

# ABSTRACT

## SPECIAL FUND PROPOSAL

### Section I. BASIC INFORMATION

**Proposed Project Title:** Biotechnology & Biomedicine Education at Regional Career High School

**Grant Source and Agency:** Alexion Pharmaceutical

**Total Amount Requested:** \$ 25,000      **Due Date of Application:**

**System Contact:** Huân Ngô, MS, PhD.

**Telephone #:** C. 773-624-4335

**Description of Project:** Provide a brief description below. Use Section VI to outline specific objectives and strategies relating to goals described in the application.

Alexion Pharmaceuticals provides this grant for Regional Career High can purchase equipment and supplies to teach molecular and genomic sciences to students in College Biology and STEM Careers.



**TARGET: Schools/Unit:** Regional Career High School  
**No. of Students:** 140      **Grade Level(s):** 10-12  
**Eligibility Criteria:** \_\_\_\_\_

<b>GRANT PERIOD:</b> From: (mm/dd/year): 09/01/2023 To: (mm/dd/year): 06/30/2024
<input checked="" type="checkbox"/> New <input type="checkbox"/> Continuation
<b>Previous Bd. of Ed. Approval:</b> <input type="checkbox"/> Planning <input checked="" type="checkbox"/> Operational
<b>Bd. of Ed. Information</b> <input checked="" type="checkbox"/> Action <input type="checkbox"/> Information <input type="checkbox"/> Support <input type="checkbox"/> Competitive <input type="checkbox"/> Entitlement <input type="checkbox"/> Grant

**PROPOSAL DEVELOPERS:**

Huân M. Ngô, MS, PhD

### CENTRAL OFFICE USE ONLY – MUST REMAIN ON PAGE 1

ABSTRACT TIMETABLE	REVIEW
<b>Return to:</b> _____	<b>Grants Manager</b>  <b>Finance Manager</b>  <b>Human Resource Manager</b> _____
<b>Received:</b> _____	
<b>Board of Education FINANCE &amp; OPERATIONS Meeting Date</b> <u>9/19/23</u>	
<b>Board of Education Meeting Date:</b> <u>9/20/23</u>	
<b>Due Date to Grantor:</b> _____	

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**SECTION II: FISCAL INFORMATION**

**PERSONNEL**

# FT	#PT		COST
		Administrators	\$0
		Teachers	\$0
		Management	\$0
		Paraprofessionals	\$0
		Clerks	\$0
		Others	\$0
		Stipend	\$0
		Longevity	0
		<b>SUBTOTAL</b>	<b>\$0</b>

**NON PERSONNEL**

	COST
Supplies & Materials	\$10,000
Student Transportation	\$
Staff Travel	\$
Internal Evaluation	\$
External Evaluation	\$
Independent Contractors	\$
Equipment	\$15,000
Other	\$
Indirect Costs, if allowed	\$
<b>TOTAL</b>	<b>\$25,000</b>
<b>NON- PERSONEL</b>	

**FIXED COSTS:**

Health Benefits	\$0
Pension (Paras & Mgmt.)	\$0
FICA/Medicare	\$0
Workmen's Compensation	\$0
<b>SUBTOTAL</b>	<b>\$0</b>
<b>TOTAL PERSONNEL &amp; FIXED COSTS</b>	<b>\$0</b>

**Notes:**

- 1) **Total Personnel and Non Personnel columns must equal grant total.**
- 2) **The Abstract budget must be aligned with the Grant Application budget/ED114.**
- 3) **All applications should budget for staff development (stipends) and evaluation wherever appropriate.**

**SECTION IIA: BUDGET EXPLANATION**

The following categories must be explained:

**All Personnel:** explain positions; **Salary:** if the grant pays a percent of salary and fixed costs, please describe below, breaking down **percentages and amounts to be paid by grant and by NHPS**. **Other;** and **All Non- Personnel items.** If additional space is needed, continue to next page.

**Equipment:** Micropipettor, Gel Electrophoresis System, Thermal Cycler, MiniPCR, Centrifuge, Vortex Mixer, PCR tube racks, Micro-tube racks, Heat block, Mini-centrifuge, Wash bottle, Fridge/ Freezer, Insulated Cool Rack.

**Consumables:** 1.5 mL tubes, 0.2 mL PCR strip tubes, tips (p20), tips (p200), tips (p1000), Flash Gel 1.2%, Flash Gel 2.2%, Plastic bags, Lab markers, Brady label printer, Label cartridges, 0.5 mL colored tubes

**Reagents:** Deionized Water (diH20), Ethanol (200 Proof), Molecular Biology Grade Water (mbH20), Food Coloring, DNA Extraction Kits, prepIT L2P, PCR Cocktail, PCR Primers\*. DNA Ladder, Extraction Buffer



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**SECTION IV: PROPOSED PERSONNEL**

List, **individually**, each position proposed by this grant application. **If no personnel**, please indicate **N/A** in the chart below

F/T	P/T	Classification	Position Description	Duration of Proposed Service	Proposed Employee	Current NHPS Employee Yes/No	If Yes Current Employee Number
N/A							
	N/A						

**V. PROPOSED CONTRACTS**

List **individually**, each contract that will be prepared by this proposed project. **If contractors will not be utilized**, please indicate **N/A** in the chart below.

Proposed Independent Contractor	Brief Description of Service	Proposed Pay Rate	Proposed Total
N/A			

**VI. ADDITIONAL INFORMATION:**

**Please Answer All Questions -- Use Additional Pages if Necessary**

- 1. Please state specific goals for this grant or the grant period.**

140 students in Biology and STEM Careers classes will learn modern, genomic skills not being taught in any other high schools in New Haven. Our high level of science education will prepare students for the current science workforce of Greater New Haven, that is driven by world-leading Biomedicine Research of Yale Medical School and Biotechnology Sector.

- 2. If this is a continuation grant, please detail past year goal performance and accomplishments. Use additional space if needed:**

N/A

- 3. How does this grant address School Reform goals?**

The Magnet Theme of Career High is Health and Business, which can be broken down to four sectors: Discovery, Manufacturing, Healthcare, and Business of medical cures. Learning the fundamental science and skills is fundamental.

- 4. Please explain why this proposal is significant and important in relation to improving student and/or staff performance, as well as any additional pertinent information that is specific and relevant: (Include resume of person(s) providing service for contracts \$10,000 and over)**

Students will learn a set of 5 genomic skills using these equipment and supplies:

1. Precision Volume Measurement.
2. Isolation of Own Human Genome.
3. Isolation and Amplification of Human Gene.
4. Visualization and Analysis of Gene Fragments.
5. Analysis of Human Gene Sequence.

These are basic skills of Modern Biology. They are used for routines in the local Biomedicine and Biotechnology Workforce.

**REQUIRED:**

**A COPY OF THE GRANT APPLICATION MUST BE ATTACHED TO THE ABSTRACT.**