

# AFRICA'S NEGLECTED EPIDEMIC

## Multidisciplinary Research, Intervention and Policy for Chronic Diseases



16 – 17 February 2009  
British Council  
Accra

Africa faces a neglected epidemic of chronic diseases. In countries like Ghana, Cameroon and Nigeria, stroke, hypertension, diabetes and cancers cause a significant number of medical admissions and deaths. This conference brings together researchers, healthcare providers, policymakers and donors from Africa, UK and Europe to discuss research, practice and policy on Africa's chronic disease burden.



# **AFRICA'S NEGLECTED EPIDEMIC: MULTIDISCIPLINARY RESEARCH, INTERVENTION AND POLICY FOR CHRONIC DISEASES**

**An international conference organised by the British Academy, Royal Society and  
the Ghana Academy of Arts and Sciences  
16<sup>th</sup> – 17<sup>th</sup> February 2009**

**British Council, Accra**

Africa faces a neglected epidemic of chronic diseases. In countries like Ghana, Cameroon and Nigeria, chronic conditions such as stroke, hypertension, diabetes and cancers cause a significant number of medical admissions and deaths. Experts recognize that a problem exists and attribute it to an interaction of factors including medical, psychological, socio-cultural, economic, structural and geopolitical. There is a consensus that successful interventions have to be 'multi-faceted' and 'multi-institutional'. However, research, practice and policy responses remain inadequate.

In 2006, the British Academy awarded a UK-Africa Partnership grant to Dr Ama de-Graft Aikins from the University of Cambridge, and Dr Daniel Arhinful, from Noguchi Memorial Institute for Medical Research, to develop a programme of collaborative research on the subject of *Africa's 'neglected epidemic': Developing a multidisciplinary research and intervention model for chronic disease*. Given the success of their project, and its strong interdisciplinary approach, it was felt to form the ideal basis for a larger conference to be jointly organized by the British Academy, Royal Society and Ghana Academy of Arts and Sciences.

This conference brings together researchers, healthcare providers, policymakers, donors and other stakeholders from Africa, UK and Europe to discuss Africa's chronic disease burden. Topics include: the history of public health in Africa, current trends in public health policy, prospects for achieving the health MDGs in Africa, developing interdisciplinary interventions for chronic diseases, the nutrition transition in Africa, the inter-relationship between communicable and non-communicable diseases, scientific and lay aspects of traditional medicine, and building capacity in the health sciences. It is hoped that the conference might be able to bring fresh insights to the ongoing debate, and to the formulation of a new set of recommendations.

## **Speakers include:**

Dr Edward Addai (The Global Fund, Geneva)  
Professor Marian Addy (Anglican University College/GAAS)  
Dr Charles Agyemang (University of Amsterdam)  
Professor Pascale Allotey (Brunel University)  
Dr Paul Amuna (University of Greenwich)  
Dr Marius de Jong (Royal Netherlands Embassy/DFID)  
Dr Anthony Seddoh (WHO-Afro)  
Professor Nigel Unwin (University of Newcastle)  
Professor Megan Vaughan (University of Cambridge/The British Academy)  
Professor Sir Magdi Yacoub (**Keynote Speaker**, Imperial College/Royal Society)

**The organizers gratefully acknowledge the support of The British Council, Accra and the LSE's Institute of Social Psychology for this event.**

## WORKSHOP PROGRAMME

### DAY ONE: Monday, 16<sup>th</sup> February 2009

8.30 - 9.20	Registration, Tea & Coffee.
<b>9.25 – 11.00</b> <b>9.25</b>	<b>Welcome</b> <b>Chair:</b> Minister of Health
9.30	<b>Prof. Reginald F. Amonoo, FGA, President GAAS:</b> Welcome Address and Introduction
9.40	<b>Professor Duncan Gallie, FBA, Foreign Secretary, British Academy</b>
9.50	<b>Professor Lorna Casselton, FRS, Foreign Secretary, Royal Society</b>
<b>10.00</b>	<b>Professor Sir Magdi Yacoub, FRS: Keynote Address: Advancing biomedical research in Africa as a priority</b>
10.30 – 11.00	Tea break
<b>11.00 – 12.30</b> <b>11.00</b>	<b>Panel 1: Africa's Disease Burden: Medical and Policy Responses</b> <b>Chair:</b> Professor Fred T. Sai, FGA, Fmr Presidential Advisor on Reproductive Health and HIV/AIDS
11.05	<b>Professor Megan Vaughan, FBA (University of Cambridge):</b> History of Public Health in Africa.
11.35	<b>Dr Edward Addai (The Global Fund):</b> Public Health Policy in Contemporary Africa
<b>12.05</b>	<b>Plenary</b>
12.30 – 13.30	Lunch
<b>13.30 – 15.00</b> <b>13.30</b>	<b>Panel 2: Millennium Development Goals (MDGs): Achievements and Challenges in Health</b> <b>Chair:</b> Dr Elias Sory, Director General, Ghana Health Service
13.35	<b>Dr Anthony Seddoh (World Health Organisation, Africa Region (WHO-Afro)):</b> Prospects for achieving the health MDGs in Africa
14.05	<b>Professor Pascale Allotey (Brunel University):</b> Health MDGs and diseases of poverty in Africa
<b>14.35</b>	<b>Plenary</b>
15.00 – 15.30	Tea Break
<b>15.30 – 17.15</b> <b>15.30</b>	<b>Panel 3: Influencing Chronic Disease Policy through Evidence-Based Research</b> <b>Chair:</b> Professor Alexander Nyarko, Director, Noguchi Memorial Institute for Medical Research (NMIMR)
15.35	<b>Dr Ama de-Graft Aikins (University of Cambridge) and Dr Daniel Arhinful (NMIMR):</b> Chronic Disease Intervention in Africa: bridging the gaps between theory, practice and policy. <b>British Academy Partnership Award Research</b>
16.00	<b>Dr Charles Agyemang (University of Amsterdam):</b> Collaborative research on chronic disease among African populations in Europe: insights for evidence-based research in Africa
16.25	<b>Dr Marius de Jong (Royal Netherlands Embassy/DFID):</b> Local challenges for funding collaborative research
16.50	<b>Plenary</b>
17.15	<b>Professor Kwadwo Koram (NMIMR):</b> Closing Remarks
<b>6.00 – 8.00</b>	<b>Evening Reception: Residence of the Director of British Council, Accra</b>

## DAY TWO: Tuesday, 17<sup>th</sup> February 2009

8.30 - 9.15	Registration, Tea & Coffee.
9.15	Deputy Minister for Health: Opening Remarks
<b>9.30 – 11.00</b> <b>9.30</b>	<b>Panel 4: Emerging Issues in Public Health</b> <b>Chair:</b> Professor Fred Binka, Dean, School of Public Health, University of Ghana, Legon
9.35	<b>Professor Nigel Unwin (University of Newcastle):</b> Tackling the epidemic of chronic non-communicable disease in sub Saharan Africa: established priorities and new concerns
10.05	<b>Dr Paul Amuna (University of Greenwich):</b> The nutrition transition and Africa's chronic disease burden.
<b>10.35</b>	<b>Plenary</b>
11.00 – 11.30	Tea break
<b>11.30 – 13.00</b> <b>11.30</b>	<b>Panel 5: Medical Pluralism and Traditional Medicine</b> <b>Chair:</b> Professor Ivan Addae-Mensah, FGA, Former Vice-Chancellor, University of Ghana.
11.35	<b>Professor Marian Addy, FGA, President, Anglican University College:</b> Scientific aspects of plant medicine
12.05	<b>Professor Kodjo Senah (Dept of Sociology, UG):</b> Lay community uses of pluralistic medical systems
<b>12.35</b>	<b>Plenary</b>
13.00 – 14.30	Tea break
<b>14.00 – 15.30</b> 14.00	<b>Panel 6: Building Human Resources Capacity through Postgraduate Training and Support</b> <b>Chair:</b> Professor Lawrence Boadi, FGA, Vice President, Arts, GAAS.
14.05	<b>Professor Naana Jane Opoku-Agyemang, FGA, VC, University of Cape Coast:</b> Leadership and training for the social sciences and humanities in Africa
14.35	<b>Professor Paul Nyame (Ghana College of Physicians and Surgeons):</b> Post-graduate training for medical and health personnel in Africa
15.05	<b>Plenary</b>
15.30 – 16.00	Tea break
16.00 – 17.15	<b>Summary of the Event and Announcement of Findings and Recommendations</b>
<b>16.00</b>	<b>Dr Ama de-Graft Aikins (University of Cambridge) and Dr Daniel Arhinful (Noguchi Memorial Institute):</b> Summary of the Event and Announcement of Findings and Recommendations
<b>16.45</b>	<b>Professor Lawrence Boadi, FGA, Vice President, Arts, GAAS:</b> Thanks and closing remarks
	<b>Conference Ends</b>

## ABSTRACTS

### PANEL 1: AFRICA'S DISEASE BURDEN: MEDICAL AND POLICY RESPONSES

**Megan Vaughan (University of Cambridge):** The History of Public Health in Africa

Healing systems in pre-colonial African societies were immensely varied and pluralistic, but they had in common the fact that they were strongly oriented towards the social body. Health was inherently a political and public concern, and an individual's health was seen as closely tied to the well-being and harmonious social relations of the society in which she or he lived, and to the political leadership of those communities. Traditional leaders were aware of the necessity of keeping harmonious relations with healing experts. This is not to say that traditional African communities always had effective 'public health' systems – they did not – but their ideologies posited a close relationship between health and the political sphere, between the individual and their social context. This paper explores what happened to this idea of 'public health' in the course of the colonial and post-colonial periods. It argues that governments (both colonial and postcolonial) were not without ambitions in the public health sphere and that there were periods of significant progress and creative innovation, as well as numerous examples of gross neglect (particularly of endemic diseases). In some regions of colonial Africa the racial economy turned African subjects into real and imagined bearers of new diseases, but the colonial period was also a time when African health professionals began to create a nationalist vision of the body politic, which drew on older concepts of health and healing. From the late 1970s, however, structural adjustment policies have undermined the notion of the centrality of the 'public' to the sphere of health. A mis-reading of African healing traditions contributed to the argument that Africans were accustomed to paying for and 'shopping around' for their health care, and that health care could be most effectively delivered by the private sector. The decline of public health provision combined, in some regions, with the enormous strain posed by the HIV/AIDS epidemic has produced nothing less than a public health disaster. There are numerous examples of health activism in Africa and of communities campaigning for the 'right' to health, but in general expectations of public provision are low. Who is the 'public' in public health in Africa today, and how can our knowledge of history help us put the public back into public health?

**Edward Addai (The Global Fund):** Public Health Policy in Contemporary Africa

For abstract see Conference Pack or visit <http://www.psych.lse.ac.uk/chronicdiseaseafrica/>

### PANEL 2: MILLENNIUM DEVELOPMENT GOALS: ACHIEVEMENTS AND CHALLENGES IN HEALTH

**Anthony Seddoh (WHO-Afro):** Prospects for achieving the health MDGs in Africa

The development goals and targets set by the Millennium Development Declaration have come to be considered as a framework for measuring progress towards the attainment of a range of economic and social development. Since its formulation, the goals have occupied a prime spot on the agenda of major international development agencies.

Organizations such as the World Bank and OECD have found a way of making it a necessary preamble if not silent conditionality for funding country programmes. This has led to an interesting propensity to judge progress of attainment in terms of regions, countries and oddly enough, a new debate to measure them at the district or provincial level (Report of the WHO Africa Regional Committee, 2007). Thus assessing whether progress is 'on track' for meeting the targets by 2015 is now being quantified on the basis of historical trends of particular region or specific countries. There is debate as to whether this should be the case and if indeed, 'the spirit of

the Millennium Declaration was to impose a one-size-fits-all benchmark for appraising and comparing country performance, regardless of differing historical background' (Vandemoortele, 2007).

Barring whatever form the debate takes, a consistent and almost unanimous verdict has been passed on sub-Saharan Africa by many who care to use the benchmark approach to judge performance. The UN World Summit, 2005 stated that 'Africa ... is the only continent not on track to meet any of the goals of the Millennium Declaration by 2015'. The Blair Commission report of the same year opined that '... Africa is well behind target on reaching all the goals' with its follow up report in 2007 by the Africa Progress Panel stating that '... at the mid point of the Millennium Development Goals (MDGs), sub-Saharan Africa is the only region which, at current rates, will meet none of the MDG targets by 2015'.

Similar conclusions have been drawn by the World Bank and the International Monetary Fund with some sterling graphs on their MDG websites which sometimes dramatizes the Africa situation as a monumental failure.

This paper proposes that that it is generally unfair to blanket score the Africa region as being 'off track' in attaining the MDGs. It argues that:

1. The MDGs being borne out of a declaration was probably never intended to be used to measure individual country or regional performance
2. The current translation of the indicators to measure progress is a general travesty to Africa given the benchmark and the design of the MDGs
3. In the thematic areas, African countries have made commendable progress which should be recognized and rewarded without deference to a score card

**Pascale Allotey (Brunel University):** MDGs, Diseases of Poverty and Chronic Disease: "can we all get along?"

Global health is typically characterized by parallel and competing discourses among different actors, stakeholders and funders. This makes priority setting in low income countries a particular challenge. Internal priorities may be identified, but if they do not align with external funders' interests and perceptions then funding opportunities are either lost, or the health systems need to be steered towards the priorities of the funders.

The health related MDGs have provided global funders (government and philanthropic) a particular framework for priority setting that focuses on the most visible conditions; i.e., those diseases that affect the poorest and for the most part are responsible for the greatest mortality. These are mainly infectious diseases with a particular focus on HIV, Malaria, and TB. Glaringly absent is any substantive consideration of chronic and non communicable diseases, half the burden of which is projected to be carried by low income countries by 2025.

Priority setting itself is necessary, and in an environment of constrained resources some issues will need to be given primacy over others. The issue is one of flexibility, in which genuine national priorities that do not conform to the perceptions of external agents can also be resourced. In this paper, we explore ways in which these seemingly parallel issues can be made to converge through interdisciplinary models of research, policy and practice.

**Ama de-Graft Aikins (University of Cambridge) and Daniel K Arhinful (NMIMR):** Chronic Disease Intervention in Africa: bridging the gaps between theory, practice and policy

Africa faces an urgent but 'neglected epidemic' of chronic disease. The rising prevalence of conditions like hypertension, stroke, diabetes and cancers is strongly attributed to changing behavioural practices (e.g sedentary lifestyles and high fat diets) as well as structural factors such as industrialization, urbanization and increasing food market globalization. The problem is compounded by under-funded and under-resourced health systems and research communities operating in policy environments that marginalise chronic diseases. More than 80% of health budgets are allocated to acute communicable diseases. The African region has the lowest number of health workers trained to treat chronic diseases. The privileging of communicable diseases such as HIV/AIDS, malaria and tuberculosis by donors and development partners creates research cultures ideologically biased towards acute communicable diseases. Research suggests that diverse communities – lay, biomedical, ethnomedical, religious – lack or have poor knowledge of prevalent chronic conditions. This exacerbates avoidable risk, medical complications and death.

Over the last decade experts have set out clear recommendations to tackle Africa's chronic disease burden. First, health policymakers need to develop priority based interventions that address Africa's double burden of disease. Second, a three prong approach to intervention is required – this consists of epidemiological surveillance, primary prevention (preventing chronic disease in lay healthy communities) and secondary prevention (preventing complications and improving the quality of life of people with chronic disease). Finally interventions must be deployed through a 'multi-faceted, multi-institutional' framework to address the complex causes and consequences of chronic diseases.

These important ideas remain to be translated into practice and policy. In this paper we discuss three practical approaches that can bridge the gaps between theory, practice and policy.

1. The first crucial step to understanding the nature of the epidemic and to setting informed, practical and contextually relevant agendas for future research, intervention and policy will be to analyse and synthesise existing data. Contrary to popular expert views there is sufficient data on chronic diseases to begin secondary analyses of intra/cross country trends on prevalence, morbidity and mortality. The WHO sponsored surveys on chronic disease risk factors, the demographic and health data gathered by surveillance sites and a body of chronic disease research published in African and international journals since the 1950s constitute such important data sources.
2. The important three-prong approach recommended by experts has been ignored by researchers, practitioners and policymakers. Epidemiological research has been prioritised over research on primary and secondary intervention over the last decade. Yet primary and secondary prevention strategies are crucial for a public health problem rooted in socio-cultural systems and 'lifestyle practices that are amenable to change' (WHO-AFRO: <http://www.afro.who.int/>). These strategies require theories, methods and analyses from the social sciences and humanities. There are existing interdisciplinary partnerships on public health and chronic disease that provide a template for multi-faceted multi-institutional research and intervention. We single out the goals and activities of the UK-Africa Academic Partnership on Chronic Disease for discussion.
3. Health interventions and policies must be informed by lay knowledge, experiences and practices. Across the continent there is a growth in self-help groups and patient user movements, much like the movements that turned the tide on utilitarian HIV/AIDS policies in the 1990s. The ideas, relationships and practices embodied in these groups have much to teach researchers, healthcare professionals and policymakers about maximising primary and secondary prevention within the context of minimal resources.

**Charles Agyemang (University of Amsterdam):** Collaborative research on chronic disease among African populations in Europe: insights for evidence-based research in Africa

Worldwide, cardiovascular disease (CVD) is the leading cause of death. This is particularly so in Western countries, where CVD has continued to maintain its lead for several decades. However, the experiences of CVD mortality, morbidity and risk factors vary among ethnic groups in Western countries. Populations of African descent living in Europe, for example, have comparatively high risks of stroke whereas coronary heart disease is, comparatively, less common. The patterning of these health inequalities is complex. Some researchers emphasise the genetic underpinning of health inequalities and others emphasise socio-economic inequalities. Recent evidence suggests, for example, that the residing countries' environmental influences in terms of social, economic, physical and health policies may play an important role in determining health differences within and between populations.

It was against this background that the international collaborative project on CVD among ethnic minority populations was initiated. This collaborative project involves researchers from Europe (the Netherlands, Norway and the UK) and North America (Canada and USA). The initial analyses based on standardised datasets from the UK (i.e. Health Survey for England 1999, 2004 and the Newcastle Heart Project) and the Netherlands (i.e. the SUNSET study) show important differences in health outcomes between African descent populations as well as the European descent populations living in the Netherlands and the UK, and highlight the importance of the residing countries' environmental context on ethnic inequalities on health. These findings have important implications for future CVD interventions and prevention among ethnic minority groups in Western countries.

International collaboration initiatives on chronic disease are of paramount importance. Such collaboration is useful to assure exchange of information and sharing of experiences on theory, methodology and results between countries. African countries could benefit enormously from these collaborative initiatives. Undoubtedly, there is a huge diversity within and across Africa countries in terms of culture, religion, dietary practices, socio-economic development, risk behaviour, geographical locations, genes etc. All these factors are important determinants of health and might contribute to differences in health outcomes within and across African countries. However, this important diversity is often ignored in health research and policies. Data on chronic diseases such as diabetes and hypertension, for example, show important differences between countries. For example, the prevalence of hypertension in urban Ghana was 33.4% in men and 28.9% in women compared with 22.0% in men and 16.9% in women in urban Gambia. The obvious question is why is there such a huge disparity in the prevalence of hypertension between Ghana and Gambia? And what can Ghana learn from Gambia to help prevent the increasing prevalence of hypertension? This paper will argue that the diversity within and across African countries offers an important opportunity to increase our knowledge about the increasing prevalence of chronic diseases across Africa; and that such knowledge is crucial for the prevention efforts. It will also argue that collaborative initiatives on chronic diseases in African is feasible and should be encouraged by policy makers at all levels including WHO, African governments and (inter)national researchers.

**Marius de Jong (Royal Netherlands Embassy/DFID):** Local challenges for funding collaborative research

Local challenges for funding collaborative research are very similar to local challenges for funding research more in general. Lack of a business approach with poor understanding of 'market mechanisms' results in lack of understanding with researchers of, or in their unwillingness to respond to, the demand side of research. Policy and decision makers are overwhelmed by advocacy for blue print approaches from international agencies, undermining the demand for a more balanced analysis of the local situation. Appreciation of the potential contribution of local

research/researchers is low. It is important for (health) researchers to demystify research and to actively participate in policy formulation, monitoring and evaluation and to plan dissemination of research results right from the beginning of their research projects. Researchers should be anxious to also 'sell' their value to local private sector industries. For the same reasons researchers should keep themselves informed about research demands of international organisations, often derived from demands of the multinational industries. Funding for collaborative research is also hampered by infighting between researchers or research institutions with insufficient thinking about the benefits of complementary specialisation. In general the research world is very competitive, not a fertile soil for collaboration. Individual fame through publications in renowned journals can be considered more important than the potential importance and impact of the research results on society and its people. Local challenges for funding of collaborative research should be mindfully and structurally addressed in business plans of research institutes. Such a business plan should include a variety of different research levels through which capacity building can take place. It should also take the changed international aid structure into account.

#### PANEL 4: EMERGING ISSUES IN PUBLIC HEALTH

**Nigel Unwin (University of Newcastle):** Tackling the epidemic of chronic non-communicable disease in sub Saharan Africa: established priorities and new concerns

Communicable diseases will remain the predominant health problem for populations in sub-Saharan Africa, including adults, for at least the next 10 years. It is a surprise to many therefore to discover that chronic (non-communicable) diseases already present a major burden, at age specific mortality rates that are higher than in rich countries where chronic diseases predominate. The prevalence of certain chronic diseases, such as diabetes and hypertension, is increasing rapidly in sub Saharan Africa, particularly in urban areas, and significant demands are being made on limited health services. Surveillance is needed to place chronic diseases within the context of other health problems facing populations in sub Saharan Africa in order to guide the allocation of scarce resources, and research is needed to guide improvements in the coverage, clinical and cost effectiveness of resources currently committed to the care of patients with chronic diseases, and to direct and evaluate preventive measures.

In addition to these established priorities for chronic disease research, research is also needed to assess the public health importance and clinical implications of poorly recognised deleterious relationships between chronic and communicable diseases. For example, diabetes increases the risk of TB by around 3 fold, and the rapidly increasing prevalence of diabetes may add to the impact of HIV infection on TB control. Diabetes, and intermediate hyperglycaemia, may also make successful TB treatment more difficult. Another example arises from the essential need to increase the coverage of antiretroviral therapy for HIV infection, and that this may increase the risk of type 2 diabetes, leading to even leading greater demands upon overstretched health services. In populations that continue to have high levels of both chronic non-communicable and communicable diseases research is urgently needed to better understand and respond to the interactions between them.

**Paul Amuna (University of Greenwich):** The nutrition transition and Africa's chronic disease burden

Evidence gathered over the last five decades show strong associations between poverty, demographic and socio-economic changes and chronic disease patterns in Africa. Intrauterine foetal growth pressures in a stunted, undernourished mother predispose to nutritional programming of adult diseases such as diabetes and cardiovascular disease, the levels of which are rapidly increasing in Africa and are projected to overtake communicable diseases by 2030. The biological and social causal associations of chronic disease require exploration as a basis for formulating multi-disciplinary intervention strategies to tackle them effectively. Such strategies

also require specifically targeted nutritional interventions and health promotional elements which empower individuals and communities to better manage and sustain initial health gains over the medium to long term.

The focus of this paper is to explore the biological basis of chronic disease risk with an emphasis on the foetal origins of these diseases and the role of the nutrition transition within an African context. We have recently studied the impact of the nutrition transition on obesity trends and risk of chronic disease in homogeneous populations in two countries with rising incomes and undertaken a patient-centred intervention aimed at improving diabetes self-management in one country. The findings we believe, are of relevance to future chronic disease interventions and prevention in Africa.

## PANEL 5: MEDICAL PLURALSIM AND TRADITIONAL MEDICINE

**Marian Ewurama Addy (Anglican University College):** Medical pluralism and traditional medicine  
There are those who would argue that traditional medicine (TM) has been practiced with effectiveness over the centuries in many parts of the world and that it can continue in its own steam without “interference” from other systems of health. Indeed there are some who would rather have a sharp distinction between TM and modern or conventional medicine (CM). For those who hold such a view there is no such thing as scientific aspects of TM. Fortunately, these are in a minority. Whether traditional or conventional, medicine has, or ought to have a scientific base, that is to say, it ought to be evidence-based. People who think analytically and critically will accept a system of medicine not because of long usage but because there is evidence to back the claims of the system’s effectiveness. Systematically assembling evidence for proof of a cure or amelioration of a disease ought to be possible. In TM it is relatively easy to assemble such evidence when herbs are used, solely or partially, for the treatment. This presentation is about the assembling of such evidence and the need to do this for improvement, not only of plant medicine and therefore TM, but also for the health system that Africa’s people are used to using as an important social service.

How does one gather unequivocal evidence except through research! Research into plant medicine must be carried out for the scientific aspects to be laid bare, not merely for the sake of it, but for wider acceptance and use of plant medicine. However, the methods to be used should not necessarily be the same as those used in research relating to conventional medicine. What we need to establish is the plant medicines’ safety, efficacy and how they work. There is no reason why we cannot have “Confirmatory Clinical Investigations” for plant medicines which have extensive data on traditional uses, in place of the various phases of Clinical Trials. Another area to be considered is research and documentation of possible drug-drug interaction between plant medicines and the drugs known in conventional medical practice. There are too many of our people who take plant medicines together with conventional drugs, whether prescribed or over-the-counter, without blinking an eye. There is an entire area of research which could be described as virgin because it is untouched; the differences that must exist between wild-crafted and cultivated plant of the same species and indeed, the same variety of species. This area is so critical because it has a direct bearing on the quality of the raw material, when one is dealing with plant medicine. Correct identification of the raw material may not necessarily be an area of scientific research. However, with the small and increasingly smaller numbers of taxonomists graduating from our institutions of higher education, the scientific aspects of plant medicine is bound to suffer. In this connection, there is a bigger challenge of human capacity for the necessary scientific research for the needed evidence gathering.

Multidisciplinary research is part of the major theme. Nowhere does one find this more at home

than in the scientific aspects of plant medicine where we find scientists in both basic and applied science and in various disciplines, working together to unfold one mystery: scientists in agriculture, basic sciences, pharmaceutical sciences and clinicians. Traditional Medicine is purported to be more effective against chronic diseases. If indeed this is so, then engaging in multidisciplinary research into one subset of TM, plant medicine, could be one of the best, if not the best intervention for chronic diseases in Africa. Since we are informed that there is an interrelationship between acute and chronic diseases this could be the best intervention for all diseases!

**Kodjo Senah (University of Ghana):** Lay community uses of pluralistic medical systems

For many people, especially health professionals, hospitals/clinics are the most appropriate places to seek health care in times of ill health. By extrapolation therefore, biomedicine is the most rational ('scientific') response to ill health. Given this perception, globally, biomedicine has been raised to a pedestal where its practices and underlying philosophies cannot and must not be challenged by any other medical cosmology. In the developing world, however, ample evidence shows that biomedicine has met with pragmatic difficulties: among the people it is meant to serve, its practices and philosophies have been acculturated in many ways. The thesis of this paper is that health systems are important cultural universals: they are created by societies and made meaningful within a cultural context. Consequently, ill health, diseases and their etiologies and chosen therapeutic paths are subject to cultural definitions and manipulations. The paper concludes that by seeking health care from multiple sources - hospitals, clinics, pharmacies, drug stores, shrines, pastors, prayer camps and mallams, Ghanaians are not only giving full expression to their socio-cultural reality but also they are reiterating the Shakespearean aphorism that "there is a system in madness."

**PANEL 6: BUILDING HUMAN RESOURCE CAPACITY THROUGH POSTGRADUATE TRAINING AND SUPPORT**

**Naana Jane Opoku-Agyemang (University of Cape Coast):** Leadership and Training in the Social Sciences and the Humanities in Africa

Complexities in the socio-economic and political challenges facing African Governments in the 21<sup>st</sup> Century require solution techniques based on scientific, analytical and critical approaches to human capacity building. This paper argues that academic courses offered in the social sciences and humanities in our universities have the capacity for developing in students such analytical and critical skills. Both social sciences and humanities deal with courses such as law, politics, economics, education, linguistics and psychology which offer students an opportunity to develop their reasoning capacity. These academic programmes are critical in national development efforts and are, therefore, indispensable. Global and national changes in the level of support for the delivery of social sciences and humanity courses in universities have, however, made social sciences education challenging. Factors such as large class sizes, inadequate budgetary support, inadequate teaching and learning resources and ineffective instructional techniques have made the challenges facing the social sciences and humanities more complex. These have implications for professional as well as instructional leadership. In this light, the paper challenges the Ministry of Education to reconsider policies on leadership development for university staff tasked with the development and training of students in the social sciences and the humanities. It advocates a paradigm shift from the current lecturer and subject – centred training techniques to a more competency and student-based training approaches to the teaching of courses in the social sciences and humanities in our universities.

**Paul K. Nyame (Ghana College of Physicians and Surgeons):** Post-graduate training for medical and health personnel in Africa

It is the aim of the Ghana College of Physicians and Surgeons to encourage as many practitioners as possible to enter postgraduate, residency training programmes in various specialties. These are structured programmes lasting, on the average, 3 years (except radiology, radiation oncology, neurosurgery and orthopaedics) and lead to the qualification of Membership of the Ghana College of Physicians and Surgeons. The residency programme is planned to produce a generalist specialist who would not only have the skills and competencies of his specialty but is equipped to take advantage of his/her professional circumstance to do some research.

We need research institutions to support and train medical researchers. The Noguchi Memorial Institute for Medical Research (NMIMR), the Kumasi Centre for Clinical Research (KCCR) and the School of Public Health at Legon are eminently suitable. We need a hospital with the discipline, human and material resources to be linked to one of the centres mentioned above. The medical, dental and other health professions together with academic, industry and policy makers should have a cohesive body to plan the health needs and systems in the country. Mentorship of fledgling academics and researchers in the medical profession should be promoted

The areas of research must reflect the needs of our country. A case has often been made for "herbal medicine" to be permitted to run side by side with orthodox or allopathic medicine. Acceptance of herbal medicine - as a professional discipline - may not sit well, side by side, with evidence-based scientific orthodox medicine. However, research into the possible use of medicines originated from flora should be pursued vigorously, as part of the medical sub-specialty of clinical pharmacology. Digoxin from the plant *Digitalis lanata* for heart failure, quinine from the cinchona tree bark, artemisin from the Chinese plant *qinghaosu*, and *cryptolepis* all have a proven anti-malarial effect. The therapeutic and economic potential of our flora is immense and justify an enhanced support for the Centre for Scientific Research into Plant Medicine, at Mampong Akuapem, including staffing with specialist physicians/clinical pharmacologists.

The bane of our effort in research is funding. Although this is a global challenge, the U.S.A and Europe have Trusts, Foundations, and industry which support research. The government of the U.S.A. clearly saw the potential of the Human Genome Project and supported it. Our government could be more generous in its support of medical research. Overworked doctors, will not see any excitement and prospect in an underfunded research environment.

## PROFILES

### **Professor Addae-Mensah (Ghana Academy of Arts and Sciences)**

Professor Ivan Addae-Mensah is Professor of Chemistry and former Vice Chancellor of the University of Ghana. He was educated at Achimota School, and the University of Ghana, where he obtained the B.Sc and M.Sc. degrees in Chemistry, and Churchill College, University of Cambridge, England (1967-70) where he obtained the Ph.D degree. He was appointed a Lecturer in Chemistry at the University of Ghana in October 1970. For the past thirty seven years he has taught and done research in universities in Ghana, Nigeria, Kenya and Germany where he was a Fellow of the Alexander von Humboldt Foundation (1982-1984). He became the Dean of the Faculty of Science (1993) before being appointed the Vice-Chancellor of the University of Ghana (1996-2002). He is a Fellow of the Royal Society of Chemistry (UK), Fellow, Ghana Academy of Arts and Sciences, and Fellow, Ghana Chemical Society. He has published a considerable number of books and research papers.

Professor Addae-Mensah has for the past four years been the Chairman of the National Petroleum Authority, Member of the National Council for Tertiary Education and the Council of the University of Mines and Technology at Tarkwa. He has been a Member of the Board of the United Nations University Institute of Natural Resources in Africa since 2001. Since 1988, he has been a member of the WHO Expert Committee on Drug Quality Assurance. He has also carried out consultancy assignments for several other organisations including UNESCO. From 1980 to 1982, he was the Chairman of the Volta River Authority.

Professor Addae-Mensah has received Honorary Doctorate degrees from New York University (2002), the University of Ghana (2003) and the Highest Honour of Soka University, Tokyo, (1998). In 2006, the State of Ghana awarded him the Companion of the Order of the Volta (COV). He has been a strong advocate for the underprivileged and gender equity in education and social mobility.

### **Dr Edward Addai (The Global Fund to Fight AIDS, Tuberculosis and Malaria)**

Dr Addai is from Ghana and has an MBA in health, population and nutrition for developing countries from Keele University, Staffordshire, UK. A public health expert with a focus on health policy analysis, strategy development, planning, monitoring and evaluation, Dr Addai has over 17 years experience in the design, delivery, monitoring and evaluation of health services at district, national and international levels. He is knowledgeable in planning and performance monitoring of developing country health systems in general, and the design of health systems to respond to disease control programs, with special emphasis on malaria, EPI, and AIDS. During his career Dr Addai has worked with WHO, the Ghana Health Service, the Ministry of Health in Ghana and the University of Ghana.

### **Professor Marian Ewurama Addy (Anglican University College/GAAS)**

Prof. Marian Ewurama Addy is a Professor of Biochemistry. She retired from the University of Ghana and is currently the President of the Anglican University College of Technology. She is Chair of Ghana's National Board for Professional and Technicians Examinations (NABPTEx), a member of WHO/AFRO Regional Expert Committee on Traditional Medicine, advisor of International Foundation for Science, Stockholm, Sweden and Founder and First Executive Secretary of Western Africa Network of Natural Products Research Scientists (WANNPRES), established February 2002. Her experiences in academia are mainly in teaching biochemistry, both basic and applied, to undergraduate, post-graduate, dental and medical students at the University of Ghana, Legon and at Howard University College of Medicine in Washington DC. Her main area of research is the

science of herbal preparations used by Traditional Medical Practitioners, especially their safety, efficacy and how they work. Professor Addy was educated at the University of Ghana, where she studied towards a degree in Botany, and at the Pennsylvania State University, where she obtained Masters and Doctorate degrees in biochemistry. As head of unit or department in various institutions, Professor Addy was responsible for initiating projects, running workshops and sourcing for funds for these activities as well as for younger scientists in training. Professor Addy's interests and extension activities are in bridging the gap between scientific and indigenous knowledge and in the popularization of science. She is often called upon to be a Resource Person and/or Role Model for programmes in female science education. She was the first Quiz Mistress of the popular weekly televised National Science and Mathematics Quiz programme, primarily aimed at improving the learning of science and mathematics for secondary school students. She hosted the programme for seven years and was responsible for its popularity.

In 1994, she was a member of a 4-man UNDP Consultancy Team in Ghana to formulate a National Action Program for Science and Technology Development.

Professor Addy has received many awards but the ones she is very proud of include:

- The Millennium Excellence Award for Educational Development at the turn of the millennium;
- UNESCO Kalinga Prize for the popularization of science in 1999;
- The Africa-America Institute's Distinguished Alumna for Excellence in 1998;
- Marketing Woman of the Year, in 1995, for marketing Science.

She was made a Fellow of the Ghana Academy of Arts & Sciences in 1999.

### **Dr Charles Agyemang (University of Amsterdam)**

Dr Charles Agyemang is an epidemiologist and public health scientist at Amsterdam Medical Centre, University of Amsterdam. He completed his doctoral research in the Netherlands with focus on ethnic variations in blood pressures and hypertension. In addition, he also examined blood pressure and hypertension in rural and urban Ghana. Prior to this he worked and had his Master degree in Public Health at Edinburgh University. His research interests include the epidemiology of cardiovascular diseases and cardiovascular risk factors as well as determinants among ethnic groups, and in low- and middle income countries. He also has an interest in neighbourhood level effect on health. He recently received a prestigious VENI grant to develop an international collaborative project between the Netherlands and the UK. Charles is also a visiting lecturer at the Kwame Nkrumah University of Science and Technology, Ghana.

#### **Selected publications**

- Agyemang C**, Owusu-Dabo E, de Jonge A, Martins D, Ogedegbe G, Stronks K. Overweight and obesity among Ghanaian residents in The Netherlands: how do they weigh against their urban and rural counterparts in Ghana? *Public Health Nutr.* 2008 Sep 2:1-8. [Epub ahead of print]
- Agyemang C**, de Munter J, van Valkengoed I, van den Born BJ, Stronks K. Gender disparities in hypertension among different ethnic groups in Amsterdam, The Netherlands: the SUNSET study. *Am J Hypertens.* 2008 Sep;21(9):1001-6.
- Abubakari AR, Lauder W, **Agyemang C**, Jones M, Kirk A, Bhopal RS. Prevalence and time trends in obesity among adult West African populations: a meta-analysis. *Obes Rev.* 2008 Jul;9(4):297-311.
- Beune EJ, Haafkens JA, **Agyemang C**, Schuster JS, Willems DL. How Ghanaian, African-Surinamese and Dutch patients perceive and manage antihypertensive drug treatment: a qualitative study. *J Hypertens.* 2008 Apr;26(4):648-56.
- Agyemang C**, van Valkengoed I, van den Born BJ, Stronks K (2007) Prevalence and determinants of prehypertension among African Surinamese, Hindustani Surinamese, and White Dutch in Amsterdam, the Netherlands: the SUNSET study. *Eur J Cardiovasc Prev Rehabil* 14(6):775-81.
- Agyemang C**, van Hooijdonk C, Wendel-Vos W, Lindeman E, Stronks K, Droomers M (2007) The

association of neighbourhood psychosocial stressors and self-rated health in Amsterdam, The Netherlands. *J Epidemiol Community Health* 61(12):1042-9.

- Agyemang C**, Bruijnzeels MA, Owusu-Dabo E (2006) Factors associated with hypertension awareness, treatment, and control in Ghana, West Africa. *J Hum Hypertens* 20(1):67-71.
- Agyemang C** (2006) Rural and urban differences in blood pressure and hypertension in Ghana, West Africa. *Public Health* 120(6):525-33.
- Agyemang C**, Bindraban N, Mairuhu G, Montfrans G, Koopmans R, Stronks K (2005) Prevalence, awareness, treatment, and control of hypertension among Black Surinamese, South Asian Surinamese and White Dutch in Amsterdam, The Netherlands: the SUNSET study. *J Hypertens* 23(11):1971-7.
- Agyemang C**, Bhopal R, Bruijnzeels M (2005) Negro, Black, Black African, African Caribbean, African American or what? Labelling African origin populations in the health arena in the 21st century. *J Epidemiol Community Health* 59(12):1014-8.
- Agyemang C**, Redekop WK, Owusu-Dabo E, Bruijnzeels MA (2005) Blood pressure patterns in rural, semi-urban and urban children in the Ashanti region of Ghana, West Africa. *BMC Public Health* 5:114.
- Agyemang C**, Bhopal R. Is the blood pressure of people from African origin adults in the UK higher or lower than that in European origin white people? A review of cross-sectional data. *J Hum Hypertens* 2003;17(8):523-34.

### **Professor Pascale Allotey (Brunel University)**

Professor Pascale Allotey is based at Brunel University where she is co-director of the Centre for Public Health Research, the Chair of Race and Diversity at the School of Health Sciences and Social Care and Director of the DrPH Program at the Brunel University Graduate School. She has held academic appointments at the Universities of Melbourne, Queensland, and Western Australia. Starting her career with a double major in Nursing and Psychology she worked as a nurse, midwife and public health nurse in Ghana, Cote d'Ivoire, Australia and the UK. She has a Post Graduate Diploma in Primary Health Care and International Health, a Masters in Public Health and a PhD combining medical anthropology and epidemiology. Her research has focused on the health of populations marginalised by gender, ethnicity, disability and disease and she has published extensively on gender and tropical diseases, disability in developing countries, reproductive health and rights and the health of refugees and asylum seekers. She currently serves on the Scientific and Technical Advisory Committee of the Special Programme for Research and Training in Tropical Diseases (TDR) administered by the WHO and is an Honorary Academician of the Royal Society for Health.

#### Selected publications

- Reidpath DD, **Allotey P**. (in press) Opening up Public Health: an ICT strategy to support population health. *The Lancet*
- Allotey P**, Gyapong M. (in press) Tuberculosis research in the context of gender and health studies. *International Journal of Tuberculosis and Lung Disease*
- Norris M, **Allotey P**. (in press). Culture and physiotherapy. *Diversity in Health and Social Care*. Vol 5
- Allotey P**, Gyapong M, Colfer C. (2008) The gender agenda and tropical forest diseases. In: Colfer (Ed). *Human health and forests: a global overview of issues, practice and policies*. Earthscan. London. Pages 135-160
- Allotey P**, Markovic M. (2008) Forced Migration and Health. In (Eds) *Encyclopedia of Public Health*. Elsevier Oxford
- Allotey P**. (2007). Ethnicity and access to health care. Perspectives. *The Lancet*. 370: 475-6
- Reidpath DD, **Allotey P** (2007) Measuring global health equity. *International Journal for Equity in Health* 2007, 6:16 doi:10.1186/1475-9276-6-16
- Allotey P**, Reidpath DD. (2007) Epilepsy, culture, identity and well being: a study of the social, cultural and environmental context of epilepsy in Cameroon *Journal of Health Psychology* 12 (3): 431-443.

Grove N, Zwi A, **Allotey P** (2007) Othering of refugees. Social exclusion and public health. In Douglas J, Earle S, Handsley S, Lloyd CE, Spurr S (Eds) *A Reader in Promoting Public Health. Challenge and Controversy*. London Sage Publications and The Open University: 213-224

### **Professor Reginald Fraser Amonoo (Ghana Academy of Arts and Sciences)**

Prof. Reginald Fraser Amonoo is currently the President of the Ghana Academy of Arts and Sciences. Prof. Amonoo was educated at Achimota School from 1943 – 1950; University College of the Gold Coast, 1951 - 1956, obtaining a B. A. Honours degree in French, University of London, 1956; University of Manchester, 1956 - 1958, M. A. degree in French, 1958. Between 1962-1970 he attended University of Paris-IV, Sorbonne where he obtained his, Docteur de l'Université.

Other institutions attended by Prof. Amonoo include:

- University of Nanterre, Paris-X, 1972 - 1974.
- University of Paris -IV, Sorbonne, passim 1974 - 1995, Docteur ès-Lettres, October, 1995, (Higher State Doctorate in literature).

Prof. Amonoo appointed to the staff of the Department of Modern Languages, University of Ghana in 1958 where he taught courses in French Language and Literature till retirement 1992. He became an Associate Professor in 1974 and was Head of Department, 1966 – 1980 and Dean of the Faculty of Arts, 1983 - 1988. He acted as External Examiner in universities in Ghana, Nigeria, Sierra Leone and Botswana. On retirement from Legon, he was invited to the University of Zimbabwe in December 1992, becoming a Full Professor of French in June 1995 and retiring in December, 1999. Since 2001 he has been a Temporary Part Time Lecturer in French in the Department of Modern Languages, University of Ghana, Legon.

Some of Prof. Amonoo's key achievements include:

- Docteur ès-lettres, (state doctorate), University of Paris-TV, Sorbonne, October 1995.
- Chair of French Studies, University of Zimbabwe, June 1995 to December 1999.
- President of the International Federation of Modern Languages and Literatures, (F. I. L. L. M.), 1993 – 1996.
- Licentiate of the Royal Schools of Music, (L. R. S. M.), London, piano performing, June 1954.

Prof. Amonoo has published extensively in both English and French.

He was elected Fellow of the Ghana Academy of Arts and Sciences in 1972 and has held the Office of Honorary Treasurer from 1977 – 1988; Honorary Secretary, 1988 – 1990 and of Vice-President, Arts Section from 1990 - 1992.

He has been a Consultant for the Association of African Universities, ECOWAS, BREDA - UNESCO, Dakar, and for the Commission of Enquiry for the Opportune-ness of Creating a Second University or Campus of the University of Zimbabwe, 1988 - 1989. He was a founding member, Vice-President and Secretary - General of the West African Modern Languages Association, (WAMLA). He has held the Office of Assistant Treasurer, Vice-President and of President, 1993 - 1996, of the International Federation of Modern Languages and Literatures (FILLM). He was elected as a Vice-President and then Hon. Treasurer of the International Council for Philosophy and Humanistic Studies (CIPSH - UNESCO).

### **Dr Paul Amuna (University of Greenwich)**

Dr Amuna is a graduate in Medicine and an international nutrition and public health specialist. He is a registered public health nutritionist and a Fellow of the Royal Society of Medicine. He currently serves on the Council of the British Nutrition Society and is responsible for International Nutrition for which he represents the Society at Key national and international forums. He is also a board member of the Association for Nutrition, the professional body for regulation of the nutrition profession in United Kingdom and Ireland. He has been at the forefront of promoting an

understanding of links between poverty, food security and epigenetic risk factors for chronic Non-communicable diseases (NCDs) and has published and spoken on the subject at international scientific and policy meetings. He is involved in human resource and institutional capacity building projects working through international institutional partnerships in Africa and the Middle East regions. His research interests include novel food product development for clinical and dietetics applications as well as NCD research in developing countries including patient-centred approaches to self management of chronic disease. His current research work includes collaborations in Zimbabwe, South Africa and Ghana. Dr Amuna is co-convenor of the Africa Nutrition Epidemiology Conference (ANEC), the leading regional conference on nutrition in Africa. He has been instrumental in the formation of the Africa Nutrition Society (ANES) which brings together nutritional scientists as a learned professional body across the continent. Dr Amuna is a renowned international speaker and regular invited panellist at European Union Roundtables on Development and Health Policy focusing on links between Europe and Africa. He co-authored two chapters of *Community Nutrition: Nutrition Materials for healthcare workers in resource-poor areas* published by UNICEF & TALC (2006) and an *Educational Toolkit for Patient Self-Management of Diabetes*, currently in print. He is currently working with the WHO International Malnutrition Task Force to help set up multi-country training centres for training of health personnel in the treatment of severe acute malnutrition (SAM) in West and East Africa.

#### Selected Publications

- P Amuna & FB Zotor** (2008) Epidemiological and nutrition transition in developing countries: impact on human health and development. *Proceedings of the Nutrition Society*. Vol. 67 (1), 84-97.
- FB Zotor & P Amuna** (2008) The Food Multimix Concept – new innovative approach to meeting nutritional challenges in sub-Saharan Africa. *Proceedings of the Nutrition Society*. Vol. 67 (1), 98-104.
- P Amuna, NL Hill, FB Zotor & V Trowse** (2006) Development of High Fibre, low-glycaemic index novel food products for the management of type 2 diabetes employing the food multimix concept. *Proceedings of the Nutrition Society*. Vol 65, 55A
- V Trowse, P Amuna, FB Zotor & NL Hill** (2006) Glycaemic response to a high-fibre low glycaemic novel food product in human volunteers: possible implications for dietary management of type 2 diabetes mellitus. *Proceedings of the Nutrition Society*. Vol. 65, 74A
- H Al-Shammari, P Amuna, I.Tewfik & FB Zotor** (2006) Changing trends in physical characteristics, obesity and non-communicable disease risk among 6-13 year old Kuwati school children. *Proceedings of the Nutrition Society*. Vol. 65, 95A
- FB Zotor, P Amuna, WH Oldewage-Theron, T Adewuya, G Prinsloo, Y Chinyanga, I Tewfik & N Amuna** (2006) Industrial and Dietetic applications of the Food Multimix (FMM) Concept in meeting Nutritional needs of vulnerable groups in South Africa. *Academic Journal of Vaal University of Technology*. Vol. 3, 54-63.
- Amuna P, Zotor F & Tewfik I** (2004) Human and economic development in developing countries: a public health dimension employing the food multimix concepts. *World Review of Science, Technology and Sustainable Development* 1(2), 129–137.
- Tewfik I, Amuna P & Zotor F** (2004) Would food irradiation as a means of technology transfer assist food productivity and security in Africa and sustain its development? *International Journal of Technology Policy and Management* 4(1), 44-52.

#### Dr Daniel K. Arhinful (NMIMR, University of Ghana)

Dr Daniel Kojo Arhinful is a medical anthropologist with research interests in health insurance, access to medicines and migrant health. He received his PhD in medical anthropology from the University of Amsterdam in 2003. Prior to this he gained extensive research and applied experience in the rational use of drugs for both communicable and non-communicable diseases. He teaches a course on health insurance at the School of Public Health, University of Ghana. Daniel is the Africa principal partner for the UK-Africa partnership on chronic disease.

## Selected Publications

- Banyana Cecilia Madi,, Julia Hussein, Sennen Hounton, Lucia D’Ambruoso, Endang Achadi, **Daniel Kojo Arhinful**. (2007) Setting priorities for safe motherhood programme evaluation: A participatory process in three developing countries *Health Policy* 83 (2007) 94–104
- Okiwelu T, Hussein J, Adjei S, **Arhinful D** and Armar-Klemesu M (2007) Safe Motherhood in Ghana: Still on the Agenda? *Health Policy*, 84 (2007) 359–367
- Arhinful DK, (2003). The solidarity of self interest: social and cultural feasibility of rural health insurance in Ghana Leiden: African Studies Centre publishers ISBN: 90.5448.055.6
- Ofori-Adjei, D., Ofei, F, and **Arhinful, D.K.** (1997). *Monitoring and Evaluation of the Ghana Diabetes Care and Disease Management Project*. TCPT/UGMS/SMS/Eli Lilly Company.
- Ofori-Adjei D. & **D. K. Arhinful** (1996). Effect of training on the clinical management of malaria by medical assistants in Ghana, *Social and Medicine*, Vol. 42 No 8 pp. 1169-1176.
- Arhinful DK**, & Ofori-Adjei D (1994) The Impact of in- service training on the clinical management of malaria by medical assistants in Ghana in Etkins N.L and M.L. Tan *Medicines: Meanings & Contexts*. Health Action Information Network, Phillipines

## **Professor Fred Binka (School of Public Health, University of Ghana)**

Fred Newton Binka MB. ChB MPH PhD is the Dean of the School of Public Health and a lecturer of the school since 2000. He was also the Executive Director of Indepth-Network from 2003-2007. Before then, he worked with the Ministry of Health between 1984 and 2000.

He has served on Boards. Some of which are as follows:

### World Health Organization’s committees

1. Chairman, WHO AFRO Advisory Committee of Experts on Malaria 2006-2009
2. Member, Technical and Research Advisory Committee (TRAC) of the Global Malaria Programme 2006 to date
3. Member, WHO global Advisory Committee on Health Research (ACHR) to DG 2006-2009
4. Member, WHO Expert Advisory Panel on Health Science and Technology Policy 2005-2008
5. Member, Board of Trustees, Alliance for Health Policy and Systems Research, 2005-2008

### Academic institutional boards

1. Member, Scientific Committee, Centre Muraz, O.C.C.G.E, Bobo-Dioulasso, Burkina Faso, 1999-2000.
2. Member External Research Review Team, Swiss Tropical Institute, Basel Switzerland; 2005-2007.

### Editorial boards of scientific journals

1. Member, Editorial Board, Tropical Medicine and International Health 2000 to date
2. Associate Editor, International Journal of Epidemiology, 2001 to date.
3. Member, International Advisory Board; Transactions of the Royal Society of Tropical Medicine and Hygiene 2005-2007.

Prof. Fred Binka has 79 Publications in peer reviewed journals, 2 letters to the editor and 6 chapters in Books. His research interests are in intervention studies especially in Malaria.

## **Professor Lawrence Boadi (Ghana Academy of Arts and Sciences)**

Prof. Lawrence Boadi was educated at the University College of Ghana where he obtained the Bachelor of Arts in English Language and Literature in 1960. In 1962 he obtained the Master of Arts degree in Linguistics from UCLA, and was awarded the Ph.D degree by the University of London in 1966. Prior to this he had been appointed lecturer at the University of Ghana in 1962. For almost four decades he taught at the University of Ghana and was head of Department of Linguistics for several years. He retired from the University of Ghana in 2000. He is currently on a short term contract with the university of Education at Winneba, where he is helping to establish a

postgraduate programme in Applied Linguistics.

Prof. Boadi has taught in several universities in Africa, the United States and Europe. He held the Chair of English Language and that of West African Languages at the University of Bayreuth in Germany. Prof. Boadi was elected to the Fellowship of the Ghana Academy of Arts and Sciences in 1990 and became its Honorary Secretary in 1995. He has been on the Council since 1994. He is currently the Vice President of the Arts Section of the Academy.

He delivered the 27<sup>th</sup> in the series of the J.B. Danquah Memorial Lectures in 1994 and the Sixth Ephraim Amu Memorial Lecture in 2004. Prof. Boadi is a member of several learned bodies including the Ghana Linguistics Society which he founded in 1967. For over 40 years now, Professor Boadi has been writing and broadcasting the daily programme Everyday English for the Ghana Broadcasting Corporation.

### **Professor Lorna Casselton (Oxford University/ Royal Society)**

Lorna Casselton is Foreign Secretary and Vice-President of the Royal Society. She is also Emeritus Professor of Fungal Genetics in the Department of Plant Sciences at the University of Oxford. She spent 25 years teaching genetics at the University of London during which time she spent short periods teaching at the University of Ibadan, Nigeria, the University of Parana, Brazil, the University of Lisbon, Portugal and Harvard University, USA. She is a fungal molecular biologist with a special interest in the way in which sex genes of fungi regulate sexual development. She moved to Oxford in 1991 in order to focus full time on her research. Professor Casselton's duties as Foreign Secretary of the Royal Society include overseeing the Society's international relations programme, in particular its contact with other scientific academies, and its allocation of funding to both international researchers and UK researchers wanting to study abroad.

#### **Recent Publications:**

- Casselton, L.A. (2008) Fungal sex genes - Searching for the ancestors *BioEssays*. 30 (8): pp 711-714.
- Riquelme, M, Challen, M.P, Casselton, L.A, Brown, A.J. (2005) The origin of multiple B mating specificities in *Coprinus cinereus* *Genetics*. 170 (3): pp 1105-1119.
- Casselton, L, Zolan, M. (2002) The art and design of genetic screens: Filamentous fungi *Nature Reviews Genetics*. 3 (9): pp 683-697.
- Casselton, L.A. (2002) Mate recognition in fungi *Heredity*. 88 (2): pp 142-147.
- Brown, A.J, Casselton, L.A. (2001) Mating in mushrooms: Increasing the chances but prolonging the affair *Trends in Genetics*. 17 (7): pp 393-400.
- Halsall, J.R, Milner, M.J, Casselton, L.A. (2000) Three subfamilies of pheromone and receptor genes generate multiple b mating specificities in the mushroom *Coprinus cinereus* *Genetics*. 154 (3): pp 1115-1123
- Olesnicky, N.S, Brown, A.J, Honda, Y, Dyos, S.L, Dowell, S.J, Casselton, L.A. (2000) Self-compatible B mutants in *Coprinus* with altered pheromone-receptor specificities *Genetics*. 156 (3): pp 1025-1033
- Olesnicky, N.S, Brown, A.J, Dowell, S.J, Casselton, L.A. (1999) A constitutively active G-protein-coupled receptor causes mating self-compatibility in the mushroom *Coprinus* *EMBO Journal*. 18 (10): pp 2756-2763.
- Casselton, L.A, Olesnicky, N.S. (1998) Molecular genetics of mating recognition in basidiomycete fungi *Microbiology and Molecular Biology Reviews*. 62 (1): pp 55-70
- O'Shea, S.F, Chauré, P.T, Halsall, J.R, Olesnicky, N.S, Leibbrandt, A, Connerton, I.F, Casselton, L.A. (1998) A large pheromone and receptor gene complex determines multiple B mating type specificities in *Coprinus cinereus* *Genetics*. 148 (3): pp 1081-1090

### **Dr Ama de-Graft Aikins (University of Cambridge/London School of Economics)**

Ama de-Graft Aikins is a Research Fellow at the University of Cambridge (Department of Social and Developmental Psychology) and LSE Teaching Fellow (Institute of Social Psychology). She is a social psychologist with a primary interest in representations and experiences of chronic physical and mental illnesses among African communities. Her doctoral research, completed at the LSE in 2004, examined experiences of rural and urban Ghanaians living with diabetes. It aimed to provide a systematic account of illness experiences to improve care and policy in Ghana, and also to address key limitations in social science perspectives on chronic illness experiences in Africa. She received an ESRC Postdoctoral Award to extend the theoretical and policy implications of this research between 2005 and 2006. A key development from this is a project, funded by the British Academy, to develop a UK-Africa academic partnership on chronic disease. The partnership constitutes researchers from the social and medical sciences and humanities based in the UK, the Netherlands, Ghana, Nigeria, Kenya and Cameroon with collective research expertise on chronic diseases such as cancers, cardiovascular disease and diabetes. Through co-publishing, collaborative research and postgraduate support, the partnership aims to offer a practical and sustainable interdisciplinary model for chronic disease research, intervention and policy in Africa.

Ama has extensive working experience on chronic disease experiences and mental health in Ghana and the UK, including research consulting for Ghanaian (e.g. Ministry of Health), African (e.g. African Economic Research Consortium) and international organisations (e.g. DANIDA, Management Sciences for Health, Overseas Development Institute). She has published on diabetes, chronic physical and mental illness, and healthcare in Africa. In 2007 she co-edited a special issue on "Health, Disease and Healthcare in Africa" for the *Journal of Health Psychology* (Vol 12, No 3). She is currently co-editing a special issue on "Africa's Chronic Disease Burden: local and global perspectives" for the open access online journal *Globalisation and Health*. The special issue is based on the proceedings of the second annual workshop of the UK-Africa Partnership on Chronic Disease, held at the London School of Economics in June 2008 (visit <http://www.psych.lse.ac.uk/chronicdiseaseafrica/>).

#### **Selected Publications**

- de-Graft Aikins, A (in press). Culture, diet and the maternal body: Ghanaian women's perspectives on food, fat and childbearing. In Maya Unnithan-Kumar and Soraya Tremayne (Eds). *Fatness and the Maternal Body: Women's experiences of corporeality and the shaping of social policy*. Oxford: Berghahn Books
- de-Graft Aikins, A. (forthcoming). Mental illness and destitution in Ghana: a social psychological perspective. In Arthur Kleinman, Emmanuel Akyeampong, and Alan Hill. (Eds). *African Psychiatry*. Indiana University Press.
- de-Graft Aikins, A. (2007). Ghana's neglected chronic disease epidemic: a developmental challenge. *Ghana Medical Journal*, 14(4), 154-159.
- de-Graft Aikins, A** and Ofori-Atta, A. (2007) Homelessness and mental health in Ghana: everyday experiences of Accra's migrant squatters. *Journal of Health Psychology*, 12(5), 761-778.
- Marks, D., and **de-Graft Aikins, A** (Guest Editors), (2007). Health, disease and healthcare in Africa. *Journal of Health Psychology*, 12(3).
- de-Graft Aikins, A. (2006) Reframing applied disease stigma research: a multilevel analysis of diabetes stigma in Ghana. *Journal of Community and Applied Social Psychology*, 16(6), 426-441.
- de-Graft Aikins, A (2005). Healer-shopping in Africa: new evidence from a rural-urban qualitative study of Ghanaian diabetes experiences. *British Medical Journal*, 331, 737.
- de-Graft Aikins, A (2003). Living with diabetes in rural and urban Ghana: a critical social psychological examination of illness action and scope for intervention. *Journal of Health Psychology*, 8(5), 557-72.
- de-Graft Aikins, A. (2002). Exploring biomedical and ethnomedical representations of diabetes in Ghana and the scope for cross-professional collaboration: a social psychological approach to health policy. *Social Science Information*, 41(4), 603-630.

**Dr. Marius W. de Jong (Embassy of the Kingdom of the Netherlands/DFID)**

Dr Marius de Jong is First Secretary, Health and Gender, for the Embassy of the Kingdom of the Netherlands and a Public Health Specialist (MSc in health economics). He has a diverse employment record and broad experience in assisting the formulation, implementation and evaluation of development programs through different aid modalities and their corresponding 'governance' and PFM issues. His work centres on facilitating intersectoral and interagency collaboration against a background of National Poverty Alleviation, Population, Health, HIV&AIDS Control, Nutrition, Gender and Human Rights Programs. He has longstanding experience in Africa through working within national governments, the NGO world and at the donor side (UNICEF, Cordaid, Dutch Government). When he was posted at the Dutch embassy in Bamako (Mali), he represented both the Netherlands Embassy and SIDA (Sweden) in the health sector. Since 2005 he has been based at the Dutch embassy in Accra, where he also represents DFID in the health sector. Dr de Jong has been involved in the integration of the "Ghanaian-Dutch programme for health research and development" into the main stream health sector programme.

**Professor Duncan Gallie (Oxford University/British Academy)**

Professor Duncan Gallie has been Official Fellow at Nuffield College, Oxford since 1985 and Professor of Sociology since 1996. He has been Vice President of the British Academy since 2004 having previously been a Fellow and Council Member.

His research co-ordination includes the ESRC Social Change and Economic Life Initiative (1985-1990); Employment in Britain Survey (1991-1995); DGV Processes of Detachment from the Labour Market (1992-1994); DGXII Employment Conditions, Labour Market Insecurity and Work Motivation (Britain, Bulgaria, Czech Republic and Slovakia) (1994-1996); DGXII Employment Precarity, Unemployment and Social Exclusion (8 country research programme) (1996-1999) and Co-ordinator, DG Research Cluster 'Unemployment, Work and Welfare' (2000-2002).

He has served as a Member of the Advisory Committee of the ESRC Research Centre on Micro-Social Change (MISOC); the ESRC's Future of Work Initiative and was a Member of the EU's Advisory Group on 'Social Sciences and Humanities in the European Research Area'.

His books and publications include: *In Search of the New Working Class*, Cambridge University Press, 1978; *Social Inequality and Class Radicalism in France and Britain*, Cambridge University Press, 1983; *New Approaches to Economic Life* (edited with B. Roberts and R. Finnegan), Manchester University Press, 1985; *Employment in Britain*, (editor) Blackwell, 1988; *Employee Commitment and the Skills Revolution* (with M. White), Policy Studies Institute, 1993; *Long-Term Unemployment* (edited with O. Benoit-Guilbot), Pinter, 1994; *Social Change and the Experience of Unemployment* (ed. with C. Marsh and C. Vogler), Oxford University Press, 1994; *Trade Unionism in Recession* (ed. with R. Penn and M. Rose), Oxford University Press, 1996; *Changing Forms of Employment . Organisations, Skills and Gender* (ed. with R. Crompton and K. Purcell), Routledge, 1996; *Restructuring the Employment Relationship* (with M. White, Y. Cheng and M. Tomlinson) Oxford University Press, 1998; *Welfare Regimes and the Experience of Unemployment in Europe* (ed. with Serge Paugam) Oxford University Press, 2000; *Why do we need a New Welfare State?* (with G. Esping-Andersen, Hemerijck, A. and Myles, J.) Oxford University Press, 2002; (editor) *Resisting Marginalization. Unemployment Experience and Social Policy in the European Union* (editor), Oxford University Press, 2004

**Professor Kwadwo K. Koram (Noguchi Memorial Institute for Medical Research)**

Professor Kwadwo A. Koram (NMIMR) Associate Professor and Head of Department of Epidemiology at the Noguchi Memorial Institute for Medical Research, University of Ghana. I trained in general medicine at the University of Ghana Medical School and practiced general medicine at the district level before specializing in Public Health and Epidemiology. I joined the NMIMR in 1993 after training and working at the Medical Research Laboratories in The Gambia and obtaining a PhD in Epidemiology from the London School of Hygiene and Tropical Medicine. I have since been working on various epidemiological studies of malaria in collaboration with colleagues in other departments and from several universities in and outside Ghana, generally to advance the understanding of innate immune responses to malaria infection. I have also worked with the National Malaria Control Programme in the area of responses to treatment and surveillance of parasite resistance in the country and was one of the founding members of the West African Network on Antimalarial Resistance- WANMAT II. In addition, I am interested in clinical trials and the ethics of health research in developing countries and was a founding member of the African Malaria Vaccine Network, (AMVTN) in 1995 later named African Malaria Network Trust (AMANET) and have served on several boards of the two bodies. Currently, I am the PI on a NIAID/NIH contract for malaria vaccine trials awarded to Noguchi Memorial Institute with sub contracts to the US Naval Medical Research Centre, Navrongo and Kintampo Health Research Centres (in Ghana) and the Centre National du Recherche et Formation sur Le Paludisme (CNRFP) in Burkina Faso. I also coordinate and teach 2 courses in Epidemiology at the School of Public Health (UG) as well as supervising and advising students on their dissertations.

**Professor Paul Kwame Nyame (Ghana College of Physicians and Surgeons)**

Paul Kwame Nyame is the Rector of the Ghana College of Physicians and Surgeons. He entered the University College of Ibadan Medical School in 1961 graduating MB BS (London) with Honours and Distinction in Surgery in 1966. He proceeded to the U.K. for postgraduate training, and worked in various hospitals obtaining the membership of the Royal College of Physicians in the U.K. in 1970. He was awarded a Commonwealth Fellowship in 1980-1981 to study neurology in Glasgow's Institute of Neurological Sciences and London's Institute of neurology and NeuroSurgery, Queen Square.

He is a Fellow of the Royal College of Physicians of London, and the West African, Ghanaian, and American Colleges of Physicians. He was Senior Registrar, University of Ghana Medical School, from 1971 to 1973. From 1973, till 1978 he was the Medical Director and Advisor to Ghana Cocoa Marketing Board, establishing the Cocoa Clinic in Accra, and similar institutions at Tepa and Trabuom, and factory clinics in Tema and Takoradi, and a Mobile Clinic system covering the cocoa growing areas.

He returned as lecturer to the University of Ghana Medical School in 1979. In 1983 he took a leave of absence for four years to take up the position of Consultant Physician and Neurologist with the Ministry of Health in Jeddah, Saudi Arabia. In 1988, he returned to Korle Bu as Senior Lecturer in Internal Medicine and Neurology at the University of Ghana Medical School and was promoted Associated Professor in January 1995. His research interests were in cerebrovascular accidents (strokes) and epilepsy. He has a keen professional interest in Postgraduate Medical Education. He is the author of many publications. He has held many administrative positions in the medical and educational fields, and served on Boards of some public institutions locally and abroad. From 2000 to 2006 he was chairman of the 6<sup>th</sup> Council of the Medical and Dental Council. Prof. Paul Kwame Nyame was awarded The Lifetime Achievement Award by the Medical and Dental Council in 2007.

### **Professor Alexander K. Nyarko (Noguchi Memorial Institute for Medical Research)**

Professor Nyarko is the Director of the Noguchi Memorial Institute for Medical Research at the University of Ghana. He holds a B.Sc. (Honours) and MSc degrees in Biochemistry from the same university, and a PhD in Pharmacology and Toxicology from the Philadelphia College of Pharmacy and Science (currently the University of the Sciences in Philadelphia), Pennsylvania, USA. His research for the past two decades has focused largely on chronic diseases with special interest in studies into efficacy and safety of traditional treatments for diseases such as diabetes mellitus, hypertension and cancers among others, as well as chemical/drug-induced toxic injury and environmental toxicology. Professor Nyarko has previously served as a visiting Professor to the Osaka City University in Japan, advisor to WHO/Afro Expert Committee on Traditional Medicine and a Fulbright Research Scholar at the University of North Carolina, Chapel Hill USA.

#### **Selected publications**

- Nakagawa-Goto K, Nakamura S, Bastow KF, **Nyarko A**, Peng CY, Lee FY, Lee FC, Lee KH. (2007) Antitumor agents. 256. Conjugation of paclitaxel with other antitumor agents: evaluation of novel conjugates as cytotoxic agents. *Bioorg Med Chem Lett.* **17** 2894-8.
- Lin L, Shi Q, **Nyarko AK**, Bastow KF, Wu CC, Su CY, Shih CC, Lee KH (2006) Antitumor agents. 250. Design and synthesis of new curcumin analogues as potential anti-prostate cancer agents. *J Med Chem.* **49(13):3963-72.**
- Nyarko, A.K.**, Okine, L.K.N., Wedzi, R.K., Addo, P.A., Ofosuhene, M. (2005) Sub-chronic toxicity studies of the anti-diabetic herbal preparation add-199 in the rat: absence of organ Toxicity and modulation of cytochrome P450 *J Ethnopharmacol.* **97(1):319-325**
- Ding P, Chen D, Bastow KF, **Nyarko AK**, Wang X, Lee K-H (2004) Cytotoxic Isoprenylated Flavonoids from the Roots of *Sophora flavescens*. *Helvetica Chimica Acta* **87** 2574-2580
- Nyarko, A.K.**, Asare-Anane, H., Ofosuhene, M. Addy, M.E., Teye, K., Addo, P.G. (2003) Aqueous extract of *Ocimum canum* decreases levels of fasting blood glucose and free radicals and increases anti-atherogenic lipid levels in mice. *Vascular Pharmacology* **39(6)** 273-279.
- Norikula T., Kennedy, D.O., **Nyarko, A.K.**, Kojima, K., Matsui-Yuasa, I. (2002) Protective effect of Aloe extract against the cytotoxicity of 1,4-Naphthoquinone in isolated rat hepatocytes involves modulation of cellular thiol levels. *Pharmacology and Toxicology* **90**, 278-284.
- Nyarko, A.K.**, Ankrah, N-A, Ofosuhene, M., Sittie, A.A. (1999) Acute and Subchronic Evaluation of *Indigofera arrecta*: Absence of both toxicity and modulation of selected cytochrome P450 isozymes in ddY mice. *Phytotherapy Research* **13** 686-688.

### **Professor Naana Jane Opoku-Agyemang (University of Cape Coast)**

Prof. Naana Jane Opoku-Agyemang is currently the Vice Chancellor of the University of Cape Coast. Until her appointment as Vice Chancellor, she was the Dean of the School of Graduate Studies and Research, University of Cape Coast. She holds a BA (Honors) French and English degree with a Diploma in Education from the University of Cape Coast, Ghana and a Diploma superieure D'Etudes Francais from the University of Dakar, Senegal. She also holds an MA and PhD from York University, Canada. She started her career in Higher Education as Lecturer in the Department of English, University of Cape Coast. During this successful career she has been head of the Department of English, Dean of the Faculty of Arts and has also risen to become Professor of African Literature.

She has worked with World Learning, USA, having successfully run the organization's Ghana: History and Cultures of the African Diaspora since September 1997, as Academic Director. She has served on many national and international boards and committees including Member of the Board of Governors of the Centre for Democratic Development Ghana, Member of Council of the University of Education, Winneba, Chair of the Academic Director Community, World Learning Inc., USA and serving as Member of the Executive Committee of the School for International Training Study Abroad, Member of the International Advisory Board of the Nigeria Hinterland Project of

York University and the Harriet Tubman Institute, York University, Canada, Member of the Editorial Board, Adam Matthew DIGITAL, UK.

She has been a Fulbright Senior Scholar and Fellow of the Institute for Advanced Studies into the African Humanities, Northwestern University, Evanston, USA; visiting professor, Eastern Washington University. She has given the keynote address, been the guest speaker or participant in numerous national and international conferences and events including being a panelist at the United Nations General Assembly discussion of the Legacies of Enslavement in Africa.

She has received several honours including an award for furthering international Education from Eastern Washington University, USA; an award for running consistently high quality study abroad programme from World Learning Inc. USA, an award for outstanding support for education from the Komenda Traditional Council, placing in her personal custody the founding sword of the State of Komenda.

She is a Fellow and Member of Council of the Ghana Academy of Arts and Sciences, (2007-2008); Member of African Literature Association, African Studies Association, Ghana Studies Council and the National Council of Black Studies.

#### **Professor Fred Sai (Ghana Academy of Arts and Sciences)**

Dr. Fred Sai, a Ghanaian family health physician, trained in the University of London, Edinburgh and Harvard, a past President and Past Honorary Secretary of Academy is an internationally recognized gender and reproductive health advocate. He is also well known for drawing attention to the food and nutrition problems of Africa, particularly of women and children. He has held important positions both in Ghana and internationally including, as Director of Medical Services and Professor of Community Health in Ghana; as nutrition advisor to the FAO, Africa Region, as coordinator for the World Hunger Programme of the UN University and as Senior Population Advisor to the World Bank.

Dr. Sai was President of IPPF from 1989 to 1995; was recipient of the UN Population Award in 1993, and has received many awards and honors for his work in population, reproductive health and nutrition. These include the Prince Mahidol of Thailand Prize, Honorary Doctorates from Tufts University in the USA, and the University of Ghana, Legon. He has also been accorded the Honorary Fellowship of the American College of Obstetricians and Gynaecologists and the Royal College of Obstetricians and Gynaecologists, UK, for his promotion of women's health and rights.

Dr. Sai is world renowned for his chairing of various international conferences including the WHO/UNICEF Infant and Young Child Feeding Conference in 1979 which led to the development of the international code on Marketing of Breast Milk Substitutes; Moderator for 1987 Safe Motherhood Conference which launched the Safe Motherhood Initiative, and Chairman for Main Committees of the International Conference on Population in Mexico in 1984 and of the International Conference on Population and Development, ICDP, in Cairo in 1994. It was this last Conference which produced the Programme of Action, emphasising the centrality of women to all development programmes and called for world attention to the improvement in the status of women and for equity and equality between the sexes as the basis of all human relationships.

With the Prince Mahidol Prize he set up a fund in the University of Ghana, Legon, for women reading science. About fifty students have benefited from this.

Dr. Sai till this year was an advice to the Government of Ghana, on Reproductive Health and HIV/AIDS issues; and internationally in the promotion of the ICPD Agenda. He is an external Director of the Bank of Ghana (the Central Bank) and a member of the Board of Directors of

several US NGO's working in Sexual and Reproductive Health.

He has published quite extensively on an array of health issues; latterly dwelling on the ethical issues in the Sexual and Reproductive Health field. His most recent books are: " Adam and Eve and the Serpent " , dealing with the inequalities and the difficulties faced by African Women; and "Fred Sai Speaks Out" which is a collection of essays on his views of the reproductive health field. This includes a letter to the late Pope asking for a reconsideration of the Vatican's anti-contraception and family planning stand. In 2006 he was awarded one of the Nation's highest honors, Member of the Star of Ghana.

### **Dr. Anthony T. Seddoh (WHO-Afro)**

Dr. Anthony Seddoh is an experienced senior official of the World Health Organization with research interests in the effect of political, social and economic policies on health. He is currently the Regional Advisor, Strategy, Social Policy and Health with responsibilities for health policy development, planning, social policy analysis and coordination of civil society participation towards the attainment of the health MDGs. He is also the focal person for the implementation of the International Health Partnership and its allied programmes (IHP+) and Harmonization for Health in Africa initiative in the Africa region.

He was instrumental in developing several strategies for strengthening WHO Country presence, undertook several in-depth health sector reviews for various countries including South Africa, Mozambique, Ethiopia, Nigeria, Zambia, Ethiopia, Lesotho and Swaziland. Most of these work has lead to the signing of MOUs and compacts between these countries and their northern donor partners.

Currently, he is leading work on intensifying the use of joint approaches to address inequities and socioeconomic policies to achieve the health Millennium Development Goals. Before joining WHO, he served as Head, Policy Unit of the Ghana Health Service and was a key architect of the health sector reforms in Ghana

### **Selected Publications**

- Seddoh A (2008). Primary Health Care in the context of pluralist health financing in Africa: issues and challenges, *Journal of Political Economy*, 2/4 p. 12-18
- Seddoh A (2008) New African agenda for socioeconomic policy and health systems strengthening, *WHO Africa Region Health Series on Determinants of Health* No. 1 Vol. 1. Harare: WHO
- Kirigia J, **Seddoh A**, Gbary A, Nyoni J, and Muthuri LHK. (2006) The cost of health-related brain drain to the WHO African Region, *African Journal of Health Sciences*, 13 3/4, 1-12
- Kirigia J, Gbary A, Nyoni J, Muthuri LHK and **Seddoh A**, (2006) Cost of health professionals brain drain in Kenya, *BMC Health Services Research*, 2006, 6-89
- Kirigia J, **Seddoh A**, Gatwiri D, Muthuri LHK and Seddoh J. (2005). E-health: Determinants, opportunities, challenges and the way forward, *BMC Public Health*, 2:137

### **Professor Kodjo Senah (University of Ghana)**

Professor Kodjo obtained the Bachelor of Arts (Honours) degree in sociology in 1974 from the University of Ghana. He returned to the University of Ghana for the masters programme and in 1981 he was awarded the Master of Philosophy degree in sociology. And in 1997, he obtained the doctorate (PhD) degree in Medical Anthropology from the University of Amsterdam in The Netherlands. Prof. Senah has been lecturing in the Department of Sociology in the University of Ghana since 1985. He is currently an Associate Professor and the Head of the Department of Sociology. His areas of teaching, research and publication are: Medical Anthropology, Rural Sociology, Rural Development and Criminology.

### **Dr Elias K. Sory (Ghana Health Service)**

Dr Elias Kavinah Sory is the Director General of the Ghana Health Service. Dr Sory has over 20 years experience in Health Administration and Management and has consulted on numerous health-related projects for many national and international organisations.

He has managed, monitored and supervised National, Regional and District Health delivery in Ghana. He played a pioneering role in health sector reform and safe motherhood in Ghana that led to the establishment of the Ghana Health Service; and has facilitated in the Strengthening of District Health Systems Programmes in the country.

His Public Health specialty area is in Maternal and Child Health and he has written many articles and presented papers related to this area. He is a member of the Ghana Medical Association, a Member of the American Public Health Association and a Fellow of the Ghana College of Physicians.

### **Professor Nigel Unwin (University of Newcastle)**

I am Professor of Epidemiology at the Newcastle University, UK, where I lead the Advancing Research in Chronic Disease Epidemiology Programme, in the Institute of Health and Society. I trained in general medicine before specialising in Public Health, and took up my first academic post in 1993 as an epidemiologist and public health specialist with the diabetes group at Newcastle University. From 2003 to 2005 I worked with the diabetes group at WHO in Geneva on a joint WHO – International Diabetes Federation (IDF) programme and returned to Newcastle in 2006. I continue to work closely with the diabetes group at WHO and with IDF.

My research interests largely concern the epidemiology, public health importance and prevention of diabetes and related chronic diseases, both within the UK and in low and middle income countries, and across different ethnic groups. It was during my initial time at Newcastle that I was lucky enough to become involved in collaborative projects in Africa, first in Tanzania, later in Cameroon, and to a lesser extent in activities in South Africa and Mauritius. Elements of this work have included: assessing the contribution of chronic diseases to the overall burden of disease in Africa, urban rural differences in chronic disease prevalence and risk factors in Tanzania and Cameroon, changes in risk factors on rural to urban migration in Tanzania, assessing health care provision for and the policy response to chronic diseases and piloting interventions for their treatment. A key aspect of work in these areas has been work by colleagues to understand the cultural and economic contexts of chronic disease occurrence, treatment and prevention.

New research interests, actively under development, include investigating the link between diabetes and tuberculosis and its potential public health impact particularly in urban settings in low income countries where diabetes is increasing rapidly and TB remains endemic. A major new EU funded programme of work will bring together epidemiological modelling, assessment of the policy and health care environment, investigation of local health beliefs and economic studies to guide policy responses to chronic diseases in North Africa and the Eastern Mediterranean.

#### **Selected publications**

Stevenson, C. R., N. G. Forouhi, G. Roglic, B. G. Williams, J. A. Lauer, C. Dye, and N.

**Unwin**, (2007). Diabetes and tuberculosis: the impact of the diabetes epidemic on tuberculosis incidence: *BMC Public Health*, v. 7, p. 234.

**Unwin, N.**, and K. G. Alberti, (2006). Chronic non-communicable diseases: *Annals of Tropical Medicine & Parasitology*, v. 100, p. 455-64.

Roglic, G., **N. Unwin**, P. H. Bennett, C. Mathers, J. Tuomilehto, S. Nag, V. Connolly, and H. King. (2005). The burden of mortality attributable to diabetes: realistic estimates for the year 2000.: *Diabetes Care*, v. 28, p. 2130-5.

- Unwin, N.**, D. McLarty, H. Machibya, T. Aspray, B. Tamin, L. Carlin, S. Patel, M. Walker, and K. G. Alberti, (2006), Changes in blood pressure and lipids associated with rural to urban migration in Tanzania: *Journal of Human Hypertension*, v. 20, p. 704-6.
- Sobngwi, E., J. C. Mbanya, **N. C. Unwin**, R. Porcher, A. P. Kengne, L. Fezeu, E. M. Minkoulou, C. Tournoux, J. F. Gautier, T. J. Aspray, and K. Alberti, (2004). Exposure over the life course to an urban environment and its relation with obesity, diabetes, and hypertension in rural and urban Cameroon: *International Journal of Epidemiology*, v. 33, p. 769-76.
- Unwin, N.**, L. Saker, J. Mbanya, and K. Alberti, (2004). Non-communicable diseases in Africa, in E. Parry, R. Godfrey, D. Mabey, and G. Gill, eds., *Principles of Medicine in Africa*: Cambridge, Cambridge University Press.
- Unwin, N.**, and K. Alberti. (2003). Ischaemic Heart Disease, in G. Cook, and A. Zumla, eds., *Manson's Textbook of Tropical Diseases*: London, Harcourt Health Sciences.
- Jagoe, K., R. Edwards, F. Mugusi, D. Whiting, and **N. Unwin**.(2002). Tobacco smoking in Tanzania, East Africa: population based smoking prevalence using expired alveolar carbon monoxide as a validation tool: *Tobacco Control*, v. 11, p. 210-4.
- Unwin, N.**, P. Setel, S. Rashid, F. Mugusi, J. C. Mbanya, H. Kitange, L. Hayes, R. Edwards, T. Aspray, and K. G. Alberti. (2001). Noncommunicable diseases in sub-Saharan Africa: where do they feature in the health research agenda?: *Bulletin of the World Health Organization*, v. 79, p. 947-53.

**Professor Megan Vaughan F.B.A (University of Cambridge)**

Professor Megan Vaughan is Smuts Professor of Commonwealth History at the University of Cambridge, U.K. and a fellow of King's College, Cambridge. She began her career at the University of Malawi, where she taught for several years and carried out research into the history of food supply and famine, and the history of medicine and public health. She has a longstanding interest in the history of mental health in Africa and is currently working on a study of suicide. She teaches African and World History at the University of Cambridge and is Acting Director of the Centre of African Studies there. From October 2009 she will host a Collaborative Research Programme at the Centre on 'The Public Understanding of Science in Africa'.

**Selected Publications**

- (ed. With Sloan Mahone) *Psychiatry and Empire*, Palgrave/Macmillan, 2008.
- Creating the Creole Island: Slavery in Eighteenth Century Mauritius*, Duke University Press, 2007.
- (with Henrietta Moore) *Cutting Down Trees: Gender, Nutrition and Agricultural Change in Northern Province Zambia, c1890-1990*, James Currey/Heinemann, 1995.
- Curing Their Ills: Colonial Power and African Illness*, Polity Press and Stanford University Press, 1991.
- The Story of an African Famine: Gender and Famine in Twentieth Century Malawi*, Cambridge University Press, 1987

**Professor Sir Magdi Yacoub (Imperial College, Royal Society)**

Magdi Yacoub was born and raised in Cairo where he qualified as a doctor in 1957. He came to Britain in 1962 and since then has made pioneering strides in cardiothoracic surgery. He became a consultant cardiothoracic surgeon at Harefield Hospital in 1973 and since 1986 has been Professor of Cardiothoracic Surgery at Imperial College, London. Under his leadership, Harefield Hospital became the UK's leading transplant centre, performing over 200 operations a year. Magdi was involved in the first UK heart transplant in 1980, performed the first UK live lobe lung transplant and the first ever domino operation, in which one patient with failing lungs is given a new heart and lungs, with a second patient receiving the first patient's fully functioning heart. Currently, Magdi's team of 75 scientists are looking at new ways they can improve heart transplantation and repair damaged hearts. One emerging area is stem cell research. Magdi hopes that they can be used to help the damaged heart regenerate itself and repair its own function. Currently, his team is creating heart cells in the lab. Clinical trials will be needed before stem cells can be a part of

everyday patient care, but nevertheless believes that the future for this technology, "could be near".

He is also researching techniques to improve the treatment of valvular heart disease; exploring whether tissue engineering can be used to restore valve function.

He was knighted in 1992 and made a Fellow of the Royal Society in 1999.

#### Selected Publications

- Lara-Pezzi E; Felkin LE; Birks EJ; Sarathchandra P; Panse KD; George R; Hall JL; Yacoub MH; Rosenthal N; Barton PJ. (Nov 2008). Expression of follistatin-related genes is altered in heart failure. *Endocrinology*. 149:5822-5827.
- Mocumbi AO; Ferreira MB; Sidi D; Yacoub MH. (03 Jul 2008). A population study of endomyocardial fibrosis in a rural area of Mozambique. *NEW ENGL J MED*. 359:43-49.
- Slominska EM; Orlewska C; Yuen A; Osman L; Romaszko P; Sokolowska E; Foks H; Simmonds HA; Yacoub MH; Smolenski RT. (Jun 2008). Metabolism of 4-pyridone-3-carboxamide-1-beta-D-ribose nucleoside triphosphate and its nucleoside precursor in the erythrocytes. *Nucleosides Nucleotides Nucleic Acids*. 27:830-834.
- Slominska EM; Yuen A; Osman L; Gebicki J; Yacoub MH; Smolenski RT. (Jun 2008). Cytoprotective effects of nicotinamide derivatives in endothelial cells. *Nucleosides Nucleotides Nucleic Acids*. 27:863-866.
- Yamahara K; Fukushima S; Coppens SR; Felkin LE; Varela-Carver A; Barton PJ; Yacoub MH; Suzuki K; Takkenberg JJ; Rajamannan NM; Rosenhek R; Kumar AS; Carapetis JR; Yacoub MH; Society for Heart Valve Disease. (Jan 2008). The need for a global perspective on heart valve disease epidemiology. The SHVD working group on epidemiology of heart valve disease founding statement. *J Heart Valve Dis*. 17:135-139.
- Taegtmeyer AB; Rogers P; Breen JB; Barton PJ; Banner NR; Yacoub MH. (Apr 2008). The effects of pre- and post-transplant anemia on 1-year survival after cardiac transplantation. *J Heart Lung Transplant*. 27:394-399.
- Yacoub S; Kotit S; Mocumbi AO; Yacoub MH. (Apr 2008). Neglected diseases in cardiology: a call for urgent action. *Nat Clin Pract Cardiovasc Med*. 5:176-177.
- Yacoub MH; Miller LW. (Feb 2008). Long-term left-ventricular-assist-device therapy is here to stay. *NAT CLIN PRACT CARD*. 5:60-61.
- Mocumbi AO; Yacoub S; Yacoub MH. (Mar 2008). Neglected tropical cardiomyopathies: II. Endomyocardial fibrosis: myocardial disease. *Heart*. 94:384-390.
- George RS; Yacoub MH; Bowles CT; Hipkin M; Rogers P; Hallas C; Banner NR; Dreyfus G; Khaghani A; Birks EJ. (Feb 2008). Quality of life after removal of left ventricular assist device for myocardial recovery. *J Heart Lung Transplant*. 27:165-172.

## CONTACT DETAILS: SPEAKERS AND CHAIRS

Name	Institution	Contact
Prof Ivan Addae-Mensah [C]	GAAS	c/o council@gaas-gh.org
Dr Edward Addai [S]	The Global Fund	edward.addai@theglobalfund.org
Prof Marian Addy [S]	GAAS	c/o council@gaas-gh.org
Dr Charles Agyemang [S]	University of Amsterdam	c.o.agyemang@amc.uva.nl
Prof Pascale Allotey [S]	Brunel University	Pascale.Allotey@brunel.ac.uk
Prof R.M. Amonoo[C]	GAAS	c/o council@gaas-gh.org
Dr Paul Amuna [S]	University of Greenwich	p.amuna@gmail.com
Dr Daniel Kojo Arhinful [S]	NMIMR, UG	darhinful@noguchi.mimcom.net
Prof Fred Binka [C]	School of Public Health, UG	fbinka@africaonline.com.gh
Prof Lawrence Boadi [C]	GAAS	c/o council@gaas-gh.org
Prof Lorna Casselton [S]	Royal Society (RS)	lorna.casselton@plants.ox.ac.uk
Dr Ama de-Graft Aikins [S]	University of Cambridge.	ada21@cam.ac.uk
Dr Marius de Jong [S]	Royal Netherlands Embassy/DFID	marius-de.jong@minbuza.nl
Prof Duncan Gallie [S]	British Academy (BA)	duncan.gallie@nuffield.ox.ac.uk
Prof Kwadwo Koram[S]	NMIMR	kkoram@noguchi.mimcom.net
Prof Paul Nyame [S]	Ghana College of Physicians and Surgeons	c/o council@gaas-gh.org
Prof Alexander Nyarko [C]	NMIMR	director@noguchi.mimcom.net
Prof Naana J. Opoku-Agyemang [S]	University of Cape Coast	c/o council@gaas-gh.org
Prof Fred T. Sai [C]	GAAS	c/o council@gaas-gh.org
Dr Anthony Seddoh [S]	WHO-Afro	seddoha@zw.afro.who.int
Prof Kodjo A. Senah [S]	Dept of Sociology, UG	kamesenah@yahoo.co.uk
Dr Elias Sory [C]	Ghana Health Service	info@ghsmail.org
Prof Nigel Unwin [S]	University of Newcastle	N.C.Unwin@newcastle.ac.uk
Prof Megan Vaughan [S]	University of Cambridge/BA	mav26@cam.ac.uk
Prof Sir Magdi Yacoub [KNS]	Imperial College/ RS	m.yacoub@imperial.ac.uk
KNS: Keynote Speaker; S: Speaker; C: Chair		

## THE UK-AFRICA ACADEMIC PARTNERSHIP ON CHRONIC DISEASE

In 2006, the British Academy awarded a three-year grant to Dr Ama de-Graft Aikins (University of Cambridge) and Dr Daniel Kojo Arhinful (Noguchi Memorial Institute for Medical Research, University of Ghana) to establish and facilitate a UK-Africa Academic Partnership on Chronic Disease. The grant was one of four awarded in the Academy's first call for UK-Africa Academic partnerships (see <http://www.britac.ac.uk/funding/awards/intl/africapartnerships.html>).

The UK-Africa Academic Partnership on Chronic Disease has four goals:

1. To integrate social and biomedical science research on chronic diseases of public health significance in Africa and for African communities in the UK through collaborative research between partners;
2. To influence chronic disease policies in Africa by disseminating evidence-based research and intervention to policy makers;
3. To offer postgraduate teaching, training and support in Africa and in the UK on Africa-centred chronic disease research, intervention and policy through teaching exchanges, research internships and co-publishing; and
4. To disseminate partnership research and related activities to academic, health practitioner/policy and lay audiences through annual meetings, publications and public education projects.

The partnership is currently made up of 34 partners from institutions in the UK (14), the Netherlands (1), Ghana (12), Nigeria (3), Kenya (1) and Cameroon (3). Partners' disciplines include anthropology, biological sciences (biochemistry, pharmacology), biomedicine (psychiatry, public health, epidemiology), geography, nutrition, linguistics, psychology (clinical, cognitive, social) and sociology/demography. Collectively partners have research expertise on asthma, cancers, cardiovascular disease, diabetes, hypertension, mental and neuro-degenerative disorders and sickle-cell disease.

For more information about the partnership's activities or to join, contact Ama de-Graft Aikins at [ada21@cam.ac.uk](mailto:ada21@cam.ac.uk) or visit <http://www.psych.lse.ac.uk/chronicdiseaseafrica/>.

## UK-AFRICA ACADEMIC PARTNERSHIP ON CHRONIC DISEASE: SHORT PROFILES OF PARTNERS

Profile of UK and European Partners
Dr Juliet Addo, LSHTM (Medicine, Public Health): Hypertension and cardiovascular disease, Ghana.
Dr Charles Agyemang, University of Amsterdam (Epidemiology, Public Health): Hypertension, cardiovascular disease, diabetes; Ghana, African communities in the Netherlands.
Prof Pascale Allotey, Brunel (Medical Anthropology, Public Health): international health, ethics in research, health policy; Cameroon, Australia, UK.
Dr Paul Amuna, University of Greenwich (Medicine, International Nutrition & Public Health): nutrition interventions; research; human resource training and capacity building; partnerships for health and development; UK, Africa.
Dr. Kofi Anie, Imperial College (Clinical Psychology): sickle-cell disease research and intervention; Ghana, Nigeria, UK.
Dr Petra Boynton, University College London (UCL) (Social Psychology): health research (UK, South Africa, Asia), distance learning (UK-South Africa), use of new technologies in teaching and research dissemination.
Prof Cathy Campbell, London School of Economics (LSE) (Social Psychology): HIV/AIDS, collective action; southern Africa, UK.
Dr. Sharon Cox, London School of Hygiene and Tropical Medicine (Nutrition/Genetics/Immunology): nutritional interventions and research relating to sickle cell disease; Ghana, Gambia, Tanzania.
Dr Ama de-Graft Aikins, Cambridge (Social Psychology): experiences of diabetes, hypertension and mental illness (Ghana); experiences of cancers, sickle cell disease, mental illness (UK); representations of obesity.
Dr Victor Doku, Institute of Psychiatry (Community Psychiatry): chronic disease and mental health; mental health and poverty; schizophrenia, epilepsy; Ghana, Kenya, UK.
Prof Trisha Greenhalgh, UCL (Medicine/Medical Anthropology): diabetes (UK), evidence-based medicine workshops, distance learning teaching; UK, South Africa.
Dr Emma Pitchforth, LSE (Health Sciences): maternal and reproductive health, quality and organisation of maternity services, public health; Bangladesh, India, Ethiopia, UK.
Dr Eugene Sobngwi, Newcastle (Medicine, Public Health): epidemiology, public health; obesity, diabetes, hypertension; Cameroon.
Prof Nigel Unwin, Newcastle (Medicine, Public Health): epidemiology, public health importance and prevention of diabetes and related chronic diseases; Tanzania, Cameroon, South Africa, Mauritius.
Dr Kirsty Winkley, King's College/Institute of Psychiatry (Psychology, Nursing): diabetes, depression, anxiety; African communities in London.

Profile of Africa Partners
Prof Samuel Agyei-Mensah, University of <b>Ghana</b> (Medical Geography, Population Studies): medical geography and population studies in relation to HIV/AIDS and chronic disease; West Africa
Dr Adote Anum, University of <b>Ghana</b> (Cognitive Neuropsychology): neurodegenerative disease (epilepsy), representations of body image and obesity; Ghana, Canada.
Dr Daniel Kojo Arhinful, NMIMR, University of <b>Ghana</b> (Medical Anthropology/Sociology): health systems research, health insurance, diabetes, use of medicines; Ghana.
Dr Margaret Armar-Klemesu, NMIMR, University of <b>Ghana</b> (Public Health Nutrition): public health nutrition and health promotion; Ghana.
Dr Lem Atanga, <b>Cameroon</b> (Linguistics, Gender Studies): gender, health and disease.

Dr Paschal Awah, Centre for Population Research and Health Promotion, <b>Cameroon</b> (Medical Anthropology): Diabetes, cardiovascular risk factors prevention and biomedical ethics; Cameroon, Tanzania.
Dr Delali M. Badasu, University of <b>Ghana</b> (Medical Geography, Population Studies): medical geography and population studies in relation to chronic/terminal childhood diseases; Ghana.
Dr William Bosu, University of <b>Ghana</b> (SPH) (Medicine/Public health): Public Health, National Non-Communicable Disease (NCD) co-ordinator; Ghana.
Dr Anthony Edusei, Kwame Nkrumah University of Science and Technology, <b>Ghana</b> (Community Health): disability; Ghana.
Dr Ivy Ekem, University of <b>Ghana</b> Medical School (Medicine): sickle-cell disease and blood disorders, Ghana.
Dr Ifeoma Emodi, University of <b>Nigeria</b> Teaching Hospital (Paediatrics): Sickle-cell disease, Nigeria.
Dr Audrey Forson, University of <b>Ghana</b> Medical School (Medicine): asthma, respiratory disease, Ghana.
Dr Anthony Ifekuna, <b>Nigeria</b> (Medicine); childhood cancers, Nigeria
Prof Kwadwo Koram, NMIMR, University of <b>Ghana</b> (Medicine, Epidemiology): cancer, Ghana.
Dr Catherine Kyobutungi, APHRC, <b>Kenya</b> (Medicine, Sociology/Demography): burden of chronic disease, chronic disease in the urban poor, Kenya.
Mr Chris Macauley, The Trauma Centre, <b>Cameroon</b> (Clinical Psychology): mental illness, war trauma, refugee mental health, HIV/AIDS
Prof Alexander Nyarko, NMIMR, University of <b>Ghana</b> (Pharmacology): ethnomedicines and NCDs, Ghana.
Dr Angela Lamensdorf Ofori-Atta, University of <b>Ghana</b> Medical School, (Clinical/Health Psychology): mental illness, health psychology, ethics in health research; Ghana.
Dr Ngozi Ojinnaka, University of <b>Nigeria</b> Teaching Hospital (Paediatric Neurology): chronic neurological disorders, e.g. epilepsy and cerebral palsy; Nigeria.