

Maddie's® Shelter Medicine Program

2009 – 2010



Our Mission: To enhance the health and welfare of homeless animals through education, innovation, and advancement of the life-saving goals of sheltering programs

Annual Report



Program Year Two Annual Report Table of Contents

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Message from the Director

The second year of Maddie's® Shelter Medicine Program at the University of Florida was one of tremendous growth and exploration. In the first year of the program, we began to work closely with sheltering partners, increased the Shelter Medicine coursework available to veterinary students, and implemented a number of valuable research projects. In year two we expanded on those

activities, capturing the momentum we had built and further developing our offerings to veterinary students, advanced trainees, and the sheltering community.

Acknowledging the hunger of veterinary students for Shelter Medicine training, we expanded our elective offerings through a new course in Veterinary Forensic Medicine and also developed and gained college approval for courses in Community Cat Management and Shelter Animal Behavior and Welfare. These courses will greatly broaden the range of topics available to veterinary students, and combined with other courses and experiences available to students, will provide them with a solid base for understanding sheltering issues and the role of the shelter veterinarian. To acknowledge the achievement those who choose to pursue an intensive regimen of Shelter Medicine training, we developed the first Certificate in Shelter Medicine for veterinary students, a standout credential that will support them in their efforts for further Shelter Medicine work, either through internship, residency training, or employment in shelters. Response to the Certificate program has been enthusiastic, and we look forward to graduating the first students in spring 2011.

Perhaps the greatest and one of the most exciting areas of growth this year was the addition of three Shelter Medicine residents to the program. These veterinarians are advanced trainees who will spend three years in an intensive program of study to develop expertise in Shelter Medicine. With outstanding credentials and experience working to better conditions for homeless animals, these residents bring tremendous energy and enthusiasm to the program and our efforts in shelters. From shelter consultations to research projects and resident training modules, residents participate in nearly every aspect of our work in both service and learning capacities. These specialists-in-training will provide the foundation of our growing field in the years to come.

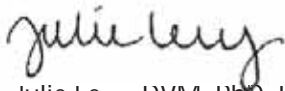
While residencies and internships in Shelter Medicine are priceless training programs, continuing education is essential for veterinary practitioners and shelter technicians whose on-the-ground work impacts animals every day. Through our sold-out second annual Maddie's® Shelter Medicine Conference, the inaugural Maddie's® Veterinary Forensic Science Conference, and numerous other professional trainings and seminars across the globe, we are honored to bring important content and share our enthusiasm and research with Shelter Medicine professionals. Attendees at our conferences provide valuable feedback, painting a clearer picture of their training needs and interests while helping guide decisions for future content.

In the sheltering community, we continue to offer our services to shelter partners through consultation and disease outbreak investigation. While still focused in our Southeast region, our presence continues to grow and this year we worked with shelters in Pennsylvania, Wisconsin, Illinois, and more. In addition to standard consultations, we found new questions of sheltering-turned-disaster when caregivers determined to provide lifelong care to vast numbers of cats were unable to meet the needs of their sheltered populations, resulting

in compromised care and suffering. In such large-scale exercises, local, regional, and national organizations collaborated to address the fallout through medical triage, investigation, and adoption and rescue. Through our training, consultation, and educational efforts, we hope to bring greater knowledge and resources to battle suboptimal sheltering operations, always looking to improve quality of life and ultimately finding positive outcomes for sheltered animals.

As we move forward into program year three, we at Maddie's® Shelter Medicine Program at UF are looking forward to building on our successes to date and stabilizing our program after this initial period of dramatic growth. Our relationships with shelters represent tremendous opportunities to teach and to learn, a partnership that serves to move our field forward so that veterinarians can play the vital role in lifesaving for which their training and passion has equipped them. On behalf of the trainees, shelters, and animals we serve, we appreciate the leadership of Maddie's Fund® in supporting Shelter Medicine at veterinary colleges across the country and in our program at the University of Florida.

Sincerely,

A handwritten signature in cursive script that reads "Julie Levy".

Julie Levy, DVM, PhD, DACVIM
Program Director

Maddie's® Shelter Medicine Program
University of Florida College of Veterinary Medicine
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Gainesville, FL 32610
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Core Strategy: Shelter evaluation and extension services

- Performed four comprehensive and four targeted onsite shelter consultations for agencies serving over 91,000 animals annually
 - 4 traditional shelters
 - 4 no-kill agencies
- Provided assistance in disease surveillance and outbreak response assistance to 39 agencies serving over 135,000 animals annually
 - 10 traditional shelters
 - 25 no-kill agencies
 - 4 trap-neuter-return organizations
- Participated in two large-scale feline rescue events affecting 1,000 cats

Shelter Consultation

Phone and email consultation is performed by our team members on an almost daily basis, while onsite shelter consultations are less frequent but provide invaluable insights for in-depth evaluation of shelter issues. From Orlando to Chicago, Philadelphia to Milwaukee, this year has taken our program across the country to bring the vital perspective of Shelter Medicine to shelter leaders committed to making changes to improve animal welfare and outcomes. Some shelters were high-functioning agencies looking for ways to take their operations to the next level, while others were seeking input to deal with fundamental challenges like infectious disease.



At PAWS Chicago, the key to saving more lives and minimizing disease turned out to be the “Fast Track” to adoption recommended by our consultants. After a thorough onsite visit, our team was able to identify roadblocks in the lifesaving process and recommended new strategies for moving highly adoptable pets through the system and to their new homes quickly and efficiently. This new approach reduced the risk of disease for vulnerable animals like puppies and kittens while increasing the number of pets that could be saved.

Shelter consultations served as priceless learning opportunities for our new residents, as they explored sheltering challenges in situ, researched and discussed the issues with faculty, and developed recommendations for improvements. With a year and a half of consulting experiences behind the core team, in March we brought our first veterinary students to a comprehensive shelter consultation at the private no-kill Jacksonville Humane Society, followed soon after by Orlando’s public open-admission Orange County Animal Services. Teaming up with residents, each veterinary student assisted with the collection of data and diagnostic samples, learned through discussions and brainstorming sessions, and was able to observe the consultants’ exit reports.



Extension Services for Disease Surveillance, Outbreak, and Response

When battling disease, shelters often lack the resources and expertise to diagnose and effectively address illness in their sheltered pets. We were fortunate to be able to help dozens of shelters and their veterinarians use diagnostic testing to investigate the causes of disease in their facilities, using sound science to make treatment recommendations.

Just as importantly, we advised our sheltering partners on ways to prevent future occurrences and outbreaks. Diseases we encountered ran the spectrum: canine distemper and parvovirus, feline herpes and panleukopenia, and even such threats as canine influenza, tritrichomonas, and *Streptococcus zooepidemicus*.

Disaster Medicine and Large-Scale Field Exercises

When the City of LaBelle Animal Control, a small rural Florida agency, found itself faced with the closure of a cat sanctuary unable to care for its 600 feline residents, a collaborative response was the only solution for the massive undertaking: medically evaluating and finding placement for the cats. Our program brought faculty, residents, staff, and veterinary student volunteers to this field-based exercise. National and regional agencies banded together to provide triage, care, and placement for the cats.



A tragically similar situation in Pennsylvania drew a small contingency from our program, and only served to underscore the importance of compassionate and realistic goals and



operational standards for any shelter, particularly those which commit to a lifetime of care for each animal. The management, animal health, and sustainability issues repeatedly found in cat sanctuaries make it clear that this model is fraught with challenges. We hope to continue to use extension services, field exercises, and continuing education opportunities to train veterinarians, investigators, and agency leaders to further bring these issues to light and identify lifesaving solutions with long-term potential.

Core Strategy: Training of shelter medicine professionals and general practitioners

- Provided intensive advanced training to three residents in Shelter Medicine
- Hosted second annual Maddie's® Shelter Medicine Conference, with 220 attendees
- Hosted inaugural Veterinary Forensic Science Conference and Wet Lab, with 70 attendees
- Lectured at six national/international veterinary continuing education meetings
- Presented 12 lectures to 1400 attendees at veterinary medical associations and colleges of veterinary medicine
- Presented nine shelter technician and practitioner seminars

Maddie's® Residency Program

The arrival of three residents in Shelter Medicine in July 2009 was an important milestone for our program. These veterinarians, experts-in-training, are pioneers in this developing field, and with their drive, passion, and commitment, will be the foundation for our emerging specialty. Prior to joining the residency program, these individuals have been in practice or advanced training, and each brings their unique perspective and experiences to the program. Our original objective for year two was to admit one new resident, but with the support of Maddie's Fund® and the Sweetbay Foundation, we admitted three: two first-year residents, Drs. Laura Andersen and Catherine McManus, and one third-year transfer, Dr. Brian DiGangi. While supporting the intensive training of three house officers represents a greater demand on faculty time, the larger group has made for a rich learning environment as they train together to become specialists in Shelter Medicine and true leaders in our field.



To fulfill a robust educational plan and prepare them for possible future board certification in Shelter Medicine, the residents were immediately immersed in training and throughout the year participated in nearly every aspect of the program. Through the week-long "Shelter Medicine 101" course, they received a solid introduction to the foundations of Shelter Medicine, including a history of the specialty, wellness, vaccination, population management, cleaning and disinfection, recordkeeping, and more. Spring brought another intensive series, "Shelter Medicine 102: Foundations in Behavioral Health," which culminated with hands-on exercises in training, enrichment, and assessment for sheltered cats and dogs. Our use of webinar format enabled residents from the University of Pennsylvania, University of California-Davis, Purdue and Mississippi State University join in these important trainings.

Throughout the year, the residents also participated in clinical training for veterinary students at the local animal shelter, attended Shelter Medicine conferences and lectures, presented published articles to the Shelter Medicine journal club and national rounds, and lectured in biosecurity and infectious diseases. They received training and experience in the forensic aspect of Shelter Medicine through a hands-on lab with



internationally recognized pioneer in veterinary forensics, Dr. Melinda Merck, and participation in cruelty investigations. Our residents also developed plans for their residency research projects, collecting data on diseases in shelters and connecting with the regional sheltering community. Also vital to resident training were our shelter consultations, in which all residents participated, leading assessment topic areas through observations, research, and presentation of recommendations. As he prepared to complete his residency in July 2010, Dr. DiGangi took the lead

consultant role in our assessment of Orange County Animal Services, guiding the consultation from start to finish in a true capstone for his specialist training.

Continuing Education for Veterinarians and Shelter Staff

Bringing Shelter Medicine training to practitioners across the region and country continued to be an important area of growth in our program's second year. The 2nd Annual Maddie's® Shelter Medicine Conference in Gainesville sold out with more than 200 attendees from 22 states and from as far away as Brazil. We were delighted to work with Maddie's Fund®, whose support brought a second day of rich content to the conference, enabling participants to spend one day discovering successful program and leadership strategies for saving lives and the another day focusing on veterinary forensics and infectious disease management.

Later in the year, MSMP hosted our first Maddie's® Veterinary Forensics Conference in Gainesville (Veterinary Forensic Science: The Key to Successful Cases), introducing the important topics of evidence documentation, forensic testing, and cruelty examination. Despite the burden placed on shelter veterinarians in investigation of animal cruelty and the need for private practitioners to operate with a solid understanding of cruelty and abuse, hands-on training in many aspects of veterinary forensics remains an under-addressed area of training for current practitioners and even new graduates. We began to seek to remedy this deficiency at our conference through a forensic necropsy wet lab for veterinarians and veterinary students. In this highly-rated session, trainees were provided instruction in the collection of forensic evidence and analysis of non-accidental injury in animal victims.



Presentations, seminars, and national/international meetings represented opportunities to share Shelter Medicine knowledge in even more venues outside our own backyard, with sessions presented by faculty on topics including infectious disease, community cat management, non-surgical sterilization, feline retroviral infections, and heartworm management in shelters. The reach for these trainings is great: MSMP presented seminars at the Southern European Veterinary

Conference, Western Veterinary Conference, Feline Forum, the International Symposium on Non-Surgical Contraceptive Methods of Pet Population Control, and HSUS EXPO, in addition to numerous others. With the advent of the vaccine for the canine influenza virus, Dr. Crawford's expertise on the topic as the virus' co-discoverer was in also high demand throughout the year. Goals for continuing education trainings for shelter technicians and veterinarians were surpassed, more than doubling our original targets.

Core Strategy: Training of veterinary students

- Taught three veterinary student elective courses:
 - Introduction to Shelter Medicine, 24 students
 - Introduction to Veterinary Disaster Response, 79 students
 - Veterinary Forensic Medicine, 29 students
- Taught three shelter medicine lectures in required courses reaching all freshmen and senior veterinary students
- Enrolled the first participants in the nation's first and only Certificate in Shelter Medicine for veterinary students
- Supported eight students in Maddie's® Shelter Medicine Externships

Courses and Lectures

The veterinary students at the University of Florida are hungry for training in Shelter Medicine. Their altruistic nature, personal experience working with and in shelters, and vision for a more humane future call them to this field. During the second year of our program, we again offered introductory elective courses in Shelter Medicine and Veterinary Disaster Response, as well as UF's first course in Veterinary Forensic Medicine. To diversify upcoming course availability, we moved forward with production of Community Cat Management and Shelter Animal Behavior and Welfare, areas in which veterinarians with solid training can have life-changing and life-saving impact in shelters.

Both courses were approved for presentation the next year.



In addition to elective courses, Shelter Medicine faculty presented lectures throughout the veterinary curriculum and continue to look for opportunities to integrate Shelter Medicine content into training for all UF veterinary students. Lectures presented this year included Feline Population Medicine, Shelter Medicine Research, discussion of Feral and Community Cats, and more. Faculty and residents also taught in numerous wetlabs with the Student Chapter of the Association of Shelter Veterinarians and the Student Chapter of the American Association of Feline Practitioners.

Certificate in Shelter Medicine

One of the most exciting achievements for our program in veterinary student training this year was the development and approval of a new Certificate in Shelter Medicine. Certificates are unique to UF, and this program joins a select few that acknowledge an intensive training regimen during a student's veterinary school career. Through a combination of required courses, elective offerings, externships, and more, we will expose students to a cross-section of opportunities in the field: care of sheltered animals, animal disaster management, cruelty investigation and forensics, shelter animal behavior and welfare, high-quality high-volume sterilization surgery, and research in Shelter Medicine. The first students enrolled in the program are slated to graduate with this new credential in Spring 2011.





Maddie's® Externship Program

No Shelter Medicine training program is truly complete until students have stepped foot in an animal shelter, a living organism of sorts that looks to those in our field for insight, technical skill, and leadership. We were pleased to support eight veterinary students in externship programs at no-kill and traditional shelters across the region and country, pairing them with veterinary teams to provide care and learn first-hand about the challenges facing shelter veterinarians and shelter animals. Challenges included restrictions on time, financial resources, the demand for surgical performance, and limited integration into population management decisions at shelters. Students overwhelmingly return with a desire to better integrate veterinary expertise into shelter operations to save more lives.

Core Strategy: Research and development of new knowledge to solve existing and emerging threats

- Initiated five new shelter health research projects
- Published four articles in veterinary journals, including the Journal of the American Veterinary Medical Association and the Journal of Applied Animal Welfare Science

Maddie's® Research Program

To better understand threats to shelter animal health and make evidence-based recommendations for addressing those threats, shelter health research is a fundamental strategy for our program. This year we worked with six student researchers through Maddie's® Research Program and the Merck-Merial NIH Veterinary Scholars Program. With an eye to understanding the current state of heartworm management for cats and dogs in shelters, Kiri Dunn and Kathleen Colby developed detailed surveys for shelters across the Southeast. Their results showed that few shelters comply with recommendations of the American Heartworm Society, primarily citing financial and staff resource limitations. In addition, the need for veterinary oversight was brought to light as many policies were based on incorrect understanding of heartworm pathobiology. Ms. Dunn and Colby presented their research posters at the 13th Triennial Symposium of the American Heartworm Society, with Ms. Dunn's work on feline heartworm protocols receiving the award for best research poster. Students Stephanie Sabshin and Tiffany Tupler examined another shelter health concern, feline and canine enteropathogens in the shelter.

Collecting fecal samples from animals within 24 hours of shelter entry, they discovered that most animals had at least one pathogen, and many were of animal or zoonotic concern. As



those projects entered the manuscript submission phase, new student researchers began their projects. Sara Salomon commenced research for her project detecting antibodies to influenza A, while Lauren Gray began her research comparing two screening tests for canine distemper and canine parvovirus antibodies in shelter dogs.

In addition to closely working with veterinary students for all aspects of their research, faculty also mentored resident research and data collection. Drs. McManus and Andersen began their investigations into respiratory and enteropathogen prevalence in different feline management models (TNR programs, shelters, foster homes, and sanctuaries), while Dr. DiGangi commenced his resident research examining protective antibody titers and vaccination efficacy in cats entering shelters.

Research Publications

Transmitting the knowledge gained in shelters and the laboratory to practitioners and other researchers is essential for the field to move forward with quality information and recommendations. This year we published four articles in veterinary journals, while numerous other manuscripts are in the draft and submission stages.

White SC, Jefferson E, Levy JK. Impact of publicly sponsored neutering programs on animal population dynamics at animal shelters: the New Hampshire and Austin experiences. J Appl Anim Welfare Sci 2010;13:191-212.

Tzipory N, Crawford PC, Levy JK. Prevalence of *Dirofilaria immitis*, *Ehrlichia canis*, and *Borrelia burgdorferi* in pet dogs, racing greyhounds, and shelter dogs in Florida. Vet Parasitol 2010;171:136-139.

Dingman P, Levy JK, Kramer LH, Johnson CM, Lappin MR, Greiner EC, Courtney CH, Tucker SJ, Morchon R. Association of *Wolbachia* with heartworm disease in cats and dogs. Vet Parasitol 2010;170:50-60.

Lechner ES, Crawford PC, Levy JK, Edinboro CH, Dubovi EJ, Caligiuri R. Prevalence of protective antibody titers for canine distemper virus and canine parvovirus in dogs entering a Florida animal shelter. J Am Vet Med Assoc 2010;236:1317-1321.



Visibility and Impact in the Field

- Visible in more than 50 media articles and stories

Media Visibility

Our shelter and research work and the support of Maddie's Fund® continues to gain visibility in both public and trade news sources. In communities, this exposure brings greater awareness to the connectedness of animal issues and the people who care about them. In the veterinary field, greater attention to Shelter Medicine topics helps raise our subfield into the consciousness of general practitioners, empowering them to understand the issues and take further steps to become involved. Selected media mentions over program year two are listed below.

New vaccine should help prevent canine influenza
The Veterinary Page, July 2009
http://www.vetmed.ufl.edu/college/pr/documents/July09_002.pdf

Consults: 10 Things to Know About the H3N8 Dog Flu
The New York Times, 7/2/2009
<http://consults.blogs.nytimes.com/2009/07/02/10-things-to-know-about-the-h3n8-dog-flu/>

Letter to the Editor: Operation Catnip a rousing success
Gainesville Sun, 10/19/2009
<http://www.gainesville.com/article/20091019/OPINION02/910179971?p=3&tc=pg>

Cat rescue underway at pet sanctuary
WBBH TV-2 (NBC), 11/23/2009
<http://www.nbc-2.com/Global/story.asp?S=11560763>

UF plays key role in ambitious cat rescue effort in South Florida
The Veterinary Page, December 2009
http://www.vetmed.ufl.edu/college/pr/documents/December09_001.pdf

UF program helps relocate more than 450 cats
Gainesville Sun, 12/6/2009
<http://www.gainesville.com/article/20091206/ARTICLES/912061012>

Matt Reed: Animal services cleaning up its act
Florida Today, 12/20/2009
<http://pqasb.pqarchiver.com/floridatoday/access/1925036821.html?FMT=ABS&date=Dec+20%2C+2009>

Holly the Dog
WCJB TV-20 (ABC), 12/20/2009
<http://www.wcjb.com/news/5766/holly-the-dog>

Blind, Traumatized Cat Bounces Back
HSUS, 2/1/2010
http://www.humanesociety.org/news/news/2010/02/tenth_life_020110.html

Phi Zeta Research Emphasis Day at UF CVM honors achievement at many levels
The Veterinary Page, February 2010
http://www.vetmed.ufl.edu/college/pr/documents/February2010_002.pdf

UF veterinarians: Canine distemper virus in wildlife puts local dogs at risk
UF HSC News, 2/18/2010
<http://news.health.ufl.edu/2010/7937/colleges/college-of-veterinary-medicine/uf-veterinarians-canine-distemper-virus-in-wildlife-puts-local-dogs-at-risk/>

Distemper Outbreak in Florida
WUFT News, 2/18/2010
<http://www.wuft.tv/news/index.php?id=373>

Control, not death, for feral cat colonies
Herald Tribune, 2/26/2010
<http://www.heraldtribune.com/article/20100226/COLUMNIST/2261021>

Rescued dog finds belly rubs, love in new home
Gainesville Sun, 5/26/2010
<http://www.gainesville.com/article/20100526/ARTICLES/5261009/1118?Title=Rescued-dog-finds-belly-rubs-love-in-new-home>

Our Team

Faculty



Julie K. Levy, DVM, PhD, Diplomate ACVIM

Maddie's® Professor of Shelter Medicine

Director, Maddie's® Shelter Medicine Program at the University of Florida

Dr. Levy's clinical interests center on feline infectious diseases, neonatal kitten health, humane alternatives for cat population control, and immunocontraceptive vaccines for cats. She is the founder of two university-based feral cat spay/neuter programs which have sterilized more than 40,000 cats since 1994 (Operation Catnip). Dr. Levy's accomplishments include publication of more than 100 journal articles and textbook chapters.



Cynda Crawford, DVM, PhD

Maddie's® Clinical Assistant Professor of Shelter Medicine

Dr. Crawford's interests include diagnosis, treatment, management, and prevention of infectious diseases in dogs and cats in sheltering facilities. Her current focus is the diagnosis of viruses and bacteria that cause acute respiratory infections in dogs in shelters. Dr. Crawford's accomplishments include discovery of canine influenza virus and evaluation of diagnostic assays for feline immunodeficiency virus.

Residents



Laura A. Andersen, DVM
Maddie's® Shelter Medicine Resident

Dr. Andersen is a resident in shelter medicine at UF. In addition to the residency, Dr. Andersen is currently pursuing an MPH from the University of Minnesota. She graduated with great distinction from Iowa State University having earned a BS in Microbiology with a minor in Food Science before attending ISU's College of Veterinary Medicine. While working toward her DVM degree, she developed a special interest in shelter medicine. She helped co-found the college's Association of Shelter Veterinarian's Student Chapter. During her senior year, she gained experience at five different shelters as part of an externship through the UC Davis Koret Shelter Medicine Program which cemented her desire to pursue a career in shelter medicine. After graduation, she worked in private practice and shelters in western North Carolina. Dr. Andersen's interests include veterinary forensics, public health, emergency response/preparedness, the "Link" between domestic violence and animal cruelty, infectious disease control and pathology.



Brian A. DiGangi, DVM
Sweetbay Shelter Medicine Resident

Dr. DiGangi is a third-year shelter medicine residency transfer. During his veterinary school career, he completed clinical externships in both shelter medicine and exotic animal medicine. As co-founder of the University of Florida Student Chapter of the Association of Shelter Veterinarians, he volunteered at the county animal shelter on a regular basis, organized spay-neuter wet labs for students, regularly participated in Operation Catnip, and fostered animals for local rescue organizations. Dr. DiGangi is concurrently pursuing a Master of Science degree in Veterinary Medical Sciences at UF. Special interests include cleaning and disinfection; high quality, high volume spay-neuter techniques; and enhancing the welfare of animals in shelters.



Catherine McManus, DVM, MPH, Diplomate ACVPM
Maddie's® Shelter Medicine Resident

Dr. McManus is board certified with the American College of Veterinary Preventive Medicine. Her interests include infectious disease prevention in animal shelter populations, the health and safety of animal shelter workers and volunteers, the rabies virus, and hoarding. Prior to becoming a shelter medicine resident, Dr. McManus was a veterinary epidemiologist with the Virginia Department of Health and a Veterinary Corp Officer on active duty with the US Army. In her free time, she works as a small animal relief veterinarian, volunteers as a feral cat spay/neuter clinic veterinarian, and fosters orphaned dogs. Dr. McManus also continues to serve as a veterinarian in the US Army reserves.

Staff



Rachel Michaud, BA, CAWA
Maddie's® Shelter Medicine Program Coordinator

Ms. Michaud, a Certified Animal Welfare Administrator, manages the business and outreach components of Maddie's Shelter Medicine Program, including fiscal administration, course and consultation logistics, electronic newsletters, website development, and coordination of special events. With a background in nonprofit administration, Ms. Michaud is committed to mission-based management and has directed the development of shelter programs including adoption, foster care, volunteer services, and low-cost spay and neuter. She is particularly interested in progressive management in sheltering agencies and innovative, replicable lifesaving programs.



Sylvia Tucker, BS
Biological Scientist
Maddie's Shelter Medicine Program at the University of Florida

Ms. Tucker coordinates the research programs of Maddie's Shelter Medicine Program to develop new knowledge in areas where insufficient information exists today. Her research experience includes testing a GnRH vaccine that may provide an alternative to surgical sterilization in cats, developing improved tests for canine influenza virus, determining the most common causes of respiratory disease outbreaks in shelter dogs, investigating usage patterns of identification microchips by shelters and veterinarians, testing identification collars for cats, and determining infectious disease rates in shelter animals.

We at Maddie's® Shelter Medicine Program at the University of Florida have been honored to work on behalf of homeless animals over the past two years. We thank Maddie's Fund® for the generous support that makes this work possible.

Appendices

Maddie's® Shelter Medicine Conference Agenda

Maddie's® Veterinary Forensics Conference Agenda

Abstract: Impact of Publicly Sponsored Neutering Programs, JAAWS

Certificate Program in Shelter Medicine

Feline Heartworm in Animal Shelters Research Poster

**2009 Maddie's®
SHELTER MEDICINE
CONFERENCE**
UNIVERSITY of FLORIDA

PARAMOUNT PLAZA | OCTOBER 23-24
GAINESVILLE, FLORIDA

FRIDAY, OCTOBER 23, 2009

Achieving Adoption Guarantee

Presented by Maddie's Fund®, The Pet Rescue Foundation



The Pet Rescue Foundation

| | |
|---|--|
| 7:15 - 8:10 AM Foyer / Bivens Arm Ballroom / Ballroom A | Registration / Continental Breakfast / Exhibits Conference Materials Sponsored by <i>Merial</i> Continental Breakfast Sponsored by <i>Fort Dodge Animal Health</i> |
| 8:10 - 8:30 AM Ballroom B&C | <u>Welcome</u> Dr. Julie Levy, Director of Maddie's® Shelter Medicine Program, University of Florida <u>Getting to a No-Kill Nation</u> Rich Avanzino, President, Maddie's Fund®, The Pet Rescue Foundation |
| 8:30 - 10:00 AM Ballroom B&C | <u>Making the Move to Adoption Guarantee: Getting Stakeholders on Board</u> Robin Robertson Starr and Suzanne Kogut |
| 10:00 - 10:30 AM Ballroom A | Break Sponsored by <i>Fort Dodge Animal Health</i> |
| 10:30 AM - 12:00 Ballroom B&C | <u>Taking the Guesswork Out of Shelter Pet Evaluations: Creating and Implementing a Pet Evaluation Matrix</u> Dr. Laurie Peek, Pam McCloud Smith, Tamsen Kingry, and Sarah Babcock |
| 12:00 - 1:30 PM Bivens Arm Ballroom | <u>Luncheon: How Shelter Medicine is Helping Create a No-Kill Nation</u> Dr. Julie Levy Sponsored by <i>Maddie's Fund®</i> |
| 1:30 - 3:00 PM Ballroom B&C | <u>Busting the Warehousing Myth</u> Dr. Jan Scarlett and Bonney Brown |
| 3:00 - 3:30 PM Ballroom A | Break Sponsored by <i>Fort Dodge Animal Health</i> |
| 3:30 - 5:00 PM Ballroom B&C | <u>The Magic of Fostering</u> Brenda Barnette |
| 5:15 - 6:45 PM Bivens Arm Ballroom | <u>Dinner: Canine Influenza: An Emerging Threat to Animal Shelters</u> Dr. Cynda Crawford Sponsored by <i>Intervet Schering-Plough Animal Health</i> |

SATURDAY, OCTOBER 24, 2009

Shelter Medicine: From “CSI” to “Outbreak”

| | |
|---|---|
| 7:15 - 8:20 AM Foyer / Bivens Arm Ballroom / Ballroom A | Registration / Continental Breakfast / Exhibits Conference Materials Sponsored by <i>Merial</i> Continental Breakfast Sponsored by <i>PetSmart Charities</i> |
| 8:20 - 8:30 AM Ballroom B&C | <u>Welcome</u> Dr. Julie Levy, Director of Maddie’s [®] Shelter Medicine Program, University of Florida |
| 8:30 - 10:00 AM Ballroom B&C | <u>Animal CSI: Forensic Investigation of Animal Cruelty, Part I</u> Dr. Melinda Merck |
| 10:00 - 10:30 AM Ballroom A | Break Sponsored by <i>PetSmart Charities</i> |
| 10:30 AM - 12:00 Ballroom B&C | <u>Animal CSI: Forensic Investigation of Animal Cruelty, Part II</u> Dr. Melinda Merck |
| 12:00 - 1:30 PM Bivens Arm Ballroom | <u>Luncheon: Capturing Cats</u> Rachael Kreisler |
| 1:30 - 2:30 PM Ballroom B&C | <u>Feline Upper Respiratory Infection</u> Dr. Julie Levy |
| 2:30 - 3:30 PM Ballroom B&C | <u>Skin Disease in the Shelter: What Can Be Done?</u> Dr. Natalie Isaza |
| 3:30 - 3:50 PM Ballroom A | Break Sponsored by <i>PetSmart Charities</i> |
| 3:50 - 4:50 PM Ballroom B&C | <u>Managing Disease Outbreaks</u> Dr. Cynda Crawford |
| 4:50 - 5:15 PM Ballroom B&C | <u>Question and Answer Panel</u> Drs. Julie Levy, Natalie Isaza, and Cynda Crawford |



Special thanks to *IDEXX Laboratories*
for providing registration scholarships for
deserving shelter employees,
veterinarians, and veterinary students.

VETERINARY FORENSIC SCIENCE



THE KEY TO
SUCCESSFUL CASES

SATURDAY, MARCH 20

| | |
|--|---|
| 7:00 - 8:00 AM | Registration Conference Materials Sponsored by <i>TBD</i> |
| 8:00 - 8:30 AM | <u>Welcome</u> Dr. Melinda Merck |
| 8:30 - 9:30 AM | <u>Evidence Documentation</u> Amy Kinsey |
| 9:30 - 10:00 AM | Break |
| 10:00 - 10:50 AM | <u>Animal CSI: When, Where, and How to use Forensic Testing</u> Dr. Melinda Merck |
| 11:00 AM - 12:00 PM | <u>Exhuming the Buried Body: Start to Finish</u> Dr. Jason Byrd |
| 12:00 - 1:30 PM <i>Location TBD</i> | Lunch |
| 1:30 - 2:20 PM | <u>Exhuming the Buried Body: Start to Finish, Continued</u> Dr. Jason Byrd |
| 2:30 - 3:30 PM | <u>Exam of the Live and Deceased Victim: The Role of First Responders and Veterinarians</u> Dr. Melinda Merck |
| 3:30 - 4:00 PM | Break |
| 4:00 - 5:00 PM | <u>Exam of the Live and Deceased Victim: The Role of First Responders and Veterinarians</u> Dr. Melinda Merck |

SUNDAY, MARCH 21

8:00 AM - 12:00 PM Forensic Necropsy Wet Lab

White SC, Jefferson E, Levy JK. Impact of publicly sponsored neutering programs on animal population dynamics at animal shelters: the New Hampshire and Austin experiences. J Appl Anim Welfare Sci 2010;13:191-212.

This study evaluated the potential impact of publicly sponsored neutering programs on shelter intake and disposition statistics. We particularly interested in reviewing data from New Hampshire as claims have been made that a relatively low rate of targeted neutering of pets in low-income families was associated with decreased shelter intake and euthanasia. We found that a trend for improved outcomes for dogs in NH shelters had started at least 8 years before the publicly funded neutering program began. By the time the neutering program was implemented in 1994, shelter dog intake had fallen to less than 4 dogs/1,000 residents, dogs were being imported from other regions for adoption, and annual dog intake had stabilized. Not surprisingly, the low rate of targeted neutering was not associated with any further improvement in intake or euthanasia. Statewide dog euthanasia stabilized at less than 1 dog/1,000 residents, one of the lowest rates in the country. The situation was different for cats. A trend for decreased shelter intake and euthanasia had started only 2 years before the neutering program began. The trend continued to improve until 1999, when intake but not euthanasia again increased. For several years at the end of the study, cat euthanasia remained less than 3 cats/1,000 residents. Together, these findings suggest that euthanasia rates were highly, but not exclusively, tied to intake rates. While the impact of community interventions on these falling rates could not be determined in this study, it appears that a low rate of targeted neutering was not a decisive factor.

Certificate *in* Shelter Medicine

University *of* Florida
College *of* Veterinary Medicine

UF | College of Veterinary Medicine

Helping shelters

Healing animals

Saving lives





"I have always been passionate about animal welfare and advocacy."

*"This passion has drawn me to shelter medicine, a branch of veterinary medicine that focuses on the welfare of a huge number of animals... I know the **certificate program** will provide me with knowledge, skills, and contacts that will be very important and useful in the future."*

*Catherine Kang
Class of 2013*

ABOUT THE CERTIFICATE PROGRAM

The Certificate in Shelter Medicine at the University of Florida College of Veterinary Medicine will expose students to a cross-section of opportunities in the field, including care of sheltered animals, animal disaster management, cruelty investigation and forensics, shelter animal behavior and welfare, high-quality high-volume sterilization surgery, and research in shelter medicine.

A Special Projects elective offers the opportunity for mentored participation in an in-depth topic, such as working with a shelter



to perform a shelter population management analysis, an infectious disease outbreak intervention, or the creation and implementation of shelter medicine protocols.

The Certificate will identify students who have completed an intensive training program in this field, providing a valuable credential for students seeking employment in animal sheltering or the pursuit of residency training.

See how we're helping shelters at www.UFShelterMedicine.com



CURRICULUM

The certificate program includes 8 units of required courses, clerkships, and externships and 7 units of electives selected from 12 units of elective offerings.

All required and elective credits also fulfill credits toward the DVM degree with the exception of 1 unit of elective credit for attending shelter medicine-related continuing education, which does not count toward the degree.



Certificate course offerings span all four years of

the curriculum and are offered at least once each year. Students must enroll in the certificate program by the end of the junior year, but are encouraged to enroll as soon as they



identify interest in the program. A faculty advisor from the Shelter Medicine Program will be appointed for each enrolled student. The Shelter Medicine Program will maintain a database of each student's progress and will report completed certificates to the Office of Instruction.



Certificate programs are unique to the University of Florida. The Certificate in Shelter Medicine is the fourth such offering, joining other intensive programs in International Veterinary Medicine, Food Animal Medicine, and Aquatic Animal Health.



FACULTY AND STAFF IN SUPPORT OF THE UF CERTIFICATE PROGRAM

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MORE INFORMATION

For more information or to enroll in the Certificate Program, contact Dr. Julie Levy.



CERTIFICATE IN SHELTER MEDICINE

| Required Courses | Credits |
|--|---------|
| Introduction to Shelter Medicine | 1 |
| Introduction to Disaster Response | 1 |
| Shelter Animal Medicine Clerkship | 2 |
| Shelter Externship | 2 |
| Spay/Neuter Externship | 2 |
| | |
| Elective Courses | Credits |
| Consultations in Shelter Animal Medicine Clerkship | 2 |
| Veterinary Forensic Medicine | 1 |
| Shelter Animal Behavior and Welfare | 1 |
| Shelter Externship #2 | 2 |
| Community Cat Management | 1 |
| Individualized Investigation (shelter topic) | 2 |
| Special Projects (shelter topic) | 2 |
| Continuing Education Meeting (shelter topic) | 1 |





MADDIE'S® SHELTER MEDICINE PROGRAM

Our mission is to enhance the health and welfare of homeless animals through education, innovation, and advancement of the life-saving goals of sheltering programs.

MADDIE'S FUND®

Maddie's® Shelter Medicine Program is underwritten by a grant from Maddie's Fund®, the Pet Rescue Foundation (www.maddiesfund.org), helping to fund the creation of a no-kill nation.



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en entered into
between agency



Number of agencies that p m

leted the survey.
cats admitted in
14%) when
admitted 1000 or
2).

twice as likely to
l cats (38%) for
ured to the larger

Figure 3. Agencies <1000

