A Proposal to Maddie’s Research Program to Fund a
Shelter Medicine Course, Student Externship and a
Summer Scholars Program in Shelter Medicine
at the University of Wisconsin-Madison School of Veterinary Medicine

A Course in Shelter Medicine

The University of Wisconsin – Madison, School of Veterinary Medicine will again be offering an elective
course in Shelter Medicine. This is the 4th time the course has been presented with generous support
provided in the past by the Maddie’s Fund. The Shelter Medicine course is coordinated by Dr. Sandra
Newbury, shelter medicine faculty from the University of California and Adjunct Assistant Professor at
the University of Wisconsin under the direction of Dr. R.D. Schultz, Chair, Department of Pathobiological
Sciences. The course is offered to all interested 1st, 2nd and 3rd year veterinary medical students in the
spring semester. Each year, the course lectures are given by a variety of experts in the field of shelter
medicine. We are pleased with the diversity of the topics that has been presented in the past and will
be covered in 2011 by an outstanding group of knowledgeable individuals involved in all areas of shelter
medicine.

Students at University of Wisconsin have been very enthusiastic about this course. For example, last
year, over 50 students enrolled, which was the highest number to date. Considering the total number of
veterinary medical students we have in the 1st through 3rd years, this was an exceptional enrollment
number for any of our elective didactic courses.

All of the topics presented in this course will focus on life saving by discussing community initiatives and
providing ways of improving animal health and welfare in shelters. Presentation topics will cover
interventions and medical care for individual animals and the population of animals. Information is
presented about outstanding programs that exist to help reduce the number of animals that come into
shelters, preventive practices to keep them healthy and happy when they do come in, and what to do
when things go wrong. The course strongly supports community “No Kill” philosophies, advances
adoption guarantee practices and methods, and helps students learn to help shelters save more lives.

Shelter medicine is an exciting and emerging field of veterinary medicine and the goal of this course is to
bring awareness and knowledge of it to our veterinary medical students. Our course focuses on active
and preventive management of group health to maximize animal health, welfare and good individual
outcomes. How to find balance as we are “Getting to Zero” is a concept that runs throughout the
course to communicate many of the goals of shelter medicine practices and how veterinarian and
community involvement are key elements in achieving the ultimate goal for all shelters to become “No
Kill.” We present information in the course that will hopefully take us to the time when all shelter
animals find homes or other appropriate placement. Most importantly, what we teach will help more
people help more pets to find and keep a lifelong companionship.

Many of our students, including those who do not take the course, will have opportunities to learn and
experience firsthand as a Maddie’s Fund Community Collaborative Project in Dane County continues.
Our students have a history of activism for the shelter animals in Dane County and surrounding counties.
The course and the collaborative project are sure to be further inspiration to the students to be involved
in shelter medicine in Dane County and to become more involved in shelter medicine in communities
where they eventually will practice veterinary medicine.
Description of the course:

The course will be open to all 1st, 2nd and 3rd year veterinary students that have an interest in learning more about shelter medicine. There will be 14 to 16 hours of lecture offered with 14 hours required for the registered students to receive full credit for taking the course. The lectures will be a combination of lunch lectures, evening lectures and two Saturday lectures over the months of February, March and April. The lectures will be required for anyone who has registered for the course but will also be open to the whole school, based on space in the lecture halls, to allow us to reach as many individuals as possible with the valuable information that will be presented.

It is our hope and goal that all of the teaching material presented in this course is directly relevant to supporting No Kill shelters. Improving the welfare and health of all shelter animals and their adoptions while providing ideas and opportunities to reduce the number of animals that come into shelters through high quality/high volume spay/neuter programs is the foundation for how we get to No Kill. From this strong foundation, we can build the programs and support to achieve the goal of adoption guarantee by keeping animals and organizations healthier and creating sound systems to intervene when more help is needed.

This course provides the only opportunity for many of the veterinary students to obtain this information; without this course, the wealth of knowledge about shelter medicine would never reach the majority of the students. This course encourages veterinary students to find ways to be involved with the animal shelters in the areas where they will end up practicing and has led some students to enter the field of shelter medicine directly. The course has been a constructive and positive experience for all of the students who choose to get involved. Although we do not know the exact number of UW-Madison trained veterinarians involved in Shelter Medicine, we do know there are many who volunteer as well as some that work full time in shelters throughout the US.

Following is a list of the lectures planned for the

**UW – Madison, School of Veterinary Medicine - Shelter Medicine Course 2011 (tentative):**


Our course has always been known as the Maddie’s Fund Shelter Medicine Course because past courses have received support from the Maddie’s Fund.

**Fourth Year Veterinary Medical Student Externship in Shelter Medicine**

In the past, monies for the course have included funds for 4th year student externships in shelters. Over the past years, 1 to 3 students/year have requested funds. The funding of up to $1,500/student has generally been used for transportation (e.g. airfare) and housing during their stay. All past students have gone to Best Friends in Utah. Funding is specified for and restricted to students that only go to adoption guaranteed shelters with full-time veterinarians on staff. The course budget requested for this year includes funding for up to 3 student externships.
Maddie’s Fund Summer Scholars Program in Shelter Medicine

We are proposing for the first time that the Maddie’s Fund support a Maddie’s Fund Summer Scholar Program. This program will provide an opportunity for up to five (5) competitively selected veterinary medical students to participate in a research program that will advance their appreciation and knowledge of shelter medicine.

Program/Process:

Veterinary medical students completing their first, second, or third year of veterinary studies interested in this program will be assigned or will select a “faculty mentor.” The student and mentor will prepare a brief research proposal related to important issues in shelter medicine, and then submit it to a committee that judges the merits of the proposal. Major emphasis of the proposal should ensure the proposed research project provides the student an opportunity:

1) To develop a testable hypothesis
2) To perform the research with techniques that exist in the mentor’s laboratory or clinical setting or techniques that can be readily applied to test the hypothesis (Note: The Maddie’s Laboratory will provide certain types of testing that may be required for the research)
3) To analyze the research results
4) To present the results via an oral or poster presentation, and
5) To write a paper that is in scientific journal style that may or may not be submitted for journal publication, but that will be published in the Maddie’s Laboratory Newsletter.

The deadline for the research proposals will be April 8, 2011. Selection of the four or five best proposals will be made by April 15, 2011. It is expected that the research will begin no later than June 6, 2011.

Criteria:

Studies must aim to improve the health and well-being of shelter animals and must demonstrate direct relevance to adoption guarantee shelter practices and methods.

Studies must follow accepted scientific principles so that results are credible.

No terminal research projects will be accepted, and all studies involving the use of live animals must be approved by the institution’s Animal Care and Use Committee prior to funding.

This research experience will hopefully help the student understand the importance of research and better appreciate its importance in the generation and dissemination of new knowledge that can answer important questions regarding shelter medicine. The students will have up to one year from time of submitting their original proposal to complete the research, present their results, and submit the journal-style paper to Dr. R.D. Schultz, Director of the Summer Scholars Program.

In addition to the laboratory and/or shelter research experience, the Maddie’s Scholars. With other scholars, will attend 10 weekly seminars, each 1 or 2 hours in length, from June to August.

The seminars include the following topics:

1st week – orientation to the program. An opportunity for the students to meet and learn what will be expected of them during their year long program.

2nd to 5th weeks – research presentations by selected faculty members. Approximately 30 minutes/faculty member.

6th to 8th weeks – Ethics in research, which includes a presentation and case studies in ethics. Also covered are presentations on “how to select a journal for publication”, “how to write a research publication”, “how to edit a manuscript”, and “how to prepare a poster and oral presentation.”
9th and 10th weeks – Students will present seminars on some aspect of their project. (They need not present results, as some may not have results during the 9th or 10th week. Students often continue their research throughout the next school year. Seminars (including question and answer) will be approximately 20 minutes/student.

Final presentation of results of student research projects will be given during Research Day in April 2012.

The School of Veterinary Medicine has held an annual one-half day program each April to highlight research accomplishments of the veterinary medical students involved in the Research Scholars program which has been in place since 1992. The Maddie’s Scholars will present either an oral or poster presentation of their summer research at this time.

Historical Perspective:

The faculty of the Department of Pathobiological Sciences, School of Veterinary Medicine, University of Wisconsin-Madison, started a summer scholars research program for veterinary medical students in 1992. The original program was funded with departmental salary savings and for four years, partial support came from a Pew Veterinary Medical Trust Grant for studies on Wildlife Health and Disease Studies. That was a cooperative program between the School of Veterinary Medicine at UC-Davis and UW-Madison. This departmental program ended in 1997 because there were insufficient funds available to continue what was perceived by all in the School of Veterinary Medicine to be a highly successful program. With the help of the “Merck Company Foundation”, the Merck-Merial Summer Fellowship Program was funded since 1998. The program became a school wide, rather than a departmental, program. If we receive Maddie’s funding, this year our Maddie’s Summer Scholars program in Shelter Medicine will be open to up to four or five additional veterinary medical students that want to work on projects related to shelter medicine specifically.

Since its inception in 1992, the veterinary medical student research training program has provided an opportunity for more than 150 students to participate in various research projects, including a few in shelter medicine. Most of the projects were one year; however, some previous students continued their projects for up to three years, with or without salary monies. All students in the program were required to present results of their research as an oral or poster presentation at the SVM Research Day held each year in April. Many of the students also presented results of their research at local and national meetings. Many students have published papers on the results of their research as principal authors, or have been co-authors on publications that included the work done by the student as part of their research project.

Our Research Scholars program has been a positive stimulus for many of these students to pursue a career in research related areas in veterinary science, to do intern and/or clinical residency programs, to attend graduate school to obtain MS and/or PhD degrees, or to seek positions in government, industry, and academia. It is our hope and there is an expectation that projects done by students in shelter medicine sponsored by the Maddie’s Scholar Program will encourage students to be active in shelter medicine after graduation. One of our previous students who did a summer scholars project in shelter medicine is currently a shelter veterinarian.

Current level of involvement by the college with area animal shelters and existing teaching, service or research:

The R. D. Schultz Laboratory, namely Dr. Laurie Larson, Dr. Sandra Newbury, Bliss Thiel, Patricia Sharp, and others, has a long history of research work relevant to preventative practices for animal shelters. The Schultz lab, in cooperation with personnel at the U.C. Davis Shelter Medicine Program, has helped to innovate the way shelters practice preventative medicine. The Schultz lab is involved with many research projects at local animal shelters to determine the immunologic status of animals that enter the shelter.
shelter and the benefits of vaccinating all animals on admission to shelters. Very recently this laboratory has received funding from the Maddie’s Fund. Subsequently, the laboratory’s activities related to shelter medicine now constitute the Maddie’s Laboratory for Shelter Medicine. This laboratory will provide help to shelters that are currently having problems with various infectious disease problems or with their current vaccination programs.

Dr. Karen Moriello’s laboratory is also involved in many dermatology research projects at local animal shelters with an emphasis on dermatophytosis. The work that has come from the UW Dermatology lab has revolutionized the way many shelters currently manage dermatophytosis.

Both the UW Maddie’s Laboratory and the UW Dermatology lab work frequently in collaboration with the UC Davis Koret Shelter Medicine Program to perform research and laboratory testing important to animal health issues and to provide consultation on preventive practices and outbreak management for shelters. Many veterinary students have participated in these research studies either during the school year or in the summer as part of a summer scholars program. It is hoped that additional students will be able to participate with funding from the Maddie’s Summer Scholar Program.

Other than the shelter medicine course, and student research, the largest involvement that the students at the veterinary school have with area animal shelters is through the third year veterinary student’s Junior Surgery Course. The third year veterinary students provide intensive medical exams and treatments before completing a free spay surgery on female cats and dogs from seven area shelters. The shelters that participate in this program include Dodge County Humane Society, Iowa County Humane Society, Rock County Humane Society, Jefferson County Humane Society, Sauk County Humane Society, Washington County Humane Society and Watertown Humane Society.

Prior to surgery, all animals receive a full physical, fecal float, urinalysis, hematocrit, total protein, Azostick, CBC, pre-anesthetic chemistry panel, antibiotic treatment, deworming treatment, fluid support and an ultrasound if needed. This is all made possible by funds raised by the Companion Animal Club annual fund raiser, the ever popular ‘Dog Jog’. There is an Adoption Coordinator as well as a Spay Fund Coordinator to assist in helping this program run smoothly. Both of these positions are filled by a third year veterinary student.

The Shelter Animal Medicine Club also sponsors an annual ‘Castration Lab’ each January. Dogs from area shelters, many from the same shelters that are involved with Junior Surgery, are brought to the veterinary school to receive free exams and neuters from third year veterinary students under the supervision of faculty from the VMTH. Second year veterinary students scrub in to assist on the surgeries and first year veterinary students provide needed support to the surgical teams to offer participation for all of the classes.

Students can gain experience with high volume/high quality spay/neuters by volunteering with either Dane County Humane Society on their SNAP (Spay Neuter Assistance Program) or SOS (Shelter Outreach Services) programs or with Friends of Ferals on their TNR programs. Both organizations encourage involvement of veterinary students on all of their programs; it is a valuable resource for both the students and the animal welfare organizations.

Funds Requested:

Shelter Medicine Course Funds $25,000*
Summer Scholars Program $25,000**

Total Funding Request $50,000
*The course budget is used to pay outside speakers a honorarium and for all travel and other expenses related to their participation in the course. Monies are also used to provide food at some, but not all, of the lectures. Funding from the course budget is also used to support the 4th year student externships (up to $1,500/student).

**The proposed Summer Scholars budget includes 5 Summer Fellowships @ $4,000/student and $1,000/student for expenses associated with the scholar’s project that is not covered by the mentor and/or for laboratory testing not provided through the UW Maddie’s Laboratory.

If proposal is funded, the check should be made payable to “University of Wisconsin Foundation” and sent to the attention of Julie Graf, Dept of Pathobiological Sciences, School of Veterinary Medicine, University of Wisconsin-Madison, Madison, WI, 53706.

Sandra Newbury, Adjunct Assistant Professor

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