West Africa Regional Technical Resource Center for Pharmaceutical Management in Ghana and Nigeria, June 25–July 9, 2007: Conceptual Framework

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ACRONYMS

AIDS acquired immunodeficiency syndrome

GHS Ghana Health Service

KNUST Kwame Nkrumah University of Science and Technology

MoH Ministry of Health

MSH Management Sciences for Health

NAFDAC National Agency for Food and Drug Administration and Control

RPM Rational Pharmaceutical Management Plus [Program]

RTRC Regional Technical Resource Collaboration

TB tuberculosis

USAID U.S. Agency for International Development

WHO World Health Organization

W/RTRC West Africa Regional Technical Resource Collaboration for

Pharmaceutical Management

BACKGROUND

This initiative, the West Africa Regional Technical Resource Collaboration for Pharmaceutical Management (W/RTRC), aims to use academic institutions to build in-country and regional capacity in pharmaceutical management. The Rational Pharmaceutical Management (RPM) Plus Program of Management Sciences for Health (MSH) will provide technical assistance to Kwame Nkrumah University of Science and Technology (KNUST) in Ghana and to the University of Jos in Plateau State, Nigeria, to develop and foster a regional network of institutions to build capacity in supply management of medicines and other commodities used for HIV/AIDS, tuberculosis (TB), and malaria treatment programs in West Africa.

To start up the initiative, an MSH/RPM Plus team composed of Emmanuel Nfor and Lloyd Matowe traveled to Kumasi in Ghana and Jos in Nigeria to help with the formation of core groups for the initiative and to discuss the objectives of the initiative with core-group members and key stakeholders. On the trip to Nigeria, the RPM Plus team was joined by Professor Mahama Duwiejua, the dean of KNUST. Professor Duwiejua is the proposed coordinator of the W/RTRC. The specific objectives of these visits were to—

- Assist with the formation and consolidation of country teams for the W/RTRC
- Discuss the objectives of the initiative with the W/RTRC country core team
- Share the RPM Plus Regional Technical Resource Collaboration (RTRC) experiences from East Africa
- Meet with ministry of health (MoH) officials and other stakeholders to discuss the RTRC concept
- Identify specific areas for interventions on pharmaceutical supply management
- Plan specific activities for W/RTRC

MEETINGS WITH KEY STAKEHOLDERS

During the trips to Kumasi and Jos, the MSH/RPM Plus team met with a number of key stakeholders (see Tables 1 and 2). All the key stakeholders that the team met with supported the RTRC concept. Additional stakeholders the team met with in Nigeria are shown in Table 3.

In Nigeria, the two Permanent Secretaries for Health of the two states of Plateau and Bauchi that the team met with were receptive to the initiative. Both Permanent Secretaries felt the initiative had come at the right time because the country is facing numerous challenges pertaining to pharmaceutical supply management. The Directors of Pharmaceutical Services of both states expressed the same sentiments.

Table 1. Key Stakeholders the RPM Plus RTRC Team Met with in Nigeria

Name (Designation)	Institution	Date of Meeting
Professor Elijah Sokomba	School of Pharmacy, University of Jos	July 2, 2007
Professor Jacob Kolawole (Dean)	School of Pharmacy, University of Jos	July 2, 2007
Prof. Sonni Gwanle Tyoden (Vice Chancellor)	University of Jos	July 3, 2007
Mr. L. S. Lar (Director of Pharmaceutical Services)	MoH, Plateau State	July 4, 2007
Dr. I. Agaldo(Permanent Secretary)	MoH, Plateau State	July 4, 2007
Dr. Lar (Deputy Chief Medical Director)	Plateau State Specialist Hospital, Jos	July 4, 2007
Mr. Danjuma Garba Adamu (Head of Pharmacy Department)	Plateau State Specialist Hospital, Jos	July 4, 2007
Mr. I. V. Emenike (Director of Pharmaceutical Services)	MoH, Bauchi State	July 5, 2007
Alh. Hassan Adamu Shiva (Permanent Secretary)	MoH, Bauchi State	July 5, 2007
Mr. J.E.B. Adagadzu (Director of Drug and Food Services)	Federal Ministry of Health, Headquarters, Abuja	July 5, 2007
Mr. Abdullahi Maiwada (Program Manager Reproductive Health)	USAID/Abuja	July 9, 2007

Table 2. Key Stakeholders the RPM Plus RTRC Team Met with in Ghana

Name (Designation)	Institution	Date of Meeting
Professor Mahama Duwiejua (Dean)	School of Pharmacy	June 24, 2007
Dr. Edward Addaii (Director, Policy Planning , Monitoring and Evaluation)	Ghana MoH	June 25, 2007
Dr. Yaw Antwi Boasiako (Director, Human Resources for Health Development)	Ghana MoH	June 25, 2007
Dr. Elias Kavinah Sory (Director General)	Ghana Health Services	June 25, 2007
Dr. Ken Sagoe (Director of Human Resources)	Ghana Health Services	June 25, 2007
Mr. Sam Boateng (Director, Procurement and Supply)	Ghana MoH	June 25, 2007
Mrs. Martha Gyansa-Lutterodtl (Program Manager)	Ghana National Drugs Programme	June 25, 2007
Peter Segbor (Executive Secretary)	Pharmaceutical Society of Ghana	June 25, 2007
Mr. Felix Yellu (Chief Pharmacist)	Ghana Health Services	June 25, 2007
Mr Joseph Nyoagbe (Registrar)	Pharmacy Council of Ghana	June 25, 2007
Professor Kwame Sarpong (Provost)	College of Health Sciences, KNUST	June 28, 2007
Professor W. O. Ellis (Pro Vice Chancellor)	KNUST	June 28, 2007

Table 3. Additional Stakeholders the RPM Plus Team Met with in Nigeria

Name	Institution
D. A. Garba	Plateau State Specialist Hospital, Jos
J. L. Zakka (Mrs.)	ECWA Evangel Hospital, Jos
Dr. Amuda-Giwa, S.O	National Agency for Food and Drug Administration and Control (NAFDAC), EID/NCZ, Jos
J. A. Dayilim (Mrs)	NAFDAC, Jos, Plateau State (Unit Head)
Tom Omo-Fregene Francis	Pharmaceutical Society of Nigeria, Jos
S. B. Banwat	Lecturer in Clinical Pharmacy, University of Jos
S. S. Gyang	Lecturer in Clinical Pharmacy, University of Jos
Y. F. Nkom	NAFDAC, Jos, Plateau State
Obioma Achlilefu	Angaz Pharm Ltd, Jos
L. D. Golen	Plateau State Specialist Hospital
Angi A. James	Central Medical Stores, Jos
Sheni Shehu	Lohmak Pharmacy, Ltd, Jos
Nelson Ochekpe	Faculty of Pharmaceutical Sciences, University of Jos
P. P. Adikwu	PABA Pharmacy, Jos

W/RTRC CONCEPTUAL FRAMEWORK

Following the advocacy meetings previously mentioned, the RPM Plus team met with the core group to develop a detailed conceptual framework for the initiative. The following individuals attended the meeting to develop the conceptual framework: Professor Mahama Duwiejua, Dr. Charles Ansah, Dr. Eric Woode, and Kwame Buabeng, all of KNUST, Ghana; Professor Elijah Sokomba, Professor Jacob Kolawole, Dr. Nelson Ochekpe, S. Gyang, and Sam Banwat, all of the Faculty of Pharmaceutical Sciences of the University of Jos, Nigeria; and Emmanuel Nfor and Lloyd Matowe of RPM Plus.

Mission Statement

The mission of the initiative is to build capacity for effective pharmaceutical supply management within the West Africa subregion.

General Objective

The general objective of the initiative is to develop and foster a regional network of academic institutions to build capacity and develop skills for pharmaceutical supply management in both Ghana and Nigeria, as well as the entire West African subregion.

Specific Objectives

The specific objectives of the initiative are to—

- Carry out assessments of the pharmaceutical supply management situation in both Ghana and Nigeria (with emphasis on HIV/AIDS, TB, and malaria)
- Conduct trainings, workshops, and skills-building activities for pharmaceutical supply management
- Develop novel skills-building and problem-solving interventions for pharmaceutical management
- Conduct operations research for the improvement of pharmaceutical management in Ghana, Nigeria, and the West African subregion
- Develop funding proposals to mobilize resources that will enhance KNUST's and the University of Jos's ability to contribute to quality improvement programs for pharmaceutical supply management in their respective countries and the West African subregion

RTRC GROUP STRUCTURE

Structure of the Nigerian RTRC Group

Professor Elijah Sokomba will lead the Nigerian W/RTRC group. He has had previous experience in personnel and materials management at national and international levels.

Other members of the core group in Nigeria include Professor Jacob Kolawole, PhD; Dr. Nelson Ochekpe, PhD; S. S. Gyang, MSc; and Sam Banwat, MPharm. Curriculum vitae for Nigerian core-group members are contained in Annex A.

Structure of the Ghanaian RTRC Group

Professor Mahama Duwiejua, PhD, will lead the Ghanaian W/RTRC group. Professor Duwiejua is Ghanaian and currently serves as dean of the Faculty of Pharmacy of Kwame Nkrumah University of Science and Technology.

Other members of the core group in Ghana include Dr. Charles Ansah, PhD; ;Eric Woode, MSc; Samuel Asare-Nkansah, MSc; Samuel Bekoe, MSc; Dr. Kofi Annan, PhD; and Dr. Frances Owusu Daaku. Curriculum vitae for Ghanaian core-group members are contained in Annex B.

INSTITUTIONALIZATION

Nigeria: University of Jos

The Nigerian W/RTRC will be based at the Faculty of Pharmaceutical Sciences of the University of Jos. The University of Jos is the largest university in Plateau State in north-central Nigeria. The Faculty was established in October 1983 and graduated the first group of 39 pharmacists in September 1990. The dean, Professor Jacob Kolawole, is administrative head of the faculty. He is assisted by a deputy dean, Dr. Nelson Ochekpe. The Faculty has the following five departments (department heads are indicated in parentheses)—

- Pharmacology (Prof. J. C. Aguiyi)
- Clinical Pharmacy (Mr. S. S. Gyang)
- Pharmaceutical Chemistry (Prof. J. Onah)
- Pharmacognosy (Prof. H. Ohiri)
- Pharmaceutics and Pharmaceutical Technology (Assoc. Prof. P. O. Olorunfemi)

As of July 2007, the Faculty has graduated more than 1,000 pharmacists who are working in both private and public establishments within and outside Nigeria. In addition, postgraduate courses are offered up to PhD levels in all the departments expect the Department of Pharmacognosy, which cannot do so because of staffing problems. A center for Mandatory Continuing Professional Development has been operating in the Faculty for more than 15 years. This center affords the Faculty the opportunity to have continual input to the practice of pharmacy even after the regular pharmacy training course.

The Faculty collaborates with pharmaceutical industry and public pharmaceutical establishments for the mutual benefit of all.

Ghana: KNUST

The Ghanaian W/RTRC will be based at the Kwame Nkrumah University of Science and Technology in Kumasi. The KNUST Faculty of Pharmacy is the only institution training pharmacists in Ghana. Since attaining Faculty status in 1964, the Faculty of Pharmacy and Pharmaceutical Sciences has trained more than 2,000 pharmacists for Ghana and several other African countries, including Gambia, Lesotho, Liberia, Malawi, Nigeria, Sierra Leone, Swaziland, Tanzania, and Zambia.

In 2007, student enrollment per year averages 120 per class. The total faculty strength stands at 33 senior members. The Faculty has the following five departments: General Pharmaceutics and Microbiology, Pharmacognosy, Pharmacology, Pharmaceutical Chemistry, and Clinical and Social Pharmacy. All departments in the Faculty offer postgraduate programs in various aspects of the pharmaceutical sciences. The Faculty also runs a Bachelor of Science program in herbal medicine. The current collaboration is envisaged as leading to a Master of Science program for the subregion in pharmaceutical supply management.

Members of the Faculty have contributed to the development and implementation of health policy in Ghana, notably as resource persons in the drafting of the Ghana National Drugs Policy, various versions of the National Essential Drugs Lists, and the drugs for reimbursement by the National Health Insurance Commission. They have also participated in continuing professional development programs for pharmacists in the private and formal sectors. The faculty therefore has good working relations with the Ministry of Health and its agencies, such as the Food and Drugs Board and Pharmacy Council and the Ghana Health Service.

FINANCE AND FINANCIAL ACCOUNTABILITY

Funding for activities undertaken by W/RTRC will come from national, bilateral, and multilateral donors who are willing to partner with W/RTRC to achieve the goals of the initiative.

Nigeria: University of Jos

Funds for the W/RTRC will be managed through the university's financial system, which is administered by the Bursary Department of the central Administration Office. Specifically, the Bursary Department of the university will administer the funds for the project in accordance with existing guidelines for the management of external funds.

Ghana: KNUST

Funds for the W/RTRC will be managed through the university's financial system. Under that system, funds for projects are paid into either the university or college accounts. Each college has a qualified accountant who reports to the Provost of the college. Release of funds is tied to activities. Therefore, to obtain money from a project fund, the principal investigator would have to apply (with justification) to either the Provost of the college or the finance officer of the university for release of funds. Invoices for purchase of all items go through a procurement committee that ensures the best use of funds. Release of further funds depends on satisfactory returns made on the previous funds obtained. The university has internal auditors that verify all expenditures.

TECHNICAL ASSISTANCE

The Strengthening Pharmaceutical Systems program of MSH, funded by the U.S. Agency for International Development (USAID), will provide technical assistance for W/RTRC. MSH, with more than 1,000 staff, is a nonprofit organization with 33 years of experience in more than 100 countries. Through its Center for Pharmaceutical Management, MSH works to improve access to medicines, collaborating with public, private, nonprofit, and faith-based host-country partners to implement innovative approaches to select, purchase, store, deliver, and effectively use high-quality medicines.

MSH initiatives include publication of *Managing Drug Supply*, the most widely respected textbook on pharmaceutical management; establishing and coordinating the International Network for the Rational Use of Drugs since 1990; and, in collaboration with the World Health Organization (WHO), developing and conducting yearly international courses on Promoting Rational Drug Use, and Drug and Therapeutics Committees. In other ongoing work, MSH aims to enhance access to essential medicines in the private sector through franchising approaches in Ghana and Kenya and through regulatory approaches in Tanzania.

SPECIFIC ACTIVITIES

The first activities earmarked for both Nigeria and Ghana are a pharmaceutical supply management training-of-trainers course to be held in Kumasi, Ghana, for RTRC members and a comprehensive assessment of the pharmaceutical supply management situations in Ghana and Plateau and Bauchi States in Nigeria.

IN-COUNTRY COLLABORATION

Collaborating Institutions in Nigeria

RTRC collaborating institutions in Nigeria include Food and Drug Services; Federal Ministry of Health, Abuja; and the MoHs of Bauchi and Plateau States.

Collaborating Institutions in Ghana

Collaborating institutions in Ghana include Ghana National Drugs Programme, MoH, Ghana Health Service, Ghana AIDs Commission, National AIDs Control Programme, Regional Health Directorates, National Malaria Control Programme, and National Tuberculosis Programme.

ANNEX A. BRIEF CURRICULUM VITAE OF NIGERIA CORE-GROUP MEMBERS

Professor E. N. Sokomba

Prof. Sokomba commenced his career in teaching and research as an Assistant Lecturer at the Ahmadu Bello University, Zaria, in July 1974. In October 1987, he transferred his service to the University of Jos. He has held various administrative responsibilities at both universities, including head of department, dean of faculty, and chairman of committees. During the period 1995 to 2000, he served as the Executive Secretary, West African Pharmaceutical Federation, and Director, Registration and Regulatory Affairs, National Agency for Food, Drug Administration and Control. He returned to the University of Jos in 2001 to resume teaching and research responsibilities. He has published several scientific articles in relevant national and international journals. He has also supervised postgraduate students at MSc. and PhD levels.

Professor Jacob Kolawole, PhD

2003: Professor of Pharmaceutical and Medicinal Chemistry, University of Jos

2002 to 2008: Dean, Faculty of Pharmaceutical Sciences

1997 to present: Member, University of Jos Senate

1990 to present: Research and teaching 1989–1990: Senior Hospital Pharmacist

Other pharmacy-related experience—

- Pharmacy Department, University of Ilorin Teaching Hospital, Ilorin
- Head of drug information unit (drug information, lectures/seminars, counseling of patients on proper use of drug)
- Pharmacist/Manager, Mixopharm Nigeria, Limited, Offa/Lagos
- General Manager of retail pharmacy outlet, compounding, procurement, and sales of drugs

Dr. Nelson Ochekpe, PhD

Dr. Ochekpe is a pharmaceutical quality assurance consultant, a trainer and manager of men and materials, with over 20 years of experience in research and regulatory issues. His work experience includes—

- October 2004 to present: Reader, Department of Pharmaceutical Chemistry, University of Jos
- January 2001–2004: Senior Lecturer, Department of Pharmaceutical Chemistry, University of Jos
- January–October 2000: Director, Laboratory Services, NAFDAC
- November 1995–1999: Deputy-Director, Laboratory Services, NAFDAC
- July 1993–October 1995: Deputy-Director (Principal Research Fellow), National Institute for Pharmaceutical Research and Development (NIPRD)

- July 1990–1993: Head of Department, Senior Research Fellow, NIPRD
- March 1989–November 1990: Lecturer I, Departmental Coordinator, University of Jos
- November 1982–November 1988: Research Student, Robert Gordon University, Aberdeen, UK
- December 1982–November 1985: Pharmacy Graduate Assistant, Ahmadu Bello University, Zaria
- July 1980–November 1982: Hospital Pharmacist, Benue and Rivers States

S. S. Gyang, MSc

Mr. Gyang's work experience includes—

- 1990–present: Lecturer 1, Departments of Clinical Pharmacy and Pharmacology, University of Jos, Plateau State, Nigeria
- 1999: Principal Consultant to "The Plateau State Commission of Inquiry into Major Contracts" ["The Dangin Commission of Inquiry"]
- 1997–1998: Pharmaceutical/Clinical Consultant, "Infant Water and Electrolyte Disorders" i/c Cross River State, Petroleum Trust Fund, Abuja, Nigeria
- 1995–1998: Appointed Pharmaceutical Inspector, Plateau State, Pharmacist Council of Nigeria

Sam Banwat, MPharm

Mr. Banwat is a management and pharmaceutical consultant who studies and offers solutions to organizational and management issues. He is experienced in training on various issues of selection, procurement, and distribution of medicines and other commodities. His work experience includes—

- 2003 to present: Lecturer, Department of Clinical Pharmacy, University of Jos, Nigeria
- 2003 to present: Consultant to National Action Committee on AIDS on capacity review of states and local government committees on AIDS in Nigeria
- 2004: Consultant to WHO/UNAIDS on the formation of Network for the Treatment of HIV/AIDS in Nigeria 2005: Consultant to WHO/AIDS on the mapping of HIV/AIDS treatment sites in Nigeria
- 2006: Consultant to UNAIDS on workplace learning assessment for UN staff in Nigeria
- September 1996–December 2002: Christian Health Association of Nigeria (CHAN)
- Director of CHANPHARM: a department of the association responsible for pharmaceutical procurement and distribution. As director, he was responsible for
 - o coordinating the development of strategic plan for CHANPHARM;
 - o managing CHANPARM in such a way that enabled the delivery of quality drugs to member units of CHAN at affordable prices and on regular basis;
 - o ensuring that all the administrative, financial and management policies passed by the National Executive Council of CHAN were implemented; and
 - o coordinating all matters relating to the activities of CHANPHARM and ensured that the staff were fully motivated.

ANNEX B. BRIEF CURRICULUM VITAE OF GHANA CORE-GROUP MEMBERS

Professor Mahama Duwiejua, PhD

Professor Duwiejua is the current dean of the Faculty of Pharmacy and Pharmaceutical Sciences, KNUST. Previously, he served for many years as a vice-dean, head of department for Pharmacology, and head of department for Clinical and Social Pharmacy. He is a member of the governing boards of the Ghana Pharmacy Board, Centre for Scientific Research into Plant Medicine, Pharmaceutical Society of Ghana, and Advisory Committee on Adverse Drug Reactions to the Ghana Food and Drugs Board. Professor Duwiejua is also the current chairman of the Joint Faculty Board of the West African Postgraduate College of Pharmacists.

He has taught pharmacology for over 20 years to pharmacy, medical, and nursing students. He was also a fixed-term lecturer in pharmacology at the department of Physiology and Pharmacology, University of Strathclyde, Glasgow (1991–1993). He has supervised much basic science research in pharmacology at undergraduate and graduate levels and has published in respected peer-reviewed journals. He is a reviewer for pharmacology journals in the West African subregion. He also serves as an external examiner to other universities in Ghana, Nigeria, and Gambia. As chairman of the Joint Faculty Board of the West African (Ghana, Nigeria, Gambia, Sierra Leone, and Liberia) Postgraduate College, he supervises the conduct of examinations for all faculties (faculties of clinical pharmacy, social and administrative pharmacy, community pharmacy, and industrial pharmacy) of the college and awards of fellowship certificates to graduates of the college.

Professor Duwiejua also holds qualifications in clinical pharmacy. He developed the curriculum for clinical and social pharmacy and set up the Department of Clinical and Social Pharmacy. As Head of Clinical and Social Pharmacy, he developed relations with the Ministry of Health leading to a memorandum of understanding to train clinical pharmacists for the MoH. He also served on several committees for the MoH, Ghana Health Service (GHS), and Ghana National Drug Programme and as a resource person for the several government and nongovernmental organizations for improving and promoting access to medicines and rational drug use. Some projects he has been involved in include—

- May 2007: Expert group that prepared the list of reimbursable medicines for the Ghana National Health Insurance. The team also reviewed the Ghana National Treatment Guidelines.
- October 2006: Member of three-person team consulting on options for Ghana under TRIPs flexibilities to increase access to ARVs and other medicines in the country. Assignment performed on behalf of International Dispensary Association solutions for Ministry of Health, Ghana.
- September 2006: Member of team that assessed the department of pharmacology, University of Ghana Medical School, for accreditation. Report submitted to the National Accreditation Board.

- December 2005: Assessed local pharmaceutical industry training needs, resulting in a proposal to the university to mount a graduate program in pharmaceutical technology to build local capacity for manufacturing.
- March 2005: Lead consultant: Institutionalizing clinical pharmacy practice into the Ghana Health Service under contract from GHS.
- March 2005: Member of team preparing recommended list of drugs for reimbursement by the National Health Insurance Scheme, sponsored by the Ghana National Drugs Programme.
- August 2004–December 2005: Principal investigator: Prevalence of adverse drug reactions among patients with pulmonary tuberculosis in Greater Accra and Upper West regions, Ghana. Project sponsored by MoH/GHS through the Ghana-Dutch Collaboration.
- March 2004: Member of team that reviewed the MoH's 2003 program of work on clinical care—sponsored by Ministry of Health, Ghana—assessed the pharmaceutical sector's performance.
- June–December 2003: Facilitated in workshops on risk management techniques in district mutual health insurance schemes to district assemblies within Ashanti region, sponsored by USAID through PHRplus/ABT Associates.
- August 2002–December 2003: Lead consultant for team that carried out feasibility study
 on establishing a district mutual health insurance scheme for Offinso District in Ashanti
 region, followed up to advise working group of scheme on benefits package and premium
 setting and risk management of the scheme. Sponsored by USAID through
 PHRplus/ABT Associates.
- December 2003–February 2004: Facilitated in sensitization workshops to all regional branches of Ghana Registered Nurses Association on the National Health Insurance Scheme. Sponsored by USAID through PHRplus/ABT Associates.
- 1995: Member of team that prepared the second edition of MOH's essential medicines lists.

Charles Ansah, PhD

Dr. Ansah is a Senior Lecturer and Head of Department of Pharmacology, KNUST, Ghana. His academic experiences include—

- 2005–present: Senior Lecturer, Department of Pharmacology, KNUST, Kumasi
- 2000–2004: PhD research student, Molecular Toxicology Unit Division of Biomedical Sciences Imperial College, London

- 1993–1994: Royal Postgraduate, Medical School (now Imperial College), University of London; MSc student, Department of Pharmacology, KNUST, Kumasi; Lecturer
- 1987–1989: National Service/Teaching Assistant, Department of Pharmacology, KNUST, Kumasi,; Teaching Assistant/Demonstrator, Department of Pharmacology, KNUST, Kumasi

Eric Woode, MSc

1986–present: Department of Pharmacology, KNUST, Kumasi, Ghana, Lecturer in pharmacology; Postgraduate Diploma in Otorhinolaryngology of the West African Postgraduate College of Surgeons and the Ghana College of Physicians and Surgeons

1984–1986: Assistant Lecturer, Department of Pharmacology, KNUST, Kumasi

1982–1984: Department of Pharmacology, KNUST, Kumasi National Service

Projects supervised: M. Pharm/M. Projects

Samuel Asare-Nkansah, MSc

February 2003 to Present, Lecturer, Department of Pharmaceutical Chemistry, KNUST

October 2000-July 2002, Demonstrator, Supervisor of Student project /research work; designing and supervising project /research work as the Principal Investigator in Pharmaceutical Chemistry for final year Bachelor of Pharmacy students since 2004.

Samuel Bekoe, MSc.

2005 to date: Lecturer, Department of Pharmaceutical Chemistry, KNUST, Kumasi

2002–2004: Demonstrator, Department of Pharmaceutical Chemistry, KNUST, Kumasi

2001–2002: Teaching/Research Assistant, Department of Pharmaceutical Chemistry, KNUST, Kumasi

Ongoing research: Bioavailability studies on amodiaquine-artesunate combination tablet dosage form

Dr. Kofi Annan, PhD

1999–2003: Academic tutor, Faculty of Pharmacy, KNUST, Kumasi; Treasurer, Academic and Social Wing of Pharmaceutical Society of Ghana

1999-2003: Superintendent Pharmacist, Anarosa Pharmacy, Kumasi

1994–1999: Supervising Community Pharmacist, Dampong Pharmacy, Kumasi

1993–1994: Intern pharmacist, Kumasi South Urban Health Centre

Dr. Frances Owusu Daaku, PhD

October 2006-present: Senior Lecturer

October 2003–December 2004: Head, Department of Clinical and Social Pharmacy, KNUST, Kumasi

October 1999–Sept 2000: Deputy Vice-Dean and Head, Department of Pharmaceutical Chemistry, KNUST, Kumasi

October 2005-present: Vice-President, Pharmaceutical Society of Ghana

Supervision of student project work/theses: Has supervised at least 35 undergraduate student projects and seven postgraduate MSc theses

Ongoing research:

- Health workers' attitudes towards people living with HIV/AIDS
- Documenting the role of pharmacists in Ghana's health care
- Developing a social pharmacy curriculum at KNUST