

ACE for Development Impact (ACE Impact)

2023 Annual Workplan Narrative

(to be submitted along with the attached detailed work plan and budget)

Name of Center	West African Centre for Cell Biology of Infectious Pathogens and Non-Communicable Diseases (WACCBIP + NCDs)
Institution	University of Ghana
Country	Ghana
Center Leader	Professor Gordon Awandare
Annual Workplan (Month – Month Year)	Jan-Dec, 2023

Narrative

1. **Center highlights in 2022** (maximum of 3 Highlights, maximum 100 words each). In a concise, descriptive statement suitable for public understanding, provide up to three Highlights from the Center accomplishments in the past year. You may attach: weblinks; press releases; photographs.
 - a) WACCBIP organized its 6th annual research conference from July 20-22, 2022, under the theme "Building Forward: Elevating African Research Innovation and Output". The conference was Chaired by the Vice Chancellor of the University of Ghana, Professor Nana Aba Appiah Amfo and provided a valuable opportunity to create direct pathways for the young scientists trained at the Centre to connect with world-renowned scientists and industry professionals. The special guest of honour Dr Anarfi Asamoah-Baah, Presidential Coordinator for Ghana's COVID-19 Response Programme, spoke on Changing the Narrative of Science in Africa. The conference also featured keynote addresses from world-renowned researchers including Professor Nadia Sam-Agudu, Senior Technical Advisor for Pediatric and Adolescent HIV at the Institute of Human Virology Nigeria (IHVN), and an Associate Professor of Pediatrics at the Institute of Human Virology, University of Maryland School of Medicine, USA, Dr. Peter Quashie, the Deputy Director in charge of Research and Senior Research Fellow at WACCBIP, and Dr. Bismarck Dinko, a Senior Lecturer from the Department of Biomedical Sciences of the University of Health and Allied Sciences. The conference included over 350 in-person and virtual participants.

<https://www.waccbip.org/news-events/news/tell-our-own-story-amidst-challenging-times-professor-awandare-charges-african-scientists-at-6th-waccbip-research-conference>

<https://www.myjoyonline.com/lets-tell-our-own-story-amidst-challenging-times-prof-awandare-charges-african-scientists/>

- b) The Centre's visibility has greatly been enhanced due to our outstanding research achievements. As a result, there were several visits from high profile officials to the Centre during the year to acquaint themselves with our research activities and explore possible collaborations. This included the then Director of the African Centre for Disease Control and Prevention (Africa-CDC) and now the U.S. Global AIDS Coordinator and Special Representative for Health Diplomacy (S/GAC), Dr. John Nkengasong, the United Kingdom Minister for Africa, Latin America and the Caribbean, the Hon. Vicky Ford and UK High Commissioner to Ghana, Harriet Thompson. Additionally, a high-powered delegation comprising of representatives from the KENUP Foundation, BioNTech, GIZ, Rwanda High Commission in Ghana and the Rwanda Food and Drug Authority also paid a working the Centre under the auspices of the Presidential Committee on Vaccine Development and Production. The team, which was led by Dr Anthony Nsiah Asare -Presidential Advisor on Health, was at the Centre to explore opportunities for collaboration in the manufacture of vaccines in Africa and Ghana.

<https://www.waccbip.org/news-events/news/director-of-africa-cdc-tours-waccbip>

<https://www.waccbip.org/news-events/news/uk-minister-for-africa-visits-waccbip>

<https://www.waccbip.org/news-events/news/working-visit-of-presidential-committee-on-vaccine-development-and-production>

2. **Key Center achievements in 2022** (Maximum 500 words) Describe the Key Accomplishments of the Center in the preceding Calendar Year. Focus on: Teaching, Research, Center-level Operations. In addition, comment on how the Accomplishments align with the ACE Impact project Disbursement Linked Indicators (DLIs) and the Center Implementation Plan.

Grant awards: The Centre was successful in applying for grants from various funding agencies including the Wellcome Trust, National Institute for Health and Care Research (NIHR), UK, National Institutes of Health (NIH), USA, and the Deutscher Akademischer Austauschdienst (DAAD), as lead and collaborating institution. These grants support ongoing research and training activities at the Centre and will ensure the Centre's objectives are sustained beyond the ACE Impact project. Key among these successful grants is the DAAD in-county/in-region scholarship programme which will provide additional scholarships for students to enroll in the MPhil programme in Molecular Cell Biology of Infectious Diseases at WACCBIP contributing towards DLI 3.2 (New masters students). Additionally, the grants will contribute towards externally generated revenue (DLI 5.1) and development impact (DLI 2) on the ACE Impact project.

Buruli ulcer drug discovery database (BuDb): A team of WACCBIP affiliated researcher including Dr Samuel Kojo, Dr Lydia Mosi, and Prof. Michael David Wilson have developed the Buruli ulcer drug discovery database known as BuDb. BuDb is a curated and integrated drug discovery database for Buruli ulcer (Bu). BuDb contains both manually verified literature and database-curated data manually verified datasets, providing enriched and comprehensive data on drug targets, tested compounds, existing drugs, ethnopharmacological plants and information on the genome of mycobacterium ulcerans. Additionally, these enriched datasets are cross-referenced to other functional annotation databases. BuDb is the first of its kind and will aid the search for new treatment options for Buruli ulcer disease. BuDb is published in the Journal of Computational Biophysics and Chemistry and is freely accessible online at <http://197.255.126.13:3000/>.

3. **Status/Progress on Implementation** (Maximum 250 words) Describe in what ways, if any, the Center is ahead of schedule with respect to the Implementation Plan.

The Centre has made significant progress in achieving results on the ACE impact project with 73% of all results achieved at mid-term. WACCBIP achieved the maximum 100% for DLR 5.1 (externally generated revenue) in the first year of project implementation. The Centre has currently achieved 86% for DLR 3.1 (New PhD students) and 100% DLR 3.3 (New Prof. Short Course Students). In addition, the Centre has achieved 100 % for both DLI 4.1 (Program Accreditation) and DLI 4.2 (Publications). The Centre has also achieved 50% of results for DLI 4.3 (Teaching & Research Infrastructure) and has submitted results for the second milestone for verification. Key among results achieved during the year was a perfect score of 5/5 (100%) for DLI 2.1 (Development Impact).

4. **Plan for Acceleration** (Maximum 500 words) Describe in what ways, if any, the Center is behind schedule with respect to the Implementation Plan. How will the Center adjust to achieve the anticipated project deliverables by the conclusion of ACE Impact?

Several strike actions by university faculty and staff (labor unions) affected the academic calendar of the University. Graduate student enrolment for the 2022/23 academic year at the University of Ghana which was due in August/September 2022 was postponed to January 2023.

To ensure the internship target for the project is achievable, the Centre proposed to reduce the overall DLR allocation to internships during mid-term review. This is because the centre has encountered difficulty in securing placements for internships in private sector industries due to the limited number of private health sector industries in West Africa. This issue was further compounded by the COVID-19 pandemic and related restrictions as organizations were not accepting interns for over a one-year period. As COVID-19 restrictions are being eased, internships have resumed but there is a likelihood we may not meet our target for internships.

Through the DAAD in-country/in-region programme, we will be able to offer scholarships and enroll more regional students in our masters programmes from the 2023/24 academic year to meet the enrolment target for masters students.