HeLa Genome Data Access Working Group

Report to the Advisory Committee to the Director

June 12, 2020

Carrie D. Wolinetz, Ph.D.
Acting Chief of Staff
Associate Director for Science Policy
National Institutes of Health

Spero M. Manson, Ph.D.
Distinguished Professor of Public Health and Psychiatry
Director, Centers for American Indian and Alaska Native Health
The Colorado Trust Chair in American Indian Health
Associate Dean for Research at the Colorado School of Public Health
University of Colorado
The HeLa Genome Data Use Agreement

Per the agreement between NIH and the Lacks family, NIH is requesting that all researchers:

- Apply for access to HeLa whole genome sequence in the database of Genotype and Phenotype (dbGaP)
- Abide by terms outlined in the HeLa Genome Data Use Agreement, such as:
  - Data can only be used for biomedical research only; this does not include the study of population origins or ancestry
  - Requestors are not to make contact with the Lacks family
  - Requestors are to disclose any commercial plans
  - Requestors are to include an acknowledgment in publications and presentations
- Deposit future whole genome sequence data into dbGaP
HeLa Genome Data Access Working Group Roster

Spero M. Mason, Ph.D. (Co-Chair)
Distinguished Professor of Public Health and Psychiatry
Director, Centers for American Indian and Alaska Native Health
The Colorado Trust Chair in American Indian Health
Associate Dean for Research at the Colorado School of Public Health
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Carrie D. Wolinetz, Ph.D. (Co-Chair)
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Russ B. Altman, M.D., Ph.D.
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Director, Johns Hopkins Berman Institute of Bioethics
Bloomberg School of Public Health
Johns Hopkins University

David Lacks Jr.
Representative, Henrietta Lacks Family

Jeri Lacks-Whye
Representative, Henrietta Lacks Family

Richard M. Myers, Ph.D.
President, Director and Faculty Investigator
HudsonAlpha Institute for Biotechnology

Robert L. Nussbaum, M.D.
Chief Medical Officer
Invitae Corporation

Veronica Spencer
Representative, Henrietta Lacks Family
Working Group Evaluation Criteria

- Is the proposed research focused on health, medical, or biomedical research objectives?
  - Is the proposed research related to determining the ancestry or population origins of HeLa cells?

- Are there any plans to develop intellectual property?
  - Specifically:
    - Does the requestor anticipate or foresee IP or developing commercial products or services from the proposed research?
    - Has the requestor agreed to notify NIH if their plans for IP or commercial products change?

- Are there any plans to publish or present findings?
## Status of Data Access Requests

<table>
<thead>
<tr>
<th>Number of Requests</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>89</td>
<td>Evaluated by the HeLa Genome Data Access Working Group</td>
</tr>
<tr>
<td>82</td>
<td>Approved by NIH Director</td>
</tr>
<tr>
<td>1</td>
<td>Disapproved by NIH Director</td>
</tr>
<tr>
<td>5</td>
<td>Disapproved by NIH staff (requestors did not respond to requests for clarifications regarding publication plans, IP, and/or the non-technical summary)</td>
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<table>
<thead>
<tr>
<th>Number of New Requests</th>
<th>Status</th>
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<tbody>
<tr>
<td>1</td>
<td>Being reported to ACD today</td>
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**Working Group Findings: Evaluation of Access Requests**

Since the last ACD meeting, the Working Group found 4 requests to be consistent with the HeLa Genome Data Use Agreement.

<table>
<thead>
<tr>
<th>Project Title</th>
<th>Requestor’s Affiliation</th>
<th>Project Overview</th>
<th>Working Group Findings</th>
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</table>
| Influence of using cell line specific reference genome on transcriptomic analysis | Harvard School of Public Health | • The investigator proposes to use the HeLa Cell Genome Sequencing Studies to develop a HeLa cell reference genome to align HeLa cell gene expression data and compare the results to HeLa cell gene expression data aligned to the human reference genome, a non-HeLa cell and non-cancer reference genome.  
• The comparison between the two pair of alignments will show gene expression changes that are specific to HeLa cells and are not observed in the human reference genome. | CONSISTENT WITH DATA USE AGREEMENT |

**ACD Discussion, Recommendation and Votes**