You have their back.  We have yours.

With Preferred Employers Insurance, association members and employees get workers’ compensation insurance specialists, savings, services, and stability.

peiwc.com
Twenty years ago, SAGE, then Veterinary Surgical Associates, launched the first annual Small Animal Symposium at the Radisson Hotel in Berkeley to an audience of about 30 attendees. Topics focused on surgery, wound management, and bandaging. Back then, we gave the schedule and proceedings to each attendee in a hard-bound, three-ring binder. THUD!

In recent years, we’ve welcomed more than 750 veterinarians, technicians and practice managers to our Symposium and we’ve made some major changes… to everything! Our topics now run the gamut from CPR labs to compassion fatigue management to the use of CBD products. We put as much online as we can to minimize paper (no more binders!), and we’ve moved back to the Oakland Marriott after we outgrew the space in Burlingame. We’ve also published PAWS magazine to introduce you to our exhibitors and to our newest veterinarians. Flip the pages and you’ll also find a Q&A about Propofol and an introduction to the new leadership structure at SAGE.

The only thing that hasn’t changed about our Symposium is our commitment to delivering high-quality CE courses… and the excitement we feel as we prepare to see you all every year.

We’d like to extend a special thank you to Dr. Julie Smith, who has led our Symposium since 2002. Her leadership and energy are boundless – we couldn’t do it without her!

Thank you for being here, and enjoy the day!

The Editors
Michelle Henderson, Executive Assistant
Gina Gotsill, Senior Clinical Recruiter
Meet Our Newest Veterinarians

SAGE Veterinary Centers has grown since the last time we all gathered for Symposium! We have expanded Emergency and Critical Care across our network, and recently added Urgent Care services at our Redwood City hospital to help us better support our referring veterinarians. We have also added an Anesthesia specialty. New veterinarians and departments at SAGE mean greater accessibility for your patients, and shorter wait times for care. It also means greater collaboration. Take a look at our doctors’ bios and you will find they come from a variety of teaching programs, and bring different ways of looking at problems—and treating them.

Alice Bugman, DVM
Surgery at SAGE Redwood City

Veterinary School: University of Illinois
Internship Training: VCA SFVS; Veterinary Specialty Center (Buffalo Grove, IL)
Residency Training: Veterinary Specialty Center

Dr. Alice Bugman started her career as a web developer after graduating with her Bachelor of Arts in English from Stanford University. Even though she treated her sick aquarium fish growing up in Hawaii, she did not realize she wanted to be a veterinarian until she was an adult and adopted a cat. She went back to school part-time at Hunter College in New York for a post-baccalaureate program, studying Biological Sciences and Chemistry.

A few years later, with her IT career in the rear-view mirror, Dr. Bugman headed to the University of Illinois College of Veterinary Medicine, where she earned her DVM. She completed a yearlong rotating internship in San Francisco followed by a one-year surgical internship and three-year surgical residency at Veterinary Specialty Center in Buffalo Grove, Illinois.

While she is experienced in all areas of surgery, Dr. Bugman has a particular interest in orthopedics and fracture repair, urinary tract surgery, wound management and reconstruction, and laparoscopy.

Mary Ellen “Emmy” Finley, MS, DVM
Emergency/Critical Care at SAGE Redwood City

Veterinary School: Colorado State University
Internship Training: Oregon State University

Dr. Mary Ellen Finley came to veterinary medicine after years of teaching rafting and climbing with Outward Bound in Colorado and Utah, as well as working as an EMT in human medicine. She completed a Master of Science degree with honors in Neuroanatomy and Physiology at Colorado State University (CSU). She stayed at CSU for veterinary school and graduated magna cum laude.

Dr. Finley completed her rotating internship at Oregon State University and a radiology fellowship at Washington State University. In addition to her work in the ER, she enjoys teaching and mentoring other veterinarians and technicians in emergency, critical care, and trauma care. She also has a special interest in pain management.
**Heidi Fink, DVM, MS, DACVIM**

**Internal Medicine at SAGE Campbell**

Veterinary School: Colorado State University  
Internship Training: University of Minnesota Veterinary Medical Center  
Residency Training: The Ohio State University Veterinary Medical Center  
Certification: Diplomate, ACVIM (2018)

Dr. Heidi Fink started her veterinary career as a technician in Santa Barbara. She moved to Colorado to attend Colorado State University, where she worked as a critical care technician while earning her DVM. Following veterinary school, Dr. Fink completed a rotating internship in small animal medicine and surgery at the University of Minnesota Veterinary Medical Center. Then she was on the road again, this time to The Ohio State University. There, she earned her MS degree in Veterinary Clinical Sciences, and received advanced training in endoscopy, hepatology, gastroenterology, and nephrology. For her master’s thesis, she researched the pharmacokinetics and pharmacodynamics of a novel insulin in healthy dogs for potential use in diabetic dogs. She also completed her small animal Internal Medicine residency, where she managed a variety of diseases in the outpatient and intensive care units, and served as a clinical instructor for senior veterinary students and rotating interns.

Dr. Fink’s special interests include feline medicine, gastroenterology and endocrinology. She has presented and taught on the subjects of feline leukemia and feline immunodeficiency, as well as diabetes in dogs and cats.

**Austin Kerns, DVM, MS, DACVIM (Neurology)**

**Neurology at SAGE Campbell**

Veterinary School: University of California, Davis  
Internship Training: University of Georgia  
Neurology Internship Training: Veterinary Specialty Hospital of San Diego  
Neurology Residency: The Ohio State University Veterinary Medical Center  
Certification: Diplomate, ACVIM (Neurology) (2018)

Dr. Austin Kerns started his career as a technician at a Sacramento veterinary referral center. He earned his Bachelor of Science degree in Neurobiology, Physiology and Behavior from UC Davis. He stayed at UC Davis for veterinary school and after earning his DVM traveled to Georgia, where he completed a rotating internship at the University of Georgia. He made his way back to the West Coast where he completed a neurology internship at a specialty hospital in San Diego. In 2015, he moved to the Midwest, where he spent the next three years earning his Master of Science degree in Comparative Veterinary Science at The Ohio State University and completing a neurology residency at the school’s Veterinary Medical Center. He moved back to the Bay Area in 2018.

In addition to his work in clinics and animal hospitals, Dr. Kerns has taught extensively, both at The Ohio State University and in private specialty practice. His special interests include neuropathic pain, inflammatory central nervous system disease, and degenerative myelopathy.
Kris Kruse-Elliott, DVM, Ph.D., DACVAA
Anesthesiology, SAGE Network of Hospitals

Veterinary School: Oregon State University
Anesthesia Residency: North Carolina State University
Board Certification: American College of Veterinary Anesthesia and Analgesia (1989)
Postdoctoral NIH Fellowship: North Carolina State University
Certification: Ph.D. – Pulmonary Physiology (1992)

Dr. Kris Kruse-Elliott is SAGE’s anesthesiologist. Dr. Kruse-Elliott is a board-certified veterinarian specializing in anesthesia and analgesia. An Oregon native, Dr. Kruse-Elliott earned her Bachelor of Science degree in General Science and her Veterinary Medicine degree at Oregon State University. She started her career as a veterinary practitioner, but was always interested in heart and lung physiology and how anesthesia could be used safely in patients with cardiopulmonary disease. She pursued her passion, completed a residency and became board certified in anesthesia, and followed with a postdoctoral fellowship and Ph.D. in Pulmonary Physiology from North Carolina State University.

Before moving to the Bay Area, Dr. Kruse-Elliott was on faculty at the University of Wisconsin where she taught anesthesia and ran the anesthesia service, providing clinical anesthesia to a wide variety of species. Her published work is vast and includes co-authorship of a 2015 manuscript in Science about how algae toxins can impair sea lion memory and hippocampal connectivity and lead to the animals being stranded. She has also been involved with The Marine Mammal Center of California and their work to study the effects of algae toxicity—the project has been documented by National Geographic.

Beth Lieblick, MS, DVM
Emergency/Critical Care at SAGE Dublin

Veterinary School: Western University of Health Sciences
Internship Training: VCA, West Los Angeles
Diagnostic Pathology Graduate Training: University of Connecticut Veterinary Medical Diagnostic Lab
Residency Training: Massachusetts SPCA – Angell Animal Medical Center

Dr. Beth Lieblick has worked in many facets of veterinary medicine, starting as a kennel assistant at a specialty hospital on the East coast when she was in high school. Her focus eventually shifted to pathology, and she spent several years assisting veterinary pathology residents in diagnostics at the University of Connecticut. From there, she moved to general practice, where she worked as a veterinary technician while earning her Bachelor of Arts degree in Biology and Microbiology at Hampshire College in Amherst, MA. She continued working as a veterinary technician while earning her Master of Science in Pathology and Veterinary Science at the University of Connecticut.

Dr. Lieblick later moved to California, where she earned her DVM at the Western University of Health Sciences in Pomona. She stayed in California for several years, working in emergency hospitals and veterinary referral centers in Norwalk and Los Angeles. In 2015 she returned to the East coast to complete her Emergency and Critical Care Residency at Angell Animal Medical Center, a branch of the Massachusetts Society for the Prevention of Cruelty to Animals.
**Allison Mattingly, DVM**  
Emergency/Critical Care at SAGE Concord

Veterinary School: University of California, Davis

Dr. Allison Mattingly attended UC Davis for her Bachelor of Science in Animal Medicine, with a minor in Native American Studies, and graduated in 1999. She stayed at UC Davis for veterinary school, and earned her DVM in 2003. From 2003 to 2011, Dr. Mattingly worked in general practice and preventative medicine in Oakley and in Lafayette. In 2011, she took an Emergency Clinician role at a hospital in Roseville, where she focused on small animal emergency care, as well as occasional exotic and wildlife medicine cases, before joining SAGE in 2018.

**Lauren Askin Quarterman, DVM, DACVR (Radiation Oncology)**  
PetCure Oncology at SAGE Campbell

Veterinary School: University of Georgia  
Internship Training: VCA West Los Angeles Medical Hospital  
Residency Training: North Carolina State University Veterinary Hospital  
Certification: Diplomate, ACVR (2012)

Dr. Lauren Quarterman works with PetCure Oncology at SAGE Campbell to deliver cancer care to our patients. Dr. Quarterman’s childhood love of animals, particularly dogs, led her to pursue a career in veterinary medicine from a young age. She received her degree in Animal Sciences with a pre-veterinary concentration from the University of Delaware before earning her DVM at the University of Georgia. After completing a medical and surgical internship at a Los Angeles veterinary hospital, she discovered radiation oncology. This specialized field combined many of her interests—animal health care, as well as math and physics, which she enjoyed studying as a kid. She completed a 2-year residency in radiation oncology at North Carolina State University and became board certified in veterinary radiation oncology in 2012.

**Dania Shirk, DVM**  
Emergency/Critical Care at SAGE Redwood City

Veterinary School: Western University of Health Sciences  
Internship Training: Veterinary Specialty Hospital of San Diego

Dr. Dania Shirk earned her Bachelor degree in Biological Science at UC Santa Barbara, and started her career as a technician assistant and receptionist at veterinary hospitals across Rocklin and Sacramento. While earning her DVM at Western University in Pomona, she worked across the state, landing several externships that gave her exposure to shelter medicine, radiology, oncology, neurology, internal medicine, and emergency and critical care. She interned at the Veterinary Specialty Hospital in San Diego and then returned to the Bay Area to work in emergency medicine. Dr. Shirk’s special areas of focus include acute kidney injury and hepatic disease.
Gurdip Singh, DVM
Emergency/Critical Care at SAGE Dublin

Veterinary School: University of Minnesota and St. George’s University, Grenada
Internship Training: BluePearl Veterinary Partners, New York

Dr. Gurdip Singh started his career in veterinary medicine working with cats and dogs at the Humane Society of Silicon Valley and rescuing avian species at the Wildlife Center of Silicon Valley. He earned his DVM in 2016 and moved into general practice. In June 2017, he began a Medicine and Surgery internship with a veterinary group in New York City, where he focused on emergency cases and stabilizing patients in the Intensive Care Unit. Upon completion of the program in New York, Dr. Singh moved back to California to be closer to his family and friends.

Beryl Swanson, DVM, Practice limited to Neurology
Neurology at SAGE Redwood City

Veterinary School: Washington State University
Internship Training: VCA Veterinary Referral & Emergency Centers, Norwalk and Shelton, CT
Neurology Residency: Animal Medical Center, New York City

Dr. Swanson started her career in human brain science. She earned a Bachelor of Science in Neurobiology at the University of Washington. After graduating, she spent two years as a data analyst at the Allen Institute for Brain Science in Seattle, where she analyzed human brain anatomy, assisted with dissection, and analyzed data for the purposes of labeling DNA and RNA strands.

Dr. Swanson left human medicine in 2010 and earned her DVM at the Washington State University College of Veterinary Medicine in 2014. Then she headed for Connecticut, where she completed a small animal rotating internship at two referral and emergency centers. Once her internship was complete, she moved to New York and completed her Neurology residency at Animal Medical Center. Her areas of veterinary interest include performing spinal surgery, treating immune mediated inflammatory brain disease, and managing epilepsy.

Dr. Christina Waitzman, DVM
Emergency/Critical Care at SAGE Redwood City

Veterinary School: University of California, Davis
Internship Training: Animal Care Center, Sonoma County

Dr. Christina Waitzman earned her Bachelor of Science degree in Zoology from UC Davis and stayed there to earn her DVM. While in veterinary school, she worked as an emergency veterinary assistant and discovered her true passion for emergency medicine. Dr. Waitzman stayed in emergency and critical care after graduating from UC Davis, and has worked at practices across the Bay Area. She finds emergency and critical care medicine to be gratifying and interesting, and she gets immense satisfaction from helping animals and their people in times of need. Her areas of clinical interest are pain management, toxicities, endocrine emergencies, and hypotension/shock.
Carla Wilson, DVM
Emergency/Critical Care at SAGE Redwood City

Veterinary School: University of Melbourne, Melbourne, Australia
Internship Training: VCA San Francisco Veterinary Specialists

Dr. Wilson’s interests in small animal emergency, critical care, emergency surgery, shelter medicine, and oncology have taken her across the globe. She started her career as an animal attendant at a veterinary surgical center in West Toowoomba in southern Queensland, Australia, while earning her Bachelor of Biomedical Science degree at the University of Southern Queensland. After graduating with distinction and a faculty medal, she moved north to the University of Melbourne, where she earned her DVM in 2016.

From 2015 to 2016, Dr. Wilson enjoyed many incredible overseas adventures that gave her diverse experience in the veterinary world. She worked at the Chengdu Zoo and Chengdu Research Base of Giant Panda Breeding in China, where she experienced firsthand the challenges and excitement of giant panda husbandry, handling, and conservation. She traveled to Kathmandu, Nepal to work in a treatment center that helped street dogs. She spent some time in Phuket, Thailand; Beaverton, Oregon; and Brooklyn, New York working in small animal general practices. And she also spent some time here in the Bay Area at the San Francisco SPCA treating shelter animals.

Dr. Wilson is particularly interested in managing critical and complicated cases, particularly emergency and critical surgery cases.

Celia Valverde, DVM, DACVS
Surgery at SAGE Dublin

Veterinary School: School of Veterinary Medicine and Zootechnics, University of São Paulo, Brazil (1985); American Veterinary Medical Association, Educational Commission for Foreign Veterinary Graduates (1991)
Residency Training: Small Animal Surgery, University of California, Davis
Fellowship: Don Low California Veterinary Medical Association Practitioner Fellowship, Anesthesia and Pain Management, UC Davis School of Veterinary Medicine

Dr. Celia Valverde’s passion for healing animals has taken her to every corner of the globe. She earned her DVM degree at the School of Veterinary Medicine and Zootechnics, University of São Paulo, Brazil in 1985. Since 1991, Dr. Valverde has worked primarily with small and exotic animal species at veterinary hospitals across the United States, including the School of Veterinary Medicine at UC Davis where she was on the faculty in various positions from 1990 to 2013. She also completed her Small Animal Surgical residency at UC Davis and received extensive training in soft tissue, orthopedic and oncological procedures, as well as minimally invasive surgery. Dr. Valverde has lectured widely across the United States, Brazil, Guatemala, Honduras, and South Africa on topics ranging from minimally invasive surgery, wound management and bandaging to wildlife medicine rehabilitation.
Elizabeth “Liza” Newsom-Stewart, DVM
Urgent Care at SAGE Redwood City

Veterinary School: Cornell University
Internship Training: Animal Medical Center, New York

Dr. Liza Newsom-Stewart is originally from Connecticut and attended Cornell University for undergraduate and veterinary school. She then completed a rotating internship at the Animal Medical Center in New York City. After completing her internship, Dr. Newsom-Stewart worked as a general practice veterinarian in New York City for six months before moving to San Francisco in February 2018.

Dr. Newsom-Stewart is interested in all aspects of emergency medicine, as well as dermatology and internal medicine.

Rachel Kuester, DVM
Urgent Care at SAGE Redwood City

Veterinary School: Ross University, St. Kitts WI

Dr. Rachel Kuester started her career as a veterinary technician in Bel Air, Maryland. She continued as a technician for more than 10 years, and actively pursued her interests in veterinary medicine, studying Biology and Functional Biology of Animals at schools in the Baltimore area. She traveled to St. Kitts, West Indies for veterinary school and earned her DVM at Ross University in 2011. She returned to Maryland and worked in General Practice for a several years before moving to the Bay Area, where she has worked in small mammal medicine and surgery.

Dr. Kuester enjoys working with small mammals and using low-stress handling strategies to make visits less stressful for them and for their owners.

Meghan Wilhelm, DVM
Urgent Care at SAGE Redwood City

Veterinary School: Michigan State University
Internship Training: VCA Sacramento Veterinary Referral Center

Dr. Meghan Wilhelm hails from Ann Arbor, Michigan where she grew up caring for horses, dogs and wildlife. After earning her undergraduate degree in Political Science from Carleton College she ventured into politics in Washington, D.C. She quickly realized that “those weren’t the animals she was interested in,” and decided to pursue veterinary medicine. After completing her rotating internship in Sacramento, she moved to the Bay Area and now calls San Francisco home.

Since 2010 Dr. Wilhelm has worked in small animal practices in Marin and San Francisco. Her areas of interest include pain management, behavior, internal medicine and emergency medicine.
WITH CARECREDIT, COST WON’T COME BETWEEN YOU AND YOUR RECOMMENDED CARE.

The CareCredit credit card gives clients a way to pay for all the care you recommend. CareCredit can be used for everything from exams and lab tests to surgery, pet food, medicine and parasite control.* In addition, 94% of cardholders are highly satisfied with CareCredit.¹

Already enrolled? Call 800-859-9975, option 1, then 6, to learn how CareCredit can help more pets get the care they need. To get started with CareCredit, call 844-812-8111 and ask for the one-time enrollment fee of $59 by April 30, 2019.

*Subject to credit approval.
¹ Cardholder Engagement Study, Q2 2018.
©2019 CareCredit

www.carecredit.com

SAGE2019VA
SAGE Veterinary Centers welcomed Kris Kruse-Elliott, DVM, Ph.D., DACVAA, to our team in 2018 and we added Anesthesiology to our list of specialties. Dr. Kruse-Elliott works with SAGE specialists and technicians throughout a pet’s hospitalization to ensure the anesthesia and pain management plan is tailored to their specific health issues. Here she answers some of the top questions she hears from General Practice veterinarians about the use of Propofol, the go-to drug for inducing anesthesia in a wide variety of species.

Q: What makes Propofol an effective drug for use in veterinary medicine?
A: Propofol works well for initial intravenous induction of general anesthesia in a wide variety of species, especially dogs and cats. It has a rapid onset of action and because of unique extra-hepatic clearance of the drug, patients recover quite rapidly following its administration. Because it does not accumulate significantly in the body it can be used as a constant rate infusion to maintain anesthesia in patients where inhalant anesthetics are contraindicated.

Q: Are there cases where you would not opt for Propofol, and choose another anesthetic drug instead?
A: In some more compromised patients where we are concerned about cardiovascular function, Propofol might not be the best choice for induction of anesthesia. Alternatively, with adequate adjunct premedication we can still use Propofol, but at a much lower dose and thus better maintain cardiovascular function in sicker patients. Also, if we have a patient with a known allergy to the emulsion, then Propofol should be avoided. Beyond that, it’s really about how you monitor the patient peri-anesthetically more than if you do or do not use Propofol as part of your protocol.

Q: Why do my patients react when I inject Propofol?
A: Propofol injections can sting, particularly when the IV catheter has been in place for more than a few hours, where the vein became irritated by catheter placement or another drug, and in smaller patients with smaller veins. The way to resolve this is to administer a small dose of lidocaine (2%) at 1 mg/kg in dogs and 0.1 ml/cat about 30 seconds prior to administering Propofol.

Q: I’ve had a couple of patients develop seizures right after I’ve given them Propofol. What should I do?
A: Sometimes you will see
seizure-like activity in patients even though Propofol is one of the drugs we use to treat status epilepticus. The solution is not to give more Propofol but rather to transition to inhaled anesthetic and/or give a small 0.5 mg/kg dose of alfaxalone or 1-2 mg/kg dose of ketamine. Giving more Propofol will generally just make the muscle tremors and stiffness worse.

Q: What can I do about my patients always becoming hypoxic and having blue tongue and mucus membranes when I induce with Propofol?
A: Propofol induced apnea happens commonly and can be avoided by proper premedication, pre-oxygenation with a face mask, and very slow titration of the drug in 0.5-1.0 mg/kg increments with 30 seconds minimum between doses to allow the drug to transit from the injection site to the brain sites of effect.

Q: I’m nervous about using Propofol in cats as I have heard it causes anemia, is this true?
A: Propofol in cats can be problematic on rare occasion and it’s still a very commonly used induction drug in cats. It is important to recognize the potential for oxidative damage to red blood cells and some infrequent but known incidence of Heinz body anemia in cats given Propofol, but this is rare and more likely to occur with repeated daily dosing or constant rate infusions over more than just a few hours. Moreover, while the preserved version of Propofol (Propofol 28) is not officially approved for use in cats, it has been used safely at normal induction doses with no worse side effects than those observed with standard Propofol.

Q: If I don’t have Propofol 28, how long can I keep an opened vial of unpreserved Propofol around for use in my patients?
A: Propofol that is not preserved has a short, 6-hour shelf life once the vial is opened. Strict attention to sterile technique is important and the potential for the solution to serve as a medium for the growth of bacteria and fungi should not be ignored. Unless you are frequently doing CRIs, you can likely switch to only using Propofol 28 with a 28-day shelf life and make your life much easier. If you plan to do CRIs or maintenance of anesthesia with Propofol, then you should also stock the unpreserved version.
Pets can’t talk to you about their kidneys. Now, the Catalyst® SDMA Test helps you assess kidney function in-house earlier than any other test.¹⁻³

For deeper insights into kidney health, run SDMA whenever you run BUN and creatinine. Add the Catalyst SDMA Test to every in-house Catalyst chemistry panel so you can advise with confidence.

Visit idexx.com
The FIRST AND ONLY FDA-approved transdermal medication for the management of weight loss in cats

“ANOTHER PILL? GIVE IT TO THE DOG.”

- In clinical studies, Mirataz™ (mirtazapine transdermal ointment) resulted in significant weight gain in cats in as little as 14 days following topical application of 2 mg per day.¹
- Mirataz gives your clients a practical way to manage their cat’s weight loss without administration of oral medication and does not rely on the cat to eat to be medicated.
- Due to proprietary Accusorb™ technology, Mirataz achieves measurable plasma concentrations of mirtazapine in cats.²
- Mirataz was well tolerated both locally and systemically in clinical studies.¹

For more information, contact your KindredBio Sales Specialist at 1-888-608-2542, your preferred Distributor Sales Representative, or go to kindredbio.com/Mirataz

Important Safety Information
Mirataz™ (mirtazapine transdermal ointment) is for topical use in cats only under veterinary supervision. Do not use in cats with a known hypersensitivity to mirtazapine or any of the excipients. Do not use in cats treated with monoamine oxidase inhibitors (MAOIs). Not for human use. Keep out of reach of children. Wear gloves when handling/applying, wash hands after and avoid contact between the treated cat and people or other animals for 2 hours following application. Use with caution in cats with hepatic and kidney disease. Cat’s food intake should be monitored upon discontinuation. Safety has not been evaluated in cats less than 2 kg, less than six months of age or in breeding, pregnant or lactating cats. The most common adverse reactions observed during clinical trials were application site reactions, behavioral abnormalities (vocalization and hyperactivity) and vomiting. For additional safety information, see brief summary of prescribing information on following page.


Mirataz™ and Accusorb™ are trademarks of KindredBio
©2018 Kindred Biosciences, Inc., Burlingame, CA 94010. All rights reserved.
USMAZ1800044. May 11, 2018
**Mirataz™**

(mirtazapine transdermal ointment)

For topical application in cats only. Not for oral or ophthalmic use.

**CAUTION:** Federal law (USA) restricts this drug to use by or on the order of a licensed veterinarian.

Before using this product, please consult the product insert, a summary of which follows:

**INDICATION:** Mirataz™ is indicated for the management of weight loss in cats.

**DOSE AND ADMINISTRATION:** Administer topically by applying a 1.5-inch ribbon of ointment (approximately 2 mg/cat) on the inner pinna of the ears once daily for 14 days. Wear disposable gloves when applying Mirataz™. Alternate the daily application of Mirataz™ between the left and right inner pinna of the ears. See Product Insert for complete dosing and administration information.

**CONTRAINDICATIONS:** Mirataz™ is contraindicated in cats with a known hypersensitivity to mirtazapine or to any of the excipients. Mirataz™ should not be given in combination, or within 14 days before or after treatment with a monoamine oxidase inhibitor (MAOI) (e.g., selegiline hydrochloride (L-deprenyl), amitraz), as there may be an increased risk of serotonin syndrome.

**HUMAN WARNINGS:** Not for human use. Keep out of reach of children. Wear disposable gloves when handling or applying Mirataz™ to prevent accidental topical exposure. After application, dispose of used gloves and wash hands with soap and water. After application, care should be taken that people or other animals in the household do not come in contact with the treated cat for 2 hours because mirtazapine can be absorbed transdermally and orally. However, negligible residues are present at the application site and the body of the cat 2 hours after dosing. In case of accidental skin exposure, wash thoroughly with soap and warm water. In case of accidental eye exposure, flush eyes with water. If skin or eye irritation occurs, seek medical attention. In case of accidental ingestion, or if skin or eye irritation occurs, seek medical attention.

**PRECAUTIONS:** Do not administer orally or to the eye. Use with caution in cats with hepatic disease. Mirtazapine may cause elevated serum liver enzymes (See Animal Safety in the product insert). Use with caution in cats with kidney disease. Kidney disease may cause reduced clearance of mirtazapine which may result in higher drug exposure. Upon discontinuation of Mirataz™, it is important to monitor the cat’s food intake. Food intake may lessen after discontinuation of mirtazapine transdermal ointment. If food intake diminishes dramatically (>75%) for several days, or if the cat cannot be eaten for more than 44 hours, reevaluate the cat. Mirataz™ has not been evaluated in cats <2 kg or less than 6 months of age. The safe use of Mirataz™ has not been evaluated in cats that are intended for breeding, pregnant or lactating cats.

**ADVERSE REACTIONS:** In a randomized, double-masked, vehicle-controlled field study to assess the effectiveness and safety of mirtazapine for the management of weight loss in cats, 115 cats treated with Mirataz™ and 113 cats treated with vehicle control were evaluated for safety. The vehicle control was an ointment containing the same inert ingredients as Mirataz™ without mirtazapine. The most common adverse reactions included application site reactions, behavioral abnormalities (localization and hyperactivity), and vomiting. See Product Insert for complete Adverse Reaction information. To report suspected adverse events, for technical assistance or to obtain a copy of the SDS, contact Kindred Biosciences, Inc. at 1-888-608-2542. For additional information about adverse drug experience reporting for animal drugs, contact FDA at 1-888-FDA-VETS or online at http://www.fda.gov/AnimalVeterinary/SafetyHealth.

**EFFECTIVENESS:** The effectiveness of Mirataz™ (mirtazapine transdermal ointment) was demonstrated in a randomized, double-masked, vehicle-controlled, multi-site field study involving client-owned cats of various breeds. Enrolled cats were ≥1 year of age and had existing documented medical history of at least 5% weight loss deemed clinically significant. The most common pre-existing conditions included renal insufficiency, vomiting, and hyperthyroidism. Some cats had more than one pre-existing condition. Cats were randomized to treatment groups in a 1:1 ratio of Mirataz™ to vehicle control. A total of 250 cats were enrolled and received either Mirataz™ (115 cats) or a vehicle control (115 cats) containing the same inert ingredients without mirtazapine. The cats were 2.8-24.63 years of age and weighed 2.19 kg. The dosage was a 1.5-inch ribbon (approximately 2 mg/cat) mirtazapine or vehicle ointment administered topically to the inner pinna of the cat’s ear. A total of 177 cats were determined to be eligible for the effectiveness analysis; 83 cats were in the Mirataz™ group and 94 cats were in the vehicle control group. The primary effectiveness endpoint was the mean percent change in body weight from Day 1 to the Week 2 Visit. At Week 2, the mean percent increase in body weight from Day 1 was 3.9% in the mirtazapine group and 0.41% in the vehicle control group. The difference between the two groups was significant (p=0.0001) based on a two-sample t-test assuming equal variances. A 95% confidence interval on the mean percent change in body weight for the Mirataz™ group is (2.77, 5.11), demonstrating that the mean percent change is statistically different from and greater than 0.

**STORAGE:** Store below 25°C (77°F). Multi-use tube. Discard within 30 days of first use.

**HOW SUPPLIED:** Mirataz™ is supplied in a 5 gram aluminum tube.

**MANUFACTURED FOR:** Kindred Biosciences, Inc. 1535 Bayshore Highway, suite 200 Burlingame, CA 94010

**NADA 141-481, Approved by FDA**

Made In USA.

NDC 86078-886-01

REG-MTZS-008 Rev. 26April2018

Mirataz™ is a trademark of Kindred Biosciences, Inc. ©2018 Kindred Biosciences, Inc.

All rights reserved.
Your Solution Source

- Over 1,000 Manufacturers including Elanco, Merck, Purina, Securos Surgical, VetOne and Zoetis
- Partnered with Vetsource for home delivery solutions
- ALLYDVM software to help solve daily challenges such as client retention, client compliance and client communication
- Capital equipment for all your procedural needs at equipment.mwianimalhealth.com, with financing options through MWI Financial Solutions
- 24/7 ordering on mwiah.com
The SAGE Learning Network

SAGE Veterinary Centers now offers RACE approved continuing education courses and professional development courses for your Veterinary clinical and non-clinical staff.

Call or e-mail for topics, availability and pricing.

sagelearning@sagecenters.com  |  925-574-SAGE ext.304
At Umpqua Bank, we take the time to get to know you and your business—from day-to-day activities to your personal long-term goals. Because the more we know, the easier it is to offer financial solutions that work for you.

When you bank with Umpqua, you’ll enjoy services like:

**Loans for Growth**
Lines of credit and equipment loans

**24/7 Access**
Online banking, bill pay, remote deposit, night deposit and ATM

**Day-to-Day Financials**
Checking, savings, debit cards, cash management services, payment processing services and payroll services

**Financial Management**
Financial planning and retirement

**Chad Means**
Sr. Commercial Banking Relationship Manager
NMLS: 257927
CALL: (925) 949-2872
chadmeans@umpquabank.com

1 Subject to credit approval
Doctor-Led, Medicine-First Has a New Face at SAGE

Last year, we made some major structural changes and re-committed ourselves to our doctor-led, medicine-first approach to care. We placed Dr. Wendi Velando Rankin, DVM, MS, DACVIM (Oncology), in the Chief Medical Officer post. As the Chief Medical Officer, Dr. Rankin oversees the medical care in all SAGE hospitals, helps develop new departments, and fosters the growth of our hospitals by placing the right doctors in the right positions. SAGE also placed Medical Directors at each of our four hospitals, and built a Medical Advisory board that oversees big-picture topics and goals. The Medical Directors and Medical Advisory Board report to Dr. Rankin and regularly meet to discuss clinical operations that improve the medical care that SAGE provides.

SAGE also created a Learning and Development department that works across the company to ensure our veterinarians, technicians, customer service staff, and managers have the tools they need to continuously grow and improve their skills.

Dr. Wendi Velando Rankin, DVM, MS, DACVIM (Oncology)
Meet the SAGE Medical Directors

When we designed the scope of the Medical Directors’ role, it was important to us that the candidates be practicing veterinarians. They also needed to know their SAGE hospital inside and out. The role of the Medical Director is to assist the doctors in their facilities with maintaining our quality medicine, and to ensure that our doctors have the support they need to take care of our patients.

**Mike Kiselow, DVM, DACVIM**  
(Oncology)  
Specialty Medical Director  
SAGE Campbell

**Gerardo Martin del Campo, DVM**  
Medical Director  
SAGE Concord

**Diane Roberts, DVM, DACVIM**  
Specialty Medical Director  
SAGE Redwood City

**Elizabeth Kollar, DVM**  
ER/CCU Medical Director  
SAGE Campbell

**Andrew Waxman, DVM, DACVIM**  
(Cardiology)  
Medical Director  
SAGE Dublin

**Emily Hanwell, DVM**  
ER/CCU/Urgent Care Medical Director  
SAGE Redwood City

Meet our Medical Advisory Board

Similarly, we wanted our Medical Advisory Board to include doctors who will ensure the quality of our medicine, and who are deeply invested in their chosen specialty and in veterinary medicine as a whole. Since starting the Medical Advisory Board in late summer 2018, the committees that make up the board focus on medicine to benefit patients, clients, and our staff. Here are our veterinary committees:

**Best Practices and Standards of Care**  
This category encompasses topics that include Infection Control and Standard Operating Procedures. This committee is focusing on improving our hospitals’ infection control to improve our patient outcomes and minimize complications. We continuously revisit our standards of care and create documentation for training purposes and to maintain quality medical care.
Our SOPs cover routine procedures and therapies that include: surgeries, anesthesia, and CPR.

The veterinarians involved in Best Practices and Standards of Care include:
- Brandy Ensley (Internal Medicine at SAGE Dublin)
- Leigh Glerum (Surgery at SAGE Redwood City)
- Emily Hanwell (ER/CCU and Urgent Care at SAGE Redwood City and ER/CCU/Urgent Care Medical Director)
- Lissa Richardson (Surgery at SAGE Concord)
- Mark Dosch (Surgery at SAGE Dublin/Concord)
- Mary Ellen Finley (ER/CCU at SAGE Redwood City)
- Ryan Garcia (Internal Medicine at SAGE Campbell)
- Kris Kruse-Elliott (Anesthesia for the SAGE Network of Hospitals)
- Bill Scherrer (Surgery at SAGE Campbell)

Clinical Trials
Our Clinical Trials committee helps us stay informed about what clinical trials are available and in which trials we would like SAGE to participate. This committee also helps us to implement the trials and share information with our staff, referring veterinarians, and our clients.

These veterinarians are on the Clinical Trials committee:
- Martin Crawford-Jakubiak (Oncology at SAGE Concord)
- Ryan Garcia (Internal Medicine at SAGE Campbell)
- Beth Kollar (ER/CCU at SAGE Campbell and ER/CCU Medical Director)
- Shyla Myrick (ER/CCU at SAGE Campbell)
- Catherine Rivara (Internal Medicine at SAGE Campbell)
- Beki Regan (Oncology at SAGE Campbell)

Learning and Development
SAGE is a leader in continuing education, with our Small Animal Symposium educating more than 750 industry professionals a year. We recognize the value of continuing education and we want to provide even more opportunities – inside and outside of SAGE. The Learning and Development committees are responsible for evaluating continuing education opportunities for referring veterinarians and technicians, as well as providing support to externs in academia.

These veterinarians are helping to develop continuing education for technicians and referring veterinarians, as well as other Learning and Development initiatives:
- Mark Dosch (Surgery at SAGE Dublin/Concord)
- Brandy Ensley (Internal Medicine at SAGE Dublin)
- Mary Ellen Finley (ER/CCU at SAGE Redwood City)
- Ryan Garcia (Internal Medicine at SAGE Campbell)
- Leigh Glerum (Surgery at SAGE Redwood City)
- Emily Hanwell (ER/CCU and Urgent Care at SAGE Redwood City and ER/CCU/Urgent Care Medical Director)
- Mike Kiselow (Oncology at SAGE Campbell and Specialty Medical Director)
- Kris Kruse-Elliott (Anesthesia for SAGE Network of Hospitals)
- Gerardo Martin del Campo (ER/CCU at SAGE Concord and Medical Director)
- Lynne Morris (ER/CCU at SAGE Dublin)
- Catherine Rivara (Internal Medicine at SAGE Campbell)
- Bill Scherrer (Surgery at SAGE Campbell)
Techniques and Medical Services/Procedures
This committee’s goal is to help develop the unique procedures we offer (such as minimally invasive surgeries and stenting), and also generate ideas for new therapies and investigate how to best implement these.

These veterinarians are on the Techniques and Medical Services/Procedures committee:
Brandy Ensley (Internal Medicine at SAGE Dublin)
Colleen McCoy (Surgery at SAGE Redwood City)
Diane Roberts (Internal Medicine at SAGE Redwood City and Specialty Medical Director)
Bill Scherrer (Surgery at SAGE Campbell)
Jennifer Strasser (Internal Medicine at SAGE Dublin)

Drugs and Inventory
This committee evaluates new drugs that we want to bring to SAGE for patient treatment. The veterinarians on this team advise us on which drugs to stock and help to ensure we have what we need to accommodate our growing caseload.

These veterinarians are on the Drugs and Inventory committee:
Brandy Ensley (Internal Medicine at SAGE Dublin)
Kris Kruse-Elliott (Anesthesia for SAGE Network of Hospitals)
Micki McCabe (Internal Medicine and Integrative Medicine at SAGE Concord)
Lynne Morris (ER/CCU at SAGE Dublin)
Bill Scherrer (Surgery at SAGE Campbell)
Andrew Waxman (Cardiology at SAGE Dublin and Medical Director)

Medical Records Systems
The Medical Records committee is assisting in the implementation of the rVetLink portal to improve our communication with referring veterinarians.

These veterinarians are on the Medical Records Systems committee:
Lynne Morris (ER/CCU at SAGE Dublin)
Shyla Myrick (ER/CCU at SAGE Campbell)
Noelani Reinker (Internal Medicine at SAGE Redwood City)
Jennifer Strasser (Internal Medicine at SAGE Dublin)
Sharon Ullman (Surgery at SAGE Redwood City)
Andrew Waxman (Cardiology at SAGE Dublin and Medical Director)

Disaster Preparedness
SAGE answered the call to assist first responders during the Camp Fire in Butte County in 2018 – the Disaster Preparedness Committee emerged out of that work. This committee is responsible for developing protocols to ensure we have the right measures in place so we can be ready to assist with veterinary care during unexpected events, such as fires and earthquakes. These veterinarians are on the Disaster Preparedness committee:

Emily Hanwell (ER/CCU and Urgent Care at SAGE Redwood City and ER/CCU/Urgent Care Medical Director)
Mike Kiselow (Oncology at SAGE Campbell and Specialty Medical Director)
Elizabeth Kollar (ER/CCU at SAGE Campbell and ER/CCU Medical Director)
Gerardo Martin del Campo (ER/CCU at SAGE Concord and Medical Director)
Lissa Richardson (Surgery at SAGE Concord)
Diane Roberts (Internal Medicine at SAGE Redwood City and Specialty Medical Director)
Andrew Waxman (Cardiology at SAGE Dublin and Medical Director)

As you can see, we’re growing! Thank you for being a part of the journey.
Your profession is unique. Your insurance should be, too.

Discover the value of VISC – Specializing in insuring veterinary professionals.

Veterinary Insurance Services Company (VISC) is the CVMA’s member-owned brokerage, offering coverages for your business, personal, and health insurance needs. The VISC sales team specializes in insuring veterinary professionals and can develop personalized insurance solutions for your entire veterinary team and their families.

Business Insurance Products
- Veterinary Hospital Business Package
- Veterinary Malpractice
- VMB Defense
- Workers’ Compensation Insurance
- Commercial Automobile
- Commercial Umbrella
- Employment Practices Liability (EPLI)
- Cyber Liability
- Customized Loss Prevention
- Superior Claim Management Services

Personal Lines Products
- Homeowners
- Auto/Motorcycle/Boat
- Condo
- Renters
- Personal Umbrella
- Recreational Vehicle
- Art/Jewelry

Life & Disability
- Disability
- Long Term Care
- Life

Call VISC at 888.762.3143 or email info@visc-ins.com for solutions to all your business and personal insurance needs.

VISC is a wholly-owned subsidiary of the California Veterinary Medical Association | CA Lic. # 0F64180
The SAGE Vet Alliance

Partner with us!
We’re looking to partner with like-minded DVMs to build a different breed of veterinary network that is doctor-led and puts medicine first.

INTERESTED?

TO LEARN MORE, PLEASE VISIT
WWW.SAGEVETALLIANCE.COM
or give us a call at
(833) 839-7243
We thank the sponsors of our 20th Annual Small Animal Symposium

We are grateful for the support of each of our exhibitors

<table>
<thead>
<tr>
<th>American Regent</th>
<th>Andover Healthcare</th>
<th>Animal Arts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Animal Memorial Service</td>
<td>AnimalScan</td>
<td>Anipanion</td>
</tr>
<tr>
<td>Aratana</td>
<td>Assisi Animal Health</td>
<td>Blue Buffalo</td>
</tr>
<tr>
<td>Dechra</td>
<td>ezyVet</td>
<td>Fuzzy Pet Health</td>
</tr>
<tr>
<td>Golden Gate Pharmacy</td>
<td>Henry Schein Animal Health</td>
<td>Hill’s Pet</td>
</tr>
<tr>
<td>ImpriMed, Inc.</td>
<td>InTouch Practice Communications</td>
<td>Johnson &amp; Johnson Animal Health</td>
</tr>
<tr>
<td>Jorgensen Laboratories</td>
<td>Just Food for Dogs</td>
<td>PetCure Oncology</td>
</tr>
<tr>
<td>Restful Paws</td>
<td>Royal Canin</td>
<td>rVetLink</td>
</tr>
<tr>
<td>SAMSUNG/AE Medical Systems</td>
<td>Trupanion</td>
<td>ScriptWorks Compounding Pharmacy</td>
</tr>
<tr>
<td>The One Health Company</td>
<td>San Mateo Neighborhood Pharmacy</td>
<td>Umpqua Bank</td>
</tr>
<tr>
<td>VDx</td>
<td>Wedgewood Pharmacy</td>
<td>Zoetis</td>
</tr>
</tbody>
</table>
SAGE Veterinary Centers would like to thank our Platinum Sponsors

Visc Veterinary Insurance Services Company

and

Preferred Employers Insurance | a Berkley Company

for their participation and support