# JHCEHSHS STUDENT TECHNOLOGY FEE REQUEST FORM

Procedure for Submission:                                                                 Form Updated: 1/19/12

1. Submitter must obtain all required information from the desired vendor(s). An official quote from the vendor must be attached.
2. Only one request per Request Form. This request must be reviewed, approved, and submitted by the requesting program's Department Chair.
3. The Dept. Chair may email this request to the Tech Fee Director. *(Since some departments will have multiple requests, please rename request in the following format ABC_Request_# where "ABC" is your department and "#" is the numbering of your request)*

| Dept. making request: | Rehabilitation Sciences | | Requesting Faculty: | Caroline Menezes |
|---|---|---|---|---|
| Date submitted: | 2-24-12 | | Requested purchase date: | Immediately after approval |

## IMPORTANT: Attach an official quote from the vendor.

## List one item OR group (for use as a "package") per page.

| Item Name and Description | Vendor info. (name, address, Web site URL, phone #, email, etc.) | | Part or Model # | Cost (each) | Quantity | Total |
|---|---|---|---|---|---|---|
| Language Environment Analysis (LENA) Pro software and two digital language processors with clothing (for appropriate mic placement) | LENA Research Foundation Sales Inquiry: 1.866.503.9918 Fax: 303.545.2166 Address: LENA Research Foundation 5525 Central Avenue Suite 100 Boulder, CO 80301-2820 www.lenafoundation.org | | Digital Language Processors (DLP) | 399.00 | 5 | 1,895.00 |
| | | | Clothing to support the DLP | 25.00 | 5 | 125.00 |
| **Course(s) where item(s) will be used** | SLP 3010, SLP 3150 SLP 3400, SLP 4000, SLP 4300, SLP 4990, SLP 6000, SLP 6010, SLP 6020, SLP 6800, SLP 8990; can be used by student researchers in OT, Early Childhood, Health Education, and more | **Required for accreditation?** | No | **# Students Impacted per Year** | | Minimum 30, Maximum 100+ |
| **Location equipment of software will be used** | Speech-Language-Hearing Clinic | | | | | |

**Impact on student learning:**

The LENA Pro software was specifically designed for researchers, speech language pathologists, audiologists, and related professionals. It allows one to easily collect, process, and analyze language environment and development data for children. It can record up to 16 hours of continuous speech data in the most natural speech environment as when the child is interacting with caregivers and other people within their natural environment. The program not only records the data but also automatically annotates the data with information indicating which parts of the recording belongs to the child(subject), the male interlocutor, the female interlocutor, other ambient sounds like television that might be in the background. The software also facilitates easy data mining from hours of recording. It allows the researcher/clinician to also append notes to the audio files.
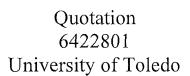
Currently, I have eight undergraduate students collecting and analyzing research data on children and adult laughter. The purpose of this study is to look for early vocal predictors of later speech disorders like stuttering, speech sound delays, autism etc. The biggest problem this study is facing at this time is the ability to collect spontaneous laughter in the lab. Both adults and children stop laughing the minute they are confined in the lab. One of the reasons being that laughter mostly occurs with a partner and only very rarely in isolation (as in the lab). The LENA will enable my students to collect copious amounts of spontaneous laughter easily in the most natural environment without setting up elaborate recording devices and without wasting several hours in the lab in the almost futile exercise of collecting lab laughter.

The LENA also has several applications in the Speech-Language program for collecting and analyzing normal child language. This is particularly important for all Speech-language students because it allows them to accurately obtain information about a child's daily experiences and language exposure/use, including factors such as background noise and television viewing, without lengthy home/school visits or relying heavily upon parent report. Because it provides insight into a child's daily discourse (with parents, teachers, care providers and peers) as well as language use, influences of the environment, and other factors, it allows students to examine relationships between language exposure and experience and development, potential intervention points, and therapeutic needs.

The components of the LENA device include 1) the Digital Language Processor (DLP) which is worn by the child or the subject, 2) clothing that helps hold the DLP at the right distance from the child's mouth for accurate recording and post-process annotation, 3) and the software that processes, annotates and analyze the obtained recordings.

The LENA software and two DLP were purchased by the department recently. The 5 new DLPs (this request) will augment the two already obtained by the department to increase the ability to include more subjects in both research and clinical needs. It is very obvious that just two DLPs will not be functionally sufficient for the number of students who will be using this device.

# Quotation
# 6422801
# University of Toledo

Quote Date: 2/24/2012    Expiration Date: 3/25/2012

**Quote For:**

University of Toledo
2026 HHS/ MS 119
2801 W Bancroft
Toledo, OH 43606

419 530 4443
caroline.menezes@utoledo.edu
Attn: Caroline Menezes, Researcher

| QUOTE # | DATE | SHIPPING METHOD | PAYMENT TERMS |
|---|---|---|---|
| 6422801 | 2/24/2012 | FedEx 2 Day | Net 30 |

| QTY | ITEM # | DESCRIPTION | UNIT PRICE | DISCOUNT | LINE TOTAL |
|---|---|---|---|---|---|
| 5 | 299995 | LENA Short Sleeve T-Shirt | 25.00 | 0.00 | 125.00 |

|  |  |
|---|---|
| **List Total** | $ 125.00 |
| Authorized By: _____ | **Item Discount Total** 0.00 |
| Title: _____ | **Item Price Total** 125.00 |
| Date: _____ | **Order Discount** 0.00 |
| Purchase Order: _____ | **Subtotal** 125.00 |
| (Attach copy of PO, if applicable) | **Applicable Tax** 0.00 |

| Please fax signed authorization and applicable information to: | or Sales Tax Exempt # _____ |
|---|---|
| Order Department | **Shipping and Handling** 20.00 |
| Fax 303-545-2166 | **Quote Total** $ 145.00 |

# Quotation
# 6422800
# University of Toledo

Quote Date: 2/23/2012    Expiration Date: 3/23/2012

**Quote For:**

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2026 HHS/ MS 119
2801 W Bancroft
Toledo, OH 43606

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| QTY | ITEM # | DESCRIPTION | UNIT PRICE | DISCOUNT | LINE TOTAL |
|---|---|---|---|---|---|
| 5 | 100100 | LENA Pro DLP Kit | 399.00 | 20.00 | 1,895.00 |
| 5 | 100003 | LENA DLP (Digital Language Processor) | | | |
| 5 | 120001 | USB Cable | | | |
| 5 | 120002 | Wall Charger | | | |

Authorized By: _____

Title: _____

Date: _____

Purchase Order: _____

(Attach copy of PO, if applicable)

Please fax signed authorization and applicable information to:

Order Department

Fax 303-545-2166

| | |
|---|---|
| **List Total** | $ 1,995.00 |
| **Item Discount Total** | 100.00 |
| **Item Price Total** | 1,895.00 |
| **Order Discount** | 0.00 |
| **Subtotal** | 1,895.00 |
| **Applicable Tax** | 0.00 |
| **or Sales Tax Exempt #** _____ | |
| **Shipping and Handling** | 60.00 |
| **Quote Total** | $ 1,955.00 |