

STUDENT TECHNOLOGY  
GRANT PROPOSAL # 2015.004  
2014 - 2015

S- 27674

TRACY BROWN: ACCEPTED  \_\_\_\_\_ OPPOSED: \_\_\_\_\_

COMMENTS: N/A

SIGNATURE: [Signature] DATE: 12/4/14

HEATH FITTS: ACCEPTED \_\_\_\_\_ OPPOSED: \_\_\_\_\_

COMMENTS: \_\_\_\_\_

SIGNATURE: \_\_\_\_\_ DATE: \_\_\_\_\_

SHAWN PARR: ACCEPTED \_\_\_\_\_ OPPOSED: \_\_\_\_\_

COMMENTS: \_\_\_\_\_

SIGNATURE: \_\_\_\_\_ DATE: \_\_\_\_\_

CHRIS PARISH: ACCEPTED \_\_\_\_\_ OPPOSED: \_\_\_\_\_

COMMENTS: \_\_\_\_\_

SIGNATURE: \_\_\_\_\_ DATE: \_\_\_\_\_

BRANDON CRAIG: ACCEPTED \_\_\_\_\_ OPPOSED: \_\_\_\_\_

COMMENTS: \_\_\_\_\_

SIGNATURE: \_\_\_\_\_ DATE: \_\_\_\_\_

RON WRIGHT: ACCEPTED  \_\_\_\_\_ OPPOSED: \_\_\_\_\_

COMMENTS: Consider Adding digital projects Attachments to A small number of units

SIGNATURE: [Signature] DATE: 12.9.14

2015.004

Priority #1

Student Technology Fee  
Grant Proposal Request Form  
Fiscal Year 2014-15  
Northwestern State University of Louisiana

**ALL BLANKS MUST BE FILLED COMPLETELY**

Prepared by: Dr. Wanda Goleman For: Biological and Physical Sciences

Department/Unit: BPS College: SB Campus: Natchitoches

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

Requested equipment will be located/installed/housed? Building 090 Room 109 & 217

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? Dr. Hatahet

Signature: Dr. Wanda Goleman Date: November 23, 2014

Proposal Requested Amount: \$ 49,028 Budget Attached (circle one):  YES/NO

Proposal delivered to Student Technology located in Watson Library, Room 113. Date \_\_\_\_\_

**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.  
All students enrolled in BIOL1011 (Introductory Biological Sciences Lab I), 2251 (Human Anatomy and Physiology I) and 2261 (Human Anatomy and Physiology Lab II), and BIO4191 (Immunology Laboratory). Students who enroll in these classes come from a variety of majors (biology, nursing, allied health, psychology, and health and human performance).

2. Describe project/initiative for which you are requesting funds.  
Microscopy is one of the most essential techniques used in biological sciences. A significant number of biology lab courses taught at NSU include critical experiments that would not be possible without compound light microscopes. For example, in Introductory Biological Sciences Lab I students use microscopes to study the basic structure of animal and plant cells, as well as the processes of mitosis and meiosis. In Human Anatomy and Physiology labs, students study the

histology and cell structure of different tissues. In Immunology lab students use microscopes to study the different types of white blood cells. These labs are taught in two rooms in Bienvenu Hall, 109 and 217. Room 109 currently has 20 microscopes that were purchased in the mid 1970s and have seen extensive use. The microscopes were designated “end of life” by the manufacturer almost ten years ago, meaning that no replacement parts were made past that point. Since then we have relied on finding replacement parts from leftover inventory and more recently by scavenging some of our microscopes. Needless to say, this is not sustainable, and we are quickly reaching the point where none of the microscopes are going to be operational. In contrast to room 109, room 217 does not currently have any microscopes. For the last several semesters we have relied on borrowing microscopes from other labs, e.g., from room 304. Given their fragile nature and relatively high cost, it more logical to purchase a dedicated set of microscopes to be housed in room 217.

It should be noted that BIOL1011 and BIOL2251 are the most frequently taken courses in our department. During the fall semester, we average nine sections of BIOL1011, eight sections of BIOL2251, and four sections of BIOL2261. During the Spring semester we average four sections each of BIOL1011 and 2251, and six sections of BIOL2261. BIOL4191 is taught once in the spring semester. Between 28 and 32 students are usually enrolled in each section of the listed courses for a grand total of more than 1,000 students enrolled per year.

We are requesting a total of 36 microscopes. 20 to replace the old microscopes currently housed in room 109 and 16 to be placed in room 217. Given that our average lab enrollment is 30 students, and that only one person can use a microscope at a time, the number of units requested would be the minimum functional number, averaging 1 microscope per 2 students. It should also be noted that the models requested are entry level student microscopes with only basic features and no add-ons.

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

1. Ensure that students taking BIOL1011, 2251, 2261 and 4191 master the basic technique of using compound light microscopes.
2. Ensure that students are trained on fully operational microscopes representing what is commonly found in the workplace (e.g., hospitals, research labs, biotechnology companies, etc.)
3. Equip the labs with a sufficient number of microscopes to allow every student time to conduct their experiments fully without being rushed or forced to wait for an unreasonable period of time.

4. Indicate how each project objective will be evaluated.

1. The ability of students to master the use of microscopes will be tested on written as well as practical laboratory exams every semester.
2. Students will be surveyed at the end of each semester and asked about their experience with the new microscopes.
3. Students and instructors will be surveyed at the end of each semester regarding the availability of sufficient microscopes.

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

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.

All equipment in Bienvenu Hall is kept under lock and key and inventoried once a year. Equipment will be used only under the supervision of a faculty member.

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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.

Please see item 6 above.

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13. Attach a detailed budget.

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



**\*\*Optics\*Imaging\*Confocals\*\***

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Pittsburgh, PA 15237

Phone 800-433-1749

Fax: 877-768-1984

Quote No: 2014-AJD-831 - 2

11/21/2014

Zafer Hatahet PHD  
Northwestern State  
Professor and Head  
Department of Biological and Physical Sciences  
Bienvenu Hall, Room 112C  
Natchitoches, LA 71497

**Sales Rep:** Andre DeBellevue  
**Phone:** (225) 772-0554  
**Email:** Andre.DeBellevue@HOI-Inc.com

*Email all Purchase Orders to  
Orders@BBMicro.com*

**Phone:** (318) 357-5344  
**Fax:** (318) 357-4518  
**E-Mail:** hatahetz@nsula.edu

**CX22 LED MICROSCOPES**

Catalog No.	Product Description	Qty	Extension
1	CX22LFS1K;CX22SET,BI,4/10/40/1 00XOB,EYEP,STG,LED,PWR,CVR	36	\$48,042.72
2	Shipping	1	\$985.28
<b>TOTAL:</b>			<b>\$49,028.00</b>

**Terms & Conditions:**

9.23a

Price Includes Product Delivery, Installation, Training & Ongoing Support  
Price Does Not Include Shipping or Sales Tax.  
A Restocking Fee Up to 20% of Cost May Be Applied on Any Returned Items  
Olympus Microscope Product Warranty:  
Five Years on Mechanics & Optics  
One Year on Electrical

This is an official price quotation for the products which you have shown an interest to purchase. The prices listed in this quotation as well as any package pricing, apply to the entire quote as presented. Changes, additions or deletions from this quotation may result in pricing adjustments. Catalog numbers may change from time to time.

This quotation is valid until 12/21/2014



**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



November 20, 2014

Ms. Jennifer Long  
Student Technology Fee Office  
Watson Library

Dear Committee Members,

It is with pleasure that I write in support of a grant submitted by Dr. Wanda Goleman to furnish two laboratory rooms in Bienvenu Hall with light microscopes.

As you are probably aware, our department is tasked with delivering a very large number of lab courses, primarily to biology, and nursing and allied health majors. Some of the highest enrollment courses are Introductory Biological Sciences Lab 1 (BIOL1011), and Anatomy and Physiology Labs I and II (BIOL2251 and 2261). We currently average close 35 to 37 sections of these three courses per year. Given the high cost of purchasing new microscopes and the current economic conditions at the university, we would greatly appreciate funding of this grant. I assure you that the equipment will see extensive use and benefit a very large number of students for many years to come.

Thank you.

Zafer Hatahet, Ph.D.  
Professor and Department Head



# NORTHWESTERN STATE

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Office of the Dean

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The Graduate  
School  
(318) 357-5851

November 20, 2014

Louisiana  
Scholars' College  
318-357-4577

School of  
Creative and  
Performing Arts  
318-357-4522

## STUDENT TECHNOLOGY GRANT COMMITTEE

This letter is in support of Dr. Wanda Goleman's grant proposal to purchase 36 light microscopes for introductory biology laboratories.

Department of  
Criminal Justice,  
History and  
Social Sciences  
318-357-6967

As you are probably aware, the department of biological and physical sciences serves a very large number of students across several colleges. Many of the courses offered in the department are mandatory labs, including BIOL1011, required by all biology, psychology, and health and human performance majors, and BIOL2251 and 2261, required by all nursing and radiological technology majors. Dr. Goleman is requesting funds to equip these labs with light microscopes which are some of most basic and essential equipment in any science lab. Given the limited financial resources currently available to all departments, and the large number of students who will benefit from updating these labs, your favorable consideration of Dr. Goleman's proposal would be greatly appreciated.

Department of  
Social Work  
318-357-5493

Department of  
Language and  
Communication  
318-357-6272

Department of  
Psychology  
318-357-6594

Sincerely,

Steven G. Horton, PhD.  
Vice Provost and Dean