointments



Danika Bannasch
Associate Director, Genetics Program
Center of Companion Animal Health



Robert Rebhun
Associate Director, Cancer Programs
Center for Companion Animal Health



Edward Schelegle
Chair
Anatomy, Physiology and Cell Biology



Gary Magdesian
Endowed Chair
Henry Chair in Emergency Medicine and Critical Care



Leadership Thank You



Rob Atwill
Director of Western
Institute of Food Safety
and Security



Dori Borjesson
Chair of Pathology,
Microbiology &
Immunology



Jenna Burton
Director, Veterinary
Center for Clinical
Trials



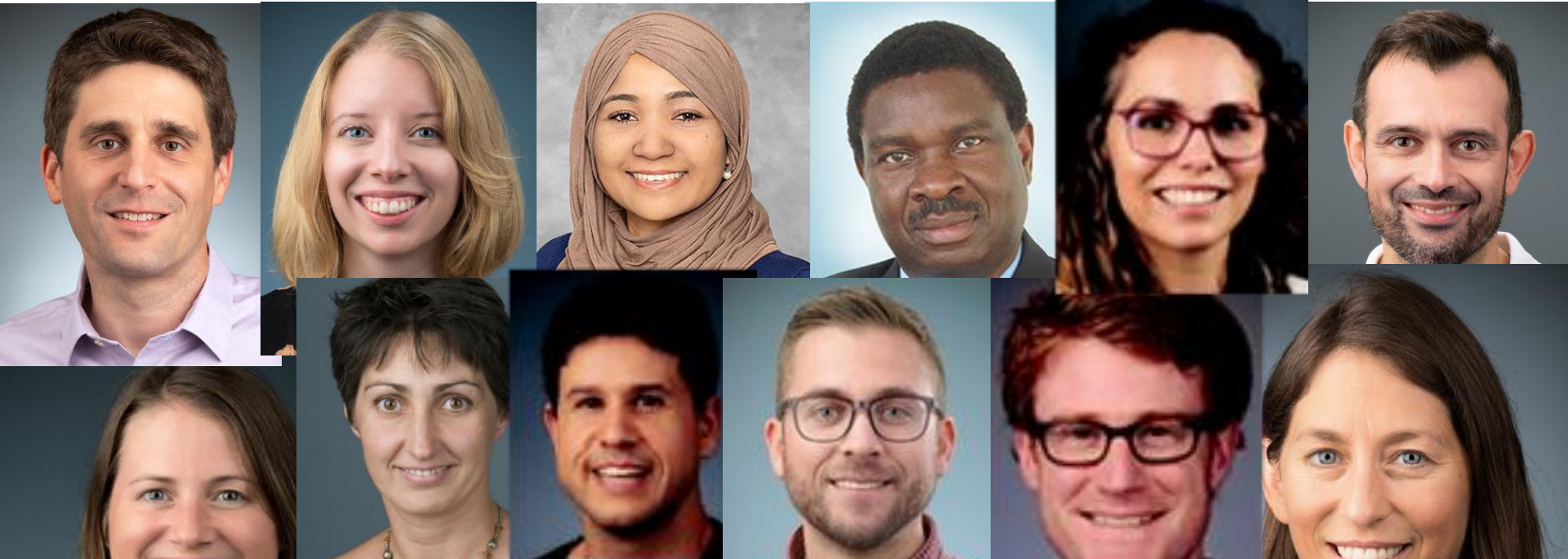
Kate Hopper
Interim Chief Medical
Officer VMTH



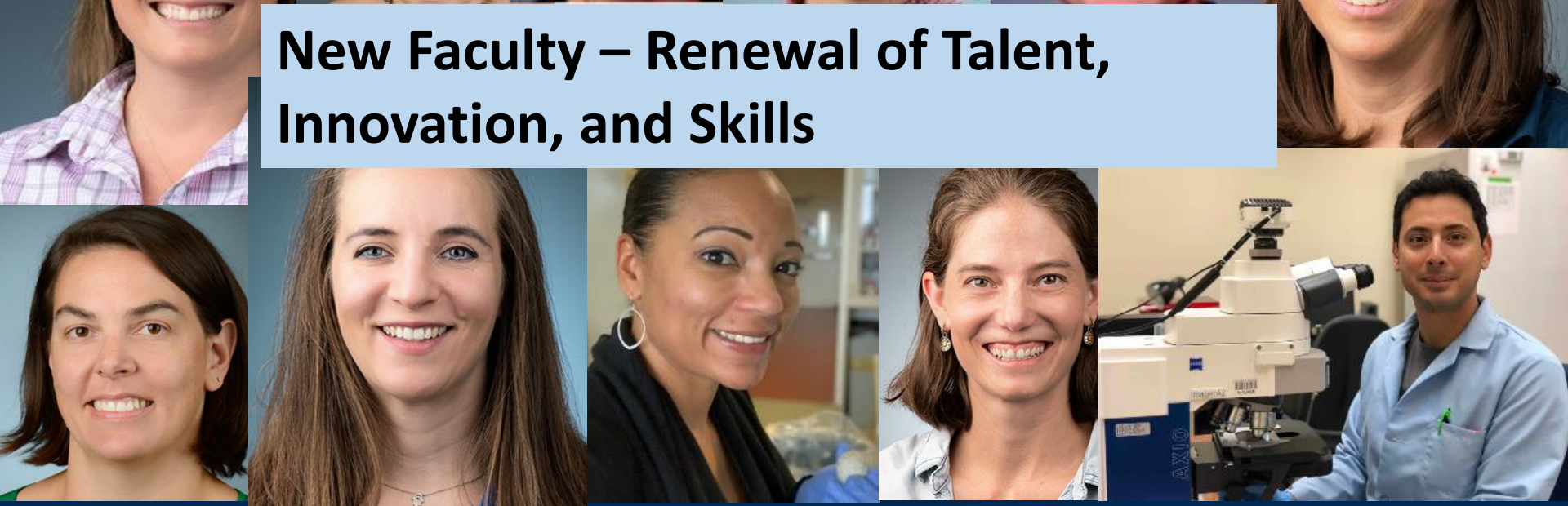
Denis Marcellin-Little
2019-2020 Chair of the
Faculty



Jonna Mazet
Executive Director
One Health Institute



New Faculty – Renewal of Talent, Innovation, and Skills



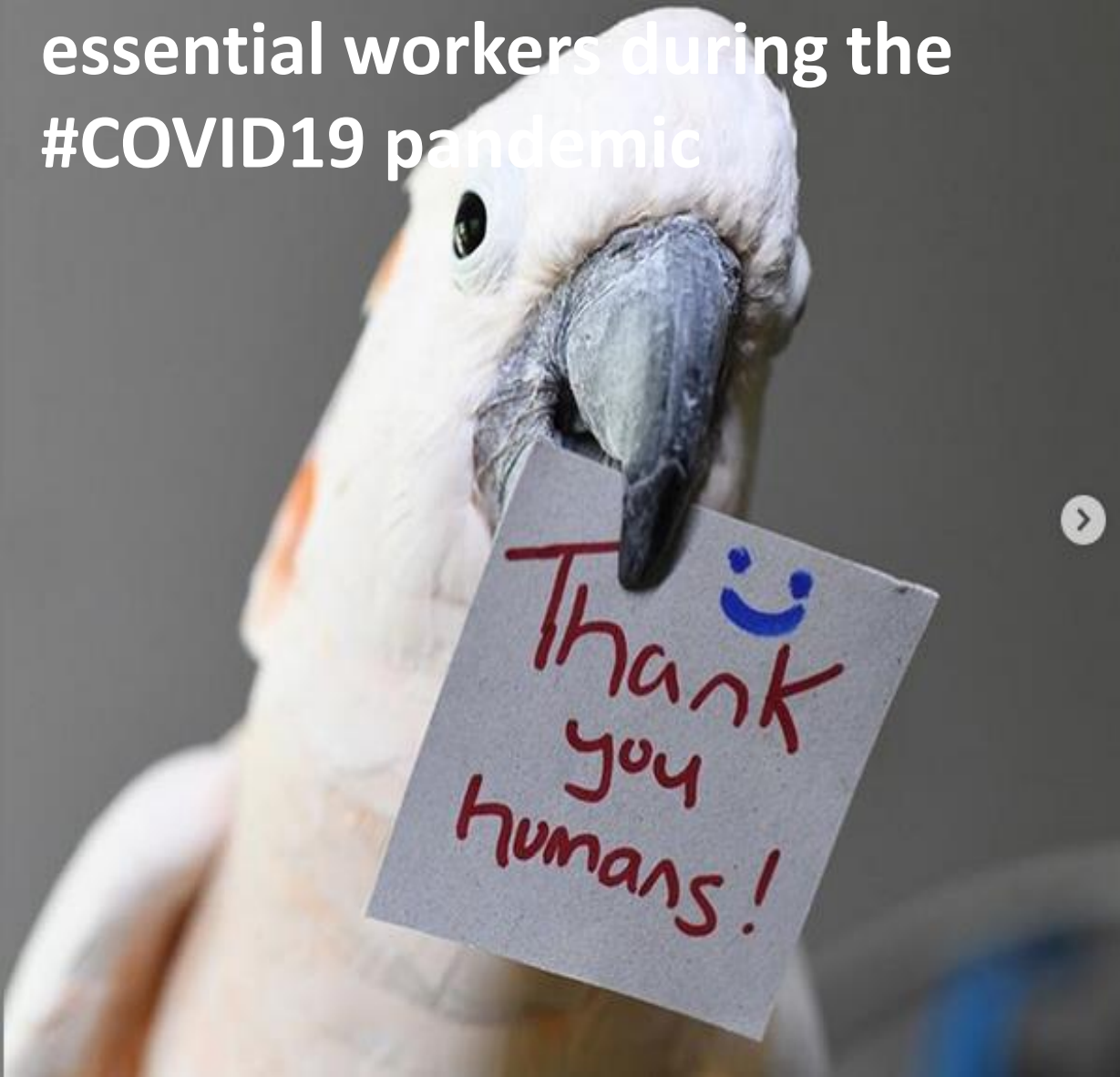
Selected Staff Awards and Recognition

- **Jason Peters – 2019 Rachel Smith Employee of the Year Award**
- **Heather McEligot – 2019 PMI Staff Award**
- **Catherine (Sass) Miller – 2019 Large Animal Staff Award**
- **Sheri Pendergraft – 2019 Small Animal Staff Award**
- **Joe Pacini – 2019 Client Service Administrative Staff Award**

The Importance of Cultural Awareness for Veterinarians in Today's Global World



Showing gratitude for our essential workers during the #COVID19 pandemic



ucdavisvetmed • Following
UC Davis School of Veterinary Medicine



ucdavisvetmed We are so grateful for everyone who is keeping our essential services running—including our custodians, veterinary technicians, clinicians, and so many others. Join us in celebrating our #HealthcareHeroes and essential staff who are on the frontlines, interacting directly with clients and each other. Tag us in your photos!

#ThankfulThursday

6d



hey_itsleila ❤️❤️



5d 2 likes Reply



Liked by mattbengel and 1,708 others

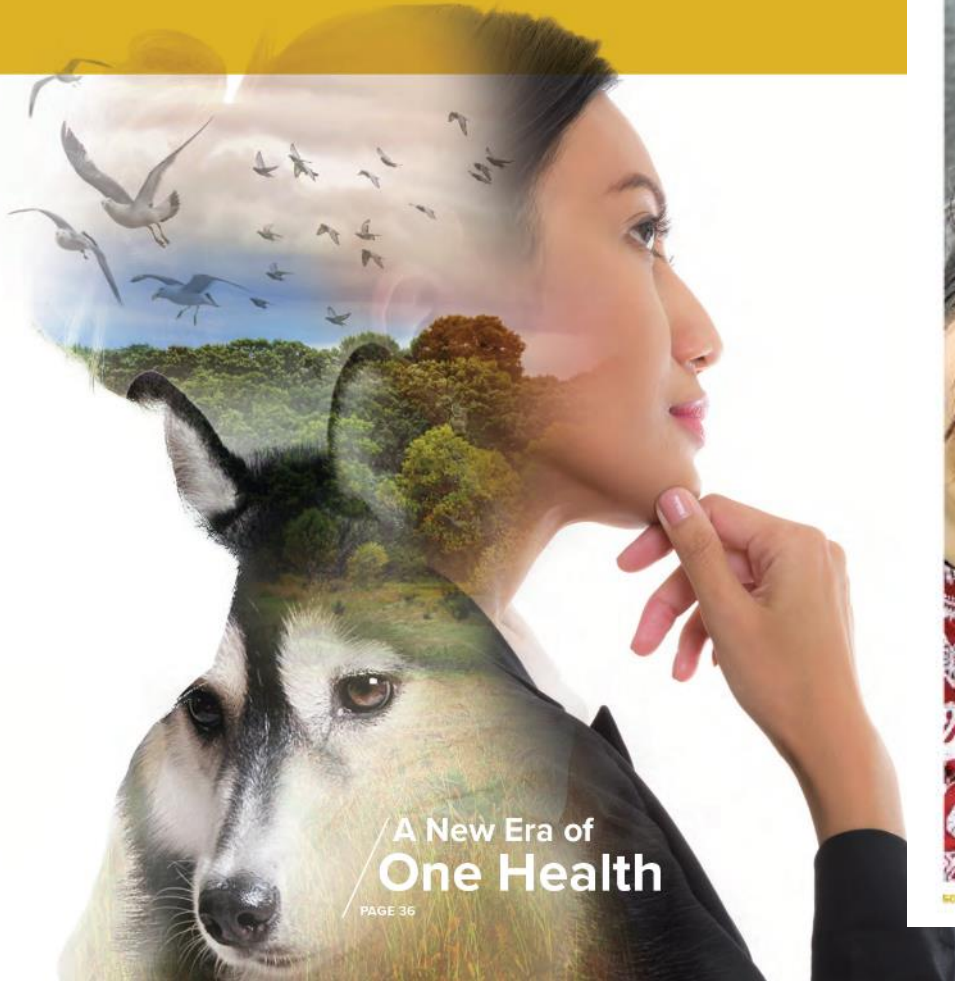
6 DAYS AGO

A photograph of a man in a light blue short-sleeved button-down shirt, blue jeans, a brown belt, and a grey cap. He is standing in a barn, leaning on a metal railing. Behind him are several black and white cows. The background shows a large, open barn structure with a white roof and metal railings. The lighting is bright, suggesting daytime.

Donors Making an Impact on our Mission and Society

Synergy

Animal / Human / Environment



A New Era of
One Health

PAGE 36



2019
GLOBAL
LEADERS

50 / Synergy / UC Davis Veterinary Medicine

Alumni Achievement Awards



Noel Dybdal, DVM, PhD



Ken Gorczyca, DVM

Alumni Rising Star Award



**Brian Bird, DVM, PhD,
MPH**



Sheila Laverty, MVB



Katrin Hinrichs, DVM, PhD

Faculty Retirees



Fredric Gorin



Steven Hollingsworth



**Pam
Hullinger**



Mary Lassaline



Ray Wack



Kimber L. Stanhope



Erik Wisner



Mary Beth Whitcomb



Reen Wu

2019-2020 Staff Retirees

– Our Foundation of Excellence

- Elizabeth Bishop, Financial Supervisor, VMTH
- Barbara Fowler, Anatomic Pathology Support Assistant, VMTH
- Clare Knightly, Anesthesia Technician, VMTH
- Harold Long, Equine Surgery Service Technician, VMTH
- Catherine (Sass) Miller, Equine Medicine Technician, VMTH
- Linda Potoski, Chief Admin Officer, PMI
- Michele Santoro, Small Animal Radiology Technician, VMTH
- Carol Tower-Brennan, Small Animal Care Supervisor, VMTH
- Pauline Wong, Associate Veterinarian, VSR
- Roxie Zalunardo, Radiology Technician, VMTH

Memories of our lives, of our works and our deeds will continue in others. --Rosa Parks



In Memoriam



A Decade of Leadership



UC DAVIS

VETERINARY MEDICINE

Leading veterinary medicine, addressing societal needs