1. Preamble

The Human Heredity and Health in Africa (H3Africa) Data and Biospecimen Access Committee (DBAC) will review and approve or reject all requests from the research community for access to biospecimens collected and data generated by the H3Africa Consortium. Data includes candidate gene association studies, genome-wide association studies (GWAS), sequencing studies and other genotype-phenotype studies (including sequencing and molecular diagnostic assays or phenotype data). The members of the H3Africa Consortium will generate a range of biospecimen sample types, however they have been required to deposit only DNA samples derived from their projects in the H3Africa Biorepositories. These DNA samples are accompanied by a minimum set of essential data, as the remaining information accompanies the data in the EGA which is derived from the sample.

The Committee will evaluate whether the request conforms to H3Africa policies and procedures including consistency of the proposed research use with the informed consent under which the data or biospecimen were collected and any other limitations stipulated by the submitting H3Africa Investigators for each study.

The H3Africa DBAC’s secretariat will maintain records of all researchers who have been given access to the H3Africa Consortium’s biospecimen and datasets for programmatic oversight and research purposes.

2. Composition of the Committee

H3Africa's DBAC will be composed of 9 voting members with appropriate scientific, bioethics and data expertise, as well as 4 ex officio members. Since some requests to the committee will be for either data (in the EGA) or biospecimens, while others will be for both data and biospecimens, a range of expertise will be included on the committee. The committee members will include individuals who are: (i) scientists involved in research relevant to H3Africa, (ii) scientists with expertise in biobanking, (iii) a data expert, (iv) individuals knowledgeable in ethics of health research in Africa, (v) person with legal expertise and (vi) lay members (e.g. a community representative or member of advocacy groups). They should not be members of the H3Africa Consortium and should have no conflict of interest with any of the H3Africa projects. The H3Africa Steering Committee will consult broadly to identify appropriate members of the H3Africa DBAC. Selection of members will be done by the H3Africa Steering Committee together with Funders. The aim is that the majority of DBAC members are people residing in Africa.

Four ex-officio members who are either H3Africa project PIs, members of the Independent Expert Committee or Funders can be included in the Committee as non-voting members. If necessary, the DBAC can call on external expertise for advice, and although H3Africa PIs cannot be involved in any decisions of the DBAC, they may be consulted as appropriate.

Summary of DBAC composition:
• Nine voting members in the categories shown in the table below.
• *Ex officio* One PI
• *Ex officio* One Independent Expert Committee member
• *Ex officio* One representative from each of the major funders

<table>
<thead>
<tr>
<th>Area of expertise</th>
<th>Number of Individuals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scientist – relevant research</td>
<td>2</td>
</tr>
<tr>
<td>Biobanking expert</td>
<td>1</td>
</tr>
<tr>
<td>Data expert</td>
<td>1</td>
</tr>
<tr>
<td>Ethics expertise (genomic studies in Africa)</td>
<td>2</td>
</tr>
<tr>
<td>Legal expertise</td>
<td>1</td>
</tr>
<tr>
<td>Patient advocate</td>
<td>1</td>
</tr>
<tr>
<td>Demographer/Epidemiologist</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>9 members</strong></td>
</tr>
</tbody>
</table>

a) Terms of Appointment

The Chair shall be elected by a majority vote of the DBAC members to a 3 year term which is renewable once. The start date of the first 3 year term will be set by the DBAC.

Members will be appointed for a term of 3 years, with the possibility of serving a further three-year term. Rotation of members will be staggered to allow for continuity of membership; at least three committee members should remain on the committee while others are replaced.

In considering the re-appointment of the Chair and the members, the H3Africa Steering Committee shall take advice from the Secretariat.

b) The Secretariat

Support of the DBAC will be provided by the Wellcome Trust through AESA, NIH and the H3Africa Coordinating Centre.

c) Accountability

The Committee is accountable to the H3Africa Steering Committee for acting within its remit and carrying out its functions.
3. Scope of Work

What the H3Africa DBAC will do:

The H3Africa DBAC will review and approve or reject all requests from the research community (the "Research community" also includes members of commercial enterprises) for access to datasets and/or biospecimens. The DBAC may request modifications to access requests before approval. If necessary, the DBAC will delay a decision pending a request for additional information from the submitter.

The DBAC must ensure that all requests conform with H3Africa policies and procedures including compliance with the terms of informed consent and any limitations stipulated by the submitting institution/investigators for each study.

Researchers who qualify to submit a request are defined as scientists or medical professionals employed at, or legitimately affiliated with academic, non-profit or government institutions, or commercial companies.

The H3Africa DBAC will only consider requests for access to data and/or biospecimens submitted using the Data and Biospecimen Access Request Form.

Data

Submission of a Data Access Request (DAR) indicates that the Requesting Investigator (Requester) and his/her institution have agreed to the terms and conditions for data use specified in the Data Access Agreement (DAA) for the H3Africa Data Access Policy. This requires that Requesters, at a minimum, agree to:

- Abide by the agreed upon research uses of the requested dataset,
- Not seek to identify individuals within the dataset,
- Not distribute the data in any form to any entity or individual other than his/her research staff or trainees or independent collaborating investigators listed in the DAR under "Research & Related Senior/Key Person Profile,"
- Keep the data secure, and
- Acknowledge H3Africa as appropriate in publications and presentations.

Biospecimens

The DBAC will review new Biospecimen Access Requests (BARs) from qualified researchers submitted through the Biospecimen Access Request (BAR) form and notify applicants of results within 30-60 days of receipt. The DBAC will only grant access to applicants outside the H3Africa Consortium who seek to use the samples in collaboration with African researchers and who aim to build African research capacity and capabilities.
The DBAC will approve the specific terms of release based on the donor and recipient’s study terms and the application details as contained in the Material Transfer Agreement (MTA).

The DBAC will take account of information from H3Africa Biorepositories, such as sample inventories and drawdowns of limited and depletable collections, when considering new applications as well as requests to extend use periods.

Donor PI information provided to the Biorepositories during shipping may be helpful when considering requests to access sensitive collections involving vulnerable populations, limited quantities of material, and/or local ethics or legal restrictions. However, the DBAC will consider this information in light of the need to identify potential conflicts of interest and take steps to prevent any appearance of conflict from influencing access decisions.

If the DBAC contacts the PI about a request, the PI has 2 weeks to respond. No response within this time frame will be considered a consent. If the PI changes institution or otherwise relinquishes responsibility for the biospecimens, the DBAC secretariat must be notified within 30 days of transfer of responsibility.

All BARs must include a plan for the disposal, return or transfer of unused biospecimens upon completion of the project.

The DBAC will mediate any disputes between biospecimen recipients, donating researchers, and participating Biorepositories, in matters related to quality control, access, appropriate use or other issues specified in this policy.

**Recipients must also agree to specific conditions, which at a minimum include:**

- The disclosure of information regarding researcher background, intended use, timeline for completion of research, and ethics, technical, and publication aspects in the DAR or BAR
- Adherence to H3Africa, institutional and ethics committees’ regulations as per the MTA, unless a modification thereof is required, which would be evaluated on its own merit
- Any remaining biospecimens cannot be used for other research unless a new request has been submitted to the DBAC
- Compliance with the rules that guide procedures for disposal of biospecimens following said research, where applicable
- Acknowledgement of the H3Africa consortium in publications arising from the acquired biospecimens
- New genomic data generated from the biospecimens should be submitted to the EGA under the H3Africa project

Given that samples are a finite resource, all research projects seeking to use H3Africa biospecimens must undergo scientific review at the recipient institution or other reputable organization and have a letter demonstrating institutional support. The DBAC will evaluate whether the scientific review was adequate or additional review is necessary.
In instances where an investigator wishes to refer to availability and use of H3Africa biospecimen in research, prior to submission of a funding application, applicants may contact the H3Africa Biorepository to obtain information about biospecimen availability and access procedures to include in their research proposals, however, this by no means guarantees approval or availability at the time of eventual request. The DBAC will only grant final approval for biospecimen release to appropriately reviewed funded applications. Applications will be judged in competition against existing and potential future applications and evaluated for the appropriateness of sample quantity versus research proposed, in light of sample availability.

The H3Africa DBAC Secretariat will develop an annual report on the DBAC activities which will be available to the ethics committees involved in the original approval of H3Africa research projects upon request. The report will include information on approved and rejected applications.

4. Conflicts of Interest

Conflict of interest for DBAC members includes, but is not limited to:

a. Collaboration on scientific publications with a Requester or a Co-Investigator listed on a data or biospecimen access request within three years of the submission date of the Request. In cases where the collaboration was on consortia-type publications, DBAC will critically evaluate each case on its own merit.

b. Supervisory relationship with a Requestor or a Co-Investigator listed on a data or biospecimen access request

c. Being a Requester or a Co-Investigator on a data or biospecimen access request.

d. Business or financial connection to the requestor

DBAC members are expected to review data and biospecimen access requests in advance to identify conflicts and communicate them to H3Africa Secretariat staff. DBAC members will recuse themselves from discussion and voting on requests for which they are in conflict. All conflicts of interest will be recorded in the minutes.

5. Operations

Review schedule

a. After submission of a DAR or BAR, H3Africa DBAC Secretariat staff will use a standardized request review checklist (Appendix A) to determine whether applications are complete

b. H3Africa DBAC Secretariat staff may ask for more information from the Requester and/or her/his institution if necessary.

c. H3Africa DBAC Secretariat staff will post a summary of the request and completed checklist in a place accessible to the DBAC only and ask members to review for Conflicts of Interest.

d. Once all actual and potential conflicts of interest are resolved, the full requests will be posted for all DBAC members to review.

e. From an initial request, the H3Africa DBAC will aim to reach and communicate a decision in 30-60 days depending on whether it is data, biospecimens or both.
Quorum

A quorum is defined as 5 out of 9 of the H3Africa DBAC members.

If it is anticipated that a quorum will not be present for making decisions about requests at a DBAC meeting, the meeting will be moved to a date such that a quorum is reached.

For quorum to be formed, at least one H3Africa DBAC member or alternate with (a) experience in bioethics or human research participant issues, (b) genetics or genomics research and (c) biobanking must be present at the meetings. The latter is only required for biospecimen requests.

Applications that have specific issues not covered by expertise on the Committee can be deferred for further consultation.

Decisions about Data and Biospecimen Access Requests

Evaluation criteria
Applications from qualified researchers that maximize use of biospecimens for biomedical research in accordance with participant consent, institutional and country regulations/guidelines, and without identification of individuals, will be further evaluated to assess:

- Scientific merit of the request, including originality and innovative use of materials, valid design and methodology capable of answering proposed research question, consideration of alternative resources;
- Institutional and researcher capacity, including researcher qualifications, adequate funding, ability to complete study within a defined time period;
- Potential for research to be published, lead to patents or aid in discovery and development of new therapies.
- Requirement to collaborate with and train African investigators for biospecimen access
- For biospecimens the proposed work should not duplicate existing research or methods

Requests will be reviewed by H3Africa DBAC members who can vote via e-mail or any other approved means to approve, reject, or discuss the request. Voting responses will be tracked by the Secretariat. If a quorum of H3Africa DBAC members vote by the stated deadline and the vote to approve or reject a request is unanimous, the request can be approved/rejected without discussion at a DBAC meeting and the requestor will be informed of the outcome. If the vote is not unanimous, the Chair will go with the consensus vote, and if there is no consensus then the majority vote should be accepted. The DBAC will aim to hold regular meetings in person, or via telephone or video conferencing software. If there is a disagreement that relates to an ethical matter, this should be referred to external ethics experts, and if agreement is still not reached it can be deferred to the original ethics committee(s) for the project. Other disagreements may be addressed by the project PI or the funder or by calling on external experts.

If an H3Africa DBAC member is not able to attend a meeting at which a request will be discussed, the member can raise issues and vote via e-mail. If the H3Africa DBAC member votes by e-mail prior to the meeting and important issues are raised at the meeting that may affect the member's vote, as judged...
by the members attending the meeting, the member who voted by e-mail will be informed of the discussion and given the opportunity to reconsider her/his vote and communicate this in writing to the DBAC prior to a final decision. The DBAC Chair will tally the in-meeting and e-mail votes, and this will constitute the final decision of the DBAC on the matter.

The decision-making process will be reviewed by the H3Africa DBAC members at least once a year to determine whether changes need to be made.

Procedures for Checking Elements for Research Use

Authentication and Terms of Access

Applicants and their institutions are checked by the DBAC Secretariat staff. To successfully submit a request, Requesters and their institutions must agree to the terms of access specified in the Data Access Agreement (DAA). Thus, authenticating Requesters and confirming agreement to the DAA require no further steps by the H3Africa DBAC.

Ethics approvals

Ethics approval or a letter of exemption will be required for access to data and/or biospecimens, depending on the scope of the research. For example, ethics approval is expected for requests of data sets with detailed phenotypic information linked to biospecimens, whereas data alone, or biospecimen derivatives and products such as anonymized cell lines, may be exempt from approval according to local policies. By agreeing to the terms of access in the DBAC, Requesters and their institutions are certifying that any applicable National; U.S. Federal, State, and Local laws are being followed and that, if applicable, a Requester is in compliance with local human subjects’ protections. While the H3Africa DBAC is not responsible for reviewing the ethics approval letter, it must be provided if required. If required, the DBAC can seek the opinion of the original ethics committee that approved sample collection.

Single institution application

The Principal Investigator (applicant) must be a faculty member or government/private sector equivalent employed by the requesting institution.

The Principal Investigator of the request and all collaborators listed as part of the request may be from the same institution. If they are not, then all participating institutions must be listed on the request form and H3Africa DBAC staff will contact the Requester to explain to her/him that collaborators from different institutions will have to submit separate access agreements if access is granted.

Compliance with any data use limitations identified by the institutions that submitted the dataset(s):

The DBAC members will review the research use statement provided by the Requester and information provided by the submitting institution, to determine whether the proposed research use is consistent
with any data or biospecimen use limitations identified by the institutions that submitted the dataset(s).

**Decision feedback**

Decisions on requests for access to datasets registered with the European Genome-phenome Archive (EGA) and the European Nucleotide Archive (ENA) are relayed in an automated fashion through the EGA mechanism. Any decision by the H3Africa DBAC not to grant access will be conveyed to the Requester with feedback on the reasoning behind the determination, for instance, a brief summary of the points considered about the proposed use and how these were not consistent with the data use parameters for the dataset in question. All approved requests will be listed on the H3Africa website.

**Reconsideration of DBAC decisions**

If a Requester wishes to contest the H3Africa DBAC’s decision regarding the appropriateness of his or her access to data and/or biospecimens, the Requester may contact the H3Africa DBAC Chair to discuss the issues or resubmit her/his request. The H3Africa DBAC Chair may approach the H3Africa Steering Committee for their advice in problematic cases.

**DBAC Annual Reports**

Annual Reports summarizing DBAC activities will be generated by the H3Africa DBAC Chair and will be due to the H3Africa Steering Committee.

**Appendix A: Request Review Checklist**

The H3Africa DBAC Secretariat will review requests for data and biospecimens prior to submission to the DBAC to ensure that all documents are present and in order. They will check the following:

- Is the H3Africa Data and Biospecimen Access request form complete, correctly filled in and is the data access agreement completed and signed?
- Review available information for any current ban on research with human subjects involving the Requesting Investigator or his/her institution.

**Specifically for Biospecimen requests:**

- Check that requester has a collaboration with African researchers.
- Check inventories of limited and depletable collections, to ensure the sample requested is available.
- Check evidence of scientific review and letter demonstrating institutional support
- Ensure that PI comments regarding future use or caveats are included, if so requested.

The H3Africa DBAC Secretariat will:

- Gather information on projects and their aims for the H3Africa website
• Using a standardized request review checklist, the H3Africa Secretariat staff will review requests to determine whether applications are complete prior to sending the request for a full H3Africa DBAC review.

• All applications will be made to the secretariat who will firstly check that the request is complete and eligible for applying, secondly, they will manage the process of communication with the applicants on instruction from the DBAC.

• The secretariat will ensure the DBAC receive all the documents required for making a decision, including:
  o Completed access request form
  o Ethics consent information for relevant project
  o Any additional conditions from relevant project
  o Information on timeline of any publication embargo
  o Availability of biospecimens being requested

• Maintain a list of applications and a spreadsheet documenting the process (with deliverable dates for each step of the process)

• Maintain a list of granted access requests on the H3Africa website

• Check publications from requesters to ensure acknowledgement is provided and relevant H3Africa publications are cited.

• Develop and circulate an annual report to the ethics committees involved in the original approval of H3Africa research projects on applications made for sample access, upon request. This will include both approved and rejected applications.