Student Technology Fee #4 2012.019
Grant Proposal Request Form FF
Fiscal Year 2011-12 5-21606
Northwestern State University of Louisiana CT #2

ALL BLANKS MUST BE FILLED COMPLETELY

53.3

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) NO

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, DVM Date: October 31, 2011

Proposal Requested Amount: $ 25,634.50 Budget Attached (circle one): (YES) NO

Proposal delivered to Student Technology located in Watson Library, Room 113. Date 10/31/11

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 last fall). Enrollment in the A.D. program is about 60 students; about 26 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. The curricula require teaching a long list 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 an automated blood cell counting machine as well as a serum chemistry analyzer in the Clinical Pathology and Parasitology laboratory in Bienvenu Hall. Additionally, we request funds to purchase four refractometers used to measure total plasma protein and urine specific gravity. 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, with overflow seating available in the laboratory next door. We have had to use overflow seating this semester. This equipment is vital for student acquisition of skills in patient clinical pathology, and is used by each student in virtually every laboratory session in that room. Additionally, students in VTEC 3201, hospital technology anesthesia and surgery laboratory, use the equipment to run pre-operative blood samples on surgical patients.

The equipment items we are requesting have the technology and capabilities for students to analyze laboratory specimens as required for successful development of skills that are directly related to workplace performance and patient outcomes. Current state-of-the-art equipment is vital for education preparing the student for success in passing the licensing board examination which is taken upon graduation for becoming a Registered Veterinary Technician.

This laboratory is currently equipped with a blood cell counter and chemistry analyzer of the types requested that are over ten years old, and the blood cell counter is outdated in its technology. The new blood cell counter represents the current state-of-the-art. The chemistry analyzer we are currently using is malfunctioning, and sometimes 8-12 attempts have to be made in order to get it to run at all. We have one functioning refractometer, and students have to line up and wait to run their patient samples on it. Adding four refractometers will provide one per each bench of students.

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

a. Each new equipment item will be set up for use on common student workbenches in the laboratory.

b. Students will be instructed in the care and use of the equipment, and will have immediate access to the machines and refractometers 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 equipment items 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 are educate Veterinary Technicians keep pace with advancements if we are doing what is best for our students. The Veterinary Technology Program enrollment is at 86 this fall during our last count, 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 24-35 students a semester, when BIOL 2201 students are added to the parasitology laboratory.

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 equipment items 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 these equipment items 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 the blood analyzers. No special installation is required. Workbenches are in place at each student workstation in the laboratory to house the equipment items. The refractometers require no installation.

9. Provide a schedule for implementation and evaluation.

The equipment items will be ordered when funding becomes available. They should be delivered within 60 days of order, and be installed during the spring or summer semester of 2012. They will be in full use by the fall semester of 2012.

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

These equipment items should last minimally ten years, and possibly 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.

13. Attach a detailed budget.

A detailed budget follows.

Budget Summary:

Qty	Product #	Description	Unit Price	Ext. Price	
1		**Blood analyzing equipment package To include:**			
1	7050	scil Vet ABC Plus blood cell counter	$15,995.00	$15,995.00	7281
2	7140	scil ABC – VET PACK	210.00	420.00	7382
1	1900	Spotchem EZ SP-4430 chemistry analyzer	7,500.00	7,500.00	7381
2	1935	Spotchem Panel V (25 strips)	248.75	497.50	7382
1	6809	Control Kit scil Spotchem EZ	57.00	57.00	7382
		Shipping	85.00	85.00	7382
4	036006	REFRACTOMETER CAT/DOG HESKA CORPORATION CAT317	270.00	1,080.00	7382
			Total	**$25,634.50**	

Vendors:

For Blood Cell Analyzer and Chemistry Analyzer:

Scil USA
151 N. Greenleaf St.
Gurnee, IL 60031
Sales-US@scilvet.com
www.scilvet.com

For Refractometers:
Clay Barber
Butler Schein Sales Support Associate
☎ *888-224-3204 ext 5406*
614-553-6882 FAX
cbarber*@ButlerSchein.com*
BUTLER SCHEIN™
ANIMAL HEALTH
A Henry Schein Company

Attach two (2) letters of support for the project from the following individuals: the requesting department's Dean, the appropriate Vice President (for non-academic units), or the SGA President from the requesting campus (for student requests).

Letters of support attached are from Dr. Austin L. Temple, Dean of the College of Science, Technology, and Business, and Dr. Zafer Hatahet, Department Head, Biological Sciences.

Student Technology Fee Grant Proposal Checklist:

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

Quote

scil USA

151 N. Greenleaf St.
Gurnee, IL 60031
847-223-6323
Sales-US@scilvet.com

DATE	Quote #
10/19/11	0

Customer #	23449

BILL TO	SHIP TO
NSU of LA, Vet Tech Program Brenda Woodard, DVM Vet Technology Program 323 Bienvenu Natchitoches, LA 71497	NSU of LA, Vet Tech Program Brenda Woodard, DVM Vet Technology Program 323 Bienvenu Natchitoches, LA 71497

Cust PO#	REP	TERMS	valid until	VIA	F.O.B.
Jessica	JG	Net 30	/ /	Fedex	PPD

QUANTITY	ITEM CODE	DESCRIPTION	PRICE EACH	AMOUNT
2	7140	ABC - VET PACK	210.00	420.00
2	1935	Spotchem Panel V (25 strips)	248.75	497.50
1	6809	Control Kit scil Spotchem EZ	57.00	57.00
1	7050	scil Vet ABC Plus	15,995.00	15,995.00
1	1900	Spotchem EZ SP-4430	7,500.00	7,500.00
			Sub-Total	**24,469.50**
		Shipping		**85.00**

Pricing subject to change. This quote is intended specifically for the stated purchaser and should not be utilized for future proposals	**Total U.S. $**	**24,554.50**

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Brenda Woodard

From: Jessica Hudspeth
Sent: Wednesday, October 19, 2011 8:37 AM
To: Brenda Woodard
Subject: FW: Price Quote

From: Barber, Clay [mailto:CBarber@ButlerSchein.com]
Sent: Wednesday, October 19, 2011 8:37 AM
To: Jessica Hudspeth
Subject: RE: Price Quote

036006 REFRACTOMETER CAT/DOG $270.00
HESKA CORPORATION CAT317

We stock this item..no freight charges..

Thanks,
Clay

Clay Barber
Butler Schein Sales Support Associate
888-224-3204 ext 5406
614-553-6882 FAX
cbarber@ButlerSchein.com
BUTLER SCHEIN™
ANIMAL HEALTH
A Henry Schein Company

From: Jessica Hudspeth [mailto:hudspethj@nsula.edu]
Sent: Wednesday, October 19, 2011 8:30 AM
To: Barber, Clay
Subject: Price Quote

Clay,

There is a Veterinary Refractometer made by Heska that we are interested in getting a quote on. Do y'all still carry it? We need a quote for the item and shipping. It is for a grant.

Sincerely,

Jessica Hudspeth, RVT
NSU Veterinary Technology Program
323 Bienvenu Hall

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 27, 2011

Mrs. Jennifer Long Martin
Student Technology Fee Office
Watson Library

Dear Committee Members,

It is with pleasure that I write in support of Dr. Brenda Woodard's grant to enhance the technology content of her parasitology and clinical pathology lab.

Dr. Woodard runs an outstanding veterinary technology program that serves close to 90 students. In addition, some of the courses taught by Dr. Woodard are of great appeal to the more the 300 biology majors interested in biomedical sciences. Of particular interest to this grant is parasitology (VTEC3100/3101), which has doubled in size in the past two years because of dual-listing it as BIOL2200/2201. Dr. Woodard is requesting funds to purchase equipment that students are likely to encounter in future workplaces. Exposure to state of the art equipment is critical to producing graduates who are competitive in the job market. I should add that Dr. Woodard keeps her labs and equipment in pristine conditions.

I give Dr. Woodard's application my strongest and unconditional support.

Thank you.

Zafer Hatahet, Ph.D.
Professor and Department Head

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

October 27, 2011

Dear Committee Members:

I am pleased to recommend the proposal to you submitted by Dr. Brenda Woodard. The acquisition of blood analyzing equipment and the refractometers are necessary instruments in the VTEC 3010, VTEC 3191 and Biol 2201 laboratories. The cost of these instruments cannot be covered in laboratory fees. Fees in these laboratories and others in the department have not been increased in ten years. Our graduates are expected to use these instruments and know how to interpret the results of tests. We need to keep current and to not do so would send graduates into the work force unprepared.

I appreciate your consideration of this proposal and I know of no better way to make a difference in this academic department than to provide funds for the purchase of these instruments.

Very truly yours,

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