Entry-Level Training Modules (ELM) for the genomics research workforce

An initiative to increase genomic knowledge in our entry-level genomics research workforce and enhance diversity within the field of genomics

Renee Rider, Lucia Hindorff, Teri Manolio, Nguyen Park, and Robb Rowley

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Purpose 1: Increase genomic knowledge in our entry-level genomics research workforce

• Entry-level workforce:
  • Positions that do not require a bachelor’s degree
  • Often require dedicated training and specific skills in community, technical, or tribal colleges
  • Examples: medical, nursing, research, and laboratory assistants

• Modules
  • Stand-alone units of curriculum that supplement existing training
  • Possible components: online coursework, lesson plans for an in-person classes, suggested readings, and/or activities to reinforce the lesson
  • Will be made freely available
  • Example topic areas: basic genomic concepts; genomic testing strategies or methodologies; and legal, ethical, and social aspects of genomic research
Purpose 1: Increase genomic knowledge in our entry-level genomics research workforce

• Lead Sites (3-5)
  • Content expertise in genetics/genomics
  • Demonstrated capacity for relationships with identified Partner Institutions
  • Develop educational modules
  • Provide training modules to and support implementation at Partner Institutions

• Partner Institutions (3-5 for each Lead Site)
  • Have programs that train entry-level research workers
  • Staff at Partner Institutions will be trained by Lead Site
  • Provide genomics education to students
Purpose 2: Enhance diversity within the field of genomics

• Entry-level workforce more diverse when compared to graduate, post-doctoral, or senior research positions

• Enhance diversity at entry-level
  • Provide $100K for each Lead Site
  • Support tuition and education
  • Reduce barriers to entry and increase enrollment

• Enhance diversity throughout the workforce
  • Some entry-level workers obtain further education and switch careers
  • By providing exposure and training in genomics, NHGRI can attract a more diverse workforce to genomic careers
Funding

• Funding per award:

<table>
<thead>
<tr>
<th></th>
<th>FY24</th>
<th>FY25</th>
<th>FY26</th>
<th>Total</th>
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<tr>
<td>Direct</td>
<td>$210,000</td>
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<td>Indirect (8%)</td>
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Three awards = $1.8M total costs for 3 years

• R25 mechanism = 8% indirect costs
• Year 1 & 2: creation and implementation of modules; higher funding
• Year 3: evaluate and refine modules
• Funds will be provided to Lead Sites
  • May use subcontracts to support implementation at the Partner Institutions
• NSF interested in collaborating, will ask for IC co-sponsors
Discussion