Psychiatry, Neuroinformatics & Mental Health

This document provides a framework to guide the development of a collaboratively agreed Terms of Reference (ToR) for the Community of Practice

Purpose

Mission Statement
The Psychiatry, Neuroinformatics and Mental Health Community of Practice is established to accelerate and coordinate psychiatric genetics research in Africa by building local capacity, fostering collaboration, and leveraging shared resources (in synergy with other African initiatives) to advance knowledge and improve mental health outcomes using bioinformatic approaches. This Community of Practice aims to serve as a pan-African hub that unites researchers and stakeholders, ensuring African populations are represented in and benefit from genomic medicine breakthroughs in the field of mental health.

Objectives

- Objective 1: Develop standardized frameworks for genomics, transcriptomics, proteomics, metabolomics, microbiomics, neurophysiological, and neuroimaging data sharing and analysis in psychiatric research.
- Objective 2: Foster interdisciplinary collaboration among bioinformaticians, geneticists, clinicians, and mental health professionals.
- Objective 3: Promote ethical and culturally sensitive approaches to psychiatric genomics research in African populations.
- Objective 4: Design and promote standardised bioinformatics training curricula for psychiatric genomics, transcriptomics, proteomics, metabolomics, microbiomics, and neuroimaging.

Scope of Work

Define what the group will focus on, including both what is and isn't included in its remit.

Inclusions

- Mapping existing psychiatric omics and neuroimaging research and training initiatives and identifying gaps.
- Serve as a coordination hub that links various psychiatric genetics projects and networks, including those in the Psychiatric Genomics Consortium (PGC) Africa's orbit. The group will maintain a catalog of ongoing studies and cohorts, and use this to connect investigators with similar interests.
- Facilitating collaborations between researchers, clinicians, and policymakers.
- Support the diverse needs of growing psychiatric research communities. This will partly be achieved through coordination with initiatives like the PGC Africa disorder working group, part of whose role is to ensure that African data and expertise integrate seamlessly into global analyses.
- Harmonizing study protocols and data collection standards where possible, the CoP helps streamline efforts instead of duplicating them. Joint analysis working teams may be formed to pool data or compare results, ensuring that findings are robust and representative of diverse African populations.
- Organizing workshops, webinars, and training programs on psychiatric omics, neuroimaging, and multimodal data integration.
- Provide guidance and technical support for bioinformatics infrastructure. This includes sharing pipelines for genotype and sequence data processing, facilitating access to high-performance computing (HPC) for data analysis, and advising on data storage solutions that comply with data protection regulations.
- Promote awareness of psychiatric genetics and the CoP's work within both the scientific community and the public. The group will maintain communications (e.g., newsletters, webinar series) and may partner with advocacy groups or clinicians to ensure research findings inform mental health practice.
- Applying for funding support for the formation of research and educational consortia.

Exclusions

- Direct clinical diagnosis or patient management.
- Allocation of research funding.
- Regulatory or policy enforcement.
- Duplication of Existing Efforts.
- The group will not act as an ethics committee that formally reviews or approves research protocols.
- The CoP will not claim ownership of datasets contributed by member projects. Any genomic data used in collaborative analyses will remain under the stewardship of the original researchers/institutions, with sharing governed by data use agreements.

Membership and Participation

The Community of Practice is intended to be inclusive, drawing expertise from across Africa and beyond. Membership is voluntary and open to individuals committed to advancing psychiatric genetics in Africa.

Composition: The working group is composed of researchers, clinicians, data scientists, and trainees involved in psychiatric genomics from active sites across Africa. This includes representatives from major projects and networks who bring experience from their ongoing studies. Key contributors to PGC Africa's initiatives are also members or advisors, ensuring alignment between the groups. Importantly, the CoP welcomes members of the African diaspora working in psychiatric genetics abroad, as their involvement can provide additional skills and strengthen global links. (Note: While the CoP benefits from members based at funded research sites, the group itself does not currently fund or maintain any dedicated field site.)

Meeting Frequency: Regular meetings will be held to maintain momentum and communication. The group will convene monthly virtual meetings (e.g., via Zoom or Teams) as the standard frequency. These meetings provide a forum to share project updates, discuss challenges, and plan collaborative activities. Additional ad-hoc meetings may be scheduled as needed (for instance, a brief check-in for an upcoming deadline, or sub-group meetings focused on specific deliverables or topics). An annual in-person meeting or workshop may be organized if resources permit, potentially aligned with an African genomics or mental health conference to maximize participation.

Attendance and Active Participation: Members are expected to attend a majority of the scheduled meetings and actively participate in discussions. Consistent attendance (for example, at least 75% of monthly meetings over a year) is encouraged to ensure continuity. If a member cannot attend a meeting, they should review the circulated minutes and contribute any input offline so that progress continues smoothly. Active participation also involves volunteering for tasks (such as contributing to a writing project or helping organize a training event) and sharing relevant updates from one's own research or region. The spirit of the CoP is collaborative; all members should feel empowered to propose agenda items and lead initiatives under the group's umbrella.

Onboarding New Members: The CoP will remain open to new members who show interest and have relevant expertise or roles. A simple onboarding process (e.g., introduction on a call or Slack, and provision of this ToR and past minutes for context) will be in place. This helps grow the community and brings in fresh perspectives. At the same time, to keep the group effective, efforts will be made to balance growth with engagement (e.g., periodic audits of membership to identify who is active, and reaching out to inactive members to confirm their continued interest).

Roles and Responsibilities

To function efficiently, the Community of Practice will have defined roles with clear responsibilities. Roles may be assigned via consensus or volunteering and can be rotated periodically to distribute opportunities for leadership.

Chair/Co-Chairs
The group will be led by either a Chair or two Co-Chairs. The Chair/Co-Chairs are responsible for providing strategic direction and leadership to the CoP. They convene and moderate the meetings, set meeting agendas (with input from members), and ensure follow-through on action items. Critically, the Chair/Co-Chairs serve as the primary liaisons to external bodies. They also represent the CoP in interactions with the broader African Bioinformatics Institute (and any sponsors or partner organizations). In cases of conflicting viewpoints, the Chair/Co-Chairs act as facilitators, striving for consensus or fair decision-making.

Members

All members share responsibility for the CoP's success. Members are expected to actively contribute their knowledge, skills, and effort. This can include: participating in discussions and decision-making; volunteering to lead or contribute to working sub-groups and serving as "champions" of the CoP's mission within their own institutions or networks. Members should communicate openly, respect diverse perspectives, and uphold the group's collaborative ethos.

Secretariat (Optional Role)

If resources allow, the CoP may have a small Secretariat or coordinating team (this could be one dedicated coordinator or a rotating duty among members). The Secretariat handles administrative and logistical tasks to support the group. Key responsibilities include scheduling meetings (circulating Doodle polls if needed to find suitable times across time zones), preparing and distributing meeting agendas, taking meeting minutes, and tracking action items and deadlines. The Secretariat maintains the group's documentation – such as updating a shared drive with meeting notes, maintaining the member contact list, and organizing key documents (ToR versions, deliverables drafts, etc.).

Governance and Decision-Making

Transparent and fair decision-making is essential for a collaborative group spread across different institutions and countries. The CoP will adhere to the following governance principles and processes to resolve issues and make decisions:

Consensus and Voting: The preferred mode of decision-making is consensus – the Chair/Co-Chairs will facilitate discussion on an issue until a general agreement is reached.

However, if consensus cannot be reached in a reasonable time, the group can resort to a voting process. Each active member (one vote per institution if multiple members from one institution, to encourage broad representation) will have an equal vote. A simple majority of those present can decide routine matters. For major decisions (such as a significant change to the ToR or committing to a large collaborative project), a supermajority (e.g., two-thirds) might be required. The exact thresholds can be set by the group. All votes can be conducted openly by show of hands or via anonymous poll if the topic is sensitive.

Handling Conflict or Disagreement: In a diverse group, disagreements may occasionally arise (whether scientific, logistical, or interpersonal). The CoP will handle these professionally and constructively. If a disagreement on a direction or policy occurs, the Chair/Co-Chairs will allocate time to hear all viewpoints, possibly convening a special meeting or forming a small ad-hoc committee to examine the issue in detail. The goal is to understand the root of disagreements. Many conflicts can be resolved by clarifying misunderstandings or finding a middle-ground solution. If a conflict becomes protracted, the group may seek mediation support – for example, asking an unbiased expert or a respected senior advisor (perhaps from the ABI leadership) to help mediate. All members are expected to engage in conflicts respectfully, focusing on facts and the group's mission, and avoiding personal attacks.

Escalation Mechanisms: If the CoP finds itself blocked in decision-making (e.g., a crucial decision cannot be made due to a deadlock, or a conflict cannot be resolved internally), an escalation pathway is in place. The issue can be escalated to the African Bioinformatics Institute's governance (such as an oversight committee or the ABI Director responsible for working groups) for guidance.

Review and Revisions

This Terms of Reference is intended to be a living document. As the Community of Practice evolves, the ToR should be revisited to ensure it remains fit for purpose. The group will adhere to the following review and revision process:

Periodic ToR Review: The ToR will be reviewed on a regular basis (annually as a minimum; for example, every January). A review can also be triggered by major events, such as after achieving a significant milestone or if there is a substantial change in the group's context (e.g., receipt of new funding, a shift in PGC Africa's structure, etc.). The annual review will involve going through each section of the ToR to confirm that the described processes and scope still make sense, and updating any sections as needed.

Communication & Collaboration Tools

The CoP will utilize modern collaboration tools to stay connected, efficiently share information, and work jointly on documents and projects. Key tools and guidelines include:

Primary Communication Channel (Slack/Teams): The group will use a messaging platform such as Slack, Zoom or Microsoft Teams as the main forum for day-to-day communication. This platform will have channels dedicated to different topics or projects (for example: #general for announcements and general discussion, #ethics for the guidelines drafting, #training for the module development, etc.). Members are encouraged to post updates, ask questions, and

share resources here. Real-time chat and notifications will help maintain engagement between meetings. It also creates an archive of discussions that can be searched later, ensuring continuity.

Deliverables & Timeline

Deliverable	Start date (Month;Year)	End date (Month; Year)
Landscape report on psychiatric genomics studies in Africa	September 2025	December 2025
Landscape report on psychiatric multi-omics studies in Africa	January 2026	October 2026
Draft ethical guidelines for psychiatric genomic data sharing	December 2025	March 2026
Training module for professional development	September 2025	June 2026