2013.007
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Student Technology Fee
Grant Proposal Request Form
Fiscal Year 2012-13
Northwestern State University of Louisiana

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 303

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 Date: October 31, 2012

Proposal Requested Amount: $ 11,495.00 Budget Attached (circle one): (YES)/NO

Proposal delivered to Student Technology located in Watson Library, Room 113. Date 10/31/12

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.

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 in Fall, 2010). Enrollment in the veterinary technology curriculum is 83 students this fall, with many of the students double majoring to include the A.D. and B.S. degree options. 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 laboratory course VTEC 3201 utilizing the requested equipment is required for student majors in each of these curricula, and is a course that requires students to use skills learned to assist in anesthesia/surgery or dental procedures on live animals. The course requires that students perform tasks which resemble those required in the work force of veterinary technicians.

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

We are requesting funding to replace an electronic automatic autoclave in the veterinary surgery laboratory in Bienvenu Hall, Room 303. This laboratory is used in VTEC 3200-3201, which are veterinary hospital technology courses involving teaching veterinary surgical patient preparation, surgical assisting in the technician role, administration and patient monitoring of anesthetics, patient anesthetic recovery, dental prophylaxis procedures, and care of the surgical suite and equipment. The autoclave requested is vital for student acquisition of skills in veterinary patient surgical nursing, and is used by each student team in virtually every laboratory session. The autoclave is used in the surgical pack preparation area to sterilize surgical instruments, dental instruments, surgical gowns and patient draping materials, as well as ancillary equipment and supply items used in patient procedures where sterility is required to prevent transfer of infectious organisms. The students use this particular model of autoclave, as it simulates ones they will find in the workplace. The students learn to monitor quality control, to monitor water levels and safety valves, to routinely clean the autoclave chamber, and to pack it properly and run instrument sterilization cycles in a manner that will assure sterility of instrument packs and ancillary equipment.

The equipment item we are requesting has the technology and capacity for students to learn to prepare, pack, and sterilize surgical equipment 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. Unfortunately, the autoclave we have used since 1994 died during the last week of the course this past spring. With current operating budget cuts, we do not have the funds to replace it.

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

a. The autoclave will be set up for use in the surgical pack preparation area of the laboratory. As it replaces a similar outdated and dysfunctional unit, an electrical 220 volt outlet is already in place for its installation.

b. Students will be instructed in the care and use of the autoclave, and will have immediate access for each laboratory session.

c. Course syllabi will be updated to reflect use of this autoclave.

d. Examinations will be administered to each student enrolled in the laboratory course using this equipment, and will reflect the students' knowledge of its use.

4. Indicate how each project objective will be evaluated.

a. The laboratory will be inspected and maintained to insure that the requested equipment item is properly placed and in use in VTEC 3200-3201.

b. The syllabi will be compared to existing syllabi to insure that updated instructions regarding use of the autoclave 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 this laboratory.

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 item requested represents 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 83 this fall during our last count, and each of these students is required to take the 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. The NSU Veterinary Technology Program 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 item requested is 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. Katie Coody. Drs. Woodard each have over 25 years experience in veterinary medicine, and have been teaching at NSU educating veterinary technicians for almost that long. Ms. Coody is a 2008 graduate of the NSU Veterinary Technology program, and is in her first year of assisting in laboratories. She has four years of clinical experience as a certified veterinary technician.

All are well experienced with the use, handling, care, and capabilities of the autoclave 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 the autoclave. No special installation is required. The old non-functioning autoclave will be removed and replaced with the new one.

9. Provide a schedule for implementation and evaluation.

The equipment item will be ordered when funding becomes available. We are hopeful that the autoclave can be delivered and fully in use by the time it is needed in late February, 2013.

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 probably longer, with careful handling and adequate maintenance. The item that it is replacing was built by the same manufacturer, and it has functioned 18 years. 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. The bulk and weight of an autoclave of this capacity makes it unlikely to be moved.

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	Price
1	3870EA	Tuttnauer Automatic Autoclave (220V)	$11,495.00
		Freight	0.00
		TOTAL	$11,495.00

Vendor:

Fisher Biomedical Incorporated
740 commerce Dr., Suite 13
Venice, FL 34292
T 800-839-0722
F 866-566-7244

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 and Physical Sciences.

DEPARTMENT OF BIOLOGICAL AND PHYSICAL 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, 2012

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 application to replace the autoclave sterilizer in the veterinary surgery laboratory. The autoclave in use since 1994 has failed, and a replacement is needed for the spring 2013 semester.
This laboratory experience is vital to the culmination of veterinary technology education at NSU, as it is where students get to put into practice skills they have learned in several veterinary technology courses. This lab allows students to develop skills in anesthesia, and in assisting in the surgical experience. Without a functional autoclave, instruments cannot be sterilized, and the laboratory cannot function without t sterilized instruments.
This laboratory is also beneficial to the community, as spay and neuter surgeries are performed on homeless animals to prepare them for adoption. The Veterinary Technology program has a strong presence in shelter animal care in the community, and we would like to see it continue. Unfortunately, laboratory fees are insufficient to cover this expenditure.
I give Dr. Woodard's proposal 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 29, 2012

Dear Committee Members:

I am pleased to recommend the proposal submitted to you by Dr. Brenda Woodard. The acquisition of an automatic autoclave for sterilizing surgical instruments is necessary in the VTEC 3200-3201 laboratories. Without the autoclave, the surgical lab cannot be conducted, as instruments used in surgeries on live animals must be free of infectious organisms. Our graduates must be educated in the practice of aseptic technique as pertains to veterinary patient surgeries.

The cost of this instrument cannot be covered in laboratory fees. Laboratory fees are barely sufficient to cover the use of expendable items in this laboratory, and could never cover the cost of an equipment item like this one, necessary as it is.

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 this instrument.

Very truly yours,

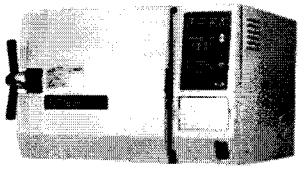
Austin L. Temple, Ph.D.

Dean, College of Science, Technology, and Business

FISHER BIOMEDICAL

www.fisherbiomedical.com

QUOTATION



Prepared For: Northwestern State University
Date: October 26, 2012
Regarding: Tuttnauer 3870EA Automatic Autoclave Quotation

DESCRIPTION	LIST PRICE	YOUR PRICE
Tuttnauer 3870EA Automatic Autoclave (220V) * 15" x 30" chamber, with 2 large trays * Includes the optional stand * No external plumbing/drainage/venting required * Full 24-month parts and labor warranty	$ 17,240.00	$ 11,495.00
Freight	$ 350.00	$ 0.00
Subtotal	$ 17,590.00	$ 11,495.00
Your Total Cost (Per System)		**$ 11,495.00**

Optional Upgrade / Downgrade:

* Switch to the Automatic 3870EAP version (with internal printer for recording cycle data) for $400 more.
* Switch to the Manual 3870M version (no closed-door drying, no printer option available) for $1,000 less.
* Add our complete ClaveCare Package (all the supplies you will need for over a year) for $375 more.

Warranty: All systems are brand new, direct from Tuttnauer, automatics with 24-month parts-and-labor warranty, and 10 years on the chamber. Lifetime technical support and ongoing dealer discounts on any future parts or supply orders.

Free Freight: These systems ship from Tuttnauer in New York by standard freight carrier. Normal lead time is about 2 weeks (but can take up to 4 weeks if back-ordered), and normal freight transit is 5 days. If your facility does not have a loading dock, we will even provide lift gate service on the delivery. (Please let us know in advance.)

Terms: Payment can be made by check, credit card, or bank transfer, whichever is most convenient to you. And for high schools, colleges, universities, government agencies, and the military (or upon account approval), we can accept PO's and extend Net-30 Terms, essentially payment due within 30 days from the date of delivery. Because of carrying costs, if payment should extend beyond 30 days, we need to charge a fee of 10% for Net-45, and 20% at Net-60.

Quote Prepared By:

Shawn Michael Fisher
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