

Student Technology Fee

Grant Proposal

2011.011

2010-11

Tracy Brown 

Comment: none

Alan Henry

Comment: _____

Gary Gatch

Comment: _____

Mike McDonald

Comment: _____

Dale Martin

Comment: _____

Student Technology Fee
Grant Proposal Request Form
Fiscal Year 2010-11
Northwestern State University of Louisiana

#1 2011.011
PF

ALL BLANKS MUST BE FILLED COMPLETELY

Prepared by: Brenda R. Woodard For: Veterinary Technology Program

Department/Unit: Biological Sciences College: Science, Tech, Business Campus: Natchitoches

Which NSTEP Goals/Objectives does this project meet? 1, 3, and 9

Requested equipment will be located/installed/housed? Building 090, Bienvenu Hall Room 230

Does the department requesting funding receive lab fees? (circle one): YES
Are department property policies and procedures in place for requested equipment? Yes

Which individual will be responsible for property control of the requested equipment?

Signature: Brenda R. Woodard Date: October 29, 2010
17,709.37

Proposal Requested Amount: \$ 35,418.75 Budget Attached (circle one): YES

Proposal delivered to Student Technology located in Watson Library, Room 113. Date 10/29/10

The proposal must include all specifications, description, model number, quotation, cost, state contract number, and vendor for each item. If the proposal does not include all requested information, it will be returned to requestor.

1. Describe target audience.

The veterinary technology program offers an Associate Degree as well as a veterinary technology concentration biology Bachelor of Science Degree curriculum (offered for the first time this fall). Enrollment in the A.D. program is over 50 students; about 15 students are enrolled in the B.S. curriculum this fall. We anticipate an increase in enrollment as that option becomes more widely known.

Graduates of these programs become veterinary technicians or veterinary technologists, respectively, and are eligible to sit for the National Veterinary Technician Examination to become Registered Veterinary Technicians or Technologists. These curricula require teaching a great deal of hands-on application of skills in laboratories to meet the guidelines of our accrediting body, the American Veterinary Medical Association.

The specific laboratory courses utilizing the requested equipment are required for student majors in each of these curricula. Additionally, one course is dually listed as a biology course, which is taken primarily by biomedical concentration students as an elective course.

2. Describe project/initiative for which you are requesting funds.

We are requesting funding to replace 25 student microscopes in the Clinical Pathology and Parasitology laboratory in Bienvenu Hall. This laboratory is used to teach VTEC 3101, VTEC 3191, and BIOL 2201, which are veterinary hospital technology courses involving teaching complete blood counts, serology, urinalysis, and cytology, as well as parasitology. Laboratory capacity for student workstation seating is 24; the remaining microscope will be set up in the laboratory common area, so that instructors may place specimens for observation on display. The microscope is vital for student acquisition of skills in cell and parasite identification, and is used by each student in virtually every laboratory session in that room.

The microscopes we are requesting have the technology and capabilities for students to visualize laboratory specimens as required for successful development of skills that are directly related to workplace performance and patient outcomes. An additional factor to consider is that beginning next summer, board examinations for veterinary technology graduates will include images for identification of parasites, blood cells, and other structures. Current state-of-the-art equipment is vital for education preparing the student for success in passing the board examination.

This laboratory is currently equipped with microscopes that are over ten years old, and they are being removed from service one-by-one as parts fail. No replacement parts are available because of the age of the microscopes. Enrollment in the laboratory is at capacity this semester, and we have had to temporarily borrow microscopes from other laboratories. As those laboratories have students needing the microscopes, we have to return them. A permanent solution is to replace these microscopes with modern, functional ones.

3. State measurable objectives that will be used to determine the impact/effectiveness of the project.

- a. Each new microscope will be set up for use, and placed in a cabinet at each individual student workstation (24); one microscope will be placed in the common area of the laboratory.
- b. Students will be instructed in the care and use of the microscopes, and will have immediate access to the microscopes for each laboratory session.
- c. Course syllabi will be updated to reflect use of this equipment.
- d. Practical examinations will be administered to each student enrolled in the laboratory courses using this equipment.

4. Indicate how each project objective will be evaluated.

- a. The laboratory will be inspected and maintained to insure that the requested microscopes are properly placed and in use in laboratory courses.
- b. The syllabi will be compared to existing syllabi to insure that updated instructions regarding use of these microscopes are included.
- c. Student examinations will be evaluated to determine that student acquisition of skills is occurring. Documentation of student acquisition of essential skills will be maintained for each student enrolled in these laboratories.

5. If funded, which NSTEP <http://www.nsula.edu/nstep/NSTEP.pdf> objective(s) will funding of this project advance? How will funding of the project advance the University and College/unit technology plan?

- a. This project will advance the following NSTEP objectives:
 - 1. *To improve access to technology by students, faculty, and staff at Northwestern State University.* Specifically, to expose students to modern laboratory

equipment, train them in its use, and give them basic essential skills required in post-graduate careers.

3. *To upgrade laboratories with modern technology.* Specifically, to use modern instruments appropriate in complexity for the current "state-of-the-art" in veterinary medicine and technology.
9. *To provide and support hardware and software upgrades, new hardware and software for specialized functions, training for technical support personnel.* Specifically, the equipment items requested represent functions specialized for modern veterinary medicine and the training of personnel for the workplace.

b. This project will advance the following University and College of Science, Technology, and Business goals:

1. *Goal 1: Northwestern State University will endeavor to create and maintain a responsive, student-oriented environment.* Specifically, by providing the latest technological advances in veterinary medicine to student instruction, we will respond to the student's need to be well educated.
2. *Goal 2: Northwestern State University will provide programs, services, and operations throughout the University of high quality and effectiveness.* Specifically, the Veterinary Technology program is fully accredited by the American Veterinary Medical Association. Providing modern technological equipment for student instruction illustrates that we care to provide a high quality educational experience for our students, so that they are well prepared for board examinations and a veterinary medical career.

6. Provide a justification for funding of this project. Estimate the number of students that will be served per academic year and in what ways. Please indicate also any unique needs of the target group.

Veterinary medicine capabilities and technologies continue to advance at a rapid rate; this fact requires that we who educate Veterinary Technicians keep pace with advancements if we are doing what is best for our students. The Veterinary Technology Program enrollment varies from about 55-75 students total at any given time, and each of these students is required to take the Parasitology and Veterinary Hospital Technology courses in their last year of coursework before a semester-long internship. The enrollment per course typically is 24-28 students a semester.

The NSU Veterinary Technology Program is one of only two fully accredited programs available in the State of Louisiana, and serves to educate students who will become Registered Veterinary Technicians after successfully completing the National Veterinary Technician Examination and applying for registration. This program helps fill a nation-wide shortage of veterinary technicians (this career was listed as a top-ten recession-proof career by CBS News recently, due to high demand into the foreseeable future). It is a necessity that we have the equipment available to train our students well, so that they will be prepared for their internship and their role in the workforce.

The microscopes requested are essential if we are to continue providing excellence in Veterinary Technology education.

7. List those individuals who will be responsible for the implementation of the project/initiative and indicate their demonstrated abilities to accomplish the objectives of the project.

The individuals who teach veterinary technology courses include two veterinarians, Dr. Brenda Woodard and Dr. James Woodard, as well as a Registered Veterinary Technician, Ms. Jessica Hudspeth. Drs. Woodard each have over 20 years experience in veterinary medicine, and

in teaching at NSU educating veterinary technicians. Ms. Hudspeth is a 2004 graduate of the NSU Veterinary Technology program, and is in her third year of assisting in laboratories.

All are well experienced with the use, handling, care, and capabilities of microscopes in teaching and in practical clinical veterinary applications.

8. Describe any personnel (technical or otherwise) required to support the project/initiative.

The vendor will deliver and set up each microscope. No special installation is required. Cabinets are in place at each student workstation in the laboratory to house the microscopes.

9. Provide a schedule for implementation and evaluation.

The microscopes will be ordered when funding becomes available. They should be delivered within 60 days of order, and be installed during the spring semester of 2011. They will be in full use by the fall semester of 2011.

10. Estimate the expected life of hardware and software. Explain any anticipated equipment/software upgrades during the next five years.

These microscopes should last minimally ten years, and possibly quite longer, with careful handling and adequate maintenance. The veterinary technology program has a history of excellent care of equipment, and we instruct students in the proper care and maintenance of equipment used.

11. Explain in detail a plan and policy that will be in place to ensure property security/controls for any equipment received through a Student Technology Fee. If you are requesting equipment that will be either/or checkout to students or moved within the department, you must provide a checkout/loan policy.

The laboratory where this equipment will be housed remains locked at all times unless the laboratory is in use for teaching purposes or clinical procedures. No loss of equipment has occurred from this laboratory since it has been in use by veterinary technology.

12. Does the department that is requesting equipment receive lab fees? If so, please provide a justification for requesting funds from tech fee funds over using lab fees from your department.

Veterinary technology does receive student assessed lab fees. However, the total amount averages less than \$5,000 per academic year. Veterinary technology laboratory courses involve extensive use of expendable medicines and medical supplies, like bandage materials, syringes/needles, gloves, all drugs needed to successfully anesthetize animals to perform surgical procedures, diagnostic testing kits, supplies to run diagnostic laboratory machines, etc. Because these materials are used, we must spend lab fee funds to restock these supplies each year. We do not receive funds in the amount necessary to purchase equipment items such as these microscopes.

13. Attach a detailed budget.

A detailed budget follows.

Budget Summary:

Qty	Product #	Description	Unit Price	Ext. Price	
25	MCA74201	NIKON E200 Main Body (120V) Right side fine focus, left side coarse & fine focus with tension adjust knob Quadruple nosepiece, mechanical stage right handle , Exclusive "push-to drop" refocusing mechanism, halogen illuminator base for 6v,20w halogen bulb with up front removal, field lens unit without diaphragm, halogen lamp 6V-20W, vinyl cover, Power Cord 120v E2-TB Binocular Eyepiece Tube (exclusive-binocular rotates 180 degrees to adjust height) Anti-mold Eyepiece CFI E 10X (Field No. 20) - two eyepieces provided adjustable, E2-C Abbe Condenser N.A. 1.25 with aperture diaphragm marked in objective magnifications, filter holder (33mm) Blue filter 33mm CFI E Plan Achromat 4X, N.A. 0.10, W.D. 30mm CFI E Plan Achromat 10X, N.A. 0.25, W.D. 7mm CFI E Plan Achromat 40X, N.A. 0.65, W.D. 0.65mm , spring-loaded CFI E Plan Achromat 100X oil, N.A. 1.25, W.D. 0.23mm, oil-immersion, spring-loaded Immersion Oil A, 8cc. 5 yr. Mechanical and 1 yr. Electrical warranty.	\$1,402.50	\$35,062.50	7280
25	MCM78500	E2-EP Eyepiece Pointer	\$4.50	\$112.50	7282
25	MXA20415	Cord Hanger for E200	\$9.75	\$243.75	7282
				Total \$35,418.75	

Vendor:

Nikon Instruments, Inc.
1955 Lakeway Drive, Suite 250B
Lewisville, TX 75057
Phone: 888-424-0880
FAX: 888-473-9511

17,709.37

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117.00
17001.00

Attach two (2) letters of support for requesting department's Dean, the a the SGA President from the requesti

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Letters of support attached are Science, Technology, and Business, an Sciences.

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Student Technology Fee Grant Proposal Checklist:

- Is all information requested provided (items 1 – 13)?
- Is a detailed budget attached?
- Are all specifications, description, model number, quotation, cost, state contract number, and vendor provided for each item?
- Are your two (2) letters of support attached?
- N/A If equipment is to be checked-out/loaned, is your policy attached?



DEPARTMENT OF BIOLOGICAL SCIENCES

COLLEGE OF SCIENCE, TECHNOLOGY AND BUSINESS

Phone (318) 357-5323. Fax (318) 357-4518. Email: Bio_Sci@nsula.edu. URL: biology.nsula.edu



October 28, 2010

Ms. Jennifer Long Martin
Student Technology Office
Watson Library

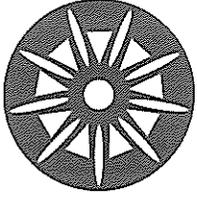
Ms. Long,

I am writing in support of Dr. Brenda Woodard's Student Tech Fee grant proposal to update microscopes in the parasitology lab of the Veterinary Technology program. This lab serves a both Vet Tech and Biology majors since the course is dual listed in the university catalog and the number of students enrolled in parasitology has increased significantly over the past two years. Microscopes are indispensable for this lab, and the existing microscopes are not sufficient in number to meet the higher enrollment numbers. In addition, the current scopes are over 10 years old and several are beginning to require significant repairs. Finally, Dr. Woodard's Vet Tech program runs the most organized, well-kept labs on campus and you can be assured the requested equipment will be put to excellent use and will be well taken care of.

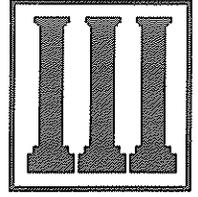
Sincerely,

A handwritten signature in black ink, appearing to read "Zafer Hatahet".

Zafer Hatahet, Ph.D.
Professor and Department Head



COLLEGE OF SCIENCE, TECHNOLOGY, & BUSINESS
OFFICE OF THE DEAN



October 29, 2010

Student Technology Fee Grant Proposal Committee
c/o Ms. Jennifer Long Martin
Watson Library, NSU

Dear Committee Members:

I am pleased to write in support of a grant proposal written by Dr. Brenda Woodard, Director of the Veterinary Technology Program. Dr. Woodard's proposal requests funds to purchase updated technology microscope equipment for clinical pathology and parasitology laboratories utilized by veterinary technology and biology (biomedical and veterinary technology concentrations) students.

It is important that students have access to state-of-the-art equipment for education in these important clinical areas. Much of the emphasis in these laboratories involves identification of blood cells, parasites, etc. that makes a difference in patient evaluation. Functional microscopy equipment is essential for good student educational outcomes in this laboratory setting.

Enrollment in these courses is increasing now that we offer the veterinary technology concentration of the biology Bachelor of Science degree. We must be prepared to meet the needs of the students.

Thank you for your thoughtful consideration of this proposal, and for your service to Northwestern State University in serving on this important committee.

Sincerely,

Austin L. Temple Jr., Ph.D.
Dean, College of Science, Technology, and Business